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## *Preface*

This compilation of industrial training opportunities for personnel from developing countries is the twenty-first issue of a publication which first appeared in 1972. It conforms to the Constitution of the United Nations Industrial Development Organization (UNIDO), adopted in April 1979, which includes, among other functions of the Organization:

“Organize and support industrial training programmes aimed at assisting the developing countries in the training of technical and other appropriate categories of personnel needed at various phases of their accelerated industrial development.”

The *Guide* is based on the replies to a questionnaire, sent to Governments, organizations, institutions and other bodies concerned with industrial training, in which information about their training activities was solicited. To reduce the size of this volume, entries listed in earlier issues have not been repeated unless a specific request was received from the organizer.

The *Guide* is divided into three chapters:

- I. Training opportunities offered by institutions in developed and developing countries;
- II. Courses of short duration and other courses that may be of interest as such or as part of longer, more comprehensive training programmes, offered by institutions in developed and developing countries;
- III. Training opportunities organized and offered by UNIDO (yellow pages).

In chapters I and II, training opportunities are listed by country, in English alphabetical order, and in chapter III in chronological order.

Under the heading “developing countries” those countries are included for which an indicative planning figure (IPF) has been foreseen under the Fifth Cycle (1992-1996) of the United Nations Development Programme (UNDP).

To keep the size of the *Guide* within certain limits, series of different courses of short duration, offered by the same organizer, have been grouped under a common heading. It is hoped that this will not inconvenience the reader to identify relevant courses.

The classification of courses is basically branch-oriented. This means that courses dealing with an industrial activity that is relevant only to a given industrial branch, will be included in the section referring to that branch. For example, a course on “Quality control in ammonium-urea plants” will appear in section “Chemical industries”. Similarly, an effort was made to put emphasis on the basic activity when classifying courses relevant to more than one industrial activity; e.g. a course on “Computer application in management” will be listed in section “Industrial management”.

According to its mandate, UNIDO is to increase or update the professional skills of technical, managerial and administrative personnel, including entrepreneurs, engaged in industry and its development. Therefore, with a few exceptions, academic courses that are part of the regular curricula of universities, vocational

training institutes or similar institutions are not included in the *Guide*, since such activities fall within the competence of the International Labour Organisation (ILO) or the United Nations Educational, Scientific and Cultural Organization (UNESCO). In the majority of cases, this also applies to courses with a duration of more than one year, which are therefore usually not reflected in the *Guide*. Similarly, part-time courses are not included.

UNIDO is not in a position to give further details on the courses contained in chapters I and II; such additional information should be obtained by contacting the organizer, using the mailing address given in each entry. Further information on UNIDO training activities (chapter III) is contained in the "UNIDO Industrial Training Offer Programme 1993", which can be requested from the Industrial Human Resource Development Branch of UNIDO.

The training opportunities listed in the *Guide* are not limited to holders of UNIDO fellowships. Any qualified individual from a developing country may apply for a course or be nominated to attend. Such applications or nominations should be sent directly to the organizer of the course. *Applicants for UNIDO fellowships, however, must be nominated by their respective Government, and nominations should be routed through the local Resident Representative of the United Nations Development Programme (UNDP) to UNIDO.*

It is hoped that this issue of the *Guide* will continue to assist individuals in developing countries who seek industrial training to identify suitable courses. The twenty-second issue of the *Guide*, which will cover courses offered in 1994, is scheduled to appear in late 1993.

## CONTENTS

	<i>Page</i>
Preface .....	iii
 <i>Chapter</i>	
I. TRAINING OPPORTUNITIES OFFERED BY INSTITUTIONS IN DEVELOPED AND DEVELOPING COUNTRIES .....	1
A. Developed countries and areas .....	1
1. Industrial branches .....	1
Mining .....	1
Food products and beverages; animal feed; tobacco products .....	2
Textiles; wearing apparel, dressing and dyeing of fur .....	3
Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear .....	4
Paper and paper products; publishing; printing and reproduction of recorded media .....	4
Coke, refined petroleum products and nuclear fuel; chemicals and chemical products; rubber and plastic products .....	6
Other non-metallic mineral products .....	8
Basic metals .....	8
Fabricated metal products, except machinery and equipment; machinery and equipment n.e.c.* .....	11
Office, accounting and computing machinery; radio, television and communication equipment and apparatus .....	14
Medical, precision and optical instruments; watches and clocks .....	16
Motor vehicles, trailers and semi-trailers; other transport equipment .....	17
Other industrial branches and intersectoral programmes ..	18
2. Utilities .....	19
Electricity, light and power .....	19
Water works and supply .....	20
3. Fields related to industry .....	23
Construction (civil engineering) .....	23
Miscellaneous public services .....	24
4. The industrial sector .....	26
Industrial policy, programming, planning, production .....	26
Industrial projects .....	28

\*Not elsewhere classified.



<i>Chapter</i>	<i>Page</i>
Small-scale industries and entrepreneurship .....	29
Industrial waste disposal, recycling, environmental protection .....	33
Energy conservation in industry .....	35
5. Industrial development support services .....	36
Computer applications, data processing .....	36
Industrial administration .....	37
Industrial extension, information .....	41
Investment promotion and industrial financing .....	43
Marketing and export promotion .....	43
Industrial technology and product development .....	45
Maintenance and repair .....	47
Quality control, materials testing .....	48
Mechanization, robotics, automation .....	50
Training of trainers and human resource development .....	50
6. Management .....	55
Factory management .....	55
Industrial management .....	57
Management development .....	62
<b>B. Developing countries and areas .....</b>	<b>65</b>
1. Industrial branches .....	65
Mining .....	65
Food products and beverages; animal feed; tobacco products .....	67
Textiles; wearing apparel, dressing and dyeing of fur .....	73
Paper and paper products; publishing; printing and reproduction of recorded media .....	73
Coke, refined petroleum products and nuclear fuel; chemicals and chemical products; rubber and plastic products .....	74
Other non-metallic mineral products .....	77
Basic metals .....	79
Fabricated metal products, except machinery and equipment; machinery and equipment n.e.c.* .....	87
Electrical machinery and apparatus n.e.c.* .....	93
Office, accounting and computing machinery; radio, television and communication equipment and apparatus .....	95
Medical, precision and optical instruments; watches and clocks .....	97
Motor vehicles, trailers and semi-trailers; other transport equipment .....	99
Other industrial branches and intersectoral programmes .....	100
2. Utilities .....	104
Electricity, light and power .....	104
Water works and supply .....	107

\*Not elsewhere classified.

<i>Chapter</i>	<i>Page</i>
3. Fields related to industry .....	108
Construction (civil engineering) .....	108
Miscellaneous public services .....	109
4. The industrial sector .....	118
Industrial policy, programming, planning, production .....	118
Industrial projects .....	119
Small-scale industries and entrepreneurship .....	121
Industrial waste disposal, recycling, environmental protection .....	124
Energy conservation in industry .....	126
5. Industrial development support services .....	128
Computer applications, data processing .....	128
Industrial administration .....	130
Investment promotion and industrial financing .....	132
Marketing and export promotion .....	134
Industrial technology and product development .....	135
Maintenance and repair .....	136
Quality control, materials testing .....	138
Mechanization, robotics, automation .....	139
Occupational and product safety .....	140
Training of trainers and human resource development ...	140
6. Management .....	142
Factory management .....	142
Industrial management .....	145
Management development .....	149
Operations research .....	150
II. OTHER TRAINING OPPORTUNITIES AND SHORT COURSES	153
A. Developed countries and areas .....	153
B. Developing countries and areas .....	177
III. TRAINING OPPORTUNITIES OFFERED BY UNIDO .....	205
<i>Annex.</i> National Placement and Supervising Agencies administering UNIDO fellowships and study-tour programmes .....	217

## Préface

Le présent *Répertoire* des possibilités de formation industrielle offertes aux cadres de pays en développement est la vingt et unième édition d'un document publié pour la première fois en 1972. Il est conforme à l'Acte constitutif de l'Organisation des Nations Unies pour le développement industriel (ONUDI), adopté en avril 1979, qui cite parmi les fonctions de l'Organisation celles qui consistent à :

"Organiser et favoriser des programmes de formation industrielle visant à aider les pays en développement à former le personnel technique et les autres personnels appropriés nécessaires à divers stades pour leur développement industriel accéléré."

Le présent *Répertoire* a été établi d'après les renseignements fournis par un certain nombre de gouvernements, d'organisations et d'institutions s'occupant de formation industrielle, en réponse à un questionnaire sur les possibilités de formation qu'ils offraient. Afin de condenser la présente édition, les rubriques qui figuraient déjà dans les éditions précédentes n'ont été réinsérées que sur la demande expresse des organisateurs.

Ce *Répertoire* comprend trois chapitres :

- I. Possibilités de formation offertes par des institutions des pays développés et des pays en développement;
- II. Stages de courte durée et stages n'entrant pas dans les catégories précitées qui présentent un intérêt en eux-mêmes ou qui peuvent utilement s'insérer dans des programmes de formation plus longs et plus vastes offerts par des institutions autres que l'ONUDI;
- III. Possibilités de formation offertes par l'ONUDI elle-même (pages jaunes).

Dans les chapitres Ier et II, les possibilités de formation énumérées sont classées, par pays hôte, dans l'ordre alphabétique anglais, tandis que pour le chapitre III on a adopté l'ordre chronologique.

Figurent sous la rubrique "Pays en développement" les pays pour lesquels un chiffre indicatif de planification (CIP) a été prévu au titre du cinquième cycle de programmation (1992-1996) du Programme des Nations Unies pour le développement (PNUD).

Afin de conserver au *Répertoire* des dimensions raisonnables, les différents stages de courte durée offerts par une même organisation ont été regroupés sous une rubrique commune. On espère que cette présentation n'empêchera pas le lecteur de repérer les stages qui l'intéressent.

Les stages sont classés essentiellement par secteur industriel. Les stages traitant d'une activité industrielle donnée, c'est-à-dire n'intéressant qu'un secteur industriel particulier, figurent donc dans la section concernant ce secteur. Par exemple, un stage sur le "Contrôle de la qualité dans les usines d'ammoniac et d'urée" figurera dans la section "Industrie chimique". De même, on s'est employé à mettre en évidence l'activité principale pour classer des stages se rapportant à deux activités industrielles ou plus : un stage sur l'"Application de l'informatique à la gestion" aura donc sa place dans la section "Gestion industrielle".

L'ONUDI a pour mandat d'améliorer ou de mettre à jour les compétences professionnelles des techniciens, des gestionnaires et des administrateurs de haut niveau, et notamment des chefs d'entreprise, qui travaillent dans l'industrie et participent à son développement. A quelques exceptions près, les formations figurant ordinairement aux programmes des universités, des institutions de formation professionnelle et des établissements similaires n'ont pas été retenues, car elles relèvent de la compétence de l'Organisation internationale du Travail (OIT) ou de l'Organisation des Nations Unies pour l'éducation, la science et la culture (UNESCO). Dans la majorité des cas, le même principe a été appliqué en ce qui concerne les stages d'une durée supérieure à un an, qui ne sont donc, sauf exception, pas indiqués dans le présent *Répertoire*. Il en a été de même pour les stages à temps partiel.

L'ONUDI n'est pas en mesure de fournir des détails supplémentaires sur les stages cités aux chapitres Ier et II; on s'adressera à cette fin à l'organisateur lui-même, dont l'adresse postale figure sous chaque rubrique. On trouvera des renseignements complémentaires sur les activités de formation de l'ONUDI (chap. III) dans la brochure intitulée "*Programme de formation industrielle proposé par l'ONUDI pour 1993*", que l'on peut obtenir auprès du Service de la mise en valeur des ressources humaines pour l'industrie de l'ONUDI.

Les moyens de formation indiqués ne sont pas réservés exclusivement aux titulaires de bourses de l'ONUDI. S'il remplit les conditions requises, tout ressortissant d'un pays en développement peut demander à participer à l'un de ces stages ou à être désigné pour y participer. Dans ce cas, les demandes ou les candidatures doivent être présentées directement à l'organisateur du stage considéré. *Les candidats à des bourses de l'ONUDI, quant à eux, doivent être désignés par leur gouvernement, et leurs dossiers doivent être soumis à l'Organisation par l'intermédiaire du représentant résident local du Programme des Nations Unies pour le développement (PNUD).*

L'ONUDI espère que la présente publication sera aussi utile que les précédentes à ceux qui, dans les pays en développement, ont besoin d'une formation industrielle. La vingt-deuxième édition du *Répertoire*, qui indiquera les possibilités de formation offertes pour l'année 1994, devrait être publiée à la fin de 1993.

## TABLE DES MATIÈRES

	<i>Page</i>
Préface .....	ix
 <i>Chapitre</i>	
I. POSSIBILITÉS DE FORMATION OFFERTES PAR DES INSTITUTIONS EN PAYS DÉVELOPPÉS ET PAYS EN DÉVELOPPEMENT .....	1
A. Pays et zones développés .....	1
1. Secteurs industriels .....	1
Industries extractives .....	1
Produits alimentaires et boissons; aliments pour animaux; produits à base de tabac .....	2
Textiles; articles d'habillement, préparation et teinture des fourrures .....	3
Tannage et préparation des cuirs; fabrication d'articles de voyage, de maroquinerie, de sellerie, de bourrellerie; fabrication de chaussures .....	4
Papier et articles en papier; édition; impression et reproduction de supports enregistrés .....	4
Coke, produits pétroliers raffinés et combustibles nucléaires; produits chimiques de base et autres; articles en caoutchouc et en matières plastiques .....	6
Autres produits minéraux non métalliques .....	8
Produits métallurgiques de base .....	8
Ouvrages en métaux, sauf machines et matériel; machines et matériel n.c.a.* .....	11
Machines de bureau, machines comptables et de traitement de l'information; équipement et appareils de radio, télévision et communications .....	14
Instruments médicaux, de précision et d'optique; horlogerie .....	16
Véhicules automobiles, remorques et semi-remorques; autres matériels de transport .....	17
Autres secteurs industriels et programmes intersectoriels .....	18
2. Services publics de distribution .....	19
Electricité, haute et basse tension .....	19
Ouvrages hydrauliques et adduction d'eau .....	20
3. Domaines liés à l'industrie .....	23
Construction (génie civil) .....	23
Services publics, divers .....	24

\*Non classés ailleurs.

<i>Chapitre</i>	<i>Page</i>
4. Le secteur industriel .....	26
Politiques, programmation, planification, production industrielles .....	26
Projets industriels .....	28
Petites industries et entreprises .....	29
Evacuation et recyclage des déchets industriels, protection de l'environnement .....	33
Economies d'énergie dans l'industrie .....	35
5. Services d'appui au développement industriel .....	36
Applications informatiques, traitement de l'information ..	36
Administration industrielle .....	37
Vulgarisation et information industrielles .....	41
Promotion de l'investissement et financement industriel ..	43
Commercialisation et promotion de l'exportation .....	43
Mise au point des techniques industrielles et des produits	45
Entretien et réparation .....	47
Contrôle de la qualité, essai des matériaux .....	48
Mécanisation, robotique, automatisation .....	50
Formation de formateurs et mise en valeur des ressources humaines .....	50
6. Gestion .....	55
Gestion de l'unité de production .....	55
Gestion industrielle .....	57
Développement des capacités de gestion .....	62
<b>B. Pays et zones en développement .....</b>	<b>65</b>
1. Secteurs industriels .....	65
Industries extractives .....	65
Produits alimentaires et boissons; aliments pour animaux; produits à base de tabac .....	67
Textiles; articles d'habillement, préparation et teinture des fourrures .....	73
Papier et articles en papier; édition; impression et reproduction de supports enregistrés .....	73
Coke, produits pétroliers raffinés et combustibles nucléaires; produits chimiques de base et autres; articles en caoutchouc et en matières plastiques .....	74
Autres produits minéraux non métalliques .....	77
Produits métallurgiques de base .....	79
Ouvrages en métaux, sauf machines et matériel; machines et matériel n.c.a.* .....	87
Machines et appareils électriques n.c.a.* .....	93
Machines de bureau, machines comptables et de traitement de l'information; équipement et appareils de radio, télévision et communications .....	95
Instruments médicaux, de précision et d'optique; horlogerie .....	97

\*Non classés ailleurs.

<i>Chapitre</i>	<i>Page</i>
Véhicules automobiles, remorques et semi-remorques; autres matériels de transport .....	99
Autres secteurs industriels et programmes intersectoriels ..	100
2. Services publics de distribution .....	104
Electricité, haute et basse tension .....	104
Ouvrages hydrauliques et adduction d'eau .....	107
3. Domaines liés à l'industrie .....	108
Construction (génie civil) .....	108
Services publics, divers .....	109
4. Le secteur industriel .....	118
Politiques, programmation, planification, production industrielles .....	118
Projets industriels .....	119
Petites industries et entreprises .....	121
Evacuation et recyclage des déchets industriels, protection de l'environnement .....	124
Economies d'énergie dans l'industrie .....	126
5. Services d'appui au développement industriel .....	128
Applications informatiques, traitement de l'information ..	128
Administration industrielle .....	130
Promotion de l'investissement et financement industriel ..	132
Commercialisation et promotion de l'exportation .....	134
Mise au point des techniques industrielles et des produits	135
Entretien et réparation .....	136
Contrôle de la qualité, essai des matériaux .....	138
Mécanisation, robotique et automatisation .....	139
Sécurité du travail et sûreté des produits .....	140
Formation de formateurs et mise en valeur des ressources humaines .....	140
6. Gestion .....	142
Gestion de l'unité de production .....	142
Gestion industrielle .....	145
Développement des capacités de gestion .....	149
Recherche opérationnelle .....	150
II. AUTRES POSSIBILITÉS DE FORMATION ET SESSIONS D'ÉTUDE DE COURTE DURÉE .....	153
A. Pays et zones développés .....	153
B. Pays et zones en développement .....	177
III. POSSIBILITÉS DE FORMATION OFFERTES PAR L'ONUDI ..	205
<i>Annexe.</i> Organismes nationaux de tutelle administrant les bourses de l'ONUDI et les programmes de voyages d'études .....	217

## *Prefacio*

La presente compilación de oportunidades de capacitación industrial para personal de países en desarrollo constituye la vigésima primera edición de una publicación que apareció por vez primera en 1972. Se ajusta a la Constitución de la Organización de las Naciones Unidas para el Desarrollo Industrial (ONUDI) aprobada en abril de 1979, que prescribe, entre otras funciones de la Organización, la siguiente:

“Organizará y apoyará programas de capacitación industrial tendientes a prestar asistencia a los países en desarrollo en la capacitación del personal técnico y de otras categorías pertinentes que resulte necesario en diversas fases para su desarrollo industrial acelerado.”

Dicha compilación o *Repertorio* se basa en las respuestas a un cuestionario enviado a gobiernos, organizaciones, instituciones y otras entidades que se ocupan de la capacitación industrial, en el que se solicitaba información sobre sus respectivas actividades de capacitación. A fin de reducir las dimensiones de esta edición, no se ha repetido ninguna entrada que figurase en ediciones anteriores salvo cuando se ha recibido una solicitud expresa de la entidad organizadora.

El *Repertorio* se divide en tres capítulos:

- I. Oportunidades de capacitación ofrecidas por instituciones en países desarrollados y en desarrollo;
- II. Cursos de corta duración y otros cursos que puedan ser de interés por sí mismos o como componentes de programas de capacitación de contenido más amplio, ofrecidos por instituciones en países desarrollados y en desarrollo;
- III. Oportunidades de capacitación organizadas y ofrecidas por la ONUDI (páginas amarillas).

En los capítulos I y II, las oportunidades de capacitación se presentan en el orden alfabético inglés de los nombres de los países en que se ofrece la capacitación, y en el capítulo III se enumeran por orden cronológico.

Bajo el encabezamiento “países en desarrollo” figuran los países para los que se ha previsto una cifra indicativa de planificación (CIP) con arreglo al Quinto Ciclo (1992-1996) del Programa de las Naciones Unidas para el Desarrollo (PNUD).

A fin de limitar las dimensiones del *Repertorio* se agrupan bajo un encabezamiento común las series de diferentes cursos de corta duración ofrecidos por el mismo organizador. Se espera que ello no cause inconvenientes al lector para encontrar los cursos que le interesen.

Los cursos se clasifican fundamentalmente por ramas industriales. Esto significa que los temas relativos a una actividad industrial pero pertinentes tan sólo a una rama determinada, figurarán en la sección referente a esa rama. Por ejemplo, un curso sobre “Control de calidad en fábricas de amonio-urea” figura en la sección “Industrias químicas”. Análogamente, se procuró destacar la actividad básica al clasificar los cursos concernientes a más de una actividad industrial; por



ejemplo, un curso sobre "Aplicación de la informática en la gestión" figurará en la sección "Gestión industrial".

Conforme a su mandato, la ONUDI ha de acrecentar o actualizar la competencia profesional del personal técnico, directivo y administrativo, incluidos los empresarios, dedicado a actividades relacionadas con la industria y su desarrollo. Por consiguiente, con escasas excepciones, no se han incluido en el *Repertorio* los cursos académicos que forman parte de los planes de estudio ordinarios de universidades, institutos de capacitación profesional o instituciones similares, ya que tales actividades son de la competencia de la Organización Internacional del Trabajo (OIT) o de la Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura (UNESCO). En la mayoría de los casos, este criterio también se aplica a los cursos de más de un año de duración, que por ello generalmente no se incluyen en el *Repertorio*. De modo similar, tampoco se incluyen los cursos a tiempo parcial.

La ONUDI no está en condiciones de dar más detalles sobre los cursos enumerados en los capítulos I y II; la información suplementaria al respecto debe obtenerse solicitándola al organizador, cuya dirección postal figura junto a cada entrada. En el "Programa de Ofertas de Capacitación Industrial de la ONUDI para 1993", que puede solicitarse a la Subdivisión de Perfeccionamiento de Recursos Humanos Industriales de la ONUDI, se ofrece más información sobre las actividades de capacitación de la organización (capítulo III).

Las oportunidades de capacitación indicadas en el *Repertorio* no se ofrecen sólo a becarios de la ONUDI. Cualquier persona calificada de un país en desarrollo puede solicitar su admisión o ser presentada como candidato para participar en uno de estos cursos. Esta solicitud o candidatura puede dirigirse directamente al organizador del curso. *En cambio, las candidaturas a becas de la ONUDI deben ser presentadas a la Organización por los respectivos gobiernos, por conducto del Representante Residente local del programa de las Naciones Unidas para el Desarrollo (PNUD).*

Se espera que esta edición del *Repertorio* siga siendo de utilidad para que las personas de los países en desarrollo que desean recibir capacitación industrial encuentren los cursos adecuados. La publicación de la vigésima segunda edición del *Repertorio*, que comprenderá los cursos que vayan a ofrecerse en 1994, está prevista para finales de 1993.

## ÍNDICE

	<i>Página</i>
Prefacio .....	xv
<i>Capítulo</i>	
I. OPORTUNIDADES DE CAPACITACIÓN OFRECIDAS POR INSTITUCIONES EN PAÍSES DESARROLLADOS Y PAÍSES EN DESARROLLO .....	1
A. Países y zonas desarrollados .....	1
1. Ramas industriales .....	1
Minería .....	1
Productos alimenticios y bebidas; alimento para ganado; productos de tabaco .....	2
Productos textiles; prendas de vestir; adobo y teñido de pieles .....	3
Curtido y adobo de cueros; fabricación de maletas, bolsos de mano, artículos de talabartería y guarnicionería, y calzado .....	4
Papel y productos de papel; edición; impresión y reproducción de grabaciones .....	4
Coque, productos de la refinación del petróleo y combustible nuclear; sustancias y productos químicos; productos de caucho y plástico .....	6
Otros productos minerales no metálicos .....	8
Metales comunes .....	8
Productos elaborados de metal, excepto maquinaria y equipo; maquinaria y equipo n.c.p.* .....	11
Maquinaria de oficina, contabilidad e informática; equipo y aparatos de radio, televisión y comunicaciones .....	14
Instrumentos médicos, ópticos y de precisión; relojes .....	16
Vehículos automotores, remolques y semirremolques; otros tipos de equipo de transporte .....	17
Otras ramas industriales y programas intersectoriales .....	18
2. Servicios públicos .....	19
Electricidad, luz y energía .....	19
Abastecimiento y distribución de agua .....	20
3. Esferas relacionadas con la industria .....	23
Construcción (ingeniería civil) .....	23
Diversos servicios públicos .....	24
4. El sector industrial .....	26
Política, programación, planeamiento y producción industriales .....	26

\*No clasificados en otra parte.

<i>Capítulo</i>	<i>Página</i>
Proyectos industriales .....	28
Pequeñas industrias y los empresarios .....	29
Evacuación de residuos industriales, reciclado, protección del medio ambiente .....	33
Conservación de la energía en la industria .....	35
<b>5. Servicios de apoyo al desarrollo industrial .....</b>	<b>36</b>
Aplicaciones de la informática, procesamiento de datos ..	36
Administración industrial .....	37
Extensión industrial e información conexa .....	41
Promoción de las inversiones y financiación industrial ...	43
Comercialización y promoción de las exportaciones .....	43
Desarrollo de tecnología industrial y de productos .....	45
Mantenimiento y reparación .....	47
Control de calidad, ensayo de materiales .....	48
Mecanización, robótica, automatización .....	50
Formación de profesionales de capacitación y perfeccionamiento de recursos humanos .....	50
<b>6. Gestión .....</b>	<b>55</b>
Gestión de fábricas .....	55
Gestión industrial .....	57
Perfeccionamiento de la gestión .....	62
<b>B. Países y zonas en desarrollo .....</b>	<b>65</b>
<b>1. Ramas industriales .....</b>	<b>65</b>
Minería .....	65
Productos alimenticios y bebidas; alimento para ganado; productos de tabaco .....	67
Productos textiles; prendas de vestir; adobo y teñido de pieles .....	73
Papel y productos de papel; edición; impresión y reproducción de grabaciones .....	73
Coque, productos de la refinación del petróleo y combustible nuclear; sustancias y productos químicos; productos de caucho y plástico .....	74
Otros productos minerales no metálicos .....	77
Metales comunes .....	79
Productos elaborados de metal, excepto maquinaria y equipo; maquinaria y equipo n.c.p.* .....	87
Maquinaria y aparatos eléctricos n.c.p.* .....	93
Maquinaria de oficina, contabilidad e informática; equipo y aparatos de radio, televisión y comunicaciones .....	95
Instrumentos médicos, ópticos y de precisión; relojes ....	97
Vehículos automotores, remolques y semirremolques; otros tipos de equipo de transporte .....	99
Otras ramas industriales y programas intersectoriales ....	100

\*No clasificados en otra parte.

<i>Capítulo</i>	<i>Página</i>
2. Servicios públicos .....	104
Electricidad, luz y energía .....	104
Abastecimiento y distribución de agua .....	107
3. Esferas relacionadas con la industria .....	108
Construcción (ingeniería civil) .....	108
Diversos servicios públicos .....	109
4. El sector industrial .....	118
Política, programación, planeamiento y producción industriales .....	118
Proyectos industriales .....	119
Pequeñas industrias y los empresarios .....	121
Evacuación de residuos industriales, reciclado, protección del medio ambiente .....	124
Conservación de la energía en la industria .....	126
5. Servicios de apoyo al desarrollo industrial .....	128
Aplicaciones de la informática, procesamiento de datos ..	128
Administración industrial .....	130
Promoción de las inversiones y financiación industrial ...	132
Comercialización y promoción de las exportaciones .....	134
Desarrollo de tecnología industrial y de productos .....	135
Mantenimiento y reparación .....	136
Control de calidad, ensayo de materiales .....	138
Mecanización, robótica, automatización .....	139
Seguridad profesional y de los productos .....	140
Formación de profesionales de capacitación y perfeccionamiento de recursos humanos .....	140
6. Gestión .....	142
Gestión de fábricas .....	142
Gestión industrial .....	145
Perfeccionamiento de la gestión .....	149
Investigación operativa .....	150
II. OTRAS OPORTUNIDADES DE CAPACITACIÓN Y CURSOS CORTOS .....	153
A. Países y zonas desarrollados .....	153
B. Países y zonas en desarrollo .....	177
III. OPORTUNIDADES DE CAPACITACIÓN OFRECIDAS POR LA ONUDI .....	205
<i>Anexo</i> Entidades nacionales de supervisión que administran becas de la ONUDI y programas de viajes de estudios .....	217

## **Chapter I. Training opportunities offered by institutions in developed and developing countries**

**Chapitre I. Possibilités de formation offertes par des institutions en pays développés et pays en développement**

**Capítulo I. Oportunidades de capacitación ofrecidas por instituciones en países desarrollados y países en desarrollo**

### **A. DEVELOPED COUNTRIES AND AREAS/PAYS ET ZONES DÉVELOPPÉS/PAÍSES Y ZONAS DESARROLLADOS**

#### **1. INDUSTRIAL BRANCHES/SECTEURS INDUSTRIELS/RAMAS INDUSTRIALES**

##### **Mining/Industries extractives/Minería**

###### **Chemical analysis of mineral samples**

*Short description:* Chemical analysis of ores and mineral samples: titrimetry, electrolysis, polarography, spectrophotometry, atomic absorption, fluorimetry, plasma emission spectrometry. The training of a group of staff from the same institution (e.g. of a mineral processor, a chemist and the head of laboratory) is encouraged. *Commencing date:* To be arranged. *Duration:* To be arranged. *Qualifications:* Degree in chemistry. English, French, Spanish. *Deadline for application:* —. *Fees:* BF 60,000-80,000 per month.

*Organizer:* Université catholique de Louvain  
Laboratoire de traitement des minerais  
2, place Ste Barbe  
1348 Louvain-la-Neuve, Belgium

###### **Managing a chemical-analysis or mineral-processing laboratory**

*Short description:* Practical organization and running of a laboratory comprising: administrative and technical management, safety, technical literature, type of equipment to be selected, work methodology, deontology, working conditions of the staff. *Commencing date:* To be arranged. *Duration:* 4-6 weeks. *Qualifications:* Heads of laboratories. English, French, Spanish. *Deadline for application:* To be arranged. *Fees:* BF 60,000-80,000 per month.

*Organizer:* Université catholique de Louvain  
Laboratoire de traitement des minerais  
2, place Ste Barbe  
1348 Louvain-la-Neuve, Belgium

###### **Mineral dressing**

*Short description:* Ore beneficiation by mineral dressing and hydrometallurgical techniques; laboratory and pilot-plant facilities; computer assistance. Materials studied:

metallic and non-metallic ores, solid wastes, residues, scraps, dusts and slags. Industry visits. The training of a group of staff from the same institution (e.g. a mineral processor, a chemist and the head of a laboratory) is encouraged. *Commencing date:* To be arranged. *Duration:* 3 months to 1 year. *Qualifications:* Degree in metallurgical or mining engineering or in geology. English, French, Spanish. *Deadline for application:* To be arranged. *Fees:* BF 80,000-100,000 per month.

*Organizer:* Université catholique de Louvain  
Laboratoire de traitement des minerais  
2, place Ste Barbe  
1348 Louvain-la-Neuve, Belgium

**Food products and beverages; animal feed; tobacco products/Produits alimentaires et boissons; aliments pour animaux; produits à base de tabac/ Productos alimenticios y bebidas; alimento para ganado; productos de tabaco**

#### **Quality management in the fishing industry**

*Short description:* Integrating quality, economy and technology to formulate a quality strategy plan for improvement. *Commencing date:* May. *Duration:* 4 weeks. *Qualifications:* Bachelor's degree in a relevant field or at least 3 years of professional experience. English. *Deadline for application:* April. *Fees:* DKr 34,500, including board and lodging.

*Organizer:* The North Sea Centre  
Willemoesvej  
P.O. Box 104  
9850 Hirtshals, Denmark

#### **Refrigeration**

*Short description:* Preservation of food by freezing. *Commencing date:* September. *Duration:* 36 weeks. *Qualifications:* Technical diploma. English, French, Italian. *Deadline for application:* May. *Fees:* To be arranged (scholarship sponsored by Italian Ministry of Foreign Affairs available).

*Organizer:* Istituto Culturale Italiano (ICI)  
P.O. Box 91  
San Benedetto del Tronto (A.P.), 63039 Italy

#### **International animal feed training programme**

*Short description:* Practice-oriented knowledge and skills in the supply and preparation of feed for cattle, poultry, pigs and other species of farm animals, with emphasis on the optimum utilization of locally available nutrients; includes nutritional, technical and economic/organizational aspects. *Commencing date:* February. *Duration:* 3 months. *Qualifications:* Diploma in agricultural science with major in animal production; direct and demonstrable links with the compound animal feed production. English. *Deadline for application:* 2 months before commencing date. *Fees:* f. 3,860.

*Organizer:* Bameveld College International Training Centre on Animal Husbandry and Milling Technology  
P.O. Box 64  
3770 AB Bameveld, Netherlands

### **Dairy husbandry and milk processing**

*Short description:* Dairy husbandry; milk procurement; small-scale milk processing; marketing of milk products; applied economics; training and extension methodology; rural development. *Commencing date:* January. *Duration:* 6 months. *Qualifications:* Diploma in agriculture; bachelor's degree in animal science, food processing or veterinary science. English. *Deadline for application:* 3 months before commencing date. *Fees:* f. 4,500.

*Organizer:* Dairy Training Centre Friesland  
Sanjesreed 4  
P.O. Box 85  
9062 ZJ Oenkerk, Netherlands

### **Planning and appraisal of agro-industrial projects**

*Short description:* Development projects with agricultural and industrial components, e.g. the supply of crops, livestock, fibres, timber etc. for industrial processing; identification, planning, appraisal, selection and implementation of projects. *Commencing date:* September. *Duration:* 12 weeks. *Qualifications:* Degree and relevant professional experience. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* The Director, Agro-Industrial Course  
Development and Project Planning Centre  
University of Bradford  
Bradford, W. Yorks, BD7 1DP, United Kingdom

### **Textiles; wearing apparel, dressing and dyeing of fur/ Textiles; articles d'habillement, préparation et teinture des fourrures/ Productos textiles; prendas de vestir; adobo y tenido de pieles**

#### **Cotton fibre testing**

*Short description:* Theoretical background of cotton fibre properties and testing techniques; significance of the different quality parameters for the manufacturing industry. *Commencing date:* To be arranged. *Duration:* To be arranged. *Qualifications:* English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Cotton Technology International  
Suite 200, Scotscroft Building  
856 Wilmslow Road  
Didsbury, Manchester M20 8RX, United Kingdom

#### **Textile technology**

*Short description:* Fundamentals of textile science and textile technology; properties of natural and synthetic fibres; testing and quality assurance; yarn manufacture; knitting; weaving; non-wovens; printing, dyeing and finishing. The courses can be modified to suit any individual needs. *Commencing date:* To be arranged. *Duration:* 1-20 weeks. *Qualifications:* Degree standard, with basic knowledge in textile technology. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* University of Leeds  
Course Coordinator  
Department of Textile Industries  
Leeds, LS2 9JT, United Kingdom

**Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear/Tannage et préparation des cuirs; fabrication d'articles de voyage, de maroquinerie, de sellerie, de bourrellerie; fabrication de chaussures/Curtido y adobo de cueros; fabricación de maletas, bolsos de mano, artículos de talabartería y guarnicionería, y calzado**

**Chimie du cuir**

*Brève description* : Tannage, retannage, travail de rivière, finissage, fabrication et contrôle.  
*Début du cours* : A arranger. *Durée* : 2 jours à 10 semaines. *Qualifications* : Français.  
*Date limite d'inscription* : —. *Droits d'inscription* : FF 10 000-30 000.

*Organisateur* : Itech-Lyon  
Formation continue  
181-203, avenue Jean Jaurès  
69007 Lyon, France

**Shoe materials quality control**

*Short description*: Physical and mechanical properties of shoe materials (leather and non-leather) and shoe components; testing, quality guidelines, reporting. *Commencing date*: April, September. *Duration*: 13 weeks. *Qualifications*: Basic knowledge of chemistry and physics. English. *Deadline for application*: 4 months before commencing date. *Fees*: To be arranged.

*Organizer*: TNO Centre for Leather and Shoe Research  
P.O. Box 135  
5140 AC Waalwijk, Netherlands

**Shoe modelling and designing**

*Short description*: Sizing systems; insole designing and pattern cutting; copying lasts as base for upper designing; designing and pattern cutting different shoe types; shoe fashion information; and designing, grading, free designing and manufacturing to bottom stage. *Commencing date*: April, September. *Duration*: 13 weeks. *Qualifications*: Basic knowledge of shoe technology. English. *Deadline for application*: 4 months before commencing date. *Fees*: To be arranged.

*Organizer*: TNO Centre for Leather and Shoe Research  
P.O. Box 135  
5140 AC Waalwijk, Netherlands

**Paper and paper products; publishing; printing and reproduction of recorded media/Papier et articles en papier; édition; impression et reproduction de supports enregistrés/Papel y productos de papel; edición; impresión y reproducción de grabaciones**

**Offset printing**

*Short description*: Fundamentals in mounting, platemaking and offset printing, technical and practical skills required for operating a printing press. *Commencing date*: August. *Duration*: 11 months. *Qualifications*: Basic knowledge in printing. English. *Deadline for application*: March. *Fees*: To be arranged.



**Organizer:** PRINTPROMOTION  
Lyonerstraße 18  
W-6000 Frankfurt 71, Germany

### **Reproduction photography**

*Short description:* Fundamentals of reproduction photography; technical and practical skill required for operating the necessary equipment, including application of required materials. *Commencing date:* August. *Duration:* 11 months. *Qualifications:* Basic knowledge in reproduction photography. English. *Deadline for application:* March. *Fees:* To be arranged.

**Organizer:** PRINTPROMOTION  
Lyonerstraße 18  
W-6000 Frankfurt 71, Germany

### **Upgrading in printing**

*Short description:* Familiarize compositors, platemakers, scanner operators and offset printers with the state of the art. *Commencing date:* August. *Duration:* 4 months. *Qualifications:* Relevant practical experience. English. *Deadline for application:* March. *Fees:* To be arranged.

**Organizer:** PRINTPROMOTION  
Lyonerstraße 18  
W-6000 Frankfurt 71, Germany

### **Graphic design**

*Short description:* Typography; composition; chromatics; illustration; photography; silk-screen printing; extension-oriented design; workshop on shopfloor management; desktop publishing. *Commencing date:* January, August. *Duration:* 18 weeks. *Qualifications:* Vocational training or professional experience. English. *Deadline for application:* 3 months before commencing date. *Fees:* f. 18,100.

**Organizer:** Graphic Media Development Centre (GMDC)  
Christoffel Plantijnstraat 1  
P.O. Box 20014  
2500 EA The Hague, Netherlands

### **Print production**

*Short description:* Text production; desktop publishing; montage; photography and offset-plate making; offset printing and print finishing; graphic design and layout; workshop on shopfloor management; silkscreen printing. *Commencing date:* January, August. *Duration:* 18 weeks. *Qualifications:* Secondary education and professional experience in the printing industry. English. *Deadline for application:* 3 months before commencing date. *Fees:* f. 17,725.

**Organizer:** Graphic Media Development Centre (GMDC)  
Christoffel Plantijnstraat 1  
P.O. Box 20014  
2500 EA The Hague, Netherlands

### **Public-sector printing**

*Short description:* Use of computers, telecommunications and reprographics to produce print-on-paper. *Commencing date:* July. *Duration:* 10 weeks. *Qualifications:* English. *Deadline for application:* 8 weeks before commencing date. *Fees:* £4,380.

**Organizer:** Royal Institute of Public Administration  
International Division, Regent's College  
Inner Circle  
Regent's Park  
London, NW1 4NS, United Kingdom

**Coke, refined petroleum products and nuclear fuel; chemicals and chemical products; rubber and plastic products/Coke, produits pétroliers raffinés et combustibles nucléaires; produits chimiques de base et autres; articles en caoutchouc et en matières plastiques/Coque, productos de la refinación del petróleo y combustible nuclear; sustancias y productos químicos; productos de caucho y plástico**

**Advanced technology in petrochemicals, polymers and plastics**

*Short description:* International programme with special emphasis on monomers and polymers manufacturing and polymer processing. *Commencing date:* January. *Duration:* 8 months. *Qualifications:* Professionals with industry experience. *English.* *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

**Organizer:** ENSPM  
1 et 4, avenue de Bois-Préau  
B.P. 311  
92506 Rueil-Malmaison Cedex, France  
and  
McGill University, Montreal, Canada

**Analytical methods and techniques applied to crude oil and petroleum products**

*Short description:* Major analytical methods, product analysis by type, practical work in laboratories. *Commencing date:* October. *Duration:* 3 weeks. *Qualifications:* Engineers, supervisory staff of laboratories. *English.* *Deadline for application:* 2 months before commencing date. *Fees:* F 23,000.

**Organizer:** ENSPM — Formation industrie  
232, avenue Napoléon Bonaparte  
92506 Rueil-Malmaison, France

**Operation, maintenance and inspection of rotating machinery**

*Short description:* Technology and operation of rotating machines, technology and maintenance of the machine components, forecasting breakdowns. *Commencing date:* August. *Duration:* 3 weeks. *Qualifications:* Supervisory and technical staff of refining, petrochemical and chemical industries. *English.* *Deadline for application:* 2 months before commencing date. *Fees:* F 18,700.

**Organizer:** ENSPM — Formation industrie  
232, avenue Napoléon Bonaparte  
92506 Rueil-Malmaison, France

**Fertilizer technology**

*Short description:* Production planning and plant management; process control; ammonia synthesis; nitric acid and ammonium nitrate technology; instrumentation technology;

pollution control; water preparation; health and safety; maintenance. *Commencing date:* To be arranged. *Duration:* 12 weeks. *Qualifications:* Relevant experience. English. *Deadline for application:* 1 month before commencing date. *Fees:* To be arranged.

*Organizer:* Chattaway (UK) Training Services  
Pool Chambers  
26 Dam Street  
Lichfield, Staffordshire WS13 6AA, United Kingdom

#### **Energy management in chemical process plants**

*Short description:* Practical and proven methods that ICI uses to reduce the energy consumption in its chemical process plants; including energy auditing, computerized modelling/optimization and revamp studies. *Commencing date:* September. *Duration:* 3 weeks. *Qualifications:* Graduate engineers or experienced personnel with responsibility for energy management in chemical plants. English. *Deadline for application:* 3 weeks before commencing date. *Fees:* To be arranged.

*Organizer:* ICI Chemicals and Polymers Ltd.  
Process Plant Services  
P.O. Box 1  
Billingham, Cleveland TS23 1LB, United Kingdom

#### **Maintenance of chemical plants**

*Short description:* Maintenance organization required to effectively operate large-scale chemical plants; planning for routine maintenance and major overhauls; use of computerized systems for work scheduling and planning; techniques the host organization employs in maintaining its own chemical plants. *Commencing date:* June. *Duration:* 3 weeks. *Qualifications:* Graduate engineers or experienced managers in maintenance engineering function. English. *Deadline for application:* 3 weeks before commencing date. *Fees:* To be arranged.

*Organizer:* ICI Chemicals and Polymers Ltd.  
Process Plant Services  
P.O. Box 1  
Billingham, Cleveland TS23 1LB, United Kingdom

#### **Safety management and major emergency control in chemical plants**

*Short description:* Organization design, developing a safety conscious culture; UK and international legislation; ICI standards; major incident planning and control; hazard studies for new processes and plants. *Commencing date:* May. *Duration:* 3 weeks. *Qualifications:* Graduate engineers or safety managers. English. *Deadline for application:* 3 weeks before commencing date. *Fees:* To be arranged.

*Organizer:* ICI Chemicals and Polymers Ltd.  
Process Plant Services  
P.O. Box 1  
Billingham, Cleveland TS23 1LB, United Kingdom

#### **Efficient marketing management for fertilizer and other agri-inputs**

*Short description:* Marketing management, dealer functions, farmers' needs identification, fertilizer promotion programmes; factors influencing marketing decisions; price factors; modern management concepts and communication skills; financial analysis and

management. *Commencing date:* August. *Duration:* 5 weeks. *Qualifications:* Middle- to senior-level managers and government officials responsible for any aspect of fertilizers or agri-marketing. English. *Deadline for application:* July. *Fees:* \$US 2,450.

*Organizer:* International Fertilizer Development Center (IFDC)  
P.O. Box 2040  
Muscle Shoals, Alabama 35662  
United States of America

*Venue:* United States of America: Muscle Shoals, Alabama; Tampa, Florida;  
Lakeland, Florida; St. Louis, Missouri; Kansas City, Missouri;  
Columbus, Mississippi

#### **Modern techniques in fertilizer logistics**

*Short description:* Theoretical and practical aspects of fertilizer distribution, packaging, handling and warehousing; field trips to loading, unloading, baggage warehouses and transportation facilities, ports, fertilizer plants. *Commencing date:* June. *Duration:* 3 weeks. *Qualifications:* Senior- and middle-level officials and managers in governmental or industrial organizations with responsibility for planning or operating systems for physical distribution of fertilizers. English. *Deadline for application:* May. *Fees:* \$US 1,800.

*Organizer:* International Fertilizer Development Center (IFDC)  
P.O. Box 2040  
Muscle Shoals, Alabama 35662  
United States of America

*Venue:* Belgium, Germany, Ireland, Netherlands, United Kingdom

#### **Other non-metallic mineral products/Autres produits minéraux non métalliques/Otros productos minerales no metálicos**

##### **Construction materials technology and testing**

*Short description:* Part 1: Basic materials properties and standard tests. Part 2: Advanced technology and testing, and individually planned project. *Commencing date:* Part 1: September; part 2: January 1994. *Duration:* Part 1: 13 weeks; part 2: 13 weeks. *Qualifications:* Some involvement with construction materials and knowledge of elementary mathematics, physics and chemistry. English. *Deadline for application:* August. *Fees:* £5,590 + VAT.

*Organizer:* Laing Technology Group Ltd.  
P.O. Box 23  
Page Street  
London NW7 2ER, United Kingdom

#### **Basic metals/Produits métallurgiques de base/Metales comunes**

##### **Design and operation of carbon-in-leach/pulp gold treatment plants**

*Short description:* Basic operating principles of CIL/CIP plants and the design of each major section including crushing and milling, flotation, thickening and filtration,

carbon stripping and smelting. *Commencing date:* To be arranged. *Duration:* 12-16 weeks. *Qualifications:* Graduate engineers or technologists with some industrial experience. English. *Deadline for application:* 3 months before commencing date. *Fees:* To be arranged.

*Organizer:* Brodie-Hall Research and Consultancy Centre  
Office of University Planning and Development  
Curtin University of Technology  
GPO Box U1987  
Perth, Western Australia 6001

#### **Maintenance of mineral processing plants**

*Short description:* This course can be custom-designed to deal with gold treatment plants, nickel concentration plants, mineral sands separation plants or iron-ore beneficiation plants. *Commencing date:* To be arranged. *Duration:* 12-16 weeks. *Qualifications:* Graduate engineers or technologists with some industrial experience. English. *Deadline for application:* 3 months before commencing date. *Fees:* To be arranged.

*Organizer:* Brodie-Hall Research and Consultancy Centre  
Office of University Planning and Development  
Curtin University of Technology  
GPO Box U1987  
Perth, Western Australia 6001

#### **European welding engineer**

*Short description:* Welding and relevant processes. *Commencing date:* To be arranged. *Duration:* 12 weeks. *Qualifications:* Degree in engineering. German. *Deadline for application:* 1 week before commencing date. *Fees:* S 50,000.

*Organizer:* Schweißtechnische Zentralanstalt  
Arsenal Objekt 207  
1030 Vienna, Austria

#### **European welding technologist**

*Short description:* Welding and relevant processes based on a higher technical education. *Commencing date:* To be arranged. *Duration:* 8 weeks. *Qualifications:* Professional qualifications. German. *Deadline for application:* 1 week before commencing date. *Fees:* To be arranged.

*Organizer:* Schweißtechnische Zentralanstalt  
Arsenal Objekt 207  
1030 Vienna, Austria

#### **Cold rolling mills — operation and maintenance**

*Short description:* Production of strips; maintenance of the equipment. *Commencing date:* To be arranged. *Duration:* 6 weeks. *Qualifications:* Degree in engineering; technical education with 6 years of experience. English, Arabic. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 200 per week.

*Organizer:* Egyptian Iron and Steel Co. (EISCO)  
Cold Rolling Strips Sector  
El-Tabbin  
Cairo, Egypt

### **European welding engineer**

*Short description:* Technical, practical, theoretical training and examination including all fields of welding. *Commencing date:* To be arranged. *Duration:* 12 weeks. *Qualifications:* Graduates of a technical college or school. German. *Deadline for application:* 4 weeks before commencing date. *Fees:* DM 5,220.

*Organizer:* Schweißtechnische Lehr- und Versuchsanstalt (SLV) Halle GmbH  
Köthener Straße 33a  
4060 Halle, Germany

### **European welding engineer**

*Short description:* Welding processes and equipment; materials and their behaviour during welding; construction and design; fabrication, applications engineering. *Commencing date:* January. *Duration:* 12 weeks. *Qualifications:* Engineers. German. *Deadline for application:* 4 weeks before commencing date. *Fees:* DM 5,980.

*Organizer:* Schweißtechnische Lehr- und Versuchsanstalt Hannover  
Am Lindener Hafen 1  
3000 Hannover 91, Germany

### **Welding engineer**

*Short description:* Welding processes and equipment; materials and their behaviour during welding construction and design; fabrication, applications engineering. *Commencing date:* March, September. *Duration:* 12 weeks. *Qualifications:* Engineers. German. *Deadline for application:* —. *Fees:* DM 6,000.

*Organizer:* Schweißtechnische Lehr- und Versuchsanstalt München  
Schachenmeierstrasse 37  
8000 München 19, Germany

### **Productivity improvement in the foundry industry**

*Short description:* Productivity increase by improving management and technical aspects; with emphasis on basic ferrous and non-ferrous castings. *Commencing date:* To be arranged. *Duration:* 3 weeks. *Qualifications:* English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 100.

*Organizer:* Asian Productivity Organization  
8-4-14, Akasaka, Minato-ku  
Tokyo 107, Japan

### **Welding engineering**

*Short description:* For high-level professionals; welding manufacturing processes; quality control and inspection; innovation in welding; new production technologies in welding. *Commencing date:* October. *Duration:* 7 months. *Qualifications:* Mechanical, metallurgical and material, and technical engineers, with at least one year of experience. Portuguese. *Deadline for application:* August. *Fees:* Esc 200,000.

*Organizer:* Instituto de Soldadura e Qualidade  
Rua Tomas de Figueiredo 16-A  
1500 Lisbon, Portugal

### **Computer-assisted welding techniques**

*Short description:* Welding processes, materials, construction, fabrication; computer-aided creation of fabricated drawings, symbol creation; computer-assisted selection of pre-

ferred welding technique. *Commencing date:* To be arranged. *Duration:* 3 months. *Qualifications:* Engineering background. English. *Deadline for application:* None. *Fees:* To be arranged.

*Organizer:* Manufacturing Division, Loughborough College  
Radmoor  
Loughborough, Leicestershire LE11 3BT, United Kingdom

#### **Welding instructor**

*Short description:* Gas welding, MMA welding, TIG welding, MAG/MIG welding. *Commencing date:* To be arranged. *Duration:* 2 months. *Qualifications:* 3 years of experience in welding. English. *Deadline for application:* None. *Fees:* To be arranged.

*Organizer:* Manufacturing Division, Loughborough College  
Radmoor  
Loughborough, Leicestershire LE11 3BT, United Kingdom

#### **Foundry technology**

*Short description:* Basic principles of metal founding: appreciation of the effect of casting design; material selection; finished products. Foundry principles will be examined in relation to specific processes in the manufacture and use of castings. *Commencing date:* February, August. *Duration:* 13 weeks. *Qualifications:* English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* METCOM Training  
Savoy Tower  
77 Renfrew Street  
Glasgow G2 3BZ, Scotland, United Kingdom

#### **Weld quality and non-destructive testing**

*Short description:* Welding inspection and quality assurance; ISO 9000 appraisal and accreditation; non-destructive testing methods, manual and automated; radiography, ultrasonics, magnetic particle, penetrant and eddy current NDT; project technology; practical work and skill training. *Commencing date:* January, April, September. *Duration:* 12 weeks. *Qualifications:* National certificate (equivalent to City and Guilds, SCOTVEC, BTec) and industrial experience. English. *Deadline for application:* 6 weeks before commencing date. *Fees:* £4,950.

*Organizer:* Prof. W. McEwan, Director  
Paisley College Quality Centre  
High Street  
Paisley PA1 2BE, Renfrewshire, Scotland, United Kingdom

**Fabricated metal products, except machinery and equipment; machinery and equipment n.e.c./Ouvrages en métaux, sauf machines et matériel; machines et matériel n.c.a./Productos elaborados de metal, excepto maquinaria y equipo; maquinaria y equipo n.c.p.**

#### **Farm machinery for field crop production**

*Short description:* Preventive maintenance organization; selection and operation of appropriate technologies; optimization of hand-operated and tractor-powered equipment;

multi-farm use of agricultural machinery; environmental impact studies; health and safety precautions. *Commencing date:* July. *Duration:* 13 weeks. *Qualifications:* Diploma or bachelor of science; several years of experience. English, French, Spanish. *Deadline for application:* February. *Fees:* DM 10,800 (including study materials, protective clothing, study tours).

*Organizer:* Deutsche Lehranstalt für Agrartechnik  
Bartningstraße 49  
6100 Darmstadt, Germany

#### **Management of agricultural and related workshops**

*Short description:* Workshop planning; parts management; health, safety and environmental measures; personnel management; efficient performance of machinery, microcomputers in project management, financial management and stock control. *Commencing date:* April. *Duration:* 12 weeks. *Qualifications:* Managers and other workshop professionals. English, French. *Deadline for application:* February. *Fees:* DM 12,575 (including study materials, protective clothing, study tours).

*Organizer:* Deutsche Lehranstalt für Agrartechnik  
Bartningstraße 49  
6100 Darmstadt, Germany

#### **Management of irrigation equipment**

*Short description:* Irrigation engineering equipment: selection, maintenance and repair; surface sprinkler and trickle irrigation, field drainage, irrigation agronomy; health and safety precautions, environmental impact studies. *Commencing date:* July. *Duration:* 13 weeks. *Qualifications:* Diploma or bachelor of science, or several years of relevant experience. English, French. *Deadline for application:* February. *Fees:* DM 12,375 (including study materials, protective clothing, study tours).

*Organizer:* Deutsche Lehranstalt für Agrartechnik  
Bartningstraße 49  
6100 Darmstadt, Germany

#### **Performance testing of agricultural machinery**

*Short description:* Evaluation of existing tractor power and tractor-powered machinery, description of tested machinery, reports on mechanical and functional reliability. *Commencing date:* July. *Duration:* 13 weeks. *Qualifications:* Test engineers, research workers, training experts. English. *Deadline for application:* February. *Fees:* DM 13,375 (including study materials, protective clothing, study tours).

*Organizer:* Deutsche Lehranstalt für Agrartechnik  
Bartningstraße 49  
6100 Darmstadt, Germany

#### **Tractors, power units and automotive vehicles in agriculture and related fields**

*Short description:* Preventive maintenance organization, diagnosis and testing of component parts, organization of workshop and overhaul procedures, staff organization and training of personnel, workshop and equipment park logistics. *Commencing date:* April. *Duration:* 13 weeks. *Qualifications:* Diploma or bachelor of science, or several years of relevant experience. English, French. *Deadline for application:* February. *Fees:* DM 10,800 (including study materials, protective clothing, study tours).



**Organizer:** Deutsche Lehranstalt für Agrartechnik  
Bartningstraße 49  
6100 Darmstadt, Germany

#### **Industrial use of high-density energy beams**

*Short description:* Training for high-level professionals in new technologies of processing materials and their industrial applications (laser, electron beam and water jet). *Commencing date:* March. *Duration:* 2 1/2 months. *Qualifications:* Degree in engineering. *Portuguese. Deadline for application:* January. *Fees:* Esc 110,000.

**Organizer:** Instituto de Soldadura e Qualidade  
Rua Tomás de Figueiredo 16A  
1500 Lisbon, Portugal

#### **Maintenance management of vehicles, equipment and plant**

*Short description:* Skills for managers to reinforce the concept of planned maintenance of plant vehicles and equipment. *Commencing date:* March, September. *Duration:* 12 weeks. *Qualifications:* Relevant working experience. *English. Deadline for application:* 4 weeks before commencing date. *Fees:* Approximately £8,040.

**Organizer:** Crown Agents  
Manpower Development Services  
St. Nicholas House  
Sutton, Surrey SM1 1EL, United Kingdom

**Venue:** Crown Agents  
Management Training Centre  
3-10 Marine Parade  
Worthing, Sussex BN11 3PW, United Kingdom

#### **Computer-aided machining (CNC)**

*Short description:* Computer-aided machining using a comprehensive range of machine control systems. *Commencing date:* January, April, August, October. *Duration:* 12 weeks. *Qualifications:* English. *Deadline for application:* 1 month before commencing date. *Fees:* £325 per week.

**Organizer:** East Kilbride and District Engineering G.T.A. Ltd.  
3 Law Place  
Nerston Industrial Estate  
East Kilbride, G74 4PP Scotland, United Kingdom

#### **Machining processes**

*Short description:* Practical training in the skilful operation of machine tools, including: centre lathes, horizontal and vertical milling machines, surface grinders, shaping machines. *Commencing date:* February, August. *Duration:* 13 weeks. *Qualifications:* English. *Deadline for application:* —. *Fees:* To be arranged.

**Organizer:** METCOM Training  
Savoy Tower  
77 Renfrew Street  
Glasgow G2 3BZ, Scotland, United Kingdom

Office, accounting and computing machinery; radio, television and communication equipment and apparatus/Machines de bureau, machines comptables et de traitement de l'information; équipement et appareils de radio, télévision et communications/Maquinaria de oficina, contabilidad e informática; equipo y aparatos de radio, televisión y comunicaciones

#### **Video equipment maintenance techniques**

*Short description:* Maintenance techniques for institutional/professional video equipment; theory and practical training on TV monitors, video cameras, VTRs and peripheral equipment. *Commencing date:* January, May, June, November. *Duration:* 5 weeks. *Qualifications:* English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 210 per day.

*Organizer:* International Training, ICD  
Sony Corporation  
6-7-35 Kitashinagawa, Shinagawa-ku  
Tokyo 141, Japan

#### **Video programme production techniques**

*Short description:* Programme production training utilizing institutional/professional audio-visual equipment. *Commencing date:* March, May, September, October. *Duration:* 5 weeks. *Qualifications:* English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 210 per day.

*Organizer:* International Training, ICD  
Sony Corporation  
6-7-35 Kitashinagawa, Shinagawa-ku  
Tokyo 141, Japan

#### **Electronic engineering**

*Short description:* Analogue and digital electronics; microcomputer architecture and instrumentation; industrial projects; computer networks; systems software. *Commencing date:* January. *Duration:* 50 weeks. *Qualifications:* University degree in electronic engineering. English. *Deadline for application:* 4 months before commencing date. *Fees:* f. 26,500 (including accommodation).

*Organizer:* Eindhoven University of Technology — RC  
Eindhoven International Institute (EII)  
P.O. Box 513  
5600 MB Eindhoven, Netherlands

#### **Telecommunication engineering**

*Short description:* Telecommunication systems; numerical analysis; signal theory; PASCAL, C programming; modulation and coding; linear programming; queueing, switching systems; telecommunication systems; operating systems; transmission; radio systems; satellite communications; computer software. *Commencing date:* August. *Duration:* 50 weeks. *Qualifications:* University degree in electronic engineering. English. *Deadline for application:* 4 months before commencing date. *Fees:* f. 26,500 (including accommodation).

*Organizer:* Eindhoven University of Technology — RC  
Eindhoven International Institute (EII)  
P.O. Box 513  
5600 MB Eindhoven, Netherlands

#### **Industrial electronics technology (EL 05)**

*Short description:* Analogue electronics technology. *Commencing date:* May. *Duration:* 3 weeks. *Qualifications:* Basic knowledge in electricity and electronics. English. *Deadline for application:* March. *Fees:* \$US 2,340.

*Organizer:* Vilhelmina Advanced Training and Education Centre (VATEC)  
912 81 Vilhelmina, Sweden

#### **Industrial electronics technology (EL 06)**

*Short description:* Basic and advanced digital technology. *Commencing date:* June. *Duration:* 4 weeks. *Qualifications:* Basic knowledge in electricity and electronics plus course EL 05 or equivalent. English. *Deadline for application:* March. *Fees:* \$US 3,120.

*Organizer:* Vilhelmina Advanced Training and Education Centre (VATEC)  
912 81 Vilhelmina, Sweden

#### **Industrial electronics technology (EL 11)**

*Short description:* Programmable logic control technique (PLC). *Commencing date:* June. *Duration:* 4 weeks. *Qualifications:* Basic knowledge in electricity, electronics and industrial automation. English. *Deadline for application:* April. *Fees:* \$US 3,120.

*Organizer:* Vilhelmina Advanced Training and Education Centre (VATEC)  
912 81 Vilhelmina, Sweden

#### **Digital technology for telecommunications**

*Short description:* Various courses in: digital electronics for communications; microprocessors and their applications; digital transmission; fibre optics. *Commencing date:* To be arranged. *Duration:* 2-8 weeks. *Qualifications:* Communication engineers and technicians with formal training in electronics. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* British Telecom — International Aeradio  
Bailbrook College  
39 London Road West  
Bath BA1 7JD, United Kingdom

#### **Telecommunications engineering**

*Short description:* Various courses in: radio technology; digital switching systems; digital microwave radio; data communications and computer networks; mobile communications and cellular radio; satellite communications. *Commencing date:* To be arranged. *Duration:* 2-8 weeks. *Qualifications:* Telecommunication engineers and technicians with formal training in electronics. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* British Telecom — International Aeradio  
Bailbrook College  
39 London Road West  
Bath BA1 7JD, United Kingdom

### Telecommunications management

*Short description:* Various courses in: digital networks — planning and management; international telecommunications traffic managers; spectrum management and radio frequency planning; management information systems. *Commencing date:* To be arranged. *Duration:* 3-8 weeks. *Qualifications:* Telecommunication engineers and managers. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* British Telecom — International Aeradio  
Bailbrook College  
39 London Road West  
Bath BA1 7JD, United Kingdom

### Medical, precision and optical instruments; watches and clocks/ Instruments médicaux, de précision et d'optique; horlogerie/ Instrumentos médicos, ópticos y de precisión; relojes

#### Gamma radiation technology

*Short description:* Operation; maintenance and radiological safety of a gamma irradiation plant; dosimetry techniques; dose distribution in products; radiation sterilization of medical devices, pharmaceutical products; microbial decontamination of foodstuff and cork stoppers. *Commencing date:* October. *Duration:* 48 weeks. *Qualifications:* Diploma in applied physics or mechanics. English. *Deadline for application:* June. *Fees:* Esc 2,000,000.

*Organizer:* National Laboratory for Industrial Technology and Engineering (LNETI)  
Training Centre  
Attn.: Maria Emília Raposo  
Azinbaga dos Lameiros à Estrada do Paço do Lumiar  
1699 Lisbon, Portugal

*Venue:* National Laboratory for Industrial Technology and Engineering (LNETI)  
Institute of Nuclear Science and Engineering  
E.N. 10  
2685 Sacavém, Portugal

#### Nuclear analytical methods

*Short description:* Assimilation and application of nuclear analytical methods, such as XRF, PGNA, NAA; PIXE; Mossebauer, liquid scintillation spectrometry. *Commencing date:* January, September. *Duration:* 15 weeks. *Qualifications:* Bachelor's or higher university degree in physics, chemistry or engineering. English. *Deadline for application:* 4 months before commencing date. *Fees:* Esc 700,000.

*Organizer:* National Laboratory for Industrial Technology and Engineering (LNETI)  
Training Centre  
Attn.: Maria Emília Raposo  
Azinbaga dos Lameiros à Estrada do Paço do Lumiar  
1699 Lisbon, Portugal

*Venue:* National Laboratory for Industrial Technology and Engineering (LNETI)  
Institute of Nuclear Science and Engineering  
E.N. 10  
2685 Sacavém, Portugal

### **Maintenance and repair of laboratory equipment**

*Short description:* Maintenance and repair of: general laboratory equipment, electrical systems, electronic instrumentation, chemical instrumentation. Optional support modules include: instrument development projects, electronics, instrument systems, computing, special subjects. *Commencing date:* February, September. *Duration:* 5 months. *Qualifications:* 5 years of relevant experience. *English.* *Deadline for application:* 1 month before commencing date. *Fees:* To be arranged.

*Organizer:* CTSE  
Faculty of Applied Sciences  
Bristol Polytechnic  
Frenchay  
Bristol BS16 1QY, United Kingdom

### **Motor vehicles, trailers and semi-trailers; other transport equipment/ Véhicules automobiles, remorques et semi-remorques; autres matériels de transport/Vehículos automotores, remolques y semirremolques; otros tipos de equipo de transporte**

#### **Ship's electrician**

*Short description:* For young electricians who already work or are starting their careers in the maritime sector. *Commencing date:* September. *Duration:* 36 weeks. *Qualifications:* Technical diploma. English, French, Spanish. *Deadline for application:* May. *Fees:* To be arranged (scholarship sponsored by Italian Ministry of Foreign Affairs available).

*Organizer:* Istituto Culturale Italiano (ICI)  
P.O. Box 91  
San Benedetto del Tronto (A.P.), 63039 Italy

#### **Ship's radiotelegraph operator**

*Short description:* For technicians who wish to work as radiotelegraph operators and radiotelephonists in the maritime sector. *Commencing date:* September. *Duration:* 36 weeks. *Qualifications:* Technical diploma. English, French, Spanish. *Deadline for application:* May. *Fees:* To be arranged (scholarship sponsored by Italian Ministry of Foreign Affairs available).

*Organizer:* Istituto Culturale Italiano (ICI)  
P.O. Box 91  
San Benedetto del Tronto (A.P.), 63039 Italy

#### **Boat building**

*Short description:* All aspects of wood boat construction from lofting to completion. *Commencing date:* January, April, September. *Duration:* 48 weeks. *Qualifications:* English. *Deadline for application:* 10 weeks before commencing date. *Fees:* £5,500.

*Organizer:* International Boatbuilding Training College  
Harbour Road, Oulton Broad  
Lowestoft, Suffolk NR32 3LZ, United Kingdom

**Other industrial branches and intersectoral programmes/  
Autres secteurs industriels et programmes intersectoriels/  
Otras ramas industriales y programas intersectoriales**

**Techniques in molecular biology**

*Short description:* Performance of experiments designed to give participants thorough hands-on knowledge of molecular biology techniques; extensive discussion of the technical principles, applications, and alternative and related techniques. *Commencing date:* July. *Duration:* 3 weeks. *Qualifications:* Must be from a developing country working in a university, or local or international research organization, involved in the teaching of molecular biology or related fields, or in research that uses or could benefit from use of these techniques. English. *Deadline for application:* January. *Fees:* \$Can 1,000.

*Organizer:* Dr. Loida J. Escote-Carlson  
Biotechnology Laboratory  
University of British Columbia  
237 Wesbrook Building  
6174 University Blvd.  
Vancouver, B.C., Canada V6T 1Z3

**Design engineering for engineers and design draughtsmen**

*Short description:* Design and draughting techniques, manufacturing methods, planning project control; design office management within the fields of mechanical, electrical/electronic engineering. *Commencing date:* Throughout the year. *Duration:* 12 weeks. *Qualifications:* Relevant experience. English. *Deadline for application:* 1 month before commencing date. *Fees:* To be arranged.

*Organizer:* Chattaway (UK) Training Services  
Pool Chambers  
26 Dam Street  
Lichfield, Staffordshire WS13 6AA, United Kingdom

## 2. UTILITIES/SERVICES PUBLICS DE DISTRIBUTION/SERVICIOS PÚBLICOS

Electricity, light and power/Electricité, haute et basse tension/Electricidad, luz y energía

### Production et distribution d'énergie électrique

*Brève description* : Production d'électricité par énergie thermique ou par les énergies renouvelables; gestion de projet; visites d'installations. *Début du cours* : A arranger.

*Durée* : 10 semaines. *Qualifications* : Français, anglais. *Date limite d'inscription* :

—, *Droits d'inscription* : A arranger.

*Organisateur* : Association momentanée CIFOP — FABRIMETAL  
1b, avenue Général Michel  
6000 Charleroi, Belgique

### Distribution technology and practice

*Short description*: Distribution technology, distribution equipment and networks, design, construction, operation and maintenance, underground cables, overhead line systems, power utility applications, distribution engineering. *Commencing date*: To be arranged.

*Duration*: 12 weeks. *Qualifications*: Engineers with distribution function. English.

*Deadline for application*: —. *Fees*: To be arranged.

*Organizer*: ESB International Ltd.  
Attn: Oliver McDonnell  
Stephen Court  
18/21 St. Stephen's Green  
Dublin 2, Ireland

### Industrial electronics components and equipment for power utilities

*Short description*: Electronic components operation, maintenance techniques, power electronics, converter technology, analogue integrated circuitry, interfacing, circuitry, analogue serving devices, digital logic techniques and interfacing, industrial process control. *Commencing date*: To be arranged. *Duration*: 10 weeks. *Qualifications*: Engineers, electrical technicians. English. *Deadline for application*: —. *Fees*: To be arranged.

*Organizer*: ESB International Ltd.  
Attn: Oliver McDonnell  
Stephen Court  
18/21 St. Stephen's Green  
Dublin 2, Ireland

### Power plant technology and operation

*Short description*: Power plant electrical theory and practice; unit operations, instrumentation, automatic control, microprocessors, business plans development. *Commencing date*: To be arranged. *Duration*: 32 weeks. *Qualifications*: Bachelor's degree in engineering. English. *Deadline for application*: —. *Fees*: To be arranged.

**Organizer:** ESB International Ltd.  
Attn.: Oliver McDonnell  
Stephen Court  
18/21 St. Stephen's Green  
Dublin 2, Ireland

#### **Utility management**

*Short description:* To prepare engineering, financial, commercial and administrative managers to undertake a wide range of general management responsibilities and to develop them for further advancement at senior level in electric power utility work. *Commencing date:* January. *Duration:* 6 months. *Qualifications:* Candidates must be university graduates, or hold a recognized professional qualification, with a record of successful achievement in their professional careers. *English.* *Deadline for application:* 3 months before commencing date. *Fees:* To be arranged.

**Organizer:** ESB International Ltd./University College Dublin  
Attn.: Diploma Programme Manager  
Stephen Court  
18/21 St. Stephen's Green  
Dublin 2, Ireland

#### **Water works and supply/Ouvrages hydrauliques et adduction d'eau/ Abastecimiento y distribución de agua**

##### **Irrigation par submersion**

*Brève description :* Travaux sur terrain, activités en irrigation, maintenance et dépannage des groupes motopompes, vulgarisation et formation dans le périmètre irrigué. *Début du cours :* Juillet. *Durée :* 13 semaines. *Qualifications :* Techniciens engagés dans le secteur sol et eau. Anglais, français. *Date limite d'inscription :* Février. *Droits d'inscription :* DM 12 375 (matériel d'enseignement, vêtement de travail, voyages d'études y compris).

**Organisateur :** Deutsche Lehranstalt für Agrartechnik  
Bartringstraße 49  
6100 Darmstadt, Allemagne

##### **Leak detection techniques**

*Short description:* Practical training in the use of a leak noise correlator and associated equipment for the physical location of leaks in water distribution systems. *Commencing date:* To be arranged. *Duration:* 3 weeks. *Qualifications:* Basic knowledge of water distribution. *English, Portuguese.* *Deadline for application:* 1 month before commencing date. *Fees:* To be arranged.

**Organizer:** Biwater Operations Ltd.  
Roman Way Business Centre  
Droitwich Spa  
Worcestershire WR9 9AJ, United Kingdom

**Venue:** United Kingdom or overseas



### **Management skills in the water sector**

*Short description:* Effective management skills, health and safety, human resource development, planning and control, and financial management with special emphasis on the water sector. *Commencing date:* To be arranged. *Duration:* 4 weeks. *Qualifications:* Supervisory or management level in water utility. English. *Deadline for application:* 1 month before commencing date. *Fees:* To be arranged.

*Organizer:* Biwater Operations Ltd.  
Roman Way Business Centre  
Droitwich Spa  
Worcestershire WR9 9AJ, United Kingdom

*Venue:* United Kingdom or overseas

### **Non-revenue water control**

*Short description:* Theory and practice of the reduction of water losses from distribution systems to optimum economic levels and methods of improved revenue collection. *Commencing date:* To be arranged. *Duration:* 13 weeks. *Qualifications:* Basic knowledge of water distribution. English. *Deadline for application:* 1 month before commencing date. *Fees:* To be arranged.

*Organizer:* Biwater Operations Ltd.  
Roman Way Business Centre  
Droitwich Spa  
Worcestershire WR9 9AJ, United Kingdom

*Venue:* United Kingdom or overseas

### **Technical and supervisory skills in water supply**

*Short description:* Water resources, treatment and distribution; mechanical and electrical maintenance; instrumentation and telemetry; supervision. *Commencing date:* To be arranged. *Duration:* 12 weeks. *Qualifications:* Basic knowledge of water supply. English. *Deadline for application:* 1 month before commencing date. *Fees:* To be arranged.

*Organizer:* Biwater Operations Ltd.  
Roman Way Business Centre  
Droitwich Spa  
Worcestershire WR9 9AJ, United Kingdom

*Venue:* United Kingdom or overseas

### **Technical management in water supply**

*Short description:* Operation and management of water resources; supply and distribution; maintenance; instrumentation and telemetry; budgets and financial control. *Commencing date:* To be arranged. *Duration:* 6 weeks. *Qualifications:* Experience in water supply. English. *Deadline for application:* 1 month before commencing date. *Fees:* To be arranged.

*Organizer:* Biwater Operations Ltd.  
Roman Way Business Centre  
Droitwich SPA  
Worcestershire WR9 9AJ, United Kingdom

*Venue:* United Kingdom or overseas

### **Training of trainers in the water industry**

*Short description:* Basic instructional techniques; advanced instructional techniques; identifying training needs; designing training programmes; training administration and management. *Commencing date:* To be arranged. *Duration:* 10 weeks. *Qualifications:* Technician or equivalent. English. *Deadline for application:* 1 month before commencing date. *Fees:* To be arranged.

*Organizer:* Biwater Operations Ltd.  
Roman Way Business Centre  
Droitwich SPA  
Worcestershire WR9 9AJ, United Kingdom

*Venue:* United Kingdom or overseas

### 3. FIELDS RELATED TO INDUSTRY/DOMAINES LIÉS A L'INDUSTRIE/ESFERAS RELACIONADAS CON LA INDUSTRIA

#### Construction (civil engineering)/Construction (génie civil)/ Construcción (ingeniería civil)

##### Cutter suction dredging

*Short description:* Dredging equipment; methods in dredging. *Commencing date:* September. *Duration:* 3 weeks. *Qualifications:* Professional experience. English. *Deadline for application:* 2 weeks before commencing date. *Fees:* f. 8,500.

*Organizer:* Training Institute for Dredging  
P.O. Box 8  
2960 AA Kinderdijk, Netherlands

##### Trailing suction hopper dredging

*Short description:* Dredging equipment; methods in dredging. *Commencing date:* October. *Duration:* 3 weeks. *Qualifications:* Professional experience. English. *Deadline for application:* 2 weeks before commencing date. *Fees:* f. 8,500.

*Organizer:* Training Institute for Dredging  
P.O. Box 8  
2960 AA Kinderdijk, Netherlands

##### Low-cost housing technology

*Short description:* Materials technology, manufacture and use; construction, draughtsmanship surveying; planning and service provisions for use in the building industry in developing countries. *Commencing date:* January. *Duration:* 44 weeks. *Qualifications:* Adequate experience in the construction industry; over 21 years of age. English. *Deadline for application:* November. *Fees:* £7,370. Students will require to obtain sponsorship from agencies such as the British Council, World Bank or other organizations.

*Organizer:* Dr. Mohsen Aboutorabi, Course Director  
Birmingham Polytechnic  
Birmingham School of Architecture

*Contact address:*

The Secretary (Overseas Courses)  
Birmingham Polytechnic  
Birmingham School of Architecture  
Edge Building, 4th Level  
Perry Barr, Birmingham B42 2SU, United Kingdom

##### Buildings maintenance management

*Short description:* To provide skills to managers involved with the maintenance function in facilities, organizations and buildings. *Commencing date:* September. *Duration:* 12 weeks. *Qualifications:* Related working experience. English. *Deadline for application:* 4 weeks before commencing date. *Fees:* £9,060.

**Organizer:** Crown Agents  
Manpower Development Services  
St. Nicholas House  
Sutton, Surrey SM1 1EL, United Kingdom

**Venue:** Crown Agents  
Management Training Centre  
3-10 Marine Parade  
Worthing, Sussex BN11 3PW, United Kingdom

#### **Construction site management (parts I and II)**

*Short description:* Two courses at intermediate and advanced level giving practical training in construction management. *Commencing date:* June (part I); September (part II). *Duration:* 12 weeks (part I); 10 weeks (part II). *Qualifications:* Relevant working experience. English. *Deadline for application:* 4 weeks before commencing date. *Fees:* £8,040 for each part.

**Organizer:** Crown Agents  
Manpower Development Services  
St. Nicholas House  
Sutton, Surrey SM1 1EL, United Kingdom

**Venue:** Crown Agents  
Management Training Centre  
3-10 Marine Parade  
Worthing, Sussex BN11 3PW, United Kingdom

#### **Roads maintenance management**

*Short description:* Efficient and effective maintenance of roads through improved technical knowledge and better management techniques. *Commencing date:* March. *Duration:* 12 weeks. *Qualifications:* Professional experience. English. *Deadline for application:* 1 month before commencing date. *Fees:* £9,060.

**Organizer:** Crown Agents  
Manpower Development Services  
St. Nicholas House  
Sutton, Surrey SM1 1EL, United Kingdom  
and  
Scott Wilson Kirkpatrick  
Consulting Engineers

**Venue:** Crown Agents  
Management Training Centre  
3-10 Marine Parade  
Worthing, Sussex BN11 3PW, United Kingdom

#### **Miscellaneous public services/Services publics, divers/Diversos servicios públicos**

##### **Railway signalling and telecommunications engineering**

*Short description:* Third RIA signalling and telecommunications course. *Commencing date:* June or July. *Duration:* 6 weeks. *Qualifications:* Graduate engineers with a minimum of 5 years railway experience. English. *Deadline for application:* March. *Fees:* Approximately £6,000 (residential).

**Organizer:** Railway Industry Association  
6 Buckingham Gate  
London SW1E 6JP, United Kingdom

**Transport management qualification**

**Short description:** United Kingdom and European Community (EC) legislation and financial management. Candidates to sit 3 United Kingdom examinations that are recognized throughout EC. **Commencing date:** March, June, September, November. **Duration:** 15 days. **Qualifications:** English. **Deadline for application:** 4 weeks before commencing date. **Fees:** £730 + VAT.

**Organizer:** TDT Management Services Ltd.  
London Road  
Kelvedon, Colchester  
Essex CO5 9AU, United Kingdom

#### 4. THE INDUSTRIAL SECTOR/LE SECTEUR INDUSTRIEL/ EL SECTOR INDUSTRIAL

**Industrial policy, programming, planning, production/  
Politiques, programmation, planification, production industrielles/  
Política, programación, planeamiento y producción industriales**

##### **Industrial planning and development**

*Short description:* Macro-planning and strategy-oriented course; long-term development issues of industrialization, industrial strategies and planning, industrial incentives and promotional policies, technology transfer and labour employment, financing industrial development; field trip. *Commencing date:* November. *Duration:* 4 weeks. *Qualifications:* University degree or equivalent; at least 5 years of experience in industrial development; between 30 and 45 years of age. *English.* *Deadline for application:* August. *Fees:* —.

*Organizer:* International Development Center of Japan (IDCJ)  
Kyofuku Bldg.  
2-9-11, Tomioka  
Koto-ku, Tokyo 135, Japan

##### **Industrial estates and complexes**

*Short description:* Management and planning aspects of industrial estates and complex development. Personalized introductions on development planning of industry and infrastructure, physical planning, location aspects, environmental planning, investment and costs, lay-out development, optimization. Programme includes further self-study of selected literature and field observations. *Commencing date:* To be arranged. *Duration:* 8-13 weeks. *Qualifications:* University degree in engineering, economics or business administration, preferably with experience in industry. *English.* *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Centre for Management and Industrial Development (CBO)  
Exchange Building  
P.O. Box 21468  
3001 AL Rotterdam, Netherlands

##### **Micro-economic policy analysis and information systems**

*Short description:* Micro-economic theoretical analysis, micro-economic policy analysis, economic organizations and the role of the State, accounting at firm sector and national level, transition topics (privatization, emerging capital markets). *Commencing date:* February. *Duration:* 6 weeks. *Qualifications:* Degree in economics. *English.* *Deadline for application:* 4 months before commencing date. *Fees:* f. 9,000.

*Organizer:* Erasmus University, Rotterdam (EUR)  
Growth Dynamics University Institute  
Faculty of Economic Sciences  
Burgemeester Oudlaan 50, UB 47  
P.O. Box 1738  
3000 DR Rotterdam, Netherlands

### **National planning, accounting and statistics**

*Short description:* Applied use of macro models, sector planning, input/output, social accounting, project analysis, public finance; computer training; workshop and paper on policy modelling. *Commencing date:* September. *Duration:* 13 weeks. *Qualifications:* Degree in economics, statistics, management, engineering or related field. English. *Deadline for application:* June. *Fees:* f. 15,000.

*Organizer:* Erasmus University, Rotterdam (EUR)  
Growth Dynamics University Institute  
Faculty of Economic Sciences  
Burgermeester Oudlaan 50, UB 47  
P.O. Box 1738  
3000 DR Rotterdam, Netherlands

### **Industrial planning, investment appraisal and environmental impact assessment**

*Short description:* Planning process from inception to project implementation, including detailed examination of methods for identifying, appraising, financing and monitoring industrial development projects; emphasis on changing priorities and policy issues, including environmental impact assessment and privatization. *Commencing date:* January. *Duration:* 12 weeks. *Qualifications:* Degree and relevant professional experience. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Director, Industrial Investments Course  
Development and Project Planning Centre  
University of Bradford  
Bradford, West Yorkshire BD7 1DP, United Kingdom

### **Environmental management for development planning**

*Short description:* The role of environmental management in identification, planning, implementation and evaluation of rural development projects. *Commencing date:* July. *Duration:* 11 weeks. *Qualifications:* Work experience in environmental management. English. *Deadline for application:* May. *Fees:* £7,000.

*Organizer:* IM Associates with Huntings Technical Services  
36 Robertson Road  
Brighton BN1 5NL, United Kingdom

*Venue:* University of Sussex, United Kingdom

### **Land resource survey and planning**

*Short description:* Resource survey techniques; computer-based technology tools for land resource assessment. *Commencing date:* July. *Duration:* 11 weeks. *Qualifications:* Professional experience. English. *Deadline for application:* May. *Fees:* £7,500.

*Organizer:* IM Associates with Huntings Technical Services  
36 Robertson Road  
Brighton BN1 5NL, United Kingdom

*Venue:* University of Sussex, United Kingdom

### **Special programme for urban and regional studies (SPURS)**

*Short description:* To investigate issues of urban, rural and regional growth, economic development and social change. *Commencing date:* September. *Duration:* 9 months. *Qualifications:* Mid-career professionals who hold responsible positions in public or private organizations. English (must have a TOEFL score of 575). *Deadline for application:* February. *Fees:* \$US 26,000.

*Organizer:* SPURS Program  
10-400  
Massachusetts Institute of Technology  
Cambridge, Massachusetts 02139  
United States of America

### **Industrial projects/Projets industriels/Proyectos industriales**

#### **Industrial project cycle**

*Short description:* Computer applications; national, regional and sectoral planning; project development cycle; market; technical and financial analysis; socio-economic appraisal; industrial project planning; implementation management; computer-assisted feasibility studies; assignment on computer application to own project; reporting at (pre)feasibility level. *Commencing date:* January. *Duration:* 13 weeks. *Qualifications:* Degree in business administration, economics or related science. English. *Deadline for application:* 4 months before commencing date. *Fees:* f. 15,500.

*Organizer:* Netherlands International Institute for Management (RVB)  
Executive Programmes  
Endepolsdomein 150  
P.O. Box 1203  
6201 BE Maastricht, Netherlands

#### **Industrial and infrastructure project management**

*Short description:* Physical, financial, organizational and administrative aspects of project implementation and management; managerial skills for successful project execution; human resource and institutional development. *Commencing date:* September. *Duration:* 12 weeks. *Qualifications:* Degree and relevant professional experience. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* The Director, IIPM Course  
Development and Project Planning Centre  
University of Bradford  
Bradford, BD7 1DP, United Kingdom

#### **Investment planning, appraisal and management for development finance institutions**

*Short description:* Methodologies of project planning and appraisal from inception to implementation; projects studied from the commercial, banking and national points of view. *Commencing date:* April. *Duration:* 12 weeks. *Qualifications:* Degree and relevant professional experience. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* The Director, Development Finance Course  
Development and Project Planning Centre  
University of Bradford  
Bradford, BD7 1DP, United Kingdom

#### **Project management**

*Short description:* Project identification, appraisal and funding; planning, management and control of project life cycle. *Commencing date:* March. *Duration:* 12 weeks. *Qualifi-*



*cations: English. Deadline for application: 8 weeks before commencing date. Fees: £5,100.*

**Organizer:** Royal Institute of Public Administration  
International Division  
Regent's College  
Inner Circle  
Regent's Park  
London NW1 4NS, United Kingdom

### **Small-scale industries and entrepreneurship/Petites industries et entreprises/ Pequeñas industrias y los empresarios**

#### **Small-scale manufacturer's formation**

*Short description: Product manufacturing (design, construction, quality, control, after-sales-service); plant management and organization, financial management, on-the-job training. Commencing date: April and July. Duration: 26 weeks. Qualifications: Engineering experience. English, French. Deadline for application: February. Fees: DM 25,150.*

**Organizer:** Deutsche Lehranstalt für Agrartechnik  
Bartningstraße 49  
6100 Darmstadt, Germany

#### **Generating projects in small communities**

*Short description: For business counsellors and community workers who assist individuals and groups of women in setting up small-scale enterprises. Course covers feasibility studies, production management, marketing, financial management; small business simulations, theoretical studies and observation visits. Commencing date: English: January; Spanish: October. Duration: 3 months. Qualifications: University or equivalent professional training in economics, social work, community development or related fields; 5 years of relevant experience; 25-40 years of age. Preference is given to women. English, Spanish. Deadline for application: 2 months before commencing date. Fees: \$US 7,200.*

**Organizer:** The Golda Meir Mount Carmel International Training Center (MCTC)  
12 David Pinsky St.  
P.O. Box 6111  
31060 Haifa, Israel

#### **Credit appraisal for small and medium industries**

*Short description: Skills in credit appraisal for small and medium industries. Commencing date: To be arranged. Duration: 3 weeks. Qualifications: English. Deadline for application: 3 months before commencing date. Fees: \$US 100.*

**Organizer:** Asian Productivity Organization  
8-4-14, Akasaka, Minato-ku  
Tokyo 107, Japan

#### **Euromarketing with telematica for small and medium enterprises**

*Short description: Cross-border marketing for small and medium enterprises of developing countries, using telematica and networking. Commencing date: September. Duration:*

3 weeks. *Qualifications:* Management and export experience. English. *Deadline for application:* To be arranged. *Fees:* ECU 75.

*Organizer:* EMDA Institute, in association with CBI Rotterdam

*Contact address:*

EMDA Institute  
Nordhornsestraße 170  
7591 NL Denekamp, Netherlands

#### **International marketing and export for small and medium-sized firms**

*Short description:* Basic concepts of international marketing: environment analysis and strategic decision; market research; product, pricing and distribution decisions; communication; organization; successful exporting and case studies. *Commencing date:* March, September. *Duration:* 13 weeks. *Qualifications:* Bachelor's degree or equivalent in a relevant field of study. English. *Deadline for application:* January, July. *Fees:* f. 15,500.

*Organizer:* International Centre for Quality and Management Sciences (ICQMS)  
's-Gravendijkwal 10  
P.O. Box 2082  
3000 CB Rotterdam, Netherlands

#### **Financing of small and medium enterprises in Central and Eastern European countries**

*Short description:* The importance of a client-oriented approach and the requirements of small entrepreneurs; skills and knowledge of the account manager within the organization; management aspects of banks dealing with small and medium enterprises. *Commencing date:* February, August. *Duration:* 5 weeks. *Qualifications:* Higher education in a relevant discipline. English. *Deadline for application:* 1 month before commencing date. *Fees:* ECU 6,500.

*Organizer:* Management for Development Foundation (MDF), FACET and  
ORTICONSULT

*Contact address:*

Management for Development Foundation (MDF)  
Bosrand 28  
P.O. Box 430  
6710 BK Ede, Netherlands

#### **Financing small enterprises**

*Short description:* The importance of a client-oriented approach and the requirements of small entrepreneurs; the role of the credit extension officer within the organization; management aspects of credit extension. *Commencing date:* January, October. *Duration:* 5 weeks. *Qualifications:* Higher education in a relevant discipline. English. *Deadline for application:* 1 month before commencing date. *Fees:* f. 12,500.

*Organizer:* Management for Development Foundation (MDF) and FACET  
Management Courses

Bosrand 28  
P.O. Box 430  
6710 BK Ede, Netherlands

#### **Energy management for small- and medium-scale industries**

*Short description:* Managerial and technical aspects of energy management in small- and medium-scale industries, organized in cooperation with the Technology and Develop-

ment Group of the Twente University. *Commencing date:* October. *Duration:* 5 weeks. *Qualifications:* Bachelor's degree in engineering or economics. English. *Deadline for application:* August. *Fees:* f. 10,000.

*Organizer:* Netherlands International Institute for Management (RVB)  
Endepolsdomein 150  
P.O. Box 1203  
6201 BE Maastricht, Netherlands

#### **Developing income-generating enterprise**

*Short description:* To improve the ability of staff of local and international voluntary organizations to design and implement effective and eventually self-sustaining programmes of assistance for enterprise, within the context of overall community development. *Commencing date:* April. *Duration:* 6 weeks. *Qualifications:* English. *Deadline for application:* January. *Fees:* £4,800 (including accommodation).

*Organizer:* Enterprise Development Centre  
Cranfield School of Management  
Cranfield, Bedfordshire MK43 OAL, United Kingdom

#### **Finance for micro-enterprise**

*Short description:* Skills for staff of finance institutions, assistance agencies etc., involved in the design and implementation of credit and loan schemes for small and micro-enterprises; key aspects of managing a sustainable credit programme, including finance, staff development, record keeping and the use of computers. *Commencing date:* June. *Duration:* 4 weeks. *Qualifications:* Currently working or planning to work in the field of micro-enterprise credit. English. *Deadline for application:* April. *Fees:* £3,600 (including accommodation and board).

*Organizer:* Enterprise Development Centre  
Cranfield School of Management  
Cranfield, Bedfordshire MK43 OAL, United Kingdom

#### **Managing enterprise development**

*Short description:* To improve the management capability of those running or coordinating small business programmes, enterprise agencies or income-generating schemes. *Commencing date:* July. *Duration:* 6 weeks. *Qualifications:* Currently working, or planning to work, as a manager/coordinator of a small business programme, enterprise agency or income-generating scheme. English. *Deadline for application:* May. *Fees:* £5,200 (including accommodation and board).

*Organizer:* Enterprise Development Centre  
Cranfield School of Management  
Cranfield, Bedfordshire MK43 OAL, United Kingdom

#### **Women into enterprise**

*Short description:* Design and implementation of effective and eventually self-sustaining programmes for women, including confidence building, and their role within the overall development of the community. *Commencing date:* September. *Duration:* 4 weeks. *Qualifications:* Currently working, or planning to work, with programmes designed to assist the development of women in income-generating activities. English. *Deadline for application:* July. *Fees:* £3,600 (including accommodation and board).

*Organizer:* Enterprise Development Centre  
Cranfield School of Management  
Cranfield, Bedfordshire, MK43 OAL, United Kingdom

### **Management for women in rural development**

*Short description:* Knowledge and skills required for the effective planning and management of women's programmes. *Commencing date:* July. *Duration:* 11 weeks. *Qualifications:* Work experience in managing women's projects and programmes. English. *Deadline for application:* May. *Fees:* £6,500.

*Organizer:* IM Associates  
36 Robertson Road  
Brighton BN1 5NL, United Kingdom

*Venue:* University of Sussex, United Kingdom

### **Management of rural development projects**

*Short description:* Methodologies required to design and manage rural development projects. *Commencing date:* July. *Duration:* 11 weeks. *Qualifications:* Work experience in management. English. *Deadline for application:* May. *Fees:* £6,500.

*Organizer:* IM Associates  
36 Robertson Road  
Brighton BN1 5NL, United Kingdom

*Venue:* University of Sussex, United Kingdom

### **Promotion and development of women's enterprise in developing countries**

*Short description:* Personal skills; role of women; changing work roles; needs of business women; basic business skills; supporting female entrepreneurs; credit and savings; rural enterprise; cooperatives; appropriate technology. *Commencing date:* August. *Duration:* 10 weeks. *Qualifications:* Middle and senior management, concerned with women's enterprise and business. English. *Deadline for application:* 2 months before commencing date. *Fees:* £6,500.

*Organizer:* Overseas Development Group  
Small Business Centre  
Durham University Business School  
Durham DH1 3LB, United Kingdom

### **Small business advisers and counsellors in developing countries**

*Short description:* To give small business advisers and counsellors in developing countries first-hand experience of the small business support network in the north-east of England. Participants are attached to small business support agencies and produce action plan for implementation in their home country. *Commencing date:* To be arranged. *Duration:* Up to 4 weeks. *Qualifications:* At least one year of involvement in some aspect of small business development and intention to continue being involved. English. *Deadline for application:* —. *Fees:* £700 per week.

*Organizer:* Overseas Development Group  
Small Business Centre  
Durham University Business School  
Durham DH1 3LB, United Kingdom

### **Small and medium enterprises in newly industrialized and developing countries**

*Short description:* Skills required to design and implement integrated programmes for the promotion and development of small businesses; emphasis placed on encouraging participants to produce action plans for implementation in their home countries.

*Commencing date:* August. *Duration:* 10 weeks. *Qualifications:* Experience in supporting and promoting the development of small businesses. *English.* *Deadline for application:* 2 months before commencing date. *Fees:* £6,500.

*Organizer:* Overseas Development Group  
Small Business Centre  
Durham University Business School  
Durham DH1 3LB, United Kingdom

#### **Management of rural projects and their evaluation**

*Short description:* Financial, planning and managerial skills essential for the best use of scarce resources within projects. *Commencing date:* September. *Duration:* 10 weeks. *Qualifications:* Professional qualifications. *English.* *Deadline for application:* August. *Fees:* £3,410 + VAT.

*Organizer:* Tropical Resource Consultants Ltd. and the University of Edinburgh  
*Contact address:*  
Unived Technologies Ltd.  
16 Buccleuch Place, Edinburgh  
EM8 9LN, Scotland, United Kingdom

*Venue:* The University of Edinburgh, Kings Buildings  
Edinburgh, Scotland, United Kingdom

#### **Cooperative business management and development**

*Short description:* Cooperative business organization principles, finance, credit and communications. *Commencing date:* August. *Duration:* 13 weeks. *Qualifications:* Major responsibilities in cooperatives. *English.* *Deadline for application:* July. *Fees:* \$US 4,500.

*Organizer:* University of Wisconsin  
Center for Cooperatives  
513 Lowell Hall, 610 Langdon Street  
Madison, Wisconsin 53703  
United States of America

#### **Industrial waste disposal, recycling, environmental protection/Evacuation et recyclage des déchets industriels, protection de l'environnement/Evacuación de residuos industriales, reciclado, protección del medio ambiente**

##### **Assessment and management of environmental pollution**

*Short description:* Multidisciplinary theoretical and practical training in the assessment and management of air, water and soil pollution. *Commencing date:* August. *Duration:* 6 weeks. *Qualifications:* University degree, involvement in environmental matters. *English.* *Deadline for application:* —. *Fees:* \$US 1,600.

*Organizer:* Prof. Dr. G. Persoone, President  
Centre for Environmental Sanitation  
University of Ghent  
J. Plateastraat 22  
9000 Ghent, Belgium

### **Gestion de l'environnement**

*Brève description* : Introduction, eau, air, déchets, aménagement du territoire, protection de la nature, bruit, énergie/radiations, T.P. et visites; travail de fin de cycle. *Début du cours* : A arranger. *Durée* : 4 mois. *Qualifications* : Baccalauréat général ou technique (ou équivalent). Français. *Date limite d'inscription* : A arranger. *Droits d'inscription* : FB 120 000.

*Organisateur* : Institut des affaires publiques (I.A.P.)  
1b, avenue Général Michel  
6000 Charleroi, Belgique

### **Resource conservation and environmental protection**

*Short description*: Insight into activities and measures undertaken in Japan to conserve its resources and to safeguard its environment; ideas which could be adapted to minimize dangers to the environment in participants' home country. *Commencing date*: To be arranged. *Duration*: 4 weeks. *Qualifications*: English. *Deadline for application*: 3 months before commencing date. *Fees*: \$US 100.

*Organizer*: Asian Productivity Organization  
8-4-14, Akasaka, Minato-ku  
Tokyo 107, Japan

### **Management of the environment**

*Short description*: Environmental problems of industrial companies in urban and rural areas; environmental elements of national policy formulation; environmental management in government. *Commencing date*: September. *Duration*: 13 weeks. *Qualifications*: Degree in economics, technical or social sciences. English. *Deadline for application*: July. *Fees*: f. 15,500.

*Organizer*: Netherlands International Institute for Management (RVB)  
Executive Programmes  
Endepolsdomein 150  
P.O. Box 1203  
6201 BE Maastricht, Netherlands

### **Water treatment**

*Short description*: Water treatment technology for processing, chemical fertilizer industries etc. *Commencing date*: To be arranged. *Duration*: 12 weeks. *Qualifications*: Relevant experience. English. *Deadline for application*: 1 month before commencing date. *Fees*: To be arranged.

*Organizer*: Chataway (UK) Training Services  
Pool Chambers  
26 Dam Street  
Lichfield, Staffordshire WS13 6AA. United Kingdom

### **Women in the environmental management process**

*Short description*: Knowledge and skills required for effective planning and management of environmental programmes in which women play an integral part. *Commencing date*: July. *Duration*: 11 weeks. *Qualifications*: Work experience in environmental programmes. English. *Deadline for application*: May. *Fees*: £7,000.

**Organizer:** IM Associates with Huntings Technical Services  
36 Robertson Road  
Brighton BN1 5NL, United Kingdom

**Venue:** University of Sussex, United Kingdom

#### **Sustainable development and the environment**

**Short description:** For senior professionals working in developing countries; insight into global environmental problems, and the advanced techniques available for analysing optimal strategies for attaining sustainable development. **Commencing date:** April. **Duration:** 10 weeks. **Qualifications:** English. **Deadline for application:** March. **Fees:** £3,630 + VAT.

**Organizer:** The University of Edinburgh

**Contact address:**  
Unived Technologies Ltd.  
16 Buccleuch Place  
Edinburgh  
EM8 9LN, Scotland, United Kingdom

**Venue:** The University of Edinburgh, Kings Buildings  
Edinburgh, Scotland, United Kingdom

#### **Energy conservation in industry/Economies d'énergie dans l'industrie/ Conservación de la energía en la industria**

##### **Energy management**

**Short description:** Skills to devise and implement measures for improving energy utilization and productivity at the plant level. **Commencing date:** To be arranged. **Duration:** 3 weeks. **Qualifications:** English. **Deadline for application:** 3 months before commencing date. **Fees:** \$US 100.

**Organizer:** Asian Productivity Organization  
8-4-14 Akasaka, Minato-ku,  
Tokyo 107, Japan

**Venue:** Republic of Korea

##### **Energy management for Eastern and Central European countries**

**Short description:** Identification and implementation of suitable energy management projects in industrial firms; optional extension for in-service training in an industrial plant. **Commencing date:** To be arranged. **Duration:** 3 weeks. **Qualifications:** Degree in engineering; at least 5 years of experience. English. **Deadline for application:** 1 month before commencing date. **Fees:** To be arranged.

**Organizer:** Twente Energy Institute  
P.O. Box 545  
7500 AM Enschede, Netherlands

**5. INDUSTRIAL DEVELOPMENT SUPPORT SERVICES/  
SERVICES D'APPUI AU DÉVELOPPEMENT INDUSTRIEL/  
SERVICIOS DE APOYO AL DESARROLLO INDUSTRIAL**

**Computer applications, data processing/Applications informatiques,  
traitement de l'information/Aplicaciones de la informática, procesamiento  
de datos**

**Computer use in business operations**

*Short description:* The EDP concept; computer hardware, functions, software development and design; systems analysis; programming languages; personal computer applications (spreadsheet, word processing, databases, tools). *Commencing date:* March, September. *Duration:* 13 weeks. *Qualifications:* Bachelor's degree or equivalent in a relevant field of study. English. *Deadline for application:* January, July. *Fees:* f. 16,000.

*Organizer:* International Centre for Quality and Management Sciences (ICQMS)  
's-Gravendijkwal 10  
P.O. Box 2082  
3000 CB Rotterdam, Netherlands

**Computer-aided design**

*Short description:* CAD course structured to give a good theoretical/practical balance for architects and engineers. *Commencing date:* To be arranged. *Duration:* 12 weeks. *Qualifications:* Architects and engineers. English. *Deadline for application:* 1 month before commencing date. *Fees:* To be arranged.

*Organizer:* Chattaway (UK) Training Services  
Pool Chambers  
26 Dam Street  
Lichfield, Staffordshire WS13 6AA, United Kingdom

**Computer subjects**

*Short description:* Writing programs for industrial and commercial applications in the popular programming languages. *Commencing date:* To be arranged. *Duration:* 12 weeks. *Qualifications:* Professional qualifications. English. *Deadline for application:* 1 month before commencing date. *Fees:* To be arranged.

*Organizer:* Chattaway (UK) Training Services  
Pool Chambers  
26 Dam Street  
Lichfield, Staffordshire WS13 6AA, United Kingdom

**Computer-aided design**

*Short description:* Advanced AUTOCAD computer-aided design system for mechanical, electrical, structural and architectural applications. *Commencing date:* January, April, August, October. *Duration:* 8 weeks. *Qualifications:* English. *Deadline for application:* 1 month before commencing date. *Fees:* £325 per week.



**Organizer:** East Kilbride and District Eng. G.T.A. Ltd.  
3 Law Place  
Nerston Industrial Estate  
East Kilbride G74 4PP, Scotland, United Kingdom

#### **Database management**

**Short description:** Systems analysis and programming for database management to advanced application generation for specific business requirements. **Commencing date:** January, April, August, October. **Duration:** 4 weeks. **Qualifications:** English. **Deadline for application:** 1 month before commencing date. **Fees:** £325 per week.

**Organizer:** East Kilbride and District Eng. G.T.A. Ltd.  
3 Law Place  
Nerston Industrial Estate  
East Kilbride G74 4PP, Scotland, United Kingdom

#### **Computer database system**

**Short description:** System design and programming using microcomputer database software such as CDS-ISIS, dBASE III/IV and FoxPro. **Commencing date:** To be arranged. **Duration:** To be arranged. **Qualifications:** English. **Deadline for applications:** To be arranged. **Fees:** To be arranged.

**Organizer:** School of Library and Information Science  
University of Wisconsin-Milwaukee  
P.O. Box 413  
Milwaukee, Wisconsin 53201  
United States of America

#### **Training in microcomputer software**

**Short description:** Basic to advanced-level training on the use of IBM-PC and compatible computers: word processing, database and spreadsheet programs. **Commencing date:** To be arranged. **Duration:** To be arranged. **Qualifications:** English. **Deadline for applications:** To be arranged. **Fees:** To be arranged.

**Organizer:** School of Library and Information Science  
University of Wisconsin-Milwaukee  
P.O. Box 413  
Milwaukee, Wisconsin 53201  
United States of America

### **Industrial administration/Administration industrielle/ Administración industrial**

#### **Marchés publics**

**Brève description :** Modes de passation des marchés publics; procédures de mise en concurrence; enregistrement et agrément des entreprises; sous-traitance et associations momentanées; rédaction de soumissions répondant au cahier des charges; régularité des soumissions et désignation de l'adjudicataire; exécution et contrôle du marché; possibilités de recours juridictionnels. **Début du cours :** A arranger. **Durée :** 3 semaines. **Qualifications :** Baccalauréat ou expérience professionnelle. Français. **Date limite d'inscription :** —. **Droits d'inscription :** A arranger.

*Organisateur :* Institut des affaires publiques (IAP)  
1b, avenue Général Michel  
6000 Charleroi, Belgique

#### **General management for State enterprises**

*Short description:* Defining and analysing managerial problems of State involvement in economic activities; economic and political elements of national decision-making; management of government; introduction to business policy. *Commencing date:* May. *Duration:* 13 weeks. *Qualifications:* Degree in business administration, economics or related science. English. *Deadline for application:* March. *Fees:* f. 15,500.

*Organizer:* Netherlands International Institute for Management (RVB)  
Executive Programmes  
Endepolsdomein 150  
P.O. Box 1203  
6201 BE Maastricht, Netherlands

#### **Managing economic development**

*Short description:* Skills necessary to guide the rapid expansion of public-sector activities and the growth of industry as part of national development. *Commencing date:* To be arranged. *Duration:* 4 weeks. *Qualifications:* Mid-career government officials, private-sector managers and public-sector managers. English. *Deadline for application:* To be arranged. *Fees:* To be arranged.

*Organizer:* Aston Business School  
Management Development Programme  
Nelson Building, Aston Triangle  
Birmingham B4 7ET, United Kingdom

#### **Financial management**

*Short description:* Greater understanding of all roles and functions of finance ministries, banks and public enterprises in the development of the economy. *Commencing date:* September. *Duration:* 8 weeks. *Qualifications:* Professional experience. English. *Deadline for application:* 2 weeks before commencing date. *Fees:* £7,370.

*Organizer:* Crown Agents  
Manpower Development Services  
St. Nicholas House  
Sutton, Surrey SM1 1EL, United Kingdom

*Venue:* Crown Agents  
Management Training Centre  
3-10 Marine Parade  
Worthing  
Sussex, United Kingdom

#### **Advanced management in government**

*Short description:* For administrative officers and specialist officers carrying policy-making responsibilities. Emphasis on administrative direction of department/ministries. *Commencing date:* July. *Duration:* 4 weeks. *Qualifications:* English. *Deadline for application:* 8 weeks before commencing date. *Fees:* £2,280.

*Organizer:* Royal Institute of Public Administration  
International Division  
Regent's College  
Inner Circle  
Regent's Park  
London NW1 4NS, United Kingdom

#### **Financial management in government**

*Short description:* For senior administrative and professional officers who have responsibility for policy formulation. *Commencing date:* April. *Duration:* 12 weeks. *Qualifications:* English. *Deadline for application:* 8 weeks before commencing date. *Fees:* £5,100.

*Organizer:* Royal Institute of Public Administration  
International Division  
Regent's College  
Inner Circle  
Regent's Park  
London NW1 4NS, United Kingdom

#### **Management and national development**

*Short description:* For top civil servants and directors of public corporations: examine new attitudes, techniques and technologies for policy-making. *Commencing date:* September. *Duration:* 4 weeks. *Qualifications:* English. *Deadline for application:* 8 weeks before commencing date. *Fees:* £4,690 (residential).

*Organizer:* Royal Institute of Public Administration  
International Division  
Regent's college  
Inner Circle  
Regent's Park  
London NW1 4NS, United Kingdom

#### **Management development for women**

*Short description:* Management training for women in the public sector. *Commencing date:* May. *Duration:* 12 weeks. *Qualifications:* English. *Deadline for application:* 8 weeks before commencing date. *Fees:* £5,000.

*Organizer:* Royal Institute of Public Administration  
International Division  
Regent's College  
Inner Circle  
Regent's Park  
London NW1 4NS, United Kingdom

#### **Management of public records**

*Short description:* For officials involved in maintaining all types of public records or archives: health records, education, personnel, land ownership etc. *Commencing date:* January. *Duration:* 12 weeks. *Qualifications:* English. *Deadline for application:* 8 weeks before commencing date. *Fees:* £5,500.

*Organizer:* Royal Institute of Public Administration  
International Division  
Regent's College  
Inner Circle  
Regent's Park  
London NW1 4NS, United Kingdom

#### **Management of public-sector enterprises**

*Short description:* Understanding and appreciation of good general management practice for senior managers working in public enterprises in overseas countries. *Commencing date:* October. *Duration:* 8 weeks. *Qualifications:* English. *Deadline for application:* 8 weeks before commencing date. *Fees:* £3,600.

*Organizer:* Royal Institute of Public Administration  
International Division  
Regent's College  
Inner Circle  
Regent's Park  
London NW1 4NS, United Kingdom

#### **Management of training**

*Short description:* For senior officers who are managing training or who are about to take up training appointments in public authorities, government training centres or institutes of public administration. *Commencing date:* February, August. *Duration:* 10 weeks. *Qualifications:* English. *Deadline for application:* 8 weeks before commencing date. *Fees:* £4,320.

*Organizer:* Royal Institute of Public Administration  
International Division  
Regent's College  
Inner Circle  
Regent's Park  
London NW1 4NS, United Kingdom

#### **Personnel management**

*Short description:* For senior officers responsible for personnel management in government departments or public authorities. *Commencing date:* January, May, September. *Duration:* 12 weeks. *Qualifications:* English. *Deadline for application:* 8 weeks before commencing date. *Fees:* £5,100.

*Organizer:* Royal Institute of Public Administration  
International Division  
Regent's College  
Inner Circle  
Regent's Park  
London NW1 4NS, United Kingdom

#### **Public-sector management**

*Short description:* Policy formulation, with emphasis on practical approach to solving administrative problems. *Commencing date:* May. *Duration:* 12 weeks. *Qualifications:* Senior public service administrators. English. *Deadline for application:* 8 weeks before commencing date. *Fees:* £5,580.

**Organizer:** Royal Institute of Public Administration  
International Division  
Regent's College  
Inner Circle  
Regent's Park  
London NW1 4NS, United Kingdom

#### **Public enterprise policy and management in developing countries**

*Short description:* International workshop bringing together public enterprise (PE) managers and their government supervisors with a group of scholars to help develop an overview of PE potentials and problems; tools for solving problems at the interface between enterprise and government; computer applications to analyse private and public profitability, performance evaluation, and investment appraisal; help participants identify resources for improving PE performance in their countries. *Commencing date:* June. *Duration:* 6 weeks. *Qualifications:* Public enterprise managers or officials from government agencies, preferably with 5 years of relevant experience. English. *Deadline for application:* April. *Fees:* \$US 9,800.

**Organizer:** Public Enterprise Workshop  
Harvard Institute for International Development  
One Eliot Street  
Cambridge, Massachusetts 02138  
United States of America

#### **Industrial extension, information/Vulgarisation et information industrielles/ Extensión industrial e información conexas**

##### **Production management information systems (PROMIS)**

*Short description:* Analysis, design and implementation of production-management information systems. *Commencing date:* To be arranged. *Duration:* 6 weeks. *Qualifications:* English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 100.

**Organizer:** Asian Productivity Organization  
8-4-14, Akasaka, Minato-ku  
Tokyo 107, Japan

##### **Financial modelling by computer**

*Short description:* Financial modelling systems for business information analysed by IBM 486 PC and local area networks. *Commencing date:* January, April, August, October. *Duration:* 4 weeks. *Qualifications:* English. *Deadline for application:* 1 month before commencing date. *Fees:* £325 per week.

**Organizer:** East Kilbride and District Engineering G.T.A. Ltd.  
3 Law Place  
Nerston Industrial Estate  
East Kilbride G74 4PP, Scotland, United Kingdom

##### **Media producers course**

*Short description:* Creative and production skills for media producers concerned with rural development; essential management skills to manage a media unit. *Commencing date:*

July. *Duration:* 11 weeks. *Qualifications:* Media production work experience. English.  
*Deadline for application:* May. *Fees:* £7,000.

*Organizer:* IM Associates  
36 Robertson Road  
Brighton BN1 5NL, United Kingdom  
*Venue:* University of Sussex, United Kingdom

#### **Management information systems**

*Short description:* For executive and administrative managers who have responsibility for determining, evolving and implementing management information systems. *Commencing date:* February, September. *Duration:* 12 weeks. *Qualifications:* English. *Deadline for application:* 8 weeks before commencing date. *Fees:* £7,370.

*Organizer:* Royal Institute of Public Administration  
International Division  
Regent's College  
Inner Circle  
Regent's Park  
London NW1 4NS, United Kingdom

#### **Information technology**

*Short description:* Survey of information and communication technology; utility in libraries and information centres and implications for management. *Commencing date:* To be arranged. *Duration:* To be arranged. *Qualifications:* English. *Deadline for application:* To be arranged. *Fees:* To be arranged.

*Organizer:* School of Library and Information Science  
University of Wisconsin-Milwaukee  
P.O. Box 413  
Milwaukee, Wisconsin 53201  
United States of America

#### **Management in information centres**

*Short description:* The library/information centre as a service organization; management of the library/information centre: planning, budgeting, decision-making, leadership styles, motivation, communication, personnel management. *Commencing date:* To be arranged. *Duration:* To be arranged. *Qualifications:* English. *Deadline for application:* To be arranged. *Fees:* To be arranged.

*Organizer:* School of Library and Information Science  
University of Wisconsin-Milwaukee  
P.O. Box 413  
Milwaukee, Wisconsin 53201  
United States of America

#### **Microcomputers in information resources management**

*Short description:* Use and applications of microcomputers in various library and information management functions. *Commencing date:* To be arranged. *Duration:* To be arranged. *Qualifications:* English. *Deadline for application:* To be arranged. *Fees:* To be arranged.

*Organizer:* School of Library and Information Science  
University of Wisconsin-Milwaukee  
P.O. Box 413  
Milwaukee, Wisconsin 53201  
United States of America

**Investment promotion and industrial financing/  
Promotion de l'investissement et financement industriel/  
Promoción de las inversiones y financiación industrial**

**Gestion financière**

*Brève description:* Marketing, comptabilité, finances des entreprises, contrôle budgétaire, informatisation dans le domaine financier. *Début du cours:* A arranger. *Durée:* 4 semaines. *Qualifications:* Diplôme universitaire de sciences économiques. Français. *Date limite d'inscription:* —. *Droits d'inscription:* A arranger.

*Organisateur:* Belgian Institute for Training, Technical Assistance and Technology  
Transfer S.A.  
63, rue Montoyer  
1040 Bruxelles, Belgique

**Financial management**

*Short description:* Cost and financial accounting; reporting; accounting systems; financial ratios; working capital management; investment appraisal and capital budgeting; financial markets in developing countries; financial planning; practical assignments and reporting. *Commencing date:* September. *Duration:* 13 weeks. *Qualifications:* Degree in accounting, economics, business administration or related science. English. *Deadline for application:* June. *Fees:* f. 15,500.

*Organizer:* Netherlands International Institute for Management (RVB)  
Executive Programmes  
Endepolsdomein 150  
P.O. Box 1203  
6201 BE Maastricht, Netherlands

**Marketing and export promotion/Commercialisation et promotion de  
l'exportation/Comercialización y promoción de las exportaciones**

**Export promotion**

*Short description:* International marketing and export-promotion techniques with particular reference to Europe for officials and entrepreneurs from developing and Eastern European countries. *Commencing date:* To be arranged. *Duration:* 2 months. *Qualifications:* English, French or Spanish according to the selected region. *Deadline for application:* —. *Fees:* —.

*Organizer:* Italian Institute for Foreign Trade (ICE)  
Uff. FORM/EST  
Via Liszt, 21  
00144 Rome, Italy

### **Marketing and export-trade development**

*Short description:* Development of the marketing function, with special emphasis on export-trade development. Personalized introductions on market analysis, international trade relations, quality assurance, marketing, pricing and costing; study of selected literature and market documentations. *Commencing date:* To be arranged. *Duration:* 8-13 weeks. *Qualifications:* University degree in engineering, economics or business administration, preferably with experience in industry. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Centre for Management and Industrial Development (CBO)  
Exchange Building  
P.O. Box 21468  
3001 AL Rotterdam, Netherlands

### **Marketing management and physical distribution**

*Short description:* Marketing concepts; marketing management; product analysis and development; marketing research; finance for marketing; physical distribution; practical assignment and reporting. *Commencing date:* May. *Duration:* 13 weeks. *Qualifications:* Degree in business administration, economics or related science. English. *Deadline for application:* March. *Fees:* f. 15,500.

*Organizer:* Netherlands International Institute for Management (RVB)  
Executive Programmes  
Endepolsdomein 150  
P.O. Box 1203  
6201 BE Maastricht, Netherlands

### **Marketing and sales management**

*Short description:* From marketing mix to technical sales operation; marketing in the overall corporate strategy; marketing plans, market research, product development, advertising, forecasting, budgets and financial control; managing the sales operation to achieve projected plans; setting up new businesses; study tours; computer use. *Commencing date:* To be arranged. *Duration:* 12 weeks. *Qualifications:* Relevant working experience. English. *Deadline for application:* 1 month before commencing date. *Fees:* To be arranged.

*Organizer:* Chattaway (UK) Training Services  
Pool Chambers  
26 Dam Street  
Lichfield, Staffordshire WS13 6AA, United Kingdom

### **Marketing and marketing management**

*Short description:* Marketing and corporate objectives; the importance of the customer; market research; marketing plan; total marketing mix; distribution and the role of the wholesaler; sales management and incentives; public relations; export marketing. *Commencing date:* To be arranged. *Duration:* 12 weeks. *Qualifications:* Responsibilities within the marketing function. English. *Deadline for application:* 1 month before commencing date. *Fees:* To be arranged.

*Organizer:* Strategic Marketing Services  
P.O. Box 37  
Lichfield, Staffordshire WS13 8LW, United Kingdom



### **Marketing management**

*Short description:* Advanced business curriculum with marketing as the primary concentration; casework; lectures; computer simulation with actual corporate boardroom situations. *Commencing date:* July. *Duration:* 4 weeks. *Qualifications:* Managers with at least 10 years of experience. *English.* *Deadline for application:* April. *Fees:* \$US 10,880.

*Organizer:* International Marketing Institute  
314 Hammond Street  
Chestnut Hill, Massachusetts 02167  
United States of America

### **Industrial technology and product development/ Mise au point des techniques industrielles et des produits/ Desarrollo de tecnología industrial y de productos**

#### **Technology management**

*Short description:* Selection, assimilation, diffusion and use of technology in business and industrial enterprises. *Commencing date:* To be arranged. *Duration:* 3 weeks. *Qualifications:* *English.* *Deadline for application:* 3 months before commencing date. *Fees:* \$US 50.

*Organizer:* Asian Productivity Organization  
8-4-14, Akasaka, Minato-ku  
Tokyo 107, Japan

#### **Industrial design engineering**

*Short description:* Product development, design methodology, computer-aided engineering, research and development project management, ergonomics, marketing, integrated product and production analysis. *Commencing date:* August. *Duration:* 1 month. *Qualifications:* Degree in engineering or equivalent; practical experience. *English.* *Deadline for application:* March. *Fees:* f. 7,500.

*Organizer:* Delft University of Technology  
CICAT  
P.O. Box 5048  
2600 GA Delft, Netherlands

#### **Sector technology and management**

*Short description:* Production and operations management (joint programme) including innovation, production process and equipment; automation quality control; sector technology and a practical assignment: (a) food processing (agri-business system, food processing, raw materials, choice of technology, fieldwork assignment); (b) metal-products manufacturing (metal technology and processing, automation, robotics, choice of technology, fieldwork assignment). *Commencing date:* January. *Duration:* 13 weeks. *Qualifications:* Degree in engineering, business administration or related science. *English.* *Deadline for application:* 4 months before commencing date. *Fees:* f. 15,500.

*Organizer:* Netherlands International Institute for Management (RVB)  
Executive Programmes  
Endepolsdomein 150  
P.O. Box 1203  
6201 BE Maastricht, Netherlands

### **Advanced materials and their link processes**

*Short description:* For high-level industrial professionals; characteristics of new materials, like composites and ceramics and the most suitable techniques to link them. *Commencing date:* March. *Duration:* 2 1/2 months. *Qualifications:* Industrial material engineers. Portuguese. *Deadline for application:* January. *Fees:* Esc 100,000.

*Organizer:* Instituto de Soldadura e Qualidade  
Rua Tomás de Figueiredo 16A  
1500 Lisbon, Portugal

### **Industrial engineering specialization**

*Short description:* For high-level professionals; new manufacturing technologies and management. *Commencing date:* October. *Duration:* 8 months. *Qualifications:* Mechanical, metallurgical and technical engineers. Portuguese. *Deadline for application:* August. *Fees:* Esc 200,000.

*Organizer:* Instituto de Soldadura e Qualidade  
Rua Tomás de Figueiredo 16A  
1500 Lisbon, Portugal

### **Science and technology policy**

*Short description:* Role of science and technology in industrialization and economic development; salient features of developing economies; role of public policy in the development and management of technology in developing countries. *Commencing date:* March. *Duration:* 12 weeks. *Qualifications:* Academic degree or equivalent background; involvement in policy and decision-making at micro and macro level. English. *Deadline for application:* 5 months before commencing date. *Fees:* £4,500.

*Organizer:* David Livingstone Institute of Overseas Development Studies  
University of Strathclyde  
26 Richmond Street  
Glasgow G1 1XH, Scotland, United Kingdom

### **Industrial instrumentation and process control**

*Short description:* Basic principles of instrumentation and process control. *Commencing date:* To be arranged. *Duration:* 65 days. *Qualifications:* Knowledge of mathematics and science equivalent to secondary school leaving level. English. *Deadline for application:* —. *Fees:* £5,235 + VAT.

*Organizer:* Roxby Engineering International Ltd.  
Lagonda Road  
Billingham, Cleveland TS23 4JA, United Kingdom

### **Instrumentation multi skill**

*Short description:* Basic principles of instrumentation and process control. *Commencing date:* To be arranged. *Duration:* 20 days. *Qualifications:* Engineering personnel. English. *Deadline for application:* —. *Fees:* £1,540 + VAT.

*Organizer:* Roxby Engineering International Ltd.  
Lagonda Road  
Billingham, Cleveland TS23 4JA, United Kingdom

**Maintenance and repair/Entretien et réparation/  
Mantenimiento y reparación**

**Corrosion et lutte contre la corrosion**

*Brève description* : Corrosion électrochimique; diagrammes d'équilibres électrochimiques; études cinétiques de la corrosion; méthodes expérimentales; théorie et applications à la lutte contre la corrosion; principes de protection et cas particuliers de corrosion.  
*Début du cours* : Toute l'année sauf en juillet et août. *Durée* : 2 semaines ou 3 mois.  
*Qualifications* : Diplôme de l'enseignement universitaire ou technique supérieur. Français, anglais. *Date limite d'inscription* : —. *Droits d'inscription* : FB 45 000-50 000 par mois.

*Organisateur* : Centre belge d'étude de la corrosion (CEBELCOR)  
2, avenue Paul Héger-Grille  
1050 Bruxelles, Belgique

**Gestion de la maintenance industrielle**

*Brève description* : Systèmes de gestion de maintenance industrielle adaptés aux conditions d'exploitation dans les pays en voie d'industrialisation, en particulier la problématique des pièces de rechange; la documentation technique, l'organisation, la planification de la maintenance; les mesures à prendre lors de l'achat de l'équipement; les ateliers de maintenance; la maintenance informatisée; la maintenance non destructive; visites d'usine. *Début du cours* : Août. *Durée* : 5 semaines. *Qualifications* : Technicien supérieur ou ingénieur ayant minimum 2 ans d'expérience en maintenance. Français. *Date limite d'inscription* : Avril. *Droits d'inscription* : FB 125 000.

*Organisateur* : DGS International S.A.  
75, Jubileumlaan  
9000 Gand, Belgique

**Maintenance management**

*Short description*: Maintenance organization, maintenance management, technical documentation, spare parts administration, maintenance costs and budgets, maintenance workshops, new equipment and plant buying strategy, maintenance strategies, non-destructive testing in maintenance, maintenance information. *Commencing date*: March. *Duration*: 3 weeks. *Qualifications*: Degree in mechanical or electrical engineering, with at least 2 years of experience in maintenance management. English. *Deadline for application*: 5 months before commencing date. *Fees*: BF 90,000.

*Organizer*: DGS International S.A.  
Jubileumlaan 75  
9000 Ghent, Belgium

**Maintenance in production engineering**

*Short description*: Organizing and administration of maintenance; maintenance tools; wear of equipment; means of investigation; equipment supervision techniques. *Commencing date*: April. *Duration*: 9 weeks. *Qualifications*: High-level technicians, engineers, managers. English. *Deadline for application*: 1 month before commencing date. *Fees*: F 45,000.

*Organizer*: Centre d'études supérieures sur l'enseignement de la mécanique  
8, rue des Minimes  
94300 Vincennes, France

*Venue*: Lyon, France

### **Corrosion science and technology**

*Short description:* Thermodynamics and kinetics of corrosion processes; electrochemistry; corrosion of ferrous and non-ferrous metals; corrosion in industrial plants; corrosion protection; testing methods in corrosion and protection. *Commencing date:* March. *Duration:* 2 years (6 months every year). *Qualifications:* Degree in engineering, chemistry or physics. Italian. *Deadline for application:* 4 months before commencing date. *Fees:* Lit 500,000.

*Organizer:* Corrosion Study Centre "A. Daccò"  
University of Ferrara  
Via L. Borsari 46  
44100 Ferrara, Italy

### **Management of maintenance in industrial plants**

*Short description:* For personnel having technical or managerial responsibilities for the operation and control of maintenance activities in industrial plants. *Commencing date:* September. *Duration:* 28 weeks. *Qualifications:* Degree or diploma in any technical field. English, French, Italian. *Deadline for application:* May. *Fees:* To be arranged (scholarship sponsored by Italian Ministry of Foreign Affairs available).

*Organizer:* Istituto Culturale Italiano (ICI)  
P.O. Box 91  
San Benedetto del Tronto (A.P.), 63039 Italy

### **Quality control, materials testing/Contrôle de la qualité, essai des matériaux/Control de calidad, ensayo de materiales**

#### **Quality management in production engineering**

*Short description:* Quality approach, organizing and administration of quality, quality tools, statistical methods, mastering of machining procedures, control procedures. *Commencing date:* October. *Duration:* 9 weeks. *Qualifications:* High-level technicians, engineers, or managers. English. *Deadline for application:* 1 month before commencing date. *Fees:* F 45,000.

*Organizer:* Centre d'études supérieures sur l'enseignement de la mécanique  
8, rue des Minimes  
94300 Vincennes, France

*Venue:* Lyon, France

#### **Quality control**

*Short description:* Basic quality-control techniques (lectures, classroom discussions and in-plant exercises) and implementation of quality-control techniques in an actual production site. *Commencing date:* July. *Duration:* 6 weeks. *Qualifications:* Engineers and managerial staff of developing countries responsible for quality control, production control or factory management. English. *Deadline for application:* 6 months before commencing date. *Fees:* ¥ 465,000.

**Organizer:** The Association for Overseas Technical Scholarship  
30-1, Senju-azuma 1-chome, Adachi-ku  
Tokyo, Japan.

### **Quality management**

*Short description:* The Japanese approach to company-wide quality control (lectures, plant visits, in-plant exercises and discussions), measures for the promotion of quality and productivity improvement. *Commencing date:* June, November. *Duration:* 3 weeks. *Qualifications:* Senior managers from developing countries responsible for quality and productivity improvement. English. *Deadline for application:* 6 months before commencing date. *Fees:* ¥ 276,000.

**Organizer:** The Association for Overseas Technical Scholarship  
30-1, Senju-azuma 1-chome, Adachi-ku  
Tokyo, Japan

### **Quality systems: installation, auditing and improvement**

*Short description:* Quality control systems; quality function; sampling and inspection; auditing and evaluation; motivation and improvement programmes; problem-solving techniques; quality requirements for export. *Commencing date:* March, September. *Duration:* 13 weeks. *Qualifications:* Bachelor's degree or equivalent in a relevant field of study. English. *Deadline for application:* January, July. *Fees:* f. 15,500.

**Organizer:** International Centre for Quality and Management Sciences (ICQMS)  
's-Gravendijkwal 10  
P.O. Box 2082  
3000 CB Rotterdam, Netherlands

### **Statistical quality control: a computer-oriented approach**

*Short description:* Aspects of computer use; flow diagrams for statistical analysis; probability; sampling; tests of significance; control charts; analysis of variance; correlation and regression; excursions. *Commencing date:* March, September. *Duration:* 13 weeks. *Qualifications:* Bachelor's degree or equivalent in a relevant field of study. English. *Deadline for application:* January, July. *Fees:* f. 15,500.

**Organizer:** International Centre for Quality and Management Sciences (ICQMS)  
's-Gravendijkwal 10  
P.O. Box 2082  
3000 CB Rotterdam, Netherlands

### **Total quality control**

*Short description:* Modern concepts of total quality control; customer service; inspection and acceptance sampling; process control; organization; planning; motivation; improvement; training period in relevant enterprises. *Commencing date:* March, September. *Duration:* 13 weeks. *Qualifications:* Bachelor's degree in economics, engineering, science or statistics. English. *Deadline for application:* January, July. *Fees:* f. 15,500.

**Organizer:** International Centre for Quality and Management Sciences (ICQMS)  
's-Gravendijkwal 10  
P.O. Box 2082  
3000 CB Rotterdam, Netherlands

**Mechanization, robotics, automation/Mécanisation, robotique, automation/  
Mecanización, robótica, automatización**

**Industrial electronics technology (EL 12)**

*Short description:* Programmable logic control (PLC) application in machine control.  
*Commencing date:* July. *Duration:* 3 weeks. *Qualifications:* Basic knowledge of electricity, electronics and industrial automation, plus programmable logic control. English. *Deadline for application:* April. *Fees:* \$US 2,340.

*Organizer:* Vilhelmina Advanced Training and Education Center  
912 81 Vilhelmina, Sweden

**Industrial electronics technology (EL 13)**

*Short description:* Programmable logic control (PLC) application in process control.  
*Commencing date:* July. *Duration:* 3 weeks. *Qualifications:* Basic knowledge of electricity, electronics and industrial automation, plus programmable logic control. English. *Deadline for application:* April. *Fees:* \$US 2,340.

*Organizer:* Vilhelmina Advanced Training and Education Center  
912 81 Vilhelmina, Sweden

**Training of trainers and human resource development/Formation de  
formateurs et mise en valeur des ressources humaines/Formación de  
profesionales de capacitación y perfeccionamiento de recursos humanos**

**Human resources development (HRD) for managers from developing countries**

*Short description:* The importance of HRD in the organization; basic concepts underlying the HRD function; identification of barriers and ways of overcoming them; elements of a comprehensive HRD programme; guidelines/criteria for determining what can be done internally and when external resources should be used; establishing the HRD function. *Commencing date:* September. *Duration:* 2-3 weeks. *Qualifications:* Top managers or managers responsible for HRD. English. *Deadline for application:* 4 weeks before commencing date. *Fees:* \$US 5,000 (including accommodation, board, local travel and all materials).

*Organizer:* Human Resources Development International  
Hofzeile 3/14  
1190 Vienna, Austria

**Formation à l'ingénierie de formation**

*Brève description :* Besoins, sélection, apprentissage, évaluation, didactique y compris l'audiovisuel, programme, calcul des coûts, aspects contractuels. *Début du cours :* A arranger. *Durée :* 3 semaines. *Qualifications :* Formateurs et responsables de formation. Français. *Date limite d'inscription :* A arranger. *Droits d'inscription :* FB 33 000.

*Organisateur :* Centre interuniversitaire de formation permanente (CIFOP)  
1b, avenue Général Michel  
6000 Charleroi, Belgique

### **Gestion des ressources humaines et management**

*Brève description* : Conduite de réunion, communication, gestion des conflits, négociation, gestion du temps, gestion de la qualité, accueil téléphonique (exercices pratiques et apports théoriques); stages en entreprise. *Début du cours* : A arranger. *Durée* : 15 jours-2 mois. *Qualifications* : Baccalauréat ou niveau équivalent ou expérience. Français. *Date limite d'inscription* : A arranger. *Droits d'inscription* : A arranger.

*Organisateur* : Institut des affaires publiques (IAP)  
1b, avenue Général Michel  
6000 Charleroi, Belgique

### **Overseas training specialist programme**

*Short description*: Duties and responsibilities of industrial training/HRD officer, direct trainer skills, training needs analysis, training identification, curriculum development, training design, validation/evaluation, management of training. *Commencing date*: September. *Duration*: 10 weeks. *Qualifications*: Human resource development officer (present or future), government officials, training managers. English. *Deadline for application*: July. *Fees*: DKr 85,000.

*Organizer*: Aarhus Technical College  
International Department  
Halmstadgade 6  
8200 Aarhus N, Denmark

### **Designing and developing your own training material**

*Short description*: Attitude to change: how adults look on and adapt to new knowledge, skills and attitudes; motivation of adults; effective discussion-leading; preparation and use of variety of training aids. *Commencing date*: May. *Duration*: 10 weeks. *Qualifications*: Middle managers. English. *Deadline for application*: March. *Fees*: £Ir 4,000.

*Organizer*: Institute of Public Administration  
57-61 Lansdowne Road  
Dublin 4, Ireland

### **Training and instructional techniques**

*Short description*: The training function and its role in the organization; identification of training needs, course objectives and design of training programmes; evaluation of training; communication skills. *Commencing date*: September. *Duration*: 10 weeks. *Qualifications*: Middle managers. English. *Deadline for application*: July. *Fees*: £Ir 4,000.

*Organizer*: Institute of Public Administration  
57-61 Lansdowne Road  
Dublin 4, Ireland

### **Training of women entrepreneurs**

*Short description*: Managerial skills for women entrepreneurs; training the trainers of women entrepreneurs; development of new enterprises; management for women. *Commencing date*: August. *Duration*: 13 weeks. *Qualifications*: Degree in social sciences, economics, law or other related science. English. *Deadline for application*: June. *Fees*: f. 15,500.

**Organizer:** Netherlands International Institute for Management (RVB)  
Executive Programmes  
Endepolsdomein 150  
P.O. Box 1203  
6201 BE Maastricht, Netherlands

#### **Training — its design and management**

*Short description:* Managing the training function: linking training to organizational goals and manpower plans. *Commencing date:* June. *Duration:* 12 weeks. *Qualifications:* Managers and officials responsible for human resource development. English. *Deadline for application:* 1 month before commencing date. *Fees:* £9,060.

**Organizer:** Crown Agents  
Manpower Development Services  
St. Nicholas House  
Sutton, Surrey SM1 1EL, United Kingdom

**Venue:** Crown Agents  
Management Training Centre  
3-10 Marine Parade  
Worthing, Sussex BN11 3PW, United Kingdom

#### **Training for enterprise**

*Short description:* For trainers, advisers, instructors and educators engaged in training entrepreneurs or those involved in small-scale enterprise development. The objective is to enhance the participants' ability to design and conduct an effective training programme. *Commencing date:* August. *Duration:* 4 weeks. *Qualifications:* Participants must be directly involved, or intend to be involved, in running training programmes for entrepreneurs or small businesses. English. *Deadline for application:* June. *Fees:* £3,800 (including accommodation and meals).

**Organizer:** Enterprise Development Centre  
Cranfield School of Management  
Cranfield, Bedfordshire MK43 0AL, United Kingdom

#### **Training and development**

*Short description:* Systematic training, training design, training needs diagnosis, training resources and methods, job analysis, recruitment and selection, interpersonal skills. *Commencing date:* Throughout the year. *Duration:* 20 days, divided into two modules of 10 days separated by a project period. *Qualifications:* English. *Deadline for application:* —. *Fees:* To be arranged.

**Organizer:** Fielden House Ltd.  
Mersey Road, West Didsbury  
Manchester M20 8QA, United Kingdom

#### **Training management**

*Short description:* Advanced level programme on the practice and management of training. *Commencing date:* Throughout the year. *Duration:* 25 days, divided into two modules of 15 and 10 days, separated by a project period. *Qualifications:* International baccalaureate or equivalent. English. *Deadline for application:* —. *Fees:* To be arranged.

**Organizer:** Fielden House Ltd.  
Mersey Road, West Didsbury  
Manchester M20 8QA, United Kingdom



### **Training of trainers**

*Short description:* To develop skills and knowledge in management and planning of training programmes and training organizations. *Commencing date:* July. *Duration:* 11 weeks. *Qualifications:* Training experience. English. *Deadline for application:* May. *Fees:* £6,500.

*Organizer:* IM Associates  
36 Robertson Road  
Brighton BN1 5NL, United Kingdom

*Venue:* University of Sussex  
United Kingdom

### **Managing the training function**

*Short description:* Formulation of training and development policy, assessment of training needs, designing of learning/development methods, delivery of training and setting up and operation of training facilities. *Commencing date:* September. *Duration:* 10 weeks. *Qualifications:* Training officers, advisers and line managers with responsibility for training. English. *Deadline for application:* 4 weeks before commencing date. *Fees:* To be arranged.

*Organizer:* International Training Service Ltd.  
The Beeches, 37 Parkfield Road  
Coleshill, Warwickshire B46 3LD, United Kingdom

### **Management of training within organizations**

*Short description:* Organization and management of the training function within organizations. Successful completion of the course and a major project leads to the award of the diploma in training management. *Commencing date:* March, June, November. *Duration:* 7 weeks. *Qualifications:* Certificate in training and development or equivalent. English. *Deadline for application:* —. *Fees:* £2,800.

*Organizer:* Don Macdonald  
Polytechnic of West London  
Business Training Services  
Wellington Street  
Slough, Berkshire SL1 1YG, United Kingdom

### **Training techniques for training officers**

*Short description:* Training officer skills, including training methods, assessing training needs and organizing and designing training. *Commencing date:* January, April, September. *Duration:* 8 weeks. *Qualifications:* English. *Deadline for application:* —. *Fees:* Approximately £3,200.

*Organizer:* Don Macdonald  
Polytechnic of West London  
Business Training Services  
Wellington Street  
Slough, Berkshire SL1 1YG, United Kingdom

### **Training techniques for scientists and technologists**

*Short description:* Advanced instruction in teaching and training techniques for vocational and in-service courses. *Commencing date:* October. *Duration:* 7 weeks. *Qualifications:* Graduates in education, agriculture, rural extension, forestry and specialist organizations. English. *Deadline for application:* September. *Fees:* £2,310 + VAT.

**Organizer:** The University of Edinburgh

**Contact address:**

Unived Technologies Ltd.  
16 Buccleuch Place, Edinburgh  
EM8 9LN, Scotland, United Kingdom

**Venue:** The University of Edinburgh, Kings Buildings  
Edinburgh, Scotland, United Kingdom

## 6. MANAGEMENT/GESTION/GESTIÓN

### Factory management/Gestion de l'unité de production/Gestión de fábricas

#### Amélioration de la performance des ateliers

*Brève description* : Etudes de poste, diagnostic d'atelier, temps prédéterminés, utilisation d'un logiciel *ad hoc*, introduction du changement. *Début du cours* : Février. *Durée* : 16 jours. *Qualifications* : Niveau technicien supérieur, 5 ans d'expérience en atelier. Français, anglais, néerlandais. *Date limite d'inscription* : Janvier. *Droits d'inscription* : FB 68 000.

*Organisateur* : AGESOC-FABRIMETAL

21, rue des Drapiers  
1050 Bruxelles, Belgique

*Adresse de l'organisme à contacter* :

AGESOC-FABRIMETAL  
22, rue Léopold  
6000 Charleroi, Belgique

#### Perfectionnement pour agents de maîtrise et cadres moyens

*Brève description* : Formation-action sur les compétences nécessaires à la conduite des hommes : psychologie, économie, gestion du temps, gestion de production. *Début du cours* : Janvier, septembre. *Durée* : 15 jours. *Qualifications* : Exercer une fonction d'encadrement ou s'y préparer. Français, anglais, néerlandais. *Date limite d'inscription* : 1 mois avant le début du cours. *Droits d'inscription* : FB 84 900.

*Organisateur* : AGESOC-FABRIMETAL

21, rue des Drapiers  
1050 Bruxelles, Belgique

*Adresse de l'organisme à contacter* :

AGESOC-FABRIMETAL  
22, rue Léopold  
6000 Charleroi, Belgique

#### General management training

*Short description*: Marketing, finance and accountancy, managerial skills; in-company training; special workshops. *Commencing date*: To be arranged. *Duration*: 8 weeks. *Qualifications*: Residents from Central and Eastern Europe; University degree or equivalent, with some years of experience at decision-making level. English. *Deadline for application*: —. *Fees*: —.

*Organizer*: Belgian Institute for Training, Technical Assistance and Technology

Transfer S.A. (IBF)  
63, rue Montoyer  
1040 Brussels, Belgium

#### Diagnostics d'entreprises ou de départements

*Brève description* : Diagnostics généraux d'entreprises, de départements ou de services; analyse des fonctions, validité des outils de gestion; fiabilité des informations,

systèmes et procédures; rentabilité; stratégie d'entreprise; études de marchés. *Début du cours* : A arranger. *Durée* : A arranger. *Qualifications* : Minimum baccalauréat ou niveau équivalent. Français, anglais. *Date limite d'inscription* : —. *Droits d'inscription* : A arranger.

*Organisateur* : Helping SA  
38, avenue Montjoie  
1180 Bruxelles, Belgique

#### Conseiller opérationnel en gestion

*Brève description* : Economie, comptabilité générale, diagnostic de l'entreprise, comptabilité analytique d'exploitation, gestion financière, gestion informatisée, organisation commerciale, droit des entreprises. *Début du cours* : A arranger. *Durée* : 3 mois. *Qualifications* : Français. *Date limite d'inscription* : —. *Droits d'inscription* : A arranger.

*Organisateur* : Institut des affaires publiques et Centre interuniversitaire de formation permanente  
1b, avenue Général Michel  
6000 Charleroi, Belgique

#### Plant operations management

*Short description*: Study and develop relevant techniques and measures for managing plant operations effectively. *Commencing date*: To be arranged. *Duration*: 3 weeks. *Qualifications*: English. *Deadline for application*: 3 months before commencing date. *Fees*: \$US 100.

*Organizer*: Asian Productivity Organization  
8-4-14, Akasaka, Minato-ku  
Tokyo 107, Japan

#### Production management

*Short description*: Corporate activities and functions; system function flow diagrams; factory management; production planning and control. *Commencing date*: February. *Duration*: 6 weeks. *Qualifications*: Senior staff with more than 5 years of relevant experience. English. *Deadline for application*: 6 months before commencing date. *Fees*: ¥ 465,000.

*Organizer*: The Association for Overseas Technical Scholarship  
30-1, Senju-azuma 1-chome, Adachi-ku  
Tokyo, Japan

#### Supply and materials management

*Short description*: Expand the skills of senior and middle managers in developing supply systems and procedures. *Commencing date*: March, June, September. *Duration*: 12 weeks. *Qualifications*: Relevant working experience. English. *Deadline for application*: 4 weeks before commencing date. *Fees*: £8,040.

*Organizer*: Crown Agents  
Manpower Development Services  
St. Nicholas House  
Sutton, Surrey SM1 1EL, United Kingdom

*Venue*: Crown Agents  
Management Training Centre  
3-10 Marine Parade  
Worthing, Sussex BN11 3PW, United Kingdom

### Supervisory management

*Short description:* Work measurement, methods and systems improvement, organizational effectiveness. *Commencing date:* Throughout the year. *Duration:* 30 days. *Qualifications:* English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Fielden House Ltd.  
Mersey Road  
West Didsbury  
Manchester M20 8QA, United Kingdom

### Procurement and materials management

*Short description:* For directors and senior managers in the private and public sectors who have or will have involvement in strategic planning in procurement and materials management, and responsibility for the professional development and supervision of middle managers. *Commencing date:* July. *Duration:* 4 weeks. *Qualifications:* English. *Deadline for application:* 1 month before commencing date. *Fees:* £6,500 (residential); £5,250 (non-residential).

*Organizer:* Institute of Purchasing and Supply  
Easton House  
Easton on the Hill  
Stamford, Lincolnshire PE9 3NZ, United Kingdom

*Venue:* Bournemouth, United Kingdom

### Purchasing and materials management

*Short description:* For middle management and senior personnel with responsibilities for purchasing goods and services, and for management of stores. *Commencing date:* March, June, September. *Duration:* 12 weeks. *Qualifications:* English. *Deadline for application:* 1 month before commencing date. *Fees:* £9,000 (residential); £7,450 (non-residential).

*Organizer:* Institute of Purchasing and Supply  
Easton House  
Easton on the Hill  
Stamford, Lincolnshire PE9 3NZ, United Kingdom

*Venue:* Bournemouth, United Kingdom

## Industrial management/Gestion industrielle/Gestión industrial

### Gestion des ressources humaines

*Brève description :* Sélection, analyse de postes, définition et classification des fonctions; politiques d'évaluation, de formation, de motivation et de rémunération du personnel; relations industrielles. *Début du cours :* A arranger. *Durée :* A arranger. *Qualifications :* Minimum baccalauréat ou niveau équivalent. Français, anglais. *Date limite d'inscription :* —. *Droits d'inscription :* A arranger.

*Organisateur :* Helping SA  
38, avenue Montjoie  
1180 Bruxelles, Belgique

### **Personnel management**

*Short description:* Introduction to personnel management: manpower planning/development; recruitment and selection; training and career development; job grading and evaluation; industrial relations and pay; role of labour legislation; personnel administration. *Commencing date:* April. *Duration:* 10 weeks. *Qualifications:* Middle managers. English. *Deadline for application:* March. *Fees:* £Ir 4,000.

*Organizer:* Institute of Public Administration  
57-61 Lansdowne Road  
Dublin 4, Ireland

### **Integrated productivity improvement**

*Short description:* Identification of problems in the areas of designing, production and quality control, and selection of appropriate techniques for problem solving. *Commencing date:* June. *Duration:* 4 weeks. *Qualifications:* English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 100.

*Organizer:* Asian Productivity Organization  
8-4-14, Akasaka, Minato-ku  
Tokyo 107, Japan

### **Management consultancy for productivity improvement**

*Short description:* Skills to provide an integrated approach in consultancy services for productivity improvement. *Commencing date:* To be arranged. *Duration:* 8 weeks. *Qualifications:* English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 200.

*Organizer:* Asian Productivity Organization  
8-4-14, Akasaka, Minato-ku  
Tokyo 107, Japan

### **Management and industrial development**

*Short description:* Principles of operational management in industry. Personalized introduction to the development of product programme and market potentials, production management, technology development, investment planning and costing, operations research, licensing and international industrial collaboration; includes study of selected literature and field observations. *Commencing date:* To be arranged. *Duration:* 8-13 weeks. *Qualifications:* University degree in engineering, economics or business administration, preferably with experience in industry. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Centre for Management and Industrial Development (CBO)  
Exchange Building  
P.O. Box 30042  
3001 AL Rotterdam, Netherlands

### **Advanced consultancy skills**

*Short description:* Analysis of problem areas; tools for consultancy work; behavioural skills for consultancy; organization of consultancy work. *Commencing date:* May. *Duration:* 9 weeks. *Qualifications:* Degree in business administration, economics or related science. English. *Deadline for application:* March. *Fees:* f. 15,500.

**Organizer:** Netherlands International Institute for Management (RVB)  
Executive Programmes  
Endepolsdomein 150  
P.O. Box 1203  
6201 BE Maastricht, Netherlands

#### **Management for general managers**

**Short description:** Decision-making techniques; environmental scanning; introduction to business policy and strategy management; marketing; finance; manpower policies; organization development; managerial control. **Commencing date:** January. **Duration:** 13 weeks. **Qualifications:** Degree in business administration, economics or related science. English. **Deadline for application:** 4 months before commencing date. **Fees:** f. 15,500.

**Organizer:** Netherlands International Institute for Management (RVB)  
Executive Programmes  
Endepolsdomein 150  
P.O. Box 1203  
6201 BE Maastricht, Netherlands

#### **Industrial engineering and management**

**Short description:** Production engineering and management, materials management, maintenance and quality, finance, marketing, personnel management; practical training in a company. **Commencing date:** November. **Duration:** 1 year. **Qualifications:** Bachelor's degree in engineering, economics or management. English, Portuguese. **Deadline for application:** October. **Fees:** Esc 200,000.

**Organizer:** Laboratorio Nacional de Engenharia e Tecnologia Industrial (LNETI)  
Departamento de Pré-Investimento  
Promoção e Comercialização (DPIPC)  
Praça do Príncipe Real, 19  
1200 Lisbon, Portugal

**Contact address:**

Maria Emília Raposo  
LNETI/CFT, Technical Training Centre  
Azinhaga dos Lameiros à Estrada do Paço do Lumiar  
1699 Lisbon, Portugal

**Venue:** LNETI-CFT, Technical Training Centre  
Azinhaga dos Lameiros à Estrada do Paço do Lumiar  
1699 Lisbon, Portugal

#### **Management and administration**

**Short description:** Management and general office administration; personnel administration; health and safety in industry; quality control and inspection; fire precautions; toxic hazards; communications; computers; facsimile; methods of instruction and teaching practice; financial appraisal. **Commencing date:** To be arranged. **Duration:** 12 weeks. **Qualifications:** Relevant experience. English. **Deadline for application:** 1 month before commencing date. **Fees:** To be arranged.

**Organizer:** Chattaway (UK) Training Services  
Pool Chambers  
26 Dam Street  
Lichfield, Staffordshire WS13 6AA, United Kingdom

### **Advanced logistics management**

*Short description:* Skills and knowledge required to control effectively logistics activities and to ensure that each activity is properly coordinated and integrated so as to optimize organizational efficiency. *Commencing date:* April. *Duration:* 12 weeks. *Qualifications:* Senior managers. English. *Deadline for application:* 4 weeks before commencing date. *Fees:* Approximately £9,060.

*Organizer:* Crown Agents  
Manpower Development Services  
St. Nicholas House  
Sutton, Surrey SM1 1EL, United Kingdom

*Venue:* Crown Agents  
Management Training Centre  
3-10 Marine Parade  
Worthing, Sussex BN11 3PW, United Kingdom

### **Human resource management**

*Short description:* Manpower policies and strategies; conditions of employment; industrial/employee relations; recruitment and selection; performance appraisal; personnel records and systems; introduction to new technology; training and development. *Commencing date:* August. *Duration:* 10 weeks. *Qualifications:* Personnel managers/advisers and line managers. English. *Deadline for application:* 4 weeks before commencing date. *Fees:* To be arranged.

*Organizer:* International Training Service Ltd.  
The Beeches, 37 Parkfield Road  
Coleshill, Warwickshire B46 3LD, United Kingdom

### **Management for engineers and scientists**

*Short description:* Management skills and approaches, with particular emphasis on people management. *Commencing date:* July, October. *Duration:* 3 weeks. *Qualifications:* Junior managers. English. *Deadline for application:* 4 weeks before commencing date. *Fees:* To be arranged.

*Organizer:* International Training Service Ltd.  
The Beeches, 37 Parkfield Road  
Coleshill, Warwickshire B46 3LD, United Kingdom

### **Management of production**

*Short description:* Current production techniques and best current practice in optimizing the human resource element in production processes, intervention techniques appropriate to "technical advisers to management". *Commencing date:* January. *Duration:* 10 weeks. *Qualifications:* Managers and senior specialists with production management responsibilities. English. *Deadline for application:* 4 weeks before commencing date. *Fees:* To be arranged.

*Organizer:* International Training Service Ltd.  
The Beeches, 37 Parkfield Road  
Coleshill, Warwickshire B46 3LD, United Kingdom

### **Managing change in organizations**

*Short description:* Introduction and effective implementation of technological change process, with particular emphasis on information technology (IT) and management infor-



mation systems (MIS). *Commencing date:* September. *Duration:* 10 weeks. *Qualifications:* Managers responsible for the development and implementation of strategies aimed at applying IT and MIS. English. *Deadline for application:* 4 weeks before commencing date. *Fees:* To be arranged.

*Organizer:* International Training Service Ltd.  
The Beeches, 37 Parkfield Road  
Coleshill, Warwickshire B46 3LD, United Kingdom

#### **Personnel management**

*Short description:* Training in the principles and practice of personnel management. *Commencing date:* January, May, September. *Duration:* 12 weeks. *Qualifications:* English. *Deadline for application:* —. *Fees:* Approximately £4,800.

*Organizer:* Don Macdonald  
Polytechnic of West London  
Business Training Services  
Wellington Street  
Slough, Berkshire SL1 1YG, United Kingdom

#### **Management analysis and consultancy skills**

*Short description:* Analytical methods; consultancy skills; job-evaluation study. *Commencing date:* June. *Duration:* 14 weeks. *Qualifications:* English. *Deadline for application:* 8 weeks before commencing date. *Fees:* £6,400.

*Organizer:* Royal Institute of Public Administration  
International Division  
Regent's College  
Inner Circle  
Regent's Park  
London NW1 4NS, United Kingdom

#### **Manpower budgeting and staff inspection**

*Short description:* To build up knowledge and skills from a foundation of management theory leading to exercising practical skills of staffing and staff inspection. *Commencing date:* October. *Duration:* 10 weeks. *Qualifications:* English. *Deadline for application:* 8 weeks before commencing date. *Fees:* £4,420.

*Organizer:* Royal Institute of Public Administration  
International Division  
Regent's College  
Inner Circle  
Regent's Park  
London NW1 4NS, United Kingdom

#### **Management skills**

*Short description:* To develop an understanding of management skills, with an emphasis on team building and the effective use of human resources. *Commencing date:* January, April, July, October. *Duration:* 12 weeks. *Qualifications:* English. *Deadline for application:* 4 weeks before commencing date. *Fees:* £3,960 + VAT.

*Organizer:* Teesside Transport Training Association Ltd.  
Hamilton House  
Cargo Fleet Lane  
Middlesbrough, Cleveland TS3 8DJ, United Kingdom

### **Supervisory management**

*Short description:* Management of human resources, management of financial resources, management of information and management of products and services. *Commencing date:* January, April, July, October. *Duration:* 12 weeks. *Qualifications:* English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Teesside Transport Training Association Ltd.  
Hamilton House  
Cargo Fleet Lane  
Middlesborough, Cleveland TS3 8DJ, United Kingdom

### **Effective management and decision-making**

*Short description:* Develop the abilities and sharpen the skills of senior and mid-level public administrators and private-sector managers from developing countries. *Commencing date:* June. *Duration:* 6 weeks. *Qualifications:* Management experience. English. *Deadline for application:* April. *Fees:* \$US 4,950.

*Organizer:* Dr. Franklin Van Buer  
Director, OITC  
Northern Illinois University  
DeKalb, Illinois 60115  
United States of America

### **Management development/Développement des capacités de gestion/ Perfeccionamiento de la gestión**

#### **Effective problem solving for production managers**

*Short description:* Identification and definition of critical work-related problems, problem resolution, and development and implementation of effective problem-solving measures to improve the performance of production systems and procedures. *Commencing date:* June. *Duration:* 6 weeks. *Qualifications:* English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 200.

*Organizer:* Asian Productivity Organization  
8-4-14, Akasaka, Minato-ku  
Tokyo 107, Japan

#### **Cross-cultural management**

*Short description:* Participants from various countries with different cultural backgrounds will compare the Japanese management system with their own to develop new styles: lectures, case studies, exercises and discussions. *Commencing date:* To be arranged. *Duration:* 3 weeks. *Qualifications:* Staff engaged in cross-cultural business with at least 5 years of relevant experience. English. *Deadline for application:* 6 months before commencing date. *Fees:* ¥ 276,000.

*Organizer:* The Association for Overseas Technical Scholarship  
30-1, Senju-azuma 1-chome, Adachi-ku  
Tokyo, Japan

### **Managerial control and management information systems**

*Short description:* Managerial control systems; financial control systems design; cost accounting; management information systems; design and implementation; computer hardware and software; decision support tools; behavioural aspects; practical assignments and reporting. *Commencing date:* May. *Duration:* 13 weeks. *Qualifications:* Degree in accounting, economics, business administration or related science. English. *Deadline for application:* March. *Fees:* f. 15,500.

*Organizer:* Netherlands International Institute for Management (RVB)  
Executive Programmes  
Endepolsdomein 150  
P.O. Box 1203  
6201 BE Maastricht, Netherlands

### **Strategic management**

*Short description:* Detailed understanding of strategic management and its contribution to improved business performance. *Commencing date:* To be arranged. *Duration:* 3 weeks. *Qualifications:* Participants must be in a position to make a major contribution to the strategic development of their businesses. English. *Deadline for applications:* —. *Fees:* £6,900 + VAT (including all residential costs).

*Organizer:* Ashridge Management College  
Berkhamsted, Hertshire, HP4 INS, United Kingdom

**B. DEVELOPING COUNTRIES AND AREAS/PAYS ET ZONES EN DÉVELOPPEMENT/PAÍSES Y ZONAS EN DESARROLLO**

**1. INDUSTRIAL BRANCHES/SECTEURS INDUSTRIELS/  
RAMAS INDUSTRIALES**

**Mining/Industries extractives/Minería**

**Geofísica aplicada**

*Breve descripción:* Uso de métodos geofísicos orientado a la solución de diferentes problemas de la prospección geológica e ingenieril. *Fecha de iniciación:* Enero. *Duración:* 45 días. *Calificaciones:* Graduado universitario. Español. *Fecha límite de inscripción:* 4 semanas antes del curso. *Derechos de inscripción:* \$US 1,755.

*Organizador:* Escuela Superior de Cuadros del Ministerio de la Industria Básica  
Carretera de Vento, Km 10<sup>1/2</sup>  
Municipio Boyeros  
La Habana, Cuba

**Non-metallic raw material testing**

*Short description:* Laboratory testing of non-metallic raw materials, quality technologies. *Commencing date:* March, September. *Duration:* 5 weeks. *Qualifications:* Professional experience. English. *Deadline for application:* February, August. *Fees:* \$US 2,100.

*Organizer:* IDEA Ltd.  
Pražská 12  
305 11 Plzen, Czechoslovakia

**Mining engineering and technology**

*Short description:* Basic concepts, main theoretical aspects, application in industry, field training. *Commencing date:* To be arranged. *Duration:* 2-4 weeks. *Qualifications:* Bachelor's degree in engineering or science, technicians. English. *Deadline for application:* —. *Fees:* \$US 500 per week.

*Organizer:* Tabbin Institute for Metallurgical Studies (TIMS)  
P.O. Box 109  
Helwan  
11421 Cairo, Egypt

**Petroleum drilling**

*Short description:* Drilling technology; optimization of drilling parameters; drilling fluids and cementing; drilling machinery and equipment. *Commencing date:* September. *Duration:* 4 weeks. *Qualifications:* Degree in petroleum engineering. English. *Deadline for application:* June. *Fees:* To be arranged.

*Organizer:* Academy of Mining and Metallurgy  
Drilling and Petroleum Engineering Faculty  
Al. Mickiewicza 30  
30-059 Krakow, Poland

### **Low-grade anthracite coal briquettes as domestic fuel**

*Short description:* Technologies for coal preparation and mixing; briquetting of 22-hole Korean briquette. Use of Korean briquette (*Yontan*) as domestic fuel and its burning characteristics. *Commencing date:* January. *Duration:* Either 1 month for seminar in the beneficiary country or 3 months for training courses in the Republic of Korea. *Qualifications:* Background in chemical or mechanical engineering. English. *Deadline for application:* 3 months before commencing date. *Fees:* To be arranged.

*Organizer:* Head of Combustion Engineering Laboratory  
Korea Institute of Energy Research  
P.O. Box 5, Daeduck Science Town  
Daejeon, Republic of Korea

### **Projecting core drilling and building up rigs**

*Short description:* Projecting hole drilling using geological data. *Commencing date:* October. *Duration:* 45 days. *Qualifications:* Projecting engineers. English, French. *Deadline for application:* March. *Fees:* \$US 6,750.

*Organizer:* CIMPINA Training and Research Institute  
29 Blv. Culturii  
Prahova Country, Romania

*Contact address:*

PETROM Romanian Oil Corporation  
109 Victoriei  
Bucharest, Romania

### **Projecting drilling technology**

*Short description:* Drilling technologies and projecting duration of drilling. *Commencing date:* November. *Duration:* 30 days. *Qualifications:* Drilling engineers. English, French. *Deadline for application:* May. *Fees:* \$US 5,250.

*Organizer:* CIMPINA Training and Research Institute  
29 Blv. Culturii  
Prahova Country, Romania

*Contact address:*

PETROM Romanian Oil Corporation  
109 Victoriei  
Bucharest, Romania

### **Recovering oil deposits**

*Short description:* Conventional and non-conventional methods of increasing recoverable oil deposits; projecting, execution and evaluation of the process. *Commencing date:* May. *Duration:* 60 days. *Qualifications:* Oil deposit specialists. English. *Deadline for application:* January. *Fees:* \$US 10,500.

*Organizer:* CIMPINA Training and Research Institute  
29 Blv. Culturii  
Prahova Country, Romania

*Contact address:*

PETROM Romanian Oil Corporation  
109 Victoriei  
Bucharest, Romania

### **Rig geophysical prospecting and investigation**

*Short description:* Methods and procedures of investigations; elaboration and evaluation of geophysical diagrams. *Commencing date:* April. *Duration:* 30 days. *Qualifications:* Geophysical engineers. English, French. *Deadline for application:* January. *Fees:* \$US 5,250.

*Organizer:* CIMPINA Training and Research Institute  
29 Blv. Culturii  
Prahova Country, Romania  
*Contact address:*  
PETROM Romanian Oil Corporation  
109 Victoriei  
Bucharest, Romania

### **Work study and ergonomomy**

*Short description:* Ergonomic analysis of work processes; techniques of work measurement; establishing rules of work for drilling and exploitation of wells. *Commencing date:* September. *Duration:* 30 days. *Qualifications:* Engineers. English, French. *Deadline for application:* February. *Fees:* \$US 5,250.

*Organizer:* CIMPINA Training and Research Institute  
29 Blv. Culturii  
Prahova Country, Romania  
*Contact address:*  
PETROM Romanian Oil Corporation  
109 Victoriei  
Bucharest, Romania

### **Food products and beverages; animal feed; tobacco products/Produits alimentaires et boissons; aliments pour animaux; produits à base de tabac/ Productos alimenticios y bebidas; alimento para ganado; productos de tabaco**

#### **Tecnología azucarera**

*Breve descripción:* Literatura azucarera; control técnico; diagrama de flujo; composición de la caña; estudio básico de los azúcares; carácter general de la industria; comparación entre industria de caña y la de remolacha; balance de materiales y energético. *Fecha de iniciación:* Febrero. *Duración:* 30 días. *Calificaciones:* Graduado universitario. Español. *Fecha límite de inscripción:* 2 meses antes del curso. *Derechos de inscripción:* Para ser acordado.

*Organizador:* Instituto Cubano de Investigaciones Azucareras (ICINAZ)  
Apartado 10 154  
Quivicán 33 500  
La Habana, Cuba

#### **Biscuits and confectionary industries**

*Short description:* Production planning and plant operation; marketing and distribution; inventory management. *Commencing date:* To be arranged. *Duration:* 3 months. *Qualifications:* Bachelor's degree in an appropriate field. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* The Egyptian Co. for Food  
Sawah Street  
El-Kobbah, Egypt

#### **Cheese making**

*Short description:* Preparing of milk, starters, rennet, processing, curing and ripening.  
*Commencing date:* March. *Duration:* 6 weeks. *Qualifications:* Bachelor's degree in an appropriate field. Arabic or English. *Deadline for application:* February. *Fees:* \$US 1,000.

*Organizer:* Misi Milk and Food Co.  
National Dairy Training Centre  
El-Montaza  
Alexandria, Egypt

#### **Foodstuffs — standardization and quality control**

*Short description:* National and international food standardization; principles and practice of food quality control; training in food testing; computer-aided laboratory management (tailor-made programmes). *Commencing date:* To be arranged. *Duration:* 1-3 months. *Qualifications:* Degree in chemistry and/or agriculture. English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 3,000 per month.

*Organizer:* Hungarian Office for Standardization  
Attn.: Edith Nagy, Training Director  
P.O. Box 24  
1450 Budapest 9, Hungary

#### **Cell growth and division**

*Short description:* Regulation of macromolecular synthesis during bacterial growth, the bacterial cell division cycle, growth and division control in eukaryotic cells (particular attention will be paid to lower eukaryotes (e.g. yeasts, slime moulds)). *Commencing date:* October. *Duration:* 4 weeks. *Qualifications:* Master's degree in an appropriate field. English. *Deadline for application:* March. *Fees:* To be arranged.

*Organizer:* Technical University of Budapest  
Department of Agricultural Chemical Technology  
Attn.: Béla Novák  
Gellért tér 4  
1521 Budapest, Hungary

#### **Enzyme engineering**

*Short description:* Lectures and practical training on enzyme production, purification and immobilization. Main enzymes: cellulases, amylases, beta-glucosidases and beta-galactosidases. *Commencing date:* September. *Duration:* 6 weeks. *Qualifications:* Bachelor's or higher degree in chemistry or biology. English. *Deadline for application:* 6 months before commencing date. *Fees:* To be arranged.

*Organizer:* Technical University of Budapest  
Department of Agricultural Chemical Technology  
Attn.: Katalin Réczey  
Gellért tér 4  
1521 Budapest, Hungary

### **Storage of foodgrains**

*Short description:* Storage and inspection of foodgrains at farm and commercial storage. *Commencing date:* To be arranged. *Duration:* 2 months. *Qualifications:* Degree in science or agriculture. English. *Deadline for application:* 20 days before commencing date. *Fees:* To be arranged.

*Organizer:* Indian Grain Storage Institute  
Hapur, Hyderabad and Ludhiana

*Contact address:*  
S & R Division  
Ministry of Food  
Krishi Bhavan  
New Delhi, India

### **Technologie sucrière**

*Brève description :* Etapes spécifiques au processus de production dans une sucrerie aussi bien de canne que de betterave (extraction, épuration, évaporation, cristallisation); analyses pratiquées en laboratoire de sucrerie. *Début du cours :* Janvier. *Durée :* 15 jours. *Qualifications :* Baccalauréat + 2 (formation scientifique). Français. *Date limite d'inscription :* 15 jours avant le début du cours. *Droits d'inscription :* DH 1 500 par jour.

*Organisateur :* ISERF  
67, rue Jaafar as Sadik Agdal  
Rabat, Maroc

### **Cane sugar manufacture**

*Short description:* Cane handling, preparation and milling; juice: heating, clarification, filtration and evaporation; sugar: pan boiling, crystallization and centrifugation; handling of final products; utilization of by-products; steam and power generation; energy savings; pollution control and introduction to management. *Commencing date:* May for French-speaking, September for English-speaking participants. *Duration:* 3 months. *Qualifications:* Diploma in sugar technology or similar; professional qualifications. English or French. *Deadline for application:* March (French); July (English). *Fees:* \$US 2,500.

*Organizer:* Regional Sugarcane Training Centre for Africa  
Réduit, Mauritius

### **Chemical control of sugar factories and analysis of sugar products**

*Short description:* Sampling procedures at different stages during sugar manufacture from cane preparation, through milling, clarification, evaporation, pan boiling and final products; analysis of those samples at ICUMSA standard; analysis of boiler waters and their treatment; pollution control and introduction to management. *Commencing date:* May for French-speaking, September for English-speaking participants. *Duration:* 3 months. *Qualifications:* Diploma in chemistry or similar professional qualification. English or French. *Deadline for application:* March (French); July (English). *Fees:* \$US 2,500.

*Organizer:* Regional Sugarcane Training Centre for Africa  
Réduit, Mauritius



### **Fishing gear technology**

*Short description:* Fish net materials, fishing gear design and construction, fishing techniques and methods, mechanics of trawling fishing gear, methods of fishing gear model testing; training in the fishing gear Model Research Station and on board fishing vessels; influence of environmental conditions on fish behaviour and dynamics of fishing resources. *Commencing date:* May, June. *Duration:* 6 weeks. *Qualifications:* High school education. English. *Deadline for application:* April. *Fees:* To be arranged.

*Organizer:* University of Agriculture  
Department of Fishing  
Attn.: Józef Swiniarski  
K. Królewicza 3  
71-550 Szczecin, Poland

### **Fishing trawl gear systems**

*Short description:* Design, construction and operation of trawl gear systems; methods of trawl-model testing; modern construction of trawls using models at 1:2 to 1:10 scale (also for the biggest trawlers); measurements and observation of trawl models towing at different rigging and towing speed; relationship between towing speed, hydrodynamic forces and shape; application of computer technology to design, construction and testing of trawl-gear systems. *Commencing date:* April, June. *Duration:* 6 weeks. *Qualifications:* High school education. English. *Deadline for application:* April. *Fees:* To be arranged.

*Organizer:* University of Agriculture  
Department of Fishing  
Attn.: Józef Świniarski  
K. Królewicza 3  
71-550 Szczecin, Poland

### **Conservation et transformation des fruits et légumes**

*Brève description :* Initiation aux techniques de base de la conservation et de la transformation des fruits et légumes. *Début du cours :* Mars, juillet. *Durée :* 2-4 semaines. *Qualifications :* Français. *Date limite d'inscription :* 2 mois avant le début du cours. *Droits d'inscription :* \$US 600.

*Organisateur :* ITA  
Route des Pères Maristes  
B.P. 2765  
Hann, Dakar, Sénégal

### **Contrôle de qualité des denrées alimentaires**

*Brève description :* Analyses microbiologiques chimiques et sensorielles : détermination des taux en mycotoxines des aliments. *Début du cours :* Mars. *Durée :* 2-8 semaines. *Qualifications :* Français. *Date limite d'inscription :* 1 mois avant le début du cours. *Droits d'inscription :* \$US 600.

*Organisateur :* ITA  
Route des Pères Maristes  
B.P. 2765  
Hann, Dakar, Sénégal

### **Panification**

*Breve description* : Techniques de panification à base de farines composées (mil ou maïs et blé), pâtisserie. *Début du cours* : Février. *Durée* : 3-8 semaines. *Qualifications* : Français. *Date limite d'inscription* : 2 mois avant le début du cours. *Droits d'inscription* : \$US 600.

*Organisateur* : ITA  
Route des Pères Maristes  
B.P. 2765  
Hann, Dakar, Sénégal

### **Techniques de transformation des poissons et produits halieutiques**

*Breve description* : Techniques de séchage, salage et fumage; congélation et contrôle de qualité; visites d'usines et de centres pilotes de transformation. *Début du cours* : Novembre. *Durée* : 2-8 semaines. *Qualifications* : Français. *Date limite d'inscription* : 2 mois avant le début du cours. *Droits d'inscription* : \$US 600.

*Organisateur* : ITA  
Route des Pères Maristes  
B.P. 2765  
Hann, Dakar, Sénégal

### **Quality management in the food industry**

*Short description*: Quality management; total quality control (QC); statistical QC; computer-aided QC; QC circles; hazard analysis — critical control point; product QC in the food industry. *Commencing date*: October. *Duration*: 4 weeks. *Qualifications*: University degree and relevant work experience. English. *Deadline for application*: 6 weeks before commencing date. *Fees*: \$US 2,000.

*Organizer*: Director  
Continuing Education Center  
Asian Institute of Technology  
G.P.O. Box 2754  
Bangkok 10501, Thailand

### **Cereals, grains, legumes and oilseed processing**

*Short description*: Modern techniques for the processing of cereals, grains, legumes and oilseeds. *Commencing date*: June. *Duration*: 6 weeks. *Qualifications*: Bachelor's degree in a relevant field. English. *Deadline for application*: —. *Fees*: To be arranged.

*Organizer*: Institute of Food Research and Product Development  
Kasetsart University  
P.O. Box 170  
Bangkok 10400, Thailand

### **Food and enzyme production from agricultural products**

*Short description*: Fermentation technology for agricultural products. *Commencing date*: September. *Duration*: 3 weeks. *Qualifications*: Bachelor's degree in an appropriate field. English. *Deadline for application*: —. *Fees*: To be arranged.

*Organizer*: Institute of Food Research and Product Development  
Kasetsart University  
P.O. Box 170  
Bangkok 10400, Thailand

### **Food processing and quality control**

*Short description:* Food processing and quality control, with emphasis on upgrading the products' quality. *Commencing date:* June, November. *Duration:* 8 weeks. *Qualifications:* Bachelor's degree in an appropriate field. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Institute of Food Research and Product Development  
Kasetsart University  
P.O. Box 170  
Bangkok 10400, Thailand

### **Fruit and vegetable processing**

*Short description:* Post-harvest processing and preservation of tropical fruits and vegetables. *Commencing date:* April. *Duration:* 5 weeks. *Qualifications:* Bachelor's degree in an appropriate field. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Institute of Food Research and Product Development  
Kasetsart University  
P.O. Box 170  
Bangkok 10400, Thailand

### **Quality control for fruit and vegetable products**

*Short description:* Skills in quality control for upgrading the standard of tropical fruit and vegetable products. *Commencing date:* To be arranged. *Duration:* 3 weeks. *Qualifications:* Bachelor's degree in a relevant field. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Institute of Food Research and Product Development  
Kasetsart University  
P.O. Box 170  
Bangkok 10400, Thailand

### **Rice processing and utilization**

*Short description:* Knowledge and techniques for rice processing and profitable utilization. *Commencing date:* To be arranged. *Duration:* 3 weeks. *Qualifications:* Bachelor's degree in an appropriate field. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Institute of Food Research and Product Development  
Kasetsart University  
P.O. Box 170  
Bangkok 10400, Thailand

### **Soybean processing and utilization**

*Short description:* Development and utilization of soybean as high-protein food. *Commencing date:* To be arranged. *Duration:* 6 weeks. *Qualifications:* Bachelor's degree in an appropriate field. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Institute of Food Research and Product Development  
Kasetsart University  
P.O. Box 170  
Bangkok 10400, Thailand

**Textiles; wearing apparel, dressing and dyeing of fur/Textiles; articles d'habillement, préparation et teinture des fourrures/Productos textiles; prendas de vestir; adobo y teñido de pieles**

**Instructors for spinning fitters (drawing frames, roving frames and ring frames)**

*Short description:* To prepare instructors for fitters; by employing the "analytical methods productivity system" (AMPS) instructors will help to streamline the work of fitters on a scientific basis. *Commencing date:* To be arranged. *Duration:* 10-12 weeks. *Qualifications:* Matriculation with 3 years experience in the area in which training is sought. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Textile Industry Research and Development Centre (TIRDC)  
G.P.O. Box 479  
Karachi, Pakistan

**Instructors for weaving fitters (looms)**

*Short description:* To prepare instructors for fitters; by employing the "analytical methods productivity system" (AMPS) instructors will help to streamline the work of fitters on a scientific basis. *Commencing date:* To be arranged. *Duration:* 72 days. *Qualifications:* Matriculation with 5 years experience as weaving fitter. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Textile Industry Research and Development Centre (TIRDC)  
G.P.O. Box 479  
Karachi, Pakistan

**Cotton textiles**

*Short description:* Broadening and upgrading professional knowledge and skills; problems in the textile industry and their solutions; technological developments. *Commencing date:* September. *Duration:* 26 days. *Qualifications:* Textile, chemical and mechanical engineers, with 3 years of related experience. English. *Deadline for application:* May. *Fees:* To be arranged.

*Organizer:* Sümerbank Holding A.Ş.  
Araştırma Geliştirme ve Eğitim İşletmesi  
Bursa, Turkey

**Paper and paper products; publishing; printing and reproduction of recorded media/Papier et articles en papier; édition; impression et reproduction de supports enregistrés/Papel y productos de papel; edición; impresión y reproducción de grabaciones**

**Tecnología de producción de pulpa y papel**

*Breve descripción:* Química de la madera y el bagazo de la caña de azúcar; tecnología de pulpero; tecnología del papel; el curso está enfocado hacia el empleo del bagazo como materia prima para la producción de papel. *Fecha de iniciación:* Para ser acordado. *Duración:* 2 meses. *Calificaciones:* Profesionales vinculados al campo del papel. Español, inglés. *Fecha límite de inscripción:* —. *Derechos de inscripción:* Para ser acordado.

*Organizador:* Unión de Investigación-Producción de la Celulosa del  
Bagazo "Cuba-9"  
Central Pablo Noriega  
Apartado 8  
Quivicán 33 500  
La Habana, Cuba

**Coke, refined petroleum products and nuclear fuel; chemicals and chemical products; rubber and plastic products/Coke, produits pétroliers raffinés et combustibles nucléaires; produits chimiques de base et autres; articles en caoutchouc et en matières plastiques/Coque, productos de la refinación del petróleo y combustible nuclear; sustancias y productos químicos; productos de caucho y plástico**

#### **Operation of process units — I**

*Short description:* Operation of water treatment plant and solids handling unit with the help of pilot plants. *Commencing date:* April. *Duration:* 2 weeks. *Qualifications:* Personnel engaged in process plant operation with at least 1 year of experience. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 600; board and lodging \$US 25 per day.

*Organizer:* Training Institute for Chemical Industries  
(Central Training Institute of Bangladesh Chemical Industries Corporation)  
P.O. Sarkarkhana  
Ghorasal, Narsingdi, Bangladesh

#### **Operation of process units — II**

*Short description:* Operation of chemical process units with the help of absorption and neutralization, evaporation, crystallization and distillation pilot plants. *Commencing date:* April. *Duration:* 4 weeks. *Qualifications:* Personnel engaged in process plant operation with at least 1 year of experience. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 1,200; board and lodging \$US 25 per day.

*Organizer:* Training Institute for Chemical Industries  
(Central Training Institute of Bangladesh Chemical Industries Corporation)  
P.O. Sarkarkhana  
Ghorasal, Narsingdi, Bangladesh

#### **Aplicación de las zeolitas naturales en la industria química y protección ambiental**

*Breve descripción:* Propiedades y regularidades fisicoquímicas de las zeolitas naturales de uso generalizado; posibilidades de empleo en la producción de mejoradores de suelos, incremento de la retención de los nutrientes minerales en la agricultura, mejora de las propiedades fisicoquímicas de fertilizantes; empleo como rellenos sólidos, gomas, plástico, papel. *Fecha de iniciación:* Octubre. *Duración:* 21 días. *Calificaciones:* Graduado universitario. Español. *Fecha límite de inscripción:* Septiembre. *Derechos de inscripción:* \$US 945.

*Organizador:* Escuela Superior de Cuadros del Ministerio de la Industria Básica  
Carretera de Vento, Km 10<sup>1/2</sup>  
Municipio Boyeros  
La Habana, Cuba

### Catalisis y absorción en zeolitas

*Breve descripción:* Propiedades fisicoquímicas de las zeolitas sintéticas y naturales de aplicación en la industria química; empleo como adsorbentes en el secado y purificación de las bases y solventes; empleo industrial de las propiedades, tamiz molecular; procesos de refinación de petróleo y petroquímica, isomerización de hidrocarburos, hidrocrqueo selectivo de N-parafinas. *Fecha de iniciación:* Octubre. *Duración:* 21 días. *Calificaciones:* Graduado universitario. Español. *Fecha límite de inscripción:* Septiembre. *Derechos de inscripción:* \$US 945.

*Organizador:* Escuela Superior de Cuadros del Ministerio de la Industria Básica  
Carretera de Vento, Km 10 1/2  
Municipio Boyeros  
La Habana, Cuba

### Operation of chemical industry plants

*Short description:* Courses on: welding, application to heat exchangers; preventive maintenance and safety; analysis of raw materials; operation and maintenance of control and recording instruments; operation and maintenance of electric power supply units; operation and maintenance of compressors, turbines and pumps; operation of high-technology plants under normal and exceptional conditions. *Commencing date:* To be arranged. *Duration:* To be arranged. *Qualifications:* Practical experience as operators. Arabic, English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* The Chairman  
Abu Qir Fertilizers and Chemical Industries Company  
El-Tabia, Rasheed Road, Private Box  
Alexandria, Egypt

### Applied heterogeneous catalysis

*Short description:* Theoretical background; catalysts, catalysts preparation and characterization; catalytic processes applied mainly in the fine chemicals industry. *Commencing date:* To be arranged. *Duration:* 4 weeks. *Qualifications:* Master's or Bachelor's degree of science. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Technical University  
Organic Chemical Technology Department  
Attn.: József Petró  
Müegyetem P.O. Box 91  
1521 Budapest, Hungary

### Organic chemistry

*Short description:* Advanced organic chemistry for students and young scientists with a primary interest in the synthetic organic chemistry. *Commencing date:* May. *Duration:* 1 month. *Qualifications:* Basic knowledge in organic chemistry. English. *Deadline for application:* 4 months before commencing date. *Fees:* To be arranged.

*Organizer:* Technical University  
Institute for Organic Chemistry  
Gellért tér 4  
1111 Budapest, Hungary

### Physical chemistry of polymers

*Short description:* Physical and chemical basis of rubber elasticity; thermodynamics of polymer solutions; gelation; methods for characterizing macromolecules. *Commencing*

*date:* To be arranged. *Duration:* 4 weeks. *Qualifications:* First degree in chemistry or physics. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Technical University  
Department of Plastics and Rubber  
Attn.: Gábor Balázs  
1521 Budapest, Hungary

#### **In-plant training for engineers in chemical, electrical, mechanical and instrument disciplines**

*Short description:* Improve managerial skills of executives for a more efficient management of capital and human resources. Classroom training includes lectures on and discussions of particular processes. On-the-job training in one of the large nitrogenous or phosphatic fertilizer plants of NFC. *Commencing date:* To be arranged. *Duration:* 3 months. *Qualifications:* Graduate engineers in a relevant field. English. *Deadline for application:* —. *Fees:* \$US 600 per month, including board and lodging.

*Organizer:* National Fertilizer Corporation of Pakistan (Private) Limited  
1st Floor, Alfalah Building  
Shahrah-e-Quaid-e-Azam  
Lahore, Pakistan

#### **In-plant training for operators/technicians in chemical, electrical, mechanical and instrument disciplines**

*Short description:* Basic training for entry-level operators and technicians in the chemical and fertilizer industries. Skills for ensuring safe and efficient operation of the plant and optimum return on investment through enhanced productivity. *Commencing date:* September. *Duration:* 1 year. *Qualifications:* High-school graduation or diploma in engineering. English. *Deadline for application:* July. *Fees:* \$US 5,000, including board and lodging.

*Organizer:* National Fertilizer Corporation of Pakistan (Private) Limited  
1st Floor, Alfalah Building  
Shahrah-e-Quaid-e-Azam  
Lahore, Pakistan

#### **Corrosion prevention**

*Short description:* Corrosion monitoring in chemical and petrochemical industries; non-destructive testing; selection of corrosion protection according to service conditions. *Commencing date:* October. *Duration:* 4 weeks. *Qualifications:* Degree in chemical, petrochemical or related engineering; 1-5 years of experience. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 1,200-1,600, including board and lodging.

*Organizer:* INFOCHEM — Rosu H.  
P.O. Box 1 — 228  
Bucharest, Romania

*Venue:* Oil and Gas Institute  
Ploiesti, Romania

#### **Preventive maintenance**

*Short description:* Plant safety, risk management, operation and maintenance piping; tanks and equipment, trucks, explosions, fire and shocks. *Commencing date:* April. *Duration:* 4 weeks. *Qualifications:* Degree in chemical, petrochemical or related engineering. 1-5 years of experience. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 1,200-1,600, including board and lodging.

**Organizer:** INFOCHEM — Rosu H.  
P.O. Box 1 — 228  
Bucharest, Romania

**Venue:** Oil and Gas Institute  
Ploiesti, Romania

#### **Plastic injection-moulding technology**

*Short description:* Mould design, mould set-up, processing and troubleshooting, plastic materials, selection of machines, ancillary equipment and processing parameters. *Commencing date:* April. *Duration:* 1 month. *Qualifications:* Basic knowledge of plastic injection moulding operations. English. *Deadline for application:* 1 month before commencing date. *Fees:* \$US 1,200.

**Organizer:** Metal Industries Company Limited  
Century Drive  
Trincity, Trinidad and Tobago

#### **Utilization of medicinal and aromatic plants in pharmaceutical and related industries**

*Short description:* Production of pharmaceutical cosmetic and perfumery raw materials and finished products using medicinal and aromatic plants; quality control; round-table discussions; factory visits. *Commencing date:* September. *Duration:* 4 weeks. *Qualifications:* Chemists, pharmacists or chemical engineers with 2 years of related experience. English. *Deadline for application:* June. *Fees:* \$US 2,000 (including board and lodging).

**Organizer:** Anadolu University  
Medicinal Plants Research Centre  
26470 Eskisehir, Turkey

#### **Process and quality control in chemical processes**

*Short description:* Basics of modern instrumental analysis techniques; gas chromatography, mass spectroscopy, FTIR, elemental analysis, ICP, electron microscopy, UV, temperature, concentration, pressure, viscosity, thermal conductivity, pH, humidity measurements; specific application of these methods and visits to industrial plants. *Commencing date:* September. *Duration:* 4 weeks. *Qualifications:* Engineers, technicians, chemists and related personnel. English. *Deadline for application:* May. *Fees:* \$US 7,000.

**Organizer:** TÜBITAK-Marmara Research Centre  
Chemical Engineering Research Department  
P.O. Box 21  
41470 Gebze-Kocaeli, Turkey

#### **Other non-metallic mineral products/Autres produits minéraux non métalliques/Otros productos minerales no metálicos**

##### **Concrete-mix design and quality control**

*Short description:* The IPT concrete-mix design method, useful for unusual conditions (e.g. with new materials); quality control including prediction of concrete strength. *Commencing date:* August. *Duration:* 4 weeks. *Qualifications:* Degree in civil engineering. English, French, Portuguese. *Deadline for application:* April. *Fees:* \$US 1,500.



*Organizer:* IPT - Agrupamento de materiais de construção civil  
Attn.: Carlos Eduardo de Siqueira Tango  
P.O. Box 7141  
01051 São Paulo, Brazil

#### **Chaux vive et chaux hydratée — technologie et applications en construction**

*Brève description :* Technologie du produit : choix des matières premières; processus de production et son influence sur les caractéristiques des chaux vive et hydratée; propriétés des mortiers de chaux et de chaux-ciment pour revêtement et maçonnerie. *Début du cours :* Deuxième semestre. *Durée :* 4 semaines. *Qualifications :* Qualifications professionnelles. Anglais, espagnol, français. *Date limite d'inscription :* Décembre 1992. *Droits d'inscription :* \$US 1 500.

*Organisateur :* IPT --- Instituto de Pesquisas Tecnológicas do Estado de São Paulo  
Attn.: Maria Alba Cincotto  
B.P. 7141  
01051 Sao Paulo, Brésil

#### **Cement technology**

*Short description:* Analysis and selection of raw materials; production technologies; use of appropriate technologies and processes; quality control; maintenance; energy conservation. *Commencing date:* May. *Duration:* 4 weeks. *Qualifications:* University education or equivalent background in chemical, mechanical or electrical engineering with 1-4 years of relevant experience; 25-40 years of age. English. *Deadline for application:* 3 months before commencing date. *Fees:* To be arranged.

*Organizer:* Turkish Cement Manufacturers' Association  
P.K.2  
Bakanliklar  
Ankara, Turkey

*Venue:* Cement Research and Development Centre of Turkish Cement Manufacturers' Association; technical visits to cement plants and related industries

#### **Energy management in the cement industry**

*Short description:* Energy management in the cement industry, including the chemical compositions of raw mix, additives to reduce energy consumption; new technologies such as precalcination, prehomogenization and preblending. *Commencing date:* October. *Duration:* 3 weeks. *Qualifications:* University education in chemical, mechanical or electrical engineering with up to 8 years of relevant experience; 25-40 years of age. English. *Deadline for application:* 3 months before commencing date. *Fees:* To be arranged.

*Organizer:* Turkish Cement Manufacturers' Association  
P.K.2  
Bakanliklar  
Ankara, Turkey

*Venue:* Cement Research and Development Centre of Turkish Cement Manufacturers' Association; technical visits to cement plants and related industries

### **Maintenance management in the cement industry**

*Short description:* Machine set-up and operation; preventive maintenance and repair; stock and inventory control; safety practices; lubrication; predictive maintenance. *Commencing date:* September. *Duration:* 3 weeks. *Qualifications:* University education in mechanical or electrical engineering with up to 8 years of relevant experience; 25-40 years of age. *Deadline for application:* 3 months before commencing date. *Fees:* To be arranged.

*Organizer:* Turkish Cement Manufacturers' Association  
P.K.2  
Bakanliklar  
Ankara, Turkey

*Venue:* Cement Research and Development Centre of Turkish Cement Manufacturers' Association; technical visits to cement plants and related industries

### **Basic metals/Produits métallurgiques de base/Metales comunes**

#### **Foundry technology**

*Short description:* Melting of ferrous and non-ferrous castings, casting design, moulding sand mixes, fettling; heat treatment and finishing of light, medium and heavy castings. *Commencing date:* January. *Duration:* 6 weeks. *Qualifications:* Bachelor's degree or diploma in engineering. Arabic, English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 300.

*Organizer:* Egyptian Copper Works  
Hagar El-Nawattia  
Alexandria, Egypt

#### **Induction furnaces**

*Short description:* Theory, maintenance, trouble-shooting. *Commencing date:* January. *Duration:* 6 weeks. *Qualifications:* Electrical engineers. Arabic, English. *Deadline for application:* 4 months before commencing date. *Fees:* \$US 300.

*Organizer:* Egyptian Copper Works  
Hagar El-Nawattia  
Alexandria, Egypt

#### **Modern technology of continuous casting machine**

*Short description:* Preparation of CCM for casting; cooling system; mechanical and electrical parts; processing and metallurgical treatment of the CCM. *Commencing date:* January. *Duration:* 4 weeks. *Qualifications:* Metallurgists, production engineers, technicians. Arabic, English. *Deadline for application:* 4 months before commencing date. *Fees:* \$US 200.

*Organizer:* Egyptian Copper Works  
Hagar El Nawattia  
Alexandria, Egypt

### **Computerized maintenance systems in metallurgy and basic industries**

*Short description:* Concepts of managed maintenance systems; organization of maintenance activities; application of computers in maintenance. *Commencing date:* To be arranged. *Duration:* 4 weeks. *Qualifications:* University degree with relevant experience. Arabic, English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 350 per week.

*Organizer:* Egyptian Iron and Steel Co. (EISCO)  
Maintenance Development Centre  
El-Tabbin  
Cairo, Egypt

### **Electric equipment maintenance and repair**

*Short description:* Breakdown prevention in iron and steel plants; protective maintenance of the equipment. *Commencing date:* To be arranged. *Duration:* 6 weeks. *Qualifications:* Engineers or technicians. Arabic, English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 250 per week.

*Organizer:* Egyptian Iron and Steel Co. (EISCO)  
Maintenance Development Centre  
El-Tabbin  
Cairo, Egypt

### **Hot rolling mills — operation and maintenance**

*Short description:* Equipment for hot rolling; production of strips; maintenance of the equipment. *Commencing date:* To be arranged. *Duration:* 8 weeks. *Qualifications:* Degree in engineering; technical education with 6 years experience. Arabic, English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 200 per week.

*Organizer:* Egyptian Iron and Steel Co. (EISCO)  
Maintenance Development Centre  
El-Tabbin  
Cairo, Egypt

### **Application of computers in metallurgical industry**

*Short description:* Basic concepts, main theoretical aspects, application in industry, field training. *Commencing date:* To be arranged. *Duration:* 2-4 weeks. *Qualifications:* Bachelor's degree in engineering or science. English. *Deadline for application:* —. *Fees:* \$US 500 per week.

*Organizer:* Tabbin Institute for Metallurgical Studies (TIMS)  
P.O. Box 109  
Helwan  
11421 Cairo, Egypt

### **Foundry production**

*Short description:* Basic concepts, main theoretical aspects, application in industry, field training. *Commencing date:* To be arranged. *Duration:* 2-4 weeks. *Qualifications:* Bachelor's degree in engineering or science, technicians. English, French. *Deadline for application:* —. *Fees:* \$US 500 per week.

*Organizer:* Tabbin Institute for Metallurgical Studies (TIMS)  
P.O. Box 109  
Helwan  
11421 Cairo, Egypt

### **Heat treatment**

*Short description:* Basic concepts, main theoretical aspects, application in industry, field training. *Commencing date:* To be arranged. *Duration:* 2-4 weeks. *Qualifications:* Bachelor's degree in engineering or science, technicians. English. *Deadline for application:* —. *Fees:* \$US 500 per week.

*Organizer:* Tabbin Institute for Metallurgical Studies (TIMS)  
P.O. Box 109  
Helwan  
11421 Cairo, Egypt

### **Industrial furnaces**

*Short description:* Basic concepts, main theoretical aspects, application in industry, field training. *Commencing date:* To be arranged. *Duration:* 2-4 weeks. *Qualifications:* Bachelor's degree in engineering or science, technicians. English. *Deadline for application:* —. *Fees:* \$US 500 per week.

*Organizer:* Tabbin Institute for Metallurgical Studies (TIMS)  
P.O. Box 109  
Helwan  
11421 Cairo, Egypt

### **Iron and steel industries**

*Short description:* Basic concepts, main theoretical aspects, application in industry, field training. *Commencing date:* To be arranged. *Duration:* 2-4 weeks. *Qualifications:* Bachelor's degree in engineering or science, technicians. English. *Deadline for application:* —. *Fees:* \$US 500 per week.

*Organizer:* Tabbin Institute for Metallurgical Studies (TIMS)  
P.O. Box 109  
Helwan  
11421 Cairo, Egypt

### **Metal forming and rolling**

*Short description:* Basic concepts, main theoretical aspects, application in industry, field training. *Commencing date:* To be arranged. *Duration:* 2-4 weeks. *Qualifications:* Bachelor's degree in engineering or science, technicians. English. *Deadline for application:* —. *Fees:* \$US 500 per week.

*Organizer:* Tabbin Institute for Metallurgical Studies (TIMS)  
P.O. Box 109  
Helwan  
11421 Cairo, Egypt

### **Ore preparation in the iron and steel industry**

*Short description:* Basic concepts, main theoretical aspects, application in industry, field training. *Commencing date:* To be arranged. *Duration:* 2-4 weeks. *Qualifications:* Bachelor's degree in engineering or science, technicians. English. *Deadline for application:* —. *Fees:* \$US 500 per week.

*Organizer:* Tabbin Institute for Metallurgical Studies (TIMS)  
P.O. Box 109  
Helwan  
11421 Cairo, Egypt

### **Traitement thermomécanique**

*Brève description* : Concepts généraux, aspects théoriques principaux, applications dans le domaine de l'industrie, formation sur le terrain. *Début du cours* : A arranger. *Durée* : 2-4 semaines. *Qualifications* : Diplôme universitaire en ingénierie ou en sciences, techniciens. Français. *Date limite d'inscription* : —. *Droits d'inscription* : \$US 500.

*Organisateur* : Tabbin Institute for Metallurgical Studies (TIMS)  
B.P. 109  
Helwan  
11421 Le Caire, Egypte

### **Welding technology**

*Short description*: Basic concepts, main theoretical aspects, application in industry, field training. *Commencing date*: To be arranged. *Duration*: 2-4 weeks. *Qualifications*: Bachelor's degree in engineering or science, technicians. English, French. *Deadline for application*: —. *Fees*: \$US 500 per week.

*Organizer*: Tabbin Institute for Metallurgical Studies (TIMS)  
P.O. Box 109  
Helwan  
11421 Cairo, Egypt

### **Foundry pattern-making technology**

*Short description*: Most frequently used moulding technologies; base materials (wood, metal, plastic) used in pattern making practice; preparation of wooden, metal, plastic patterns. *Commencing date*: To be arranged. *Duration*: 1 months. *Qualifications*: Degree in foundry technology or equivalent. English. *Deadline for application*: 2 months before commencing date. *Fees*: To be arranged.

*Organizer*: NOVOPROJECT Consulting Engineering Co.  
Csövár u. 1/F  
1151 Budapest, Hungary

### **Foundry technology**

*Short description*: Brief summary of casting technologies; practical training in a foundry workshop; moulding technologies, moulding practice; melting technologies, casting procedures; fettling of castings; quality control of foundry technologies; environmental problems of foundries. *Commencing date*: To be arranged. *Duration*: 1 month. *Qualifications*: Degree in foundry technology or equivalent. English. *Deadline for application*: 2 months before commencing date. *Fees*: To be arranged.

*Organizer*: NOVOPROJECT Consulting Engineering Co.  
Csövár u. 1/F  
1151 Budapest, Hungary

### **Quality control of castings**

*Short description*: Quality control methods for tools, quality control management in die casting shop and handling of quality control equipment. *Commencing date*: To be arranged. *Duration*: 1 month. *Qualifications*: Professional qualifications. English. *Deadline for application*: 6 months before commencing date. *Fees*: To be arranged.

*Organizer*: NOVOPROJECT Consulting Engineering Co.  
Csövár u. 1/F  
1151 Budapest, Hungary

### **Welding technology**

*Short description:* For senior inspectors concerned with safety in the welding industry. *Commencing date:* To be arranged. *Duration:* 2 months. *Qualifications:* Degree in welding technology. English. *Deadline for application:* 6 months before commencing date. *Fees:* To be arranged.

*Organizer:* NOVOPROJECT Consulting Engineering Co.  
Csövár u. 1/F  
1151 Budapest, Hungary

### **Chemical analysis of ferrous and non-ferrous alloys**

*Short description:* Chemical analysis by: wet methods; emission spectroscopy; atomic absorption; instrumental methods; X-ray diffraction. *Commencing date:* April, August. *Duration:* 3 months. *Qualifications:* Graduate of mechanical, metallurgical and chemical engineering or Bachelor's degree or diploma in metallurgy or chemistry, with 5-7 years of relevant experience. English. *Deadline for application:* 4 weeks before commencing date. *Fees:* \$US 1,000 per month.

*Organizer:* Managing Director  
Metal Industry Research and Development Centre (MIRDC)  
125-A, Industrial Area  
Kot Lakhpat  
Lahore-54770, Pakistan

### **Foundry technology**

*Short description:* Introduction to foundry technology; molting practice; sand moulding; core making; running, feeding and gating design; pattern making; equilibrium diagrams; casting techniques; defects and their remedies; inspection and quality control. *Commencing date:* April, August. *Duration:* 3 months. *Qualifications:* Bachelor's degree or diploma in metallurgy or mechanical engineering, with 5-7 years of relevant experience. English. *Deadline for application:* 1 month before commencing date. *Fees:* \$US 1,000 per month.

*Organizer:* Managing Director  
Metal Industry Research and Development Centre (MIRDC)  
125-A, Industrial Area  
Kot Lakhpat  
Lahore-54770, Pakistan

### **Foundry technology, metal working and metallurgical engineering**

*Short description:* Solidification of metals; metals cast in the foundry; cleaning and inspection; forging; rolling; heat treatment; metallurgical quality control. *Commencing date:* April, August. *Duration:* 3 months. *Qualifications:* Bachelor's degree or diploma in metallurgy or mechanical engineering, with 5-7 years of relevant experience. English. *Deadline for application:* 1 month before commencing date. *Fees:* \$US 500 per month.

*Organizer:* Managing Director  
Metal Industry Research and Development Centre (MIRDC)  
125-A, Industrial Area  
Kot Lakhpat  
Lahore-54770, Pakistan

### **Heat-treatment technology, metallography and destructive and non-destructive testing**

*Short description:* Theoretical and practical aspects of H/T processes; equilibrium-diagrams; phase identification; relation between microstructure and physical properties; different destructive and non-destructive techniques including fracture evaluation. *Commencing date:* April, August. *Duration:* 3 months. *Qualifications:* Bachelor's degree or diploma in metallurgy or mechanical engineering, with 5-7 years of relevant experience. English. *Deadline for application:* 1 month before commencing date. *Fees:* \$US 1,500 per month.

*Organizer:* Managing Director  
Metal Industry Research and Development Centre (MIRDC)  
125-A, Industrial Area  
Kot Lakhpat  
Lahore-54770, Pakistan

### **Metallography and destructive and non-destructive testing techniques**

*Short description:* Equilibrium diagrams; metallographical techniques; phase identification; destructive and non-destructive testing techniques used for quality control. *Commencing date:* April, August. *Duration:* 3 months. *Qualifications:* Bachelor's degree or diploma in metallurgy or mechanical engineering, with 5-7 years of relevant experience. English. *Deadline for application:* 1 month before commencing date. *Fees:* \$US 1,000 per month.

*Organizer:* Managing Director  
Metal Industry Research and Development Centre (MIRDC)  
125-A, Industrial Area  
Kot Lakhpat  
Lahore-54770, Pakistan

### **Quality control of metal products**

*Short description:* Destructive and non-destructive testing of metals; chemical analysis; metallography; sand and bentonite testing; statistical quality control. *Commencing date:* April, August. *Duration:* 3 months. *Qualifications:* Bachelor's degree or diploma in metallurgy or mechanical engineering, with 5-7 years of relevant experience. English. *Deadline for application:* 1 month before commencing date. *Fees:* \$US 500 per month.

*Organizer:* Managing Director  
Metal Industry Research and Development Centre (MIRDC)  
125-A, Industrial Area  
Kot Lakhpat  
Lahore-54770, Pakistan

### **Rolling and forging technology**

*Short description:* Rolling and forging technology; classification of rolling mills and reheating furnaces; hot and cold rolling techniques for ferrous and non-ferrous metals and alloys, introduction to forging equipment, hot forging of ferrous and non-ferrous metals and alloys. *Commencing date:* April, August. *Duration:* 3 months. *Qualifications:* Bachelor's degree or diploma in metallurgy or mechanical engineering, with 5-7 years of relevant experience. English. *Deadline for application:* 1 month before commencing date. *Fees:* \$US 1,000 per month.

*Organizer:* Managing Director  
Metal Industry Research and Development Centre (MIRDC)  
125-A, Industrial Area  
Kot Lakhpat  
Lahore-54770, Pakistan

#### **Tratamiento térmico y ensayo de materiales**

*Breve descripción:* Ensayos de materiales para su caracterización respectiva y prácticas de tratamientos térmicos de los aceros. *Fecha de iniciación:* Junio. *Duración:* 4 semanas. *Calificaciones:* Profesionales técnicos de las especialidades metalmecánicas; experiencia en el campo industrial. Español. *Fecha límite de inscripción:* 4 semanas antes del curso. *Derechos de inscripción:* \$US 120.

*Organizador:* Servicio Nacional de Adiestramiento en Trabajo Industrial (SENATI)  
Km. 15,200 Autopista Lima  
Ancón, San Martín de Porres  
Lima, Perú

#### **Corrosion resistance of casting alloys**

*Short description:* Selection of corrosion-resistant casting alloys; wet corrosion, high-temperature corrosion; methods of corrosion protection. *Commencing date:* To be arranged. *Duration:* 1 month. *Qualifications:* University degree. English. *Deadline for application:* —. *Fees:* —.

*Organizer:* Academy of Mining and Metallurgy  
Faculty of Foundry Engineering  
Attn.: Mariusz Holtzer  
Reymonta 23  
30-059 Krakow, Poland

#### **Foundry mechanization and environment protection**

*Short description:* Basic equipment for modern foundries; preparation of moulding sands; reclaiming of foundry sands; cleaning and finishing of castings; environment protection. *Commencing date:* To be arranged. *Duration:* 1 month. *Qualifications:* University degree. English. *Deadline for application:* —. *Fees:* —.

*Organizer:* Academy of Mining and Metallurgy  
Faculty of Foundry Engineering  
Attn.: Mariusz Holtzer  
Reymonta 23  
30-059 Krakow, Poland

#### **Foundry technology**

*Short description:* Moulding materials; computer-aided design of moulds; analysis of solidification of castings. *Commencing date:* To be arranged. *Duration:* 1 month. *Qualifications:* University degree. English. *Deadline for application:* —. *Fees:* —.

*Organizer:* Academy of Mining and Metallurgy  
Faculty of Foundry Engineering  
Attn.: Mariusz Holtzer  
Reymonta 23  
30-059 Krakow, Poland



### **Secondary metallurgy of iron alloys**

*Short description:* Secondary metallurgy of steel; production of spheroidal graphite iron and vermicular graphite iron. *Commencing date:* To be arranged. *Duration:* 1 month.

*Qualifications:* University degree. English, French. *Deadline for application:* —.

*Fees:* —.

*Organizer:* Academy of Mining and Metallurgy  
Faculty of Foundry Engineering  
Attn.: Mariusz Holtzer  
Reymonta 23  
30-059 Krakow, Poland

### **Evolution récente des trains de laminage à chaud**

*Brève description :* Techniques de laminage; automation du contrôle du procédé; modélisation mécanique du laminage. *Début du cours :* Avril, mai, juin. *Durée :* 15 jours.

*Qualifications :* Personnel technique de fabrication. Français, roumain. *Date limite d'inscription :* Février. *Droits d'inscription :* \$US 40 par jour.

*Organisateur :* Institut de recherches métallurgiques  
Centre de formation  
39, rue Mehadia, sector 6  
Bucarest, Roumanie

### **Marketing de produits métallurgiques**

*Brève description :* Fonctions, objectifs, le marché, prévisions sur les achats et les ventes, politique des produits; distribution; traitement des données commerciales sur l'ordinateur. *Début du cours :* Avril, mai, juin. *Durée :* 15 jours. *Qualifications :* Français, roumain. *Date limite d'inscription :* Février. *Droits d'inscription :* \$US 40 par jour.

*Organisateur :* Institut de recherches métallurgiques  
Centre de formation  
39, rue Mehadia, sector 6  
Bucarest, Roumanie

### **Mise en service, maintenance et dépannage des installations métallurgiques**

*Brève description :* Dépannage et entretien; schémas d'installations; régulation électromécanique, électronique et électropneumatique; organes de détection. *Début du cours :* Avril, mai, juin. *Durée :* 15 jours. *Qualifications :* Personnel ayant des connaissances en maintenance et dépannage. Français, roumain. *Date limite d'inscription :* Février. *Droits d'inscription :* \$US 40 par jour.

*Organisateur :* Institut de recherches métallurgiques  
Centre de formation  
39, rue Mehadia, sector 6  
Bucarest, Roumanie

### **Traitement thermique et surface des métaux**

*Brève description :* Principes généraux du traitement, influence des traitements sur les matériaux, modification des caractéristiques des surfaces par transformation des matériaux ou par revêtement; tests et contrôles. *Début du cours :* Avril, mai, juin. *Durée :* 15 jours. *Qualifications :* Personnel technique de fabrication. Français, roumain. *Date limite d'inscription :* Février. *Droits d'inscription :* \$US 40 par jour.

*Organisateur :* Institut de recherches métallurgiques  
Centre de formation  
39, rue Mehadia, sector 6  
Bucarest, Roumanie

#### **Basic welding**

*Short description:* Basic metallurgy; welding processes, equipment, design; distortion and its control in welding; defects in welds; code aspects; quality control of welds; heat treatment of welded joints; economics of welding. *Commencing date:* April. *Duration:* 1 month. *Qualifications:* Basic knowledge in welding. English. *Deadline for application:* 1 month before commencing date. *Fees:* \$US 60 per day.

*Organizer:* Metal Industries Company Limited  
Century Drive  
Trincity, Trinidad and Tobago

**Fabricated metal products, except machinery and equipment; machinery and equipment n.e.c./Ouvrages en métaux, sauf machines et matériel; machines et matériel n.c.a./Productos elaborados de metal, excepto maquinaria y equipo; maquinaria y equipo n.c.p.**

#### **Machine shop practice**

*Short description:* Theory: shop theory; related mathematics; mechanical drawing; measuring tools; safety, care and maintenance of machine tools; engineering materials; heat treatment. Practical: bench fitting; turning; milling; drilling; surface and cylindrical grinding; tool and cutter grinding. *Commencing date:* January, May, September. *Duration:* 14 weeks. *Qualifications:* Professional qualifications. English. *Deadline for application:* 15 days before commencing date. *Fees:* \$US 140.

*Organizer:* Course Director  
Bangladesh Industrial Technical Assistance Centre (BITAC)  
Tejgaon Industrial Area  
Dhaka 1208, Bangladesh

#### **Mechanical drafting**

*Short description:* Shop theory; related mathematics; mechanical drawing; measuring tools; safety, care and maintenance of tools; engineering materials; heat treatment; orthographic projection system; review of isometric, oblique, sectional and auxiliary views; dimensioning; limits, fits and tolerances; orthographic and isometric views of m/c components; assembly drawings; basic tool design. *Commencing date:* January, May, September. *Duration:* 14 weeks. *Qualifications:* Professional qualifications. English. *Deadline for application:* 2 weeks before commencing date. *Fees:* \$US 140.

*Organizer:* Course Director  
Bangladesh Industrial Technical Assistance Centre (BITAC)  
Tejgaon Industrial Area  
Dhaka 1208, Bangladesh

#### **Plastic mould design**

*Short description:* Plastic materials; plastics moulding; plastics mould design; mould-making technology; pool materials; heat treatment; limits, fits and tolerances; essential of engineering drawings; mould design; mould making and moulding practice. *Com-*

*Commencing date:* September. *Duration:* 30 weeks. *Qualifications:* Professional qualifications. English. *Deadline for application:* 2 weeks before commencing date. *Fees:* \$US 400.

*Organizer:* Course Director  
Bangladesh Industrial Technical Assistance Centre (BITAC)  
Tejgaon Industrial Area  
Dhaka 1208, Bangladesh

#### **Vibraciones y balance dinámico de máquinas rotatorias**

*Breve descripción:* Profundizar en los conocimientos sobre medición, análisis, interpretación y corrección de vibraciones mecánicas de máquinas rotatorias como primera etapa de especialización de esta técnica. *Fecha de iniciación:* Mayo. *Duración:* 28 días. *Calificaciones:* Graduado universitario. Español. *Fecha límite de inscripción:* Marzo. *Derechos de inscripción:* \$US 1,120.

*Organizador:* Escuela Superior de Cuadros del Ministerio de la Industria Básica  
Carretera de Vento, Km 10<sup>1/2</sup>  
Municipio Boyeros  
La Habana, Cuba

#### **Computerized spare parts production planning**

*Short description:* Spare parts planning; policy for spare parts supply; new technology for spares' renewal; application of computers in production planning and control. *Commencing date:* To be arranged. *Duration:* 4 weeks. *Qualifications:* University degree. Arabic, English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 350 per week.

*Organizer:* Egyptian Iron and Steel Co. (EISCO)  
Maintenance Development Centre  
El-Tabbin  
Cairo, Egypt

#### **Design and manufacturing of spare parts**

*Short description:* Classification and manufacturing technology for spare parts. *Commencing date:* To be arranged. *Duration:* 6 weeks. *Qualifications:* Degree in engineering. Arabic, English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 250 per week.

*Organizer:* Egyptian Iron and Steel Co. (EISCO)  
Spare Parts Workshops' Sectors  
El-Tabbin  
Cairo, Egypt

#### **Mechanical engineering**

*Short description:* Vibration analysis; lubrication and wear analysis; auto car drawing and design; energy conservation. *Commencing date:* To be arranged. *Duration:* 4 weeks. *Qualifications:* Degree from a technical university. Arabic, English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 350 per week.

*Organizer:* Egyptian Iron and Steel Co. (EISCO)  
Maintenance Development Centre  
El-Tabbin  
Cairo, Egypt

### **Refrigeration and air-conditioning technology**

*Short description:* To upgrade or update professional capabilities in refrigeration and air-conditioning technology: lectures, discussions, working groups, visits to plants.  
*Commencing date:* August. *Duration:* 4 weeks. *Qualifications:* University degree or equivalent with at least 3 years of experience. English. *Deadline for application:* February. *Fees:* \$US 1,000; full board \$US 3,000.

*Organizer:* El-Nasr Engineering and Air-conditioning Company  
Sakiet Mikki Giza Egypt (KOLDAIR)  
P.O. Box 431  
11511 Cairo, Egypt

### **Basic course in hydraulics**

*Short description:* Operation of hydraulic equipment; upgrading skills of engineers who deal with hydraulic systems. *Commencing date:* To be arranged. *Duration:* 5 weeks. *Qualifications:* University degree in engineering. Arabic, English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 250 per week.

*Organizer:* Mannesmann Rexroth, Hydraulic Centre affiliated to Egyptian Iron and Steel Co. (EISCO)  
El-Tabbin  
Cairo, Egypt

### **Practical hydraulics for technicians**

*Short description:* Practical experience for technicians dealing with hydraulic equipment. *Commencing date:* To be arranged. *Duration:* 6 weeks. *Qualifications:* Technical education, with at least 3 years of experience. Arabic, English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 250 per week.

*Organizer:* Mannesmann Rexroth, Hydraulic Centre affiliated to Egyptian Iron and Steel Co. (EISCO)  
El-Tabbin  
Cairo, Egypt

### **Maintenance of mechanical equipment**

*Short description:* Basic concepts, main theoretical aspects, application in industry, field training. *Commencing date:* To be arranged. *Duration:* 2-4 weeks. *Qualifications:* Bachelor's degree in engineering or science. English. *Deadline for application:* —. *Fees:* \$US 500 per week.

*Organizer:* Tabbin Institute for Metallurgical Studies (TIMS)  
P.O. Box 109  
Helwan  
11421 Cairo, Egypt

### **Appareils frigorifiques**

*Brève description :* Mise en service d'une installation, réglage des éléments, dépannage des appareils frigorifiques, retour de l'huile au compresseur. *Début du cours :* Juillet. *Durée :* 2 mois. *Qualifications :* Certificat d'aptitude professionnelle électricité ou fabrication mécanique. Français. *Date limite d'inscription :* Avril. *Droits d'inscription :* FCFA 192 000.

*Organisateur :* ECICA  
B.P. 1828  
Bamako, Mali

*Adresse de l'organisme à contacter :*  
DNESGTP - MEN  
B.P. 71  
Bamako, Mali

#### **Exploitation des centrales de froid**

*Breve description :* Diagnostics de bonne marche; recherche et élimination des pannes; vérification des performances des centrales de froid. *Début du cours :* Juillet. *Durée :* 6 semaines. *Qualifications :* Techniciens frigoristes, avec expérience de 2 ans au moins. Français. *Date limite d'inscription :* Avril. *Droits d'inscription :* FCFA 144 000.

*Organisateur :* ECICA  
B.P. 1828  
Bamako, Mali

*Adresse de l'organisme à contacter :*  
DNESGTP - MEN  
B.P. 71  
Bamako, Mali

#### **Autocad**

*Breve descripción:* Diseño y dibujo técnico de elementos mecánicos y componentes de máquinas con apoyo de computadoras. *Fecha de iniciación:* Abril. *Duración:* 11 semanas. *Calificaciones:* Formación técnica en dibujo técnico y diseño de máquinas. Español. *Fecha límite de inscripción:* Marzo. *Derechos de inscripción:* \$US 250.

*Organizador:* Servicio Nacional de Adiestramiento en Trabajo Industrial (SENATI)  
Dirección Zonal Centro  
Panamericana Norte Km. 15,200  
San Martín de Porres  
Lima, Perú

#### **Programación de máquinas herramientas de control numérico computarizado**

*Breve descripción:* Prácticas en base a programas simulados en computadoras PC para la programación de las máquinas herramientas de control numérico computarizado (CNC). *Fecha de iniciación:* Septiembre. *Duración:* 3 semanas. *Calificaciones:* Profesionales técnicos de las especialidades metalmeccánicas; experiencia en el campo industrial. Español. *Fecha límite de inscripción:* Agosto. *Derechos de inscripción:* \$US 100.

*Organizador:* Servicio Nacional de Adiestramiento en Trabajo Industrial (SENATI)  
Dirección Zonal Centro  
Panamericana Norte Km. 15,200  
San Martín de Porres  
Lima, Perú

#### **Pruebas con circuitos neumáticos e hidráulicos**

*Breve descripción:* Prácticas con circuitos neumáticos e hidráulicos (N/H) mediante el uso de módulos didácticos que permiten experimentar en equipos y elementos N/H reales. *Fecha de iniciación:* Mayo. *Duración:* 3 semanas. *Calificaciones:* Profesionales técni-

cos de las especialidades metalmecánicas, experiencia en el campo industrial. Español.  
*Fecha límite de inscripción:* Abril. *Derechos de inscripción:* \$US 100.

*Organizador:* Servicio Nacional de Adiestramiento en Trabajo Industrial (SENATI)  
Dirección Zonal Centro  
Panamericana Norte Km. 15.200  
San Martín de Porres  
Lima, Perú

#### **Tool-room practice**

*Short description:* Theoretical knowledge and practical skills on different mechanical machines; manufacturing of press tools. *Commencing date:* April. *Duration:* 36 weeks.  
*Qualifications:* Professional qualifications. English. *Deadline for application:* February. *Fees:* \$US 540.

*Organizer:* Electronics Service and Training Centre  
Kaniya, Ramnagar 244 715  
Distt. Nainital (U.P.), India

#### **Dynamic analysis of turbomachinery**

*Short description:* Vibrations of turbine and compressor blades; stress-strain problems in turbine and compressor blade roots; analysis of the effect of cracks on natural and forced vibrations of turbine blades and shafts. *Commencing date:* October. *Duration:* 2-3 months. *Qualifications:* Degree in mechanical engineering. English. *Deadline for application:* April. *Fees:* —.

*Organizer:* Polish Academy of Sciences  
Institute of Fluid Flow Machinery  
Attn.: W. Ostachowicz  
Ul. Fiszera 14  
80-952 Gdansk, Poland

#### **Gas dynamics of fluid-flow machinery**

*Short description:* Basic equations of fluid — mechanics in absolute and relative reference frame; different simplified forms of conservation equations; boundary layer; blade cascade theory for incompressible and compressible flow; one-, two- and three-dimensional models of flow in turbine stages; numerical methods for its solution; characteristics of experimental data for design and flow calculations in the turbine stage; methods of theory verification. *Commencing date:* October. *Duration:* 2-3 months. *Qualifications:* Bachelor's degree. English. *Deadline for application:* April. *Fees:* —.

*Organizer:* Polish Academy of Sciences  
Institute of Fluid Flow Machinery  
Attn.: W. Ostachowicz  
Ul. Fiszera 14  
80-952 Gdansk, Poland

#### **Monitoring of reliability and energy consumption of machines and vehicles**

*Short description:* Reliability estimation and durability forecasting, estimation of the operating costs components, forecasting of the spare parts and subassemblies reserve, optimization of the maintenance process, optimization of energy consumption. *Commencing date:* May. *Duration:* —. *Qualifications:* Master's degree in engineering.

with relevant industrial experience. English. *Deadline for application:* 5 months before commencing date. *Fees:* —.

*Organizer:* Technical University  
Institute of Rail Vehicles  
Warszawska Str. 24  
31-155 Krakow, Poland

#### **Maintenance of agricultural machinery**

*Short description:* Management and organization of reconditioning and repair activities, methods and specific equipment. *Commencing date:* August. *Duration:* 6 weeks. *Qualifications:* University degree, technical background. English. *Deadline for application:* July. *Fees:* To be arranged.

*Organizer:* Management Consulting and Training Centre for Agricultural Equipment  
Stefanesti km 7  
Bucharest SAI 8246, Romania

#### **Basic machining**

*Short description:* Safety; measuring instruments; benchwork; drilling; milling; drill sharpening and marking out tools; technical drawing; heat treatment; calculations; materials science; surface grinding; inspection and quality control. *Commencing date:* June. *Duration:* 2 months. *Qualifications:* Basic knowledge of machining. English. *Deadline for application:* 1 month before commencing date. *Fees:* \$US 60 per day.

*Organizer:* Metal Industries Company Limited  
Century Drive  
Trincity, Trinidad and Tobago

#### **General maintenance (fitting)**

*Short description:* The correct and safe use of maintenance tools; safety in maintenance; manufacturing of simple components; the safe and efficient method for fitting components; lubrication; cost control; electrical and mechanical systems. *Commencing date:* June. *Duration:* 2 months. *Qualifications:* Basic knowledge of work relating to maintenance fitters. English. *Deadline for application:* 1 month before commencing date. *Fees:* \$US 60 per day.

*Organizer:* Metal Industries Company Limited  
Century Drive  
Trincity, Trinidad and Tobago

#### **Introduction to tool design**

*Short description:* Basic principles of drawing; ISO drawing standards; ISO limits and fits; basic press tools and plastic mould design; introduction to computer-aided design. *Commencing date:* April. *Duration:* 2 months. *Qualifications:* Basic knowledge of drafting. English. *Deadline for application:* 1 month before commencing date. *Fees:* \$US 60 per day.

*Organizer:* Metal Industries Company Limited  
Century Drive  
Trincity, Trinidad and Tobago

**Electrical machinery and apparatus n.e.c./Machines et appareils  
électriques n.c.a./Maquinaria y aparatos eléctricos n.c.p.**

**Electrical maintenance**

*Short description:* Electrical circuits and wiring; electric machines; industrial electronics; measuring instruments; electrical and electronic control systems; related mathematics; safety; maintenance of electric machines and instruments; house and industrial wiring; HT and LT lines distribution systems; motor, generator and transformer winding; industrial control system; simple PC boards. *Commencing date:* January, May, September. *Duration:* 14 weeks. *Qualifications:* Professional qualifications. English. *Deadline for application:* 2 weeks before commencing date. *Fees:* \$US 140.

*Organizer:* Course Director  
Bangladesh Industrial Technical Assistance Centre (BITAC)  
Tejgaon Industrial Area  
Dhaka 1208, Bangladesh

**Transformadores de fuerza**

*Breve descripción:* Métodos de pruebas de transformadores; valoración de resultados de las pruebas de aceites. *Fecha de iniciación:* Enero. *Duración:* 30 días. *Calificaciones:* Graduado universitario. Español. *Fecha límite de inscripción:* 4 semanas antes del curso. *Derechos de inscripción:* \$US 1,200.

*Organizador:* Escuela Superior de Cuadros del Ministerio de la Industria Básica  
Carretera de Vento, Km 10 1/2  
Municipio Boyeros  
La Habana, Cuba

**Computer-aided measurement and diagnostics of electrical machines**

*Short description:* Measurements of electrical machines; application of special devices and computer programmes; microprocessor-based measurement control, data acquisition and processing. *Commencing date:* To be arranged. *Duration:* 3 weeks. *Qualifications:* Test engineers, research workers. English. *Deadline for application:* To be arranged. *Fees:* To be arranged.

*Organizer:* Technical University Budapest  
Faculty of Electrical Engineering  
Department of Electrical Machines  
Egry József utca 18  
1111 Budapest, Hungary

**Operation and maintenance of transformers, motors and switchgear**

*Short description:* "Hands-on" learning with a focus on maintenance and troubleshooting of the above power equipment; suitable theoretical inputs coupled with field visits. *Commencing date:* September. *Duration:* 12 weeks. *Qualifications:* Diploma in electrical engineering, with at least 5 years of experience with power equipment. English. *Deadline for application:* July. *Fees:* \$US 2,000.

*Organizer:* Divisional Manager  
Human Resources Development  
NCEF Ltd.  
P.O. Box 3876  
Byappanahalli  
Bangalore 560 038, India



### **Electrical insulating varnishes and enamels for electrical engineering**

*Short description:* Enamelled winding wires, impregnated insulating sleeveings, electrical insulating systems; application technique for electrical insulating varnishes and enamels; testing and evaluation of products. *Commencing date:* May. *Duration:* 3 weeks. *Qualifications:* Electrical engineers. English. *Deadline for application:* January. *Fees:* To be arranged.

*Organizer:* Instytut Elektrotechniki  
Oddział Technologii i Materialoznawstwa Elektrotechnicznego  
ul. M. Skłodowskiej-Curie 55/61  
50-950 Wrocław, Poland

### **Environmental and corrosion protection of electrical equipment**

*Short description:* Environment effect on electrical equipment life and performance; materials choice, design evaluation and electrical equipment protection; testing of materials and products under environmental conditions and in accelerated tests. *Commencing date:* May. *Duration:* 3 weeks. *Qualifications:* Electrical engineers. English. *Deadline for application:* January. *Fees:* To be arranged.

*Organizer:* Instytut Elektrotechniki  
Oddział Technologii i Materialoznawstwa Elektrotechnicznego  
ul. M. Skłodowskiej-Curie 55/61  
50-950 Wrocław, Poland

### **High-voltage insulating technique**

*Short description:* Epoxide, silicone and glass-epoxide composites; production engineering, winding or casting techniques and attachment; testing and evaluation methods for composite materials. *Commencing date:* May. *Duration:* 3 weeks. *Qualifications:* Electrical engineers. English. *Deadline for application:* January. *Fees:* To be arranged.

*Organizer:* Instytut Elektrotechniki  
Oddział Technologii i Materialoznawstwa Elektrotechnicznego  
ul. M. Skłodowskiej-Curie 55/61  
50-950 Wrocław, Poland

### **Materials for electrical engineering**

*Short description:* Insulating materials in low- and high-voltage techniques, bodies; soft magnetic materials; sintered contact materials; choice; preparation; application; testing; evaluation; standardization; environmental and corrosion protection. *Commencing date:* March. *Duration:* 3 months. *Qualifications:* Electrical engineers. English. *Deadline for application:* December 1992. *Fees:* To be arranged.

*Organizer:* Instytut Elektrotechniki  
Oddział Technologii i Materialoznawstwa Elektrotechnicznego  
ul. M. Skłodowskiej-Curie 55/61  
50-950 Wrocław, Poland

### **Short-circuit and high-voltage tests of electrical apparatuses and switchboards**

*Short description:* Testing technology; series of tests in short-circuit testing station and in high-voltage laboratory. *Commencing date:* June, July. *Duration:* 8 weeks. *Qualifications:* Degree in engineering. English. *Deadline for application:* 5 months before commencing date. *Fees:* To be arranged.

*Organizer:* Technical University of Gdansk  
Apparatus Institute  
Gdansk, Poland

**Office, accounting and computing machinery; radio, television and communication equipment and apparatus/Machines de bureau, machines comptables et de traitement de l'information; équipement et appareils de radio, télévision et communications/Maquinaria de oficina, contabilidad e informática; equipo y aparatos de radio, televisión y comunicaciones**

#### **Electronic circuits**

*Short description:* Electronic components, electronic circuits, troubleshooting of electronic circuits and measurements. *Commencing date:* October. *Duration:* 4 weeks. *Qualifications:* Electric or electronic secondary school diploma or two years study of electronics after secondary school. Arabic, English. *Deadline for application:* August. *Fees:* \$US 200.

*Organizer:* Eastern Tobacco and Cigarettes Co.  
Attn.: Training Affairs Officer  
450 Al-Ahram Street, Giza  
P.O. Box 1543  
Cairo, Egypt

#### **Consumer electronics**

*Short description:* Installation, maintenance and servicing of AM/FM radio receivers, tuner amplifiers/P.A. system, tape recorders, cassette recorders, monochrome and colour TV receivers and CCTV systems comprising of VTR/VCR monitors and mixers. *Commencing date:* October. *Duration:* 48 weeks. *Qualifications:* Certificate or diploma in electronics, communications or radio engineering, or bachelor's degree in physics or mathematics. English, Hindi. *Deadline for application:* September. *Fees:* \$US 750.

*Organizer:* Advanced Training Institute for Electronics and Process Instrumentation  
15-B Mohini Road  
Dehra Dun 248 001 (U.P.), India

*Contact address:*

Director of Training  
Ministry of Labour  
Government of India  
Shram Shakti Bhawan,  
Refi Marg, New Delhi, India

#### **Industrial electronics**

*Short description:* Operation and maintenance of industrial electronics equipment; test equipment and accessories for repair and maintenance of industrial instruments; computer applications; preparation of a machine language programme to operate on microprocessor 8085. *Commencing date:* October. *Duration:* 48 weeks. *Qualifications:* Certificate or diploma in electronics or radio engineering, or bachelor's degree in physics or mathematics. English, Hindi. *Deadline for application:* September. *Fees:* \$US 750.

*Organizer:* Advanced Training Institute for Electronics and Process Instrumentation  
15-B Mohini Road  
Dehra Dun 248 001 (U.P.), India

*Contact address:*

Director of Training  
Ministry of Labour  
Government of India  
Shram Shakti Bhawan  
Refi Marg, New Delhi, India

### Medical electronics

*Short description:* Physics, basic physiology and anatomy, electrical machines, electronic components, common hand tools, electrical and electronic service equipment, electromedical equipment, safety and standards of medical equipment, biomedical transducers; selection, use and servicing of electromedical equipment, drawing and electronic drafting. *Commencing date:* October. *Duration:* 48 weeks. *Qualifications:* Bachelor's degree in physics or mathematics, diploma in electrical or electronic engineering. *English.* *Deadline for application:* 3 months before commencing date. *Fees:* To be arranged.

*Organizer:* Advanced Training Institute for Electronics and Process Instrumentation  
Ministry of Labour  
Directorate General of Employment and Training  
Ramanthapur, Uppal Road  
Hyderabad 500 013, Andhra Pradesh, India

*Contact address:*

Director General/Joint Secretary  
Ministry of Labour  
Directorate General of Employment and Training  
Shram Shakti Bhavan  
New Delhi 110 001, India

### PCB design

*Short description:* Theory and practice of computer-aided design of single- and multi-layer PCBs. *Commencing date:* April. *Duration:* 8 weeks. *Qualifications:* Diploma in electrical or electronics engineering; science graduates. *English.* *Deadline for application:* February. *Fees:* \$US 120.

*Organizer:* Electronics Service and Training Centre  
Kaniya, Ramnagar 244 715  
Distt. Nainital (U.P.), India

### PCB manufacturing

*Short description:* Theoretical knowledge and practical skills for PCB manufacturing, i.e. single-side and double-side PTH. *Commencing date:* April. *Duration:* 8 weeks. *Qualifications:* Diploma in electrical, electronics or mechanical engineering, or science graduates. *English.* *Deadline for application:* February. *Fees:* \$US 120.

*Organizer:* Electronics Service and Training Centre  
Kaniya, Ramnagar 244 715  
Distt. Nainital (U.P.), India

### Telecommunications

*Short description:* Passive devices, electronics fundamentals, applied digital electronics, propagation and antenna; electronic measurements, line plant practice, public communication systems, power plant practice, telegraphy, telephony, carrier and multiplexing; train traffic control, HF/VHF/MW communication, telephony and control laboratory, electronic laboratory, outdoor telecommunications laboratory. *Commencing date:* To be arranged. *Duration:* 18 weeks. *Qualifications:* Engineers with 5-8 years of experience. *English.* *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India

*Contact address:*

Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

*Venue:* Indian Railways Institute of Signal Engineering and Telecommunication  
P.O. Lallaguda  
Secunderabad 500 017, India

**Telecommunication Inspectors**

*Short description:* Theory: basic concepts of signalling, passive devices, applied electronics, digital electronics and microprocessors, electronic measurements, line plant/power practices, public address system, telephony, telegraphy, carrier communications, train traffic control, propagation and antennas HF/VHF and microwave, stores, data communications; practicals: MW/HF/VHF outdoor telecommunication laboratory, microprocessor laboratory, electronic telephony laboratory. *Commencing date:* To be arranged. *Duration:* 24 weeks. *Qualifications:* Graduate engineers. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India

*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

*Venue:* Indian Railways Institute of Signal Engineering and Telecommunication  
P.O. Lallaguda  
Secunderabad 500 017, India

**Analogue and digital VLSI design and fabrication technologies**

*Short description:* Basic blocks of analogue and digital circuits, design methodologies; modelling and simulation; fundamental steps of VLSI technologies; hands-on application in design and technology laboratories. *Commencing date:* To be arranged. *Duration:* 4 weeks. *Qualifications:* Degree or equivalent in electronics or physics. English. *Deadline for application:* To be arranged. *Fees:* \$US 2,900.

*Organizer:* TÜBITAK-Marmara Research Centre  
Electronics Department  
P.O. Box 21 41470  
Gebze-Kocaeli, Turkey

**Medical, precision and optical instruments; watches and clocks/  
Instruments médicaux, de précision et d'optique; horlogerie/  
Instrumentos médicos, ópticos y de precisión; relojes**

**Industrial instrumentation and control engineering — level I**

*Short description:* Introduction to process control; construction and functional details of control components; calibration and maintenance of measuring and control instruments; troubleshooting of control loops. *Commencing date:* April. *Duration:* 4 weeks.

*Qualifications:* Instrument maintenance personnel with at least 1 year of experience. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 1,200.

*Organizer:* Training Institute for Chemical Industries  
(Central Training Institute of Bangladesh Chemical Industries Corporation)  
P.O. Sarkarkhana  
Ghorasal, Narsingdi, Bangladesh

### **Industrial instrumentation and control engineering — level II**

*Short description:* Basic instrumentation and process control technology; construction and functional details of control components; hook-up, calibration and maintenance of measuring and control instruments; sequential logic and process interlock instrumentation. *Commencing date:* January, July. *Duration:* 6 months. *Qualifications:* Academic background in physical science or technology. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* Training Institute for Chemical Industries  
(Central Training Institute of Bangladesh Chemical Industries Corporation)  
P.O. Sarkarkhana  
Ghorasal, Narsingdi, Bangladesh

### **Measurement and control of process parameters**

*Short description:* On-line process control and monitoring instrumentation; on-line supervisory instrumentation; cascade and ratio control; sequential logic and process interlock instrumentation; automcontrol and system stability. *Commencing date:* November. *Duration:* 4 weeks. *Qualifications:* Supervisory personnel engaged in process plant operation. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 1,200.

*Organizer:* Training Institute for Chemical Industries  
(Central Training Institute of Bangladesh Chemical Industries Corporation)  
P.O. Sarkarkhana  
Ghorasal, Narsingdi, Bangladesh

### **Maintenance and repair of electronic instruments**

*Short description:* On-the-job training in repair and maintenance of electronic instruments; joint work with specialized service engineers and technicians. *Commencing date:* To be arranged. *Duration:* 3 months. *Qualifications:* Degree in electronic engineering or 3 years of experience in a relevant field. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Instruments and Measuring Technique Service of the Hungarian Academy of Sciences (MTA-MMSZ)  
P.O. Box 58  
1502 Budapest, Hungary

### **Biomedical instrumentation**

*Short description:* Electrical signals in the human body, processing of biological signals; intelligent biomedical instruments; theory of operation, safety regulations, interfaces to local networks. *Commencing date:* January. *Duration:* 3 weeks. *Qualifications:* Knowledge of basic electronics and signal processing methods. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 200 per day.

**Organizer:** Technical University of Budapest  
Department of Measurement and Instrument Engineering  
Attn.: Ákos Jobbágy  
Műgytem rkp. 9  
Budapest, Hungary

#### **Instrumentation**

*Short description:* Pneumatic, hydraulic and electronic control systems in process industries; calibration, installation, repair and maintenance of instruments and devices.  
*Commencing date:* October. *Duration:* 48 weeks. *Qualifications:* Certificate or diploma in engineering or equivalent. English. *Deadline for application:* 3 months before commencing date. *Fees:* To be arranged.

**Organizer:** Advanced Training Institute for Electronics and Process Instrumentation  
Ministry of Labour  
Directorate General of Employment and Training  
Ramanthapur, Uppal Road  
Hyderabad 500 013, Andhra Pradesh, India

*Contact address:*

Director General/Joint Secretary  
Ministry of Labour  
Directorate General of Employment and Training  
Shram Shakti Bhavan  
New Delhi 110 001, India

#### **Fluid flow technology**

*Short description:* Flow measurement and control. *Commencing date:* November. *Duration:* 4 weeks. *Qualifications:* Engineers with 3-5 years of experience. English. *Deadline for application:* 1 month before commencing date. *Fees:* \$US 4,000.

**Organizer:** Fluid Control Research Institute  
Kanjikode West  
Palghat 678 623, India

**Motor vehicles, trailers and semi-trailers; other transport equipment/  
Véhicules automobiles, remorques et semi-remorques; autres matériels de  
transport/Vehículos automotores, remolques y semirremolques; otros tipos  
de equipo de transporte**

#### **Advanced CAD/CAM systems for shipbuilding**

*Short description:* CAD/CAE/CAM and computer-integrated manufacturing systems available worldwide and how to select the most suitable system for a given shipyard.  
*Commencing date:* April, September. *Duration:* 3 months. *Qualifications:* Bachelor's degree in naval architecture or equivalent, with practical experience. English. *Deadline for application:* 4 months before commencing date. *Fees:* \$US 15,000 (including accommodation and meals).

**Organizer:** Alexandria Shipyard  
Information Systems and Computer Centre  
Gate No. 36, Kabbery  
Alexandria, Egypt

### **Professional course (phase-I) for mechanical engineers**

*Short description:* Advanced coverage of: overview of railways and role of the mechanical branch; energy conservation; workshop manufacturing suspense account; future trends in diesel locomotive development; depot layout including management and equipment; hydraulic locomotives; brake systems; fuel economy; troubleshooting; non-schedule repair analysis; load testing; lube oil and rubber testing; wagon and wagon bogie design; coach and bogie design; air brake systems; design of special-purpose stock; rail/wheel interaction; shop layout; rationalization and workshop modernization; introduction to NC/CNC machines; metrology; wheel shop management; computerized management information systems. *Commencing date:* To be arranged. *Duration:* 10 weeks. *Qualifications:* Mechanical engineers. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

*Venue:* Indian Railways Institute of Mechanical and Electrical Engineering  
Jamalpur, India

### **Professional course (phase-II) for mechanical engineers**

*Short description:* Advanced coverage of: railway transport economics; training management; corporate planning; inventory management and store procedures; operation information systems; planning for additional and replacement of rolling stock; quality assurance and management; industrial and labour relations; industrial health; material analysis and non-destructive testing; diesel locomotives—engine and electrical components; operational control of locomotives; train lighting and air-conditioning; couplers; train partings; production control organization and incentive schemes; latest developments in welding, foundry and cutting-tool technology. *Commencing date:* To be arranged. *Duration:* 12 weeks. *Qualifications:* Mechanical engineers. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

*Venue:* Indian Railways Institute of Mechanical and Electrical Engineering  
Jamalpur, India

### **Other industrial branches and intersectoral programmes/ Autres secteurs industriels et programmes intersectoriels/ Otras ramas industriales y programas intersectoriales**

#### **Disaster management**

*Short description:* Disaster management skills for persons who by nature of their duties have responsibility for disaster-related programme management. *Commencing date:* To

be arranged. *Duration:* 5 weeks. *Qualifications:* Graduation degree. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Management Development Programme  
Institute of Business Administration  
University of Dhaka  
Dhaka 1000, Bangladesh

#### **Research methodology**

*Short description:* Skills for economic and business research. *Commencing date:* To be arranged. *Duration:* 6 weeks. *Qualifications:* Graduation degree. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Management Development Programme  
Institute of Business Administration  
University of Dhaka  
Dhaka 1000, Bangladesh

#### **Operational behaviour of process equipment and process units**

*Short description:* Process equipment operational behaviour; establishment of process parameters with the help of flow assembly, heat exchange, pump arrangement and packed towers pilot plants. *Commencing date:* August. *Duration:* 4 weeks. *Qualifications:* Personnel engaged in process plant operation with at least 1 year of experience. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 1,200.

*Organizer:* Training Institute for Chemical Industries  
(Central Training Institute of Bangladesh Chemical Industries Corporation)  
P.O. Sarkarkhana  
Ghorasal, Narsingdi, Bangladesh

#### **Operation of process plants**

*Short description:* Process plant operation and process control with the help of graphic interactive dynamic simulation (keyboard and control panel operation); plant operation practice. *Commencing date:* June. *Duration:* 4 weeks. *Qualifications:* First line supervisory personnel engaged in process plant operation. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 1,200.

*Organizer:* Training Institute for Chemical Industries  
(Central Training Institute of Bangladesh Chemical Industries Corporation)  
P.O. Sarkarkhana  
Ghorasal, Narsingdi, Bangladesh

#### **Process technology and operational safety**

*Short description:* Process technology; operation of process units such as flow assembly, heat exchange, sorption, water treatment, solids handling, evaporation, crystallization, distillation, neutralization, boiler, pump, compressor and turbine; measuring and control of process parameters; industrial safety. *Commencing date:* January, July. *Duration:* 6 months. *Qualifications:* Academic background in physical science or technology. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* Training Institute for Chemical Industries  
(Central Training Institute of Bangladesh Chemical Industries Corporation)  
P.O. Sarkarkhana  
Ghorasal, Narsingdi, Bangladesh



### **Engineering materials and their uses**

*Short description:* Basic concepts, main theoretical aspects, application in industry, field training. *Commencing date:* To be arranged. *Duration:* 2-4 weeks. *Qualifications:* Bachelor's degree in engineering or science. English. *Deadline for application:* —. *Fees:* \$US 500 per week.

*Organizer:* Tabbin Institute for Metallurgical Studies (TIMS)  
P.O. Box 109  
Helwan  
11421 Cairo, Egypt

### **Genetic engineering, molecular cloning**

*Short description:* Genetics: prokaryotes, eukaryotes, genetic code, gene expression and control, movable genes, gene library. Recombinant: DNA techniques — restrictions enzymes, vector-host systems, isolation of cloned genes, introduction of DNA into bacterial and into yeast cells; recombinant DNA industry, commercial potential, examples. *Commencing date:* September. *Duration:* 100 or 250 hours. *Qualifications:* Bachelor's or higher degree in science. English. *Deadline for application:* February. *Fees:* To be arranged.

*Organizer:* Technical University of Budapest  
Attn.: Katalin Gruiz  
Gellért tér 4  
1111 Budapest, Hungary

### **Electronics**

*Short description:* Different courses on: maintenance and servicing of colour TV; introduction to microprocessing and assembly language; microprocessor and its application; operation and maintenance of VCR; programming in BASIC language. *Commencing date:* To be arranged. *Duration:* 2-5 weeks. *Qualifications:* Relevant degree or professional experience. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Advanced Training Institute for Electronics and Process Instrumentation  
D.G.E. and T., Ministry of Labour  
15-B Mohini Road  
Dehradun 248 001, India

### **Technology development**

*Short description:* Different courses related to: tool design; precision tool room; production technology; engineering metrology and inspection; machine tool maintenance; industrial hydraulic and pneumatic control; electrical maintenance; heat treatment and material testing; advanced welding; industrial chemistry; process control instrumentation. *Commencing date:* To be arranged. *Duration:* 1-12 weeks. *Qualifications:* Relevant professional experience. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* Advanced Training Institute  
D.G.E. and T., Ministry of Labour  
Guindy, Madras 600 032, India

### **Advanced application techniques**

*Short description:* Courses on: jig and fixture design; press tool and mould design; advanced machine-shop practice; cutting tools and gauge design; precision tool-making

techniques; low-cost automation technology; NC machines technology; repair and maintenance. *Commencing date:* To be arranged. *Duration:* 12 weeks. *Qualifications:* Relevant degree or professional experience. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Pakistan Industrial Technical Assistance Centre (PITAC)  
Maulana Jalal-ud-Din Roomi Road  
54600 Lahore, Pakistan

#### **Appreciation techniques**

*Short description:* Different courses on: pattern-making techniques; basic welding techniques; inspection and quality control techniques; heat-treatment technology; foundry practice; protective coatings; sheet metal and development; production management. *Commencing date:* To be arranged. *Duration:* 6 weeks. *Qualifications:* Relevant degree or professional experience. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Pakistan Industrial Technical Assistance Centre (PITAC)  
Maulana Jalal-ud-Din Roomi Road  
54600 Lahore, Pakistan

## 2. UTILITIES/SERVICES PUBLICS DE DISTRIBUTION/ SERVICIOS PÚBLICOS

### Electricity, light and power/Electricité, haute et basse tension/ Electricidad, luz y energía

#### Aplicación de la computación a los sistemas de distribución

*Breve descripción:* Cálculo de las redes de distribución que comprenden flujo de carga; cálculo de cortocircuito y estudio de coordinación reactivo; calculo de circuito secundario; valoración técnica económica de las variantes que surgen como resultado de los estudios. *Fecha de iniciación:* Mayo. *Duración:* 21 días. *Calificaciones:* Graduado universitario. Español. *Fecha límite de inscripción:* Abril. *Derechos de inscripción:* \$US 945.

*Organizador:* Escuela Superior de Cuadros del Ministerio de la Industria Básica  
Carretera de Vento, Km 10<sup>1/2</sup>  
Municipio Boyeros  
La Habana, Cuba

#### Electrical operator

*Short description:* Electric power generation processes; subsystems, transmission and distribution components and equipment; erection, testing and commissioning of power-system equipment; power station operation, grid control and load dispatch; power system instrumentation and protection, on-the-job training in power system areas; study visits. *Commencing date:* January, July, September, December. *Duration:* 26 weeks. *Qualifications:* Electrical operators of thermal power stations with 3-4 years of experience. English. *Deadline for application:* 15 days before commencing date. *Fees:* For Indians: Rs 6,000; for foreigners \$US 3,000.

*Organizer:* Power Engineers Training Society  
207-212 A, Chiranjiv Tower  
43 Nehru Place  
New Delhi 110 019, India

*Venue:* Thermal Power Station Personnel Training Institutes at Badarpur, Nagpur, Durgapur or Neyveli

#### Operation and maintenance of thermal power stations

*Short description:* Equipment and systems, control and instrumentation; start-up, shut-down and operating procedures; introduction to management, planning and cost control; hands-on training on full-scope replica simulator; on-the-job training in power plants; study visits. *Commencing date:* May, July, September, October. *Duration:* 52 weeks. *Qualifications:* Graduates in electrical, mechanical or instrumentation engineering. English. *Deadline for application:* 15 days before commencing date. *Fees:* For Indians: Rs 14,000; for foreigners: \$US 4,500, both including 2 weeks simulator training.

*Organizer:* Power Engineers Training Society  
207-212 A, Chiranjiv Tower  
43 Nehru Place  
New Delhi 110 019, India

**Venue:** Thermal Power Station Personnel Training Institutes at Badarpur, Nagpur,  
Durgapur or Neyveli

#### **Operation and maintenance of thermal power stations**

*Short description:* Equipment and systems, control and instrumentation; start-up, shut-down and operating procedures; introduction to management, planning and cost control; hands-on training on full-scope replica simulator; on-the-job training in power plants; study visits. *Commencing date:* May, June, September, October. *Duration:* 26 weeks. *Qualifications:* Graduates in electrical, mechanical or instrumentation engineering. English. *Deadline for application:* 15 days before commencing date. *Fees:* For Indians: Rs 12,000; for foreigners: \$US 4,500, both including 2 weeks simulator training.

**Organizer:** Power Engineers Training Society  
207-212 A, Chiranjiv Tower  
43 Nehru Place  
New Delhi 110 019, India

**Venue:** Thermal Power Station Personnel Training Institutes at Badarpur, Nagpur,  
Durgapur or Neyveli

#### **Operation and maintenance of hydropower stations**

*Short description:* Equipment and systems, control, protection and instrumentation; start-up, shut-down and operation of hydropower plants, load dispatch and grid operation; introduction to management, planning and cost control; on-the-job training in power plants; study visits. *Commencing date:* April, August, October, December. *Duration:* 36 weeks. *Qualifications:* Graduates in electrical, mechanical or instrumentation engineering. English. *Deadline for application:* 15 days before commencing date. *Fees:* For Indians: Rs 7,000; for foreigners: \$US 3,000.

**Organizer:** Power Engineers Training Society  
207-212 A, Chiranjiv Tower  
43 Nehru Place  
New Delhi 110 019, India

**Venue:** Thermal Power Station Personnel Training Institutes at Badarpur, Nagpur,  
Durgapur or Neyveli

#### **Operation and maintenance of power systems, transmission and distribution**

*Short description:* Electric power generation processes; substations, transmission and distribution; components and equipment; erection, testing and commissioning of power-system equipment; power-system operation, grid control and load dispatch; power system instrumentation and protection; on-the-job training in power system areas; study visits. *Commencing date:* May, July, September, October. *Duration:* 26 weeks. *Qualifications:* Graduates in electrical, mechanical or instrumentation engineering. English. *Deadline for application:* 15 days before commencing date. *Fees:* For Indians: Rs 6,000; for foreigners: \$US 3,000.

**Organizer:** Power Engineers Training Society  
207-212 A, Chiranjiv Tower  
43 Nehru Place  
New Delhi 110 019, India

**Venue:** Thermal Power Station Personnel Training Institutes at Badarpur, Nagpur,  
Durgapur or Neyveli

### **Operation of thermal power stations (stage I)**

*Short description:* Equipment and systems of thermal power plants; start-up, shut-down and operation; on-the-job training in power plants. *Commencing date:* April, May, June, October. *Duration:* 22 weeks. *Qualifications:* Diploma in engineering or Bachelor's degree in science. English. *Deadline for application:* 15 days before commencing date. *Fees:* For Indians: Rs 6,000; for foreigners: \$US 3,000.

*Organizer:* Power Engineers Training Society  
207-212 A, Chiranjiv Tower  
43 Nehru Place  
New Delhi 110 019, India

*Venue:* Thermal Power Station Personnel Training Institutes at Badarpur, Nagpur, Durgapur or Neyveli

### **Operation of thermal power stations (stage II)**

*Short description:* Power plant operation; introduction to management, planning and cost control; performance monitoring; on-the-job training in power plants; hands-on training on full-scope replica simulator. *Commencing date:* January, February, March, June, July. *Duration:* 26 weeks. *Qualifications:* Operators in thermal power stations with 3-4 years of experience or graduate engineers. English. *Deadline for application:* 15 days before commencing date. *Fees:* For Indians: Rs 6,000; for foreigners: \$US 4,500, both including 2 weeks simulator training.

*Organizer:* Power Engineers Training Society  
207-212 A, Chiranjiv Tower  
43 Nehru Place  
New Delhi 110 019, India

*Venue:* Thermal Power Station Personnel Training Institutes at Badarpur, Nagpur, Durgapur or Neyveli

### **Power station chemistry**

*Short description:* Boiler water/steam chemistry and chemical regime control; fuel chemistry and fuel analysis; combustion chemistry; lubrication oil chemistry; sampling procedures, sample testing and interpretation of results; demineralization process and chemistry. *Commencing date:* August, November. *Duration:* 12 weeks. *Qualifications:* Graduate chemist or chemists with 1-2 years of experience in thermal power stations. English. *Deadline for application:* 15 days before commencing date. *Fees:* For Indians: Rs 9,600; for foreigners: \$US 1,800.

*Organizer:* Power Engineers Training Society  
207-212 A, Chiranjiv Tower  
43 Nehru Place  
New Delhi 110 019, India

*Venue:* Thermal Power Station Personnel Training Institutes at Badarpur, Nagpur, Durgapur or Neyveli

### **Technicians/artisans for power plants**

*Short description:* Basic science and engineering; basic engineering equipment; skills for mechanical, electrical, instrumentation, maintenance and power plant operators; practical training in the respective disciplines. *Commencing date:* April, September, October, November. *Duration:* 50 weeks. *Qualifications:* Technicians. English. *Deadline for application:* 15 days before commencing date. *Fees:* For Indians: Rs 6,000; for foreigners: \$US 3,000.

*Organizer:* Power Engineers Training Society  
207-212 A, Chiranjiv Tower  
43 Nehru Place  
New Delhi 110 019, India

*Venue:* Thermal Power Station Personnel Training Institutes at Badarpur, Nagpur,  
Durgapur or Neyveli

**Aspects fondamentaux de fiabilité et d'économie des centrales thermiques conventionnelles**

*Brève description :* Examen théorique et pratique des facteurs déterminant l'économie et la fiabilité des centrales thermiques conventionnelles en service avec référence au matériel de fabrication roumaine. *Début du cours :* Septembre. *Durée :* 4 semaines. *Qualifications :* Etudes techniques supérieures. Français. *Date limite d'inscription :* 6 mois avant le début du cours. *Droits d'inscription :* \$US 4 85'

*Organisateur :* Centre de perfectionnement du personnel  
Régie autonome de l'électricité  
2-10 rue G. Sincai  
75164 Bucarest, Roumanie

**Water works and supply/Ouvrages hydrauliques et adduction d'eau/  
Abastecimiento y distribución de agua**

**Hydrology**

*Short description:* Hydrological sciences, their roles in environmental management and in water resources development and management. *Commencing date:* February. *Duration:* 6 months. *Qualifications:* Master's or Bachelor's degree or equivalent in hydrology, civil engineering, agricultural engineering, meteorology or geography. English. *Deadline for application:* 5 months before commencing date. *Fees:* \$US 10,000.

*Organizer:* VITUKI  
Water Resources Research Centre  
P.O. Box 27  
1453 Budapest, Hungary

### 3. FIELDS RELATED TO INDUSTRY/DOMAINES LIÉS A L'INDUSTRIE/ESFERAS RELACIONADAS CON LA INDUSTRIA

#### Construction (civil engineering)/Construction (génie civil)/ Construcción (ingeniería civil)

##### Construction management

*Short description:* Management tools and techniques for completing a construction project within the shortest time and at minimum cost. *Commencing date:* August. *Duration:* 3 weeks. *Qualifications:* Engineers or construction managers, with 5 years of relevant experience. English. *Deadline for application:* May. *Fees:* \$US 400.

*Organizer:* Bangladesh Management Development Centre  
4, Sobhanbagh, Mirpur Road  
Dhaka 1207, Bangladesh

##### Advanced bridge engineering

*Short description:* Bridge codes and drawings, steel as structural material, concrete and welding technology, advanced structural analysis, design in steel/RCC/PSC/composite construction, geology, foundation and bridge substructures, fabrication, erection and testing of bridges, masonry arches, hydrology, seismic analysis and protection of bridges, computer application in bridge technology. *Commencing date:* To be arranged. *Duration:* 13 weeks. *Qualifications:* Engineers/managers of civil discipline with 1-5 years of experience. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

*Venue:* Indian Railways Institute of Civil Engineering  
Pune, India

##### Computer applications in civil engineering

*Short description:* Concepts of and introduction to computers, computers in civil engineering, use of commercially available packages, demonstration of applications. *Commencing date:* To be arranged. *Duration:* 3 weeks. *Qualifications:* Engineers with 5-8 years of experience. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India  
*Venue:* Indian Railways Institute of Civil Engineering  
Pune, India

**Miscellaneous public services/Services publics, divers/  
Diversos servicios públicos**

**Commercial management in railroads**

*Short description:* Duties and responsibilities of railway staff, rules of conduct, passenger and freight traffic, station working, platform arrangements, station account claims, accidents, records and returns, statistics, pass amenities, establishment and general rules. *Commencing date:* To be arranged. *Duration:* 17 weeks. *Qualifications:* Senior staff with 5-8 years of relevant experience. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

*Venue:* Zonal Training School  
Western Railway  
Udaipur, India

**Computer applications in railways**

*Short description:* Microcomputer software (WS, dBase II plus, Lotus 1-2-3); local area network; computerized passenger reservation systems, production planning and scheduling, personnel information systems, container monitoring systems, freight operation information systems, good shed management systems, claims information-processing systems, global inquiry system, self-printing ticketing machines, traffic accounts, stores management systems, track management systems, terrain modelling, quality control, design track maintenance and machine monitoring system. *Commencing date:* To be arranged. *Duration:* 8 weeks. *Qualifications:* Graduates with computer background. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

*Venue:* Centre for Railway Information Systems (CRIS)  
Chankyapuri  
New Delhi, India

**Corporate business management in railroads**

*Short description:* Basics of management, fiscal, economic and business policies and strategies, organization process and structure, personnel management, industrial relations, operations management, finance and marketing, management information system. *Commencing date:* To be arranged. *Duration:* 4 weeks. *Qualifications:* Executive personnel. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.



**Organizer:** RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India  
**Venue:** Railway Staff College  
Vadodara, India

#### **Diesel locomotives**

*Short description:* Transmission systems, excitation systems, engine speed control, fuel injection and combustion, pressure charging of diesel locomotive engines, mechanical subassemblies, brake system, air compressor and exhaustor, electric systems and control, analysis of diesel traction, lube/fuel oil system, rating and testing of diesel locomotives, failure investigation, MIS for locomotives, accident analysis. *Commencing date:* To be arranged. *Duration:* 12 weeks. *Qualifications:* Engineers with 5 years of experience. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

**Organizer:** RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India  
**Venue:** Indian Railways Institute of Mechanical and Electrical  
Engineering  
Jamalpur, India

#### **Electrical/diesel locomotive maintenance**

*Short description:* Theory: tractive effort in relation to training load/speed, choice of alternative transmissions and their merits, maintenance organization, engine speed control, locomotive testing, troubleshooting, safety devices. Practical-diesel: manufacturing, in-stage and final inspection of electrical equipment, fabrication of special test stands from equipment data, maintenance and repair; practical-electrical: manufacture and maintenance of rotating equipment (traction motors, blowers, arno converters), maintenance and repair of power circuit equipment, recabling of locomotives, repair and testing arrangements of semi-conductor devices, fabrication of special test stands. *Commencing date:* To be arranged. *Duration:* 17 weeks. *Qualifications:* Supervisory personnel of electrical departments. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

**Organizer:** RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India  
**Venue:** Indian Railways Institute of Electrical Engineering  
P.O. Box 33  
Nasik Road 422 101, India

### **Foundation course for railway managers/engineers**

*Short description:* Railway history and organization, finance and railway accounts, civil engineering, traffic transportation, electrical engineering, personnel management, law, mechanical engineering, railway operations, signalling and telecommunications engineering, material management, statistics. *Commencing date:* To be arranged. *Duration:* 12 weeks. *Qualifications:* Managers/engineers freshly inducted in railroads. *English.* *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India  
*Venue:* Railway Staff College  
Vadodara, India

### **Geotechnical investigation and foundation design for railways**

*Short description:* Mineralogy, consolidation, shear strength, geotechnical investigation, bearing capacity of soil, stress distribution, slope stability analysis, shallow, well and pile foundations, geotechnical software. *Commencing date:* To be arranged. *Duration:* 3 weeks. *Qualifications:* Engineers with 5-6 years of experience. *English.* *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India  
*Venue:* Indian Railways Institute of Civil Engineering  
Pune, India

### **Induction course for railway managers/engineers**

*Short description:* Electrical engineering, financial management, human resource management, mechanical engineering, civil engineering, operation and commercial management, signalling and telecommunications engineering, material management, quantitative techniques, law, computer applications. *Commencing date:* To be arranged. *Duration:* 12 weeks. *Qualifications:* Managers/engineers with 2-3 years of experience in railroads. *English.* *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India  
*Venue:* Railway Staff College  
Vadodara, India

### **Maintenance of traction power supply**

*Short description:* Introduction to electrification, 25 kV AC traction system, power supply system and substation; feeding post, sectioning and paralleling posts, subsectioning posts; maintenance, schedules for substations, OHE principles and designs, OHE supporting structure; maintenance and repair at power supply substation; mobile monitoring of OHE, OHE break-down maintenance. *Commencing date:* To be arranged. *Duration:* 13 weeks. *Qualifications:* Supervisory personnel of electrical departments. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India

*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

*Venue:* Indian Railways Institute of Electrical Engineering  
P.O. Box 33  
Nasik Road 422 101, India

### **Modern railway track technology**

*Short description:* Permanent-way technology; construction and maintenance management of permanent way; skills and know-how about modern railroads; mechanized track laying and maintenance; expertise in long-welded rails and concrete sleepers. *Commencing date:* To be arranged. *Duration:* 13 weeks. *Qualifications:* Engineers/managers of civil discipline with 1-5 years of experience. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India

*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

*Venue:* Indian Railways Institute of Civil Engineering  
Pune, India

### **Permanent way inspectors**

*Short description:* Duties of permanent way inspectors, mates, keymen, gangmen; maintenance of permanent way and renewals, curved track and realignment of curves; inspection and maintenance of bridges, tunnels, turn-tables and weigh-bridges; rivers and floods, pre-monsoon measures, accidents and breaches, patrolling of tracks, working of trollies, ballast trains; engineering work in electrified areas. *Commencing date:* To be arranged. *Duration:* 26 weeks. *Qualifications:* Senior staff of permanent way, with 5 years of experience. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India

*Contact address:*

Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

*Venue:* Zonal Training School  
Western Railway  
Udaipur, India

**Railroad business — orientation programme**

*Short description:* Accounts, civil engineering, commercial practices, electrical establishment, law, mechanical engineering: signalling and telecommunication, stores management, general management. *Commencing date:* To be arranged. *Duration:* 8 weeks. *Qualifications:* Supervisory staff. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India

*Contact address:*

Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

*Venue:* Railway Staff College  
Vadodara, India

**Railroad business — initial course**

*Short description:* Mechanical engineering: motive power, non-destructive testing, derailments, impact of change in technology in management of repairs; electrical engineering: need for electrification, traction rules, OHE breakdown, AC/DC locomotives, EMUs, maintenance schedules, train lighting and air-conditioning; management; finance, commercial practices, civil engineering, material management, signalling and telecommunication, computers and MIS, human resources development. *Commencing date:* To be arranged. *Duration:* 8 weeks. *Qualifications:* Executive staff. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India

*Contact address:*

Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

*Venue:* Indian Railways Institute of Mechanical and Electrical Engineering  
Jamalpur, India

**Railroad business — for entry to administrative level (I)**

*Short description:* Accounts and finance, investment, planning, marketing, public relations, computers, electrical engineering, mechanical engineering, project management, stocks management, general management. *Commencing date:* To be arranged. *Duration:* 8 weeks. *Qualifications:* Engineers/managers with 5-8 years of experience. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

**Organizer:** RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

**Venue:** Railway Staff College  
Vadodara, India

**Railroad business — for entry to administrative level (II)**

*Short description:* Corporate planning, quality assurance, disaster management, maintenance of rolling stock, computerization and MIS, material management, rubber technology, workshop accounts, 28 LAV brake systems, diesel locomotive design, roller bearings, shed layout and management, twin-pipe air brake system, train lighting, air-conditioning, CNC machines and programming. *Commencing date:* To be arranged. *Duration:* 8 weeks. *Qualifications:* Engineers/managers of mechanical discipline with 9-13 years of experience. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

**Organizer:** RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

**Venue:** Indian Railways Institute of Mechanical and Electrical Engineering  
Jamalpur, India

**Railroad business — for entry to senior administrative level**

*Short description:* Finance management and corporate finance management, public relations, computerization, industrial relations, law, operating strategies, inventory management, corporate planning. *Commencing date:* To be arranged. *Duration:* 8 weeks. *Qualifications:* Engineers/managers with 14-18 years of experience. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

**Organizer:** RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

**Venue:** Railway Staff College  
Vadodara, India

**Railway operations**

*Short description:* Railway organization, railway historical development, permanent way, railway signalling, electrical/mechanical engineering, financial management, materials management, role of computers, communication skills, freight and pass operations, commercial practices, working of marshalling yards, railway safety organization, disaster management, corporate planning, transport pricing and costing. *Commencing*

*date:* To be arranged. *Duration:* 12 weeks. *Qualifications:* Engineers/managers of traffic discipline with 9-13 years of experience. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged

*Organizer:* RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

*Venue:* Railway Staff College  
Vadodara, India

#### **Repair, overhaul and maintenance of traction machines**

*Short description:* Inspection of traction motors, stripping of traction machines, armature assembly and testing, coil manufacture and assembly, manufacture and repair of commutator segments and traction motor, assembly and testing, stator manufacture and repair, maintenance schedules for traction machines, special tooling, jigs and fixtures for maintenance. *Commencing date:* To be arranged. *Duration:* 13 weeks. *Qualifications:* Supervisory personnel of electrical departments. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

*Venue:* Indian Railways Institute of Electrical Engineering  
Nasik Road 422 101, India

#### **Signal engineering**

*Short description:* Theory: basic concepts in signalling, principles of interlocking, orthodox mechanical signalling, double-wire signalling, relays, track circuits, equipment and control circuits, signalling in electrified area, axle counters, route relay and panel interlocking, block signalling, signalling general and safety; practicals: mechanical signalling equipment, power signalling equipment, block signalling. *Commencing date:* To be arranged. *Duration:* 18 weeks. *Qualifications:* Engineers with 5-8 years of experience. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

*Venue:* Indian Railways Institute of Signal Engineering and Telecommunication  
P.O. Lallaguda  
Secunderabad, India

### Signal Inspectors (I)

*Short description:* Basic concepts of signalling, principles of interlocking, orthodox signalling, double-wiring signalling, signalling relays, track circuits, equipment and control, electrical signalling, signalling in electrified area, power supply arrangements, relay interlocking, block signalling, general safety, preparation of lock/dog charts, stores. *Commencing date:* To be arranged. *Duration:* 18 weeks. *Qualifications:* Senior signalling staff with 5-8 years of experience. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

*Venue:* Indian Railways Institute of Signal Engineering and Telecommunication  
P.O. Lallaguda  
Secunderabad, India

### Signal Inspectors (II)

*Short description:* Theory: basic concepts of signalling, principles of interlocking, orthodox signalling, double-wire signalling, signalling relays, track circuits, electrical signalling equipment, signalling in AC electrified area, axle counter, power supply arrangements, relay interlocking, block signalling, signalling general and safety, train traffic control, preparation of lock/dog charts, accounts; practicals: mechanical/electrical signalling laboratory, outdoor telecommunication, control laboratory, digital laboratory. *Commencing date:* To be arranged. *Duration:* 24 weeks. *Qualifications:* Graduate engineers. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

*Venue:* Indian Railways Institute of Signal Engineering and Telecommunication  
P.O. Lallaguda  
Secunderabad, India

### Train operations and management

*Short description:* Transportation management, freight and passenger train control, marshalling yards, wagon utilization, traffic projections, punctuality, timetabling, signalling, permanent way, station working; passenger and freight traffic, revenue, passenger amenities, ticketless travelling, reservations, marketing and sales, booking to materials and claims, finance and general management. *Commencing date:* To be arranged. *Duration:* 13 weeks. *Qualifications:* Executive personnel of traffic discipline. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India

*Contact address:*

Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

*Venue:*

Zonal Training School  
Western Railway  
Udaipur, India



#### 4. THE INDUSTRIAL SECTOR/LE SECTEUR INDUSTRIEL/ EL SECTOR INDUSTRIAL

**Industrial policy, programming, planning, production/  
Politiques, programmation, planification, production industrielles/  
Política, programación, planeamiento y producción industriales**

##### **Development policies**

*Short description:* Development problems and policies in the national, regional and global perspective; comparative transitions to a market economy; interdisciplinary approach to the theory and practice of development in a rapidly changing international environment. *Commencing date:* March (French); October (English). *Duration:* 4 months. *Qualifications:* Bachelor's degree in economics or social sciences. English, French. *Deadline for application:* 4 months before commencing date. *Fees:* \$US 2,000.

*Organizer:* Research Institute for Developing Economies  
Warsaw School of Economics  
ul. Rakowiecka 24  
02-521 Warsaw, Poland

##### **Spécialisation sur le développement industriel en Afrique**

*Brève description :* Analyse des plans et programmes du développement industriel au niveau national, sous-régional et régional; projets industriels; politiques industrielles; recherche. *Début du cours :* Novembre. *Durée :* 3 mois. *Qualifications :* Maîtrise en économie ou diplôme équivalent; expérience professionnelle d'au moins 2 ans dans le domaine industriel; être de nationalité d'un pays africain; être parrainé par le gouvernement. Français ou anglais. *Date limite d'inscription :* Juillet. *Droits d'inscription :* \$US 2 000.

*Organisateur :* IDEP  
B.P. 3186  
Dakar, Sénégal

##### **Manpower planning**

*Short description:* Manpower planning, job analysis and description, demand analysis, supply analysis, matching supply with demand, manpower policies and human resource development. *Commencing date:* To be arranged. *Duration:* 3 weeks. *Qualifications:* Administrators involved in the planning or management of human resources. Arabic, English. *Deadline for application:* ---. *Fees:* \$US 1,200.

*Organizer:* Sudan Academy for Administrative Sciences  
P.O. Box 2003  
Khartoum, Sudan

##### **Rural development planning**

*Short description:* Area development; agricultural planning; rural development strategies; project planning. *Commencing date:* To be arranged. *Duration:* 4 weeks. *Qualifica-*

tions: Officials of local, regional or central governments. Arabic, English. *Deadline for application:* —. *Fees:* \$US 1,200.

*Organizer:* Sudan Academy for Administrative Sciences  
P.O. Box 2003  
Khartoum, Sudan

#### **Industrial infrastructure development and management**

*Short description:* Industrial zoning and industrial estates; environmental consideration; basic infrastructure for industrial areas; types and required treatment for various industrial wastes. *Commencing date:* October. *Duration:* 4 weeks. *Qualifications:* University degree with some related experience. English. *Deadline for application:* 6 weeks before commencing date. *Fees:* \$US 2,000.

*Organizer:* Director  
Continuing Education Center  
Asian Institute of Technology  
G.P.O. Box 2754  
Bangkok 10501, Thailand

#### **Industrial projects/Projets industriels/Proyectos industriales**

##### **Project preparation, appraisal and evaluation using COMFAR, including ECBA and GRAFIX**

*Short description:* Practical demonstrative training in the application of COMFAR so that upon completion participants can use COMFAR independently in their own country and work situation. *Commencing date:* August. *Duration:* 4 weeks. *Qualifications:* Holders of Bachelor's degree/graduation with at least 7 years of relevant experience or post-graduate degree with 3-5 years of relevant experience will be given preference. English. *Deadline for application:* May. *Fees:* \$US 2,500.

*Organizer:* Bangladesh Management Development Centre (BMDC)  
Project Management Division  
Attn.: A.K.M. Nurunnabi Chowdhury  
4, Sobhanbag, Mirpur Road  
Dhaka 1207, Bangladesh

##### **Computerized project management**

*Short description:* Plotting of time-scaled PERT, GANTT, and actual versus plan graphs. *Commencing date:* January. *Duration:* 6 weeks. *Qualifications:* Executives monitoring work performed by subcontractors. English. *Deadline for application:* 1 work before commencing date. *Fees:* Tk 4,500.

*Organizer:* Computer School (Division of Computerland)  
52, New Eskaton Road  
TMC Building  
Dhaka 1000, Bangladesh

##### **Evaluación social de proyectos**

*Breve descripción:* Técnicas de análisis de la actividad de pre-inversión; preparación y evaluación privada y social de proyectos de inversión específicos. *Fecha de iniciación:*

Febrero. *Duración:* 5 meses fase teórica más 5 meses fase práctica. *Calificaciones:* Título universitario, trabajar en el sector público, en universidades o en empresas de servicios públicos; ser menor de 45 años. *Fecha límite de inscripción:* 4 meses antes del curso. *Derechos de inscripción:* \$US 3,000.

*Organizador:* MIDEPLAN  
Facultad de Economía, Pontificia Universidad Católica de Chile  
Vicuña Mackenna No. 4860  
Santiago, Chile

#### **Feasibility studies and industrial economics**

*Short description:* Basic concepts, main theoretical aspects, application in industry, field training. *Commencing date:* To be arranged. *Duration:* 2-4 weeks. *Qualifications:* Bachelor's degree in engineering or science. English. *Deadline for application:* —. *Fees:* \$US 500 per week.

*Organizer:* Tabbin Institute for Metallurgical Studies (TIMS)  
P.O. Box 109  
Helwan  
11421 Cairo, Egypt

#### **Project planning and management**

*Short description:* Economics of development; objectives of development in Ghana; public administration system; concepts and issues of agricultural/rural development; project planning and analysis; investment criteria; project implementation and management; behavioural considerations in project planning and management. *Commencing date:* February. *Duration:* 8 weeks. *Qualifications:* University degree. English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 1,040.

*Organizer:* The Director  
Ghana Institute of Management and Public Administration (GIMPA)  
P.O. Box 50  
Achimota, Ghana

#### **Project management**

*Short description:* Project selection, planning, organization, monitoring and management; project leadership; PERT/CPM; project management information system. *Commencing date:* To be arranged. *Duration:* 6 weeks. *Qualifications:* Engineers/managers with 5-8 years of experience. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

*Venue:* Railway Staff College  
Vadodara, India

### **Industrial projects**

*Short description:* Project investment evaluation, planning environmental cost of a project.  
*Commencing date:* June. *Duration:* 2 months. *Qualifications:* Two years experience in project evaluation. English. *Deadline for application:* May. *Fees:* —.

*Organizer:* Warsaw School of Economics  
Training Center for Foreign Students  
Al. Niepodległości 162  
Warsaw, Poland

### **Project planning**

*Short description:* Identification and preparation of feasibility studies for evaluation and selection of development projects. *Commencing date:* To be arranged. *Duration:* 4 weeks. *Qualifications:* Graduates, preferably with suitable experience. Arabic, English. *Deadline for application:* —. *Fees:* \$US 1,200.

*Organizer:* Sudan Academy for Administrative Sciences  
P.O. Box 2003  
Khartoum, Sudan

### **Project management**

*Short description:* Project planning, implementation, monitoring and evaluation; project management information system (PMIS); project organization and motivation; project completion report (PCR) and project performance audit report (PPAR); special emphasis on irrigation, agriculture and rural development projects. *Commencing date:* May. *Duration:* 6 weeks. *Qualifications:* University degree, with some related experience. English. *Deadline for application:* 6 weeks before commencing date. *Fees:* \$US 2,700.

*Organizer:* Director  
Continuing Education Center  
Asian Institute of Technology  
G.P.O. Box 2754  
Bangkok 10501, Thailand

### **Project monitoring and evaluation**

*Short description:* Budgeting methods and cost estimation; project management information systems; project evaluation and auditing; post project evaluation. *Commencing date:* May. *Duration:* 4 weeks. *Qualifications:* University degree with some related experience. English. *Deadline for application:* 6 weeks before commencing date. *Fees:* \$US 2,000.

*Organizer:* Director  
Continuing Education Center  
Asian Institute of Technology  
G.P.O. Box 2754  
Bangkok 10501, Thailand

### **Small-scale industries and entrepreneurship/Petites industries et entreprises/ Pequeñas industrias y los empresarios**

#### **Entrepreneurship development**

*Short description:* Feasibility analysis; selection of viable projects; training and motivation for entrepreneurs. *Commencing date:* January, July. *Duration:* 3 weeks. *Qualifications:*

Bachelor's degree or equivalent; engaged in the promotion and development of small-scale industries. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 1,000.

*Organizer:* Small Business Division  
Bangladesh Management Development Centre (BMDC)  
4, Sobhanbag, Mirpur Road  
Dhaka 1207, Bangladesh

#### **Entrepreneurship development**

*Short description:* General management; production management; financial management; marketing management and other entrepreneurship qualities. *Commencing date:* March, October, November. *Duration:* 3 weeks. *Qualifications:* University degree. Bengali, English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 450.

*Organizer:* Principal  
Small and Cottage Industries Training Institute  
Attn.: Bangladesh Small and Cottage Industries Corporation  
137-138, Motijheel Commercial Area  
Dhaka 1000, Bangladesh

#### **Industrial extension services for small and cottage industries**

*Short description:* Concept of extension services, function of extension officers, nursing of industries, industrial extension tools, developing extension relations. *Commencing date:* May, December. *Duration:* 4 weeks. *Qualifications:* University degree. Bengali, English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 600.

*Organizer:* Principal  
Small and Cottage Industries Training Institute  
Attn.: Bangladesh Small and Cottage Industries Corporation  
137-138, Motijheel Commercial Area  
Dhaka 1000, Bangladesh

#### **SCI project appraisal**

*Short description:* Concept and objective of project appraisal, selection and determination of project viability in terms of technical, financial, marketing and economic aspects. *Commencing date:* February, May. *Duration:* 3 weeks. *Qualifications:* University degree. Bengali, English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 450.

*Organizer:* Principal  
Small and Cottage Industries Training Institute  
Attn.: Bangladesh Small and Cottage Industries Corporation  
137-138, Motijheel Commercial Area  
Dhaka 1000, Bangladesh

#### **Small-scale production of ceramics**

*Short description:* Simple ceramic technologies to produce tableware, art ceramics, pottery. *Commencing date:* September. *Duration:* 6 weeks. *Qualifications:* Professional qualifications. English. *Deadline for application:* August. *Fees:* \$US 2,700 (including board and lodging).

*Organizer:* UNIDO Czechoslovakia Joint Programme for Cooperation  
Non-metallic Industries  
Pražská 12  
305 11 Plzeň, Czechoslovakia

#### **Small-scale ceramic technology**

*Short description:* Ceramic raw materials, processes and technology (refractory materials, structural ceramics, slip casting), laboratory control and methods of evaluation.  
*Commencing date:* May. *Duration:* To be arranged. *Qualifications:* Background in chemistry and/or ceramics mineralogy. English, German. *Deadline for application:* 6 weeks before commencing date. *Fees:* \$US 800 per week (including board and lodging).

*Organizer:* VUK-High Temperature and Utility Ceramics Ltd.  
330 12 Horní Blatná, Czechoslovakia

#### **Management assistant programme**

*Short description:* To equip non-technical unemployed graduates to become competent management assistants for small-scale industrial units and provide them employment in SSI units. *Commencing date:* To be arranged. *Duration:* 14 weeks. *Qualifications:* Bachelor's degree. English and vernacular language. *Deadline for application:* ---.  
*Fees:* ---.

*Organizer:* Entrepreneurship Development Institute of India  
Bhat, P.O. Chandkheda 382 424  
Dist. Gandhinagar, Gujarat, India

#### **Entrepreneurship development for business entrants**

*Short description:* Develop and strengthen participant's entrepreneurial qualifications, motivation and competencies, their ability for sensing opportunities and their capability of managing an enterprise. *Commencing date:* January. *Duration:* 3 weeks. *Qualifications:* Potential entrepreneurs. English. *Deadline for application:* 3 months before commencing date. *Fees:* To be arranged.

*Organizer:* National Institute for Entrepreneurship and Small Business Development  
(NIESBUD)  
NSIC-PDTC Campus, Okhla Industrial Estate  
New Delhi 110 020, India

#### **Entrepreneurship for small-business trainers/promoters**

*Short description:* Knowledge, skills and attitudes for successful trainers/promoters of entrepreneurship and small business. *Commencing date:* October. *Duration:* 8 weeks. *Qualifications:* Working in governmental or non-governmental institutions as trainers/promoters of entrepreneurship. English. *Deadline for application:* August. *Fees:* To be arranged.

*Organizer:* National Institute for Entrepreneurship and Small Business Development  
(NIESBUD)  
NSIC-PDTC Campus, Okhla Industrial Estate  
New Delhi 110 020, India

### **Small-business creation and development for women entrepreneurs**

*Short description:* Knowledge, skills, capabilities for the creation and development of small business for women. *Commencing date:* September. *Duration:* 8 weeks. *Qualifications:* Working in organizations assisting women in the creation and development of small business ventures. English. *Deadline for application:* July. *Fees:* To be arranged.

*Organizer:* National Institute for Entrepreneurship and Small Business Development (NIESBUD)  
NSIC-PDTC Campus, Okhla Industrial Estate  
New Delhi 110 020, India

### **Small-business planning and promotion**

*Short description:* Sensing opportunities, identifying new ventures, formulation and appraisal of business plans as entrepreneurs, trainers, promoters, counsellors, consultants or managers of small business. *Commencing date:* February. *Duration:* 8 weeks. *Qualifications:* Officials and extension officers interested in small business planning and appraisal. English. *Deadline for application:* 3 months before commencing date. *Fees:* To be arranged.

*Organizer:* National Institute for Entrepreneurship and Small Business Development (NIESBUD)  
NSIC-PDTC Campus, Okhla Industrial Estate  
New Delhi 110 020, India

### **Small business management**

*Short description:* Feasibility analysis; strategic business planning; market analysis; product planning; financial planning; information management; taxes and the law; salesmanship. *Commencing date:* June. *Duration:* 4 weeks. *Qualifications:* University degree with some work experience. English. *Deadline for application:* 6 weeks before commencing date. *Fees:* \$US 2,000.

*Organizer:* Director  
Continuing Education Center  
Asian Institute of Technology  
G.P.O. Box 2754  
Bangkok 10501, Thailand

### **Industrial waste disposal, recycling, environmental protection/Evacuation et recyclage des déchets industriels, protection de l'environnement/Evacuación de residuos industriales, reciclado, protección del medio ambiente**

#### **Environmental biotechnology**

*Short description:* Reducing risks from environmental chemicals through biotechnology, pollution control, assessment, monitoring and biological treatment processes such as application onto land, subsurface application, aeration, activated sludge processes, waste stabilization, trickling filters, biological contactors, anaerobic sludge digestion, composting and waste disposal, bioremediation, bioventing, microbial ecology, molecular biology, risks of release of microbes into the environment. *Commencing date:* September. *Duration:* Short course: 100 hours; longer course: 250 hours. *Qualifications:* Bachelor's or higher degree in science. English. *Deadline for application:* February. *Fees:* —.

*Organizer:* Technical University of Budapest  
Attn: Katalin Gruiz  
Gellért tér 4  
1111 Budapest, Hungary

#### **Epuration des eaux industrielles**

*Brève description :* Analyse de la pollution des eaux, contrôle des eaux, diagnostic de la pollution, stations de traitement et d'épuration. *Début du cours :* Avril-juin. *Durée :* 15 jours. *Qualifications :* Qualifications professionnelles. Français, roumain. *Date limite d'inscription :* Février. *Droits d'inscription :* \$US 40 par jour.

*Organisateur :* Institut de recherches métallurgiques  
Centre de formation  
39, rue Mehadia, sector 6  
Bucarest, Roumanie

#### **Environmental impact assessment and review**

*Short description:* Environmental impact assessment (EIA) methodology; EIA as a management tool; environmental quality standards (EQS) setting; application of EIA to development projects; environment protection agencies in environmental planning; environmental information systems. *Commencing date:* July. *Duration:* 4 weeks. *Qualifications:* University degree, with related experience. English. *Deadline for application:* 6 weeks before commencing date. *Fees:* \$US 2,000.

*Organizer:* Director  
Continuing Education Center  
Asian Institute of Technology  
G.P.O. Box 2754  
Bangkok 10501, Thailand

#### **Industrial waste management: application of clean technologies**

*Short description:* Concepts of clean technology (CT); CT in manufacturing process; CT in hazardous waste management; technology aspect of CT; applications of CT in industry; national planning and policy aspects. *Commencing date:* April. *Duration:* 4 weeks. *Qualifications:* University degree, with related experience. English. *Deadline for application:* 6 weeks before commencing date. *Fees:* \$US 2,000.

*Organizer:* Director  
Continuing Education Center  
Asian Institute of Technology  
G.P.O. Box 2754  
Bangkok 10501, Thailand

#### **Toxic and hazardous waste management**

*Short description:* Legislation and toxicity; storage and transport; technologies and development; treatment, recycling and disposal of wastes; safety and economic aspects. *Commencing date:* April. *Duration:* 4 weeks. *Qualifications:* University degree, with related experience. English. *Deadline for application:* 6 weeks before commencing date. *Fees:* \$US 2,000.

*Organizer:* Director  
Continuing Education Center  
Asian Institute of Technology  
G.P.O. Box 2754  
Bangkok 10501, Thailand



### **Industrial air pollution assessment and control**

*Short description:* Sources of air pollution; international air pollution control legislations; pollution prevention and reduction methods and strategies; air pollution monitoring and control equipment; methods of evaluating measured data; laboratory studies and technical visits. *Commencing date:* May. *Duration:* 6 weeks. *Qualifications:* Engineers, technicians, chemists, administrators and personnel dealing with air pollution. English. *Deadline for application:* February. *Fees:* \$US 8,000

*Organizer:* TUBITAK-Marmara Research Centre  
Chemical Engineering Research Department  
P.O. Box 21  
41470 Gebze-Kocaeli, Turkey

### **Energy conservation in industry/Economies d'énergie dans l'industrie/ Conservación de la energía en la industria**

#### **Energy conservation and management in manufacturing industries**

*Short description:* Theoretical and practical aspects for the effective implementation of energy-conservation projects; supplemented by case studies, discussions and visits. *Commencing date:* November. *Duration:* 6 weeks. *Qualifications:* Engineers/technical personnel. English. *Deadline for application:* August. *Fees:* \$US 700.

*Organizer:* Bangladesh Management Development Centre (BMDC)  
4, Sobhanbagh, Mirpur Road  
Dhaka 1207, Bangladesh

#### **Combustión**

*Breve descripción:* Requerimientos necesarios para el mejoramiento de la combustión en hornos y calderas. *Fecha de iniciación:* Mayo. *Duración:* 28 días. *Calificaciones:* Graduado universitario. Español. *Fecha límite de inscripción:* Abril. *Derechos de inscripción:* \$US 1,120.

*Organizador:* Escuela Superior de Cuadros del Ministerio de la Industria Básica  
Carretera de Vento, Km 10 1/2  
Municipio Boyeros  
La Habana, Cuba

#### **Evaluación técnico-económica aplicada a las investigaciones**

*Breve descripción:* Diferentes métodos para el cálculo técnico-económico en las investigaciones; estudio de mercado; factibilidad. *Fecha de iniciación:* Junio. *Duración:* 15 días. *Calificaciones:* Graduado universitario. Español. *Fecha límite de inscripción:* 5 meses antes del curso. *Derechos de inscripción:* Para ser acordado.

*Organizador:* Instituto Cubano de Investigaciones Azucareras (ICINAZ)  
Apartado 10 154  
Quivicán 33 500  
La Habana, Cuba

#### **Industrial energy auditing**

*Short description:* Energy auditing in non-metallic industries; methods, instrumentation (portable energy auditing kit), data processing, measures for energy conservation and technological optimization. *Commencing date:* April. *Duration:* 3 weeks. *Qualifications:* Degree in engineering. English. *Deadline for application:* March. *Fees:* \$US 1,400.

**Organizer:** UNIDO Czechoslovakia Joint Programme for Cooperation  
Non-metallic Industries  
Pražská 12  
P.O. Box 211  
305 11 Plzeň, Czechoslovakia

**Industrial minerals in wastewater treatment**

*Short description:* Application of cheap industrial minerals (bentonite, zeolite, perlite, diatomite) as sorbents and flocculants in the treatment of polluted water. *Commencing date:* September. *Duration:* To be arranged. *Qualifications:* Background in chemistry and/or environmental sciences. English, German. *Deadline for application:* 6 weeks before commencing date. *Fees:* \$US 800 per week (including board and lodging).

**Organizer:** VUK-High Temperature and Utility Ceramics Ltd.  
330 12 Horní Bžiza, Czechoslovakia

**Energy saving and conservation in industry**

*Short description:* Basic concepts, main theoretical aspects, application in industry, field training. *Commencing date:* To be arranged. *Duration:* 2-4 weeks. *Qualifications:* Bachelor's degree in engineering or science. English. *Deadline for application:* —. *Fees:* \$US 500 per week.

**Organizer:** Tabbin Institute for Metallurgical Studies (TIMS)  
P.O. Box 109  
Helwan  
11421 Cairo, Egypt

**5. INDUSTRIAL DEVELOPMENT SUPPORT SERVICES/  
SERVICES D'APPUI AU DÉVELOPPEMENT INDUSTRIEL/  
SERVICIOS DE APOYO AL DESARROLLO INDUSTRIAL**

**Computer applications, data processing/  
Applications informatiques, traitement de l'information/  
Aplicaciones de la informática, procesamiento de datos**

**Computer studies**

*Short description:* Systems analysis and design, programming mathematics, database management, computer organization, use of packages, accounting, communication skills. *Commencing date:* July. *Duration:* 12 months. *Qualifications:* Cambridge Overseas School Certificate (COSC) with credit in mathematics and English. *English.* *Deadline for application:* March. *Fees:* P 400 non-residential, P 800 residential.

*Organizer:* Botswana Institute of Administration and Commerce  
P.O. Box 10026  
Gaborone, Botswana

**Acquisition of computer systems in developing countries**

*Short description:* Studies and procedures necessary before deciding the acquisition of computer systems. *Commencing date:* January, July. *Duration:* 2 months. *Qualifications:* Computer engineers, naval architects, marine engineers. *English.* *Deadline for application:* 3 months before commencing date. *Fees:* \$US 10,000 (including accommodation and meals).

*Organizer:* Alexandria Shipyard  
Information Systems and Computer Centre  
Gate No. 36, Kabbery  
Alexandria, Egypt

**Fourth generation computer language**

*Short description:* Modern and new computer language, particularly for database management. *Commencing date:* To be arranged. *Duration:* 4 weeks. *Qualifications:* University degree or high school diploma with relevant experience. *Arabic, English.* *Deadline for application:* 3 months before commencing date. *Fees:* \$US 350 per week.

*Organizer:* Egyptian Iron and Steel Co. (EISCO)  
Maintenance Development Centre  
El-Tabbin  
Cairo, Egypt

**PC for engineers**

*Short description:* Electronic spread sheet, database management; aspects of a computerized engineering office; PC for engineers. *Commencing date:* To be arranged. *Duration:* 2 months. *Qualifications:* Technicians, engineers. *English.* *Deadline for application:* 3 months before commencing date. *Fees:* To be arranged.

*Organizer:* NOVOPROJECT Consulting Engineering Co.  
1151 Csóvár u. 1/F.  
Budapest, Hungary

### **Introduction to artificial intelligence**

*Short description:* Inference methods in rule-based systems; knowledge representation; advanced problem-solving methods; expert systems; model-based reasoning systems; programming tools; applications. *Commencing date:* January. *Duration:* 4 weeks. *Qualifications:* Programming skills; awareness of the basic methods in traditional software engineering. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 200.

*Organizer:* Technical University of Budapest  
Department of Measurement and Instrument Engineering  
Attn.: Károly Tilly  
Műgyetem rkp. 9  
1521 Budapest, Hungary

### **Computer science**

*Short description:* Study of latest computer languages, video-computer-based training; PC/AT-80286 computer system handling; exposure to CDS/ISIS, MS WINDOWS, MSDOS, ESS and word processing. *Commencing date:* January, June. *Duration:* 6 months-1 year. *Qualifications:* Bachelor's degree. English. *Deadline for application:* 2 months before commencing date. *Fees:* Rs 2,000 per month.

*Organizer:* Aakash Computer Training Institute  
Bungalow No. 1/637  
Opposite City Municipal Council  
Township, Dandeli 581 325  
Karnataka, India

### **Computer programming**

*Short description:* BASIC, FORTRAN and C programming language; practical on 80286-PC/AT computer system; video-computer-based training. *Commencing date:* January, June. *Duration:* 6 months-1 year. *Qualifications:* Bachelor's degree. English. *Deadline for application:* 2 months before commencing date. *Fees:* Rs 1,000 per month.

*Organizer:* Aakash Computer Training Institute  
Bungalow No. 1/637  
Opposite City Municipal Council  
Township, Dandeli 581 325  
Karnataka, India

### **Computer programming**

*Short description:* Concepts of computers, computerized management systems, use of computers for managerial efficiency and effectiveness. *Commencing date:* To be arranged. *Duration:* 4 weeks. *Qualifications:* Engineers/managers with 5-8 years of experience. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

*Venue:* Railway Staff College  
Vadodara, India

### **Computer methods in structural mechanics**

*Short description:* Finite element method applications; static and dynamic analysis of structures; solving problems in fluid flow and heat transfer. *Commencing date:* January. *Duration:* 5 months. *Qualifications:* University degree. English. *Deadline for application:* 3 months before commencing date. *Fees:* —.

*Organizer:* Technical University of Szczecin  
Al. Piastów 41  
71-065 Szczecin, Poland

### **Informatique de gestion**

*Brève description :* Initiation à l'informatique; initiation à la programmation en BASIC, LOTUS 123, WordPerfect et DBase. *Début du cours :* Octobre. *Durée :* 10 semaines. *Qualifications :* Maîtrise ou diplôme équivalent, baccalauréat avec 5 ans d'expérience professionnelle. Français. *Date limite d'inscription :* Septembre. *Droits d'inscription :* A arranger.

*Organisateur :* Centre d'administration des entreprises (CAE)  
FASEG Université du Bénin  
B.P. 1515  
Lomé, Togo

## **Industrial administration/Administration industrielle/ Administración industrial**

### **Industrial relations**

*Short description:* Labour administration; labour laws; labour economics and productivity; personnel management; industrial psychology; industrial relations; social security; occupational safety and health; labour welfare and family planning. *Commencing date:* To be arranged. *Duration:* 4 weeks. *Qualifications:* Candidates must be nominated by their employing authority; academic qualifications. Bengali, English. *Deadline for application:* February. *Fees:* —.

*Organizer:* The Principal  
Industrial Relations Institute  
Department of Labour  
P.O. Monnu Nagar  
Tongi, Gazipur, Bangladesh

### **Public administration and management**

*Short description:* Introduction to public administration, management skills, personnel management, principles of economics, law information management, public relation and communication skills, project management. *Commencing date:* July. *Duration:* 12 months. *Qualifications:* Certificate in public administration and management or equivalent. English. *Deadline for application:* March. *Fees:* —.

*Organizer:* Botswana Institute of Administration and Commerce  
P.O. Box 10026  
Gaborone, Botswana

### **Public sector management**

*Short description:* Financial management, information technology and human resource management in the public sector; public finance. *Commencing date:* February. *Duration:* 4 weeks. *Qualifications:* Bachelor's degree or equivalent. English. *Deadline for application:* January. *Fees:* £C 1,000.

*Organizer:* Cyprus International Institute of Management  
P.O. Box 378  
Nicosia, Cyprus

### **Budgeting and financial management**

*Short description:* Government machinery; public finance; general issues in development; accounting; principles of management; statistics; auditing; current budgetary practices in Ghana; budgetary control; management information system; financial reporting; financial management; integrated planning, budgeting and control; performance measurement. *Commencing date:* April. *Duration:* 11 weeks. *Qualifications:* University degree or relevant experience in a senior position. English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 1,430.

*Organizer:* The Director  
Ghana Institute of Management and Public Administration (GIMPA)  
P.O. Box 50  
Achimota, Ghana

### **Public administration**

*Short description:* Introduction to public administration; administrative skills; government machinery; personnel management and human relations; elements of law; public relations; statistics for administrators; financial administration; organization and methods; local government administration in Ghana; administrative law; economic development planning; comparative administration. *Commencing date:* October. *Duration:* 9 months. *Qualifications:* University degree or extensive related working experience. English. *Deadline for application:* May. *Fees:* \$US 13,100.

*Organizer:* The Director  
Ghana Institute of Management and Public Administration (GIMPA)  
P.O. Box 50  
Achimota, Ghana

### **International standardization in advanced manufacturing technology**

*Short description:* The growing role, structure and major fields of international standardization in CAD/CAM/CIM; trends, case studies on the application of CAD/CAM/CIM standards, methods of successful project planning based on key standards. *Commencing date:* April. *Duration:* 3 weeks. *Qualifications:* CAD/CAM/CIM professionals. English. *Deadline for application:* March. *Fees:* \$US 2,150; \$US 3,200 including accommodation and meals.

*Organizer:* Hungarian Office for Standardization and SAGE Ltd.  
Üllői U. 25  
1085 Budapest, Hungary

**Investment promotion and industrial financing/  
Promotion de l'investissement et financement industriel/  
Promoción de las inversiones y financiación industrial**

**Advanced financial management**

*Short description:* Systematic and analytical approach in financial management. *Commencing date:* To be arranged. *Duration:* 8 weeks. *Qualifications:* Graduation degree. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Management Development Program  
Institute of Business Administration  
University of Dhaka  
Dhaka 1000, Bangladesh

**Accounting technicians**

*Short description:* Financial accounting; analysis and design of information system; cost accounting and budgeting; organization and financial control. *Commencing date:* July. *Duration:* 1 year. *Qualifications:* Diploma or equivalent. English. *Deadline for application:* March. *Fees:* P 650.

*Organizer:* Botswana Institute of Administration and Commerce  
P.O. Box 10026  
Gaborone, Botswana

**Financial management**

*Short description:* Financial environment and strategy, budgeting system and expenditure control, financial performance analysis, cash flow and funds, flow techniques, investment decisions, working capital management, railway statistics, stores suspense and stores budgeting, traffic book and earnings, traffic costing, role of computers in financial management. *Commencing date:* To be arranged. *Duration:* 4 weeks. *Qualifications:* Managers of finance discipline with 9-13 years of experience. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

*Venue:* Railway Staff College  
Vadodara, India

**Finance management**

*Brève description :* Acquisition des bases fondamentales de la finance et maîtrise des domaines de pointe. *Début du cours :* Janvier, juillet. *Durée :* 70 jours. *Qualifications :* Personnes appelées à exercer efficacement la fonction de directeur financier. Français. *Date limite d'inscription :* 1 semaine avant le début du cours. *Droits d'inscription :* \$US 7 000 y compris les repas mentionnés dans le programme et l'hébergement.

**Organisateur :** Direction des relations avec les entreprises  
c/o Institut national des sciences comptables et de l'administration  
d'entreprises (INSCAE)  
Maison des produits  
67 Ha — B.P. 946  
Antananarivo, Madagascar

### **Banca y financiamiento del desarrollo**

**Breve descripción:** El sistema financiero y las instituciones financieras para el desarrollo: organización, gestión y planeamiento estratégico en banca; técnica bancaria; proyectos de inversión; simulación por computadora. *Fecha de iniciación:* Para ser acordado. *Duración:* 5 semanas. *Calificaciones:* Profesionales; ejecutivos en actual ejercicio con experiencia en instituciones financieras. Español. *Fecha límite de inscripción:* 2 semanas antes del curso. *Derechos de inscripción:* \$US 1,000.

**Organizador:** Asociación Latinoamericana de Instituciones Financieras de Desarrollo (ALIDE)  
Av. Paseo de la República 3211  
San Isidro  
Lima 27, Perú

### **Comptabilité analytique d'exploitation**

**Brève description :** Notions de coûts, centres de coût, clés de répartition, prix de revient. *Début du cours :* Octobre. *Durée :* 10 semaines. *Qualifications :* Maîtrise ou diplôme équivalent; baccalauréat avec 5 ans d'expérience professionnelle. Français. *Date limite d'inscription :* Septembre. *Droits d'inscription :* A arranger.

**Organisateur :** Centre d'administration des entreprises (CAE)  
FASEG Université du Bénin  
B.P. 1515  
Lomé, Togo

### **Comptabilité générale**

**Brève description :** Analyse comptable, écritures comptables, compte des soldes intermédiaires de gestion, l'inventaire, le bilan. *Début du cours :* Octobre. *Durée :* 10 semaines. *Qualifications :* Maîtrise ou diplôme équivalent; baccalauréat avec 5 ans d'expérience professionnelle. Français. *Date limite d'inscription :* Septembre. *Droits d'inscription :* A arranger.

**Organisateur :** Centre d'administration des entreprises (CAE)  
FASEG Université du Bénin  
B.P. 1515  
Lomé, Togo

### **Fiscalité**

**Brève description :** Fiscalité togolaise, impôt sur le revenu des personnes physiques et morales, impôt sur les sociétés, tarifs douaniers. *Début du cours :* Octobre. *Durée :* 8 semaines. *Qualifications :* Maîtrise ou diplôme équivalent; baccalauréat avec 5 ans d'expérience professionnelle. Français. *Date limite d'inscription :* Septembre. *Droits d'inscription :* A arranger.

**Organisateur :** Centre d'administration des entreprises (CAE)  
FASEG Université du Bénin  
B.P. 1515  
Lomé, Togo



### **Mathématiques financières**

*Brève description* : Calcul intérêts simples, intérêts composés, annuités. *Début du cours* : Octobre. *Durée* : 8 semaines. *Qualifications* : Maîtrise ou diplôme équivalent; baccalauréat avec 5 ans d'expérience professionnelle. Français. *Date limite d'inscription* : Septembre. *Droits d'inscription* : A arranger.

*Organisateur* : Centre d'administration des entreprises (CAE)  
FASEG Université du Bénin  
B.P. 1515  
Lomé, Togo

### **Marketing and export promotion/Commercialisation et promotion de l'exportation/Comercialización y promoción de las exportaciones**

#### **Export marketing**

*Short description*: General aspects of export marketing. *Commencing date*: To be arranged. *Duration*: 3 weeks. *Qualifications*: Graduation degree. English. *Deadline for application*: —. *Fees*: To be arranged.

*Organizer*: Management Development Program  
Institute of Business Administration  
University of Dhaka  
Dhaka 1000, Bangladesh

#### **Marketing management**

*Short description*: Skills in marketing management. *Commencing date*: To be arranged. *Duration*: 4 weeks. *Qualifications*: Graduation degree. English. *Deadline for application*: To be arranged. *Fees*: Not yet decided.

*Organizer*: Management Development Program  
Institute of Business Administration  
University of Dhaka  
Dhaka 1000, Bangladesh

#### **Commercial agents**

*Short description*: Knowledge and skills for selling any commercial product. *Commencing date*: September. *Duration*: 4 weeks. *Qualifications*: English. *Deadline for application*: May. *Fees*: To be arranged.

*Organizer*: University for Agriculture and Food Industry  
Villányi ut 35-43  
1118 Budapest, Hungary

#### **Marketing management**

*Brève description* : Entraînement aux fonctions de directeur du marketing, en passant par la maîtrise des outils de travail. *Début du cours* : Janvier, juillet. *Durée* : 70 jours. *Qualifications* : Personnes exerçant déjà ou appelées à assurer les fonctions de directeur du marketing. Français. *Date limite d'inscription* : 1 semaine avant le début du cours. *Droits d'inscription* : \$US 7 (XX), y compris les repas mentionnés dans le programme et l'hébergement.

*Organisateur* : Direction des relations avec les entreprises  
c/o Institut national des sciences comptables et de l'administration  
d'entreprises (INSCAE)  
Maison des produits  
67 Ha — Boîte postale 946  
Antananarivo, Madagascar

### **Marketing**

*Brève description* : Etude du marché, étude du produit, segmentation du marché, marketing mix. *Début du cours* : Octobre. *Durée* : 12 semaines. *Qualifications* : Maîtrise ou diplôme équivalent, baccalauréat avec 5 ans d'expérience professionnelle. *Date limite d'inscription* : Septembre. *Droits d'inscription* : A arranger.

*Organisateur* : Centre d'administration des entreprises (CAE)  
FASEG Université du Bénin  
B.P. 1515  
Lomé, Togo

## **Industrial technology and product development/ Mise au point des techniques industrielles et des produits/ Desarrollo de tecnología industrial y de productos**

### **Industrial technology**

*Short description*: Short courses on: automation technology; CAD/CAM technology; textile and garment technology; plastic technology; building and construction; microcomputers; systems analysis and programming; microprocessors; computer operation; advanced computer technology; data communications, data security, industry-related application software, structured systems analysis and design methodology (SSADM); UNIX, NOVELL, netware; product design and development; industrial control and Taguchi method. *Commencing date*: To be arranged. *Duration*: To be arranged. *Qualifications*: Technical personnel. Chinese, English. *Deadline for application*: —. *Fees*: To be arranged.

*Organizer*: Hong Kong Productivity Council  
HKPC Building  
78 Tat Chee Avenue  
Kowloon Tong, Kowloon, Hong Kong

### **Management industriel et des technologies**

*Brève description* : Gestion du matériel; stratégie industrielle; gestion de l'innovation, recherche et développement. *Début du cours* : Mars-juin. *Durée* : 1-3 semaines. *Qualifications* : Directeur de production; directeur et responsable de services techniques. *Date limite d'inscription* : Janvier-février. *Droits d'inscription* : \$US 2 000.

*Organisateur* : Centre africain d'études supérieures en gestion (CESAG)  
B.P. 3802  
Dakar, Sénégal

**Maintenance and repair/Entretien et réparation/  
Mantenimiento y reparación**

**Management of industrial maintenance**

*Short description:* Theoretical and practical assignments in factories; case studies, discussions, study tours. *Commencing date:* February. *Duration:* 3 weeks. *Qualifications:* Engineers, technical personnel, first line managers. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 400.

*Organizer:* Bangladesh Management Development Centre (BMDC)  
4, Sobhanbagh, Mirpur Road  
Dhaka 1207, Bangladesh

**Protección catódica en suelos y aguas**

*Breve descripción:* Conocimientos generales para comprender los procesos de la corrosión en diferentes medios naturales; métodos para aplicar la protección catódica, diseño y características propias de estas instalaciones. *Fecha de iniciación:* Octubre. *Duración:* 21 días. *Calificaciones:* Graduado universitario. Español. *Fecha límite de inscripción:* Septiembre. *Derechos de inscripción:* \$US 945.

*Organizador:* Escuela Superior de Cuadros del Ministerio de la Industria Básica  
Carretera de Vento, Km 10<sup>1/2</sup>  
Municipio Boyeros  
La Habana, Cuba

**Protección contra la corrosión atmosférica de los metales**

*Breve descripción:* Conocimientos básicos para afrontar los problemas de corrosión y protección de estructuras y equipos expuestos a las más variadas condiciones ambientales. *Fecha de iniciación:* Marzo. *Duración:* 28 días. *Calificaciones:* Graduado universitario. Español. *Fecha límite de inscripción:* Febrero. *Derechos de inscripción:* \$US 1,120.

*Organizador:* Escuela Superior de Cuadros del Ministerio de la Industria Básica  
Carretera de Vento, Km 10<sup>1/2</sup>  
Municipio Boyeros  
La Habana, Cuba

**Teoría de la corrosión y métodos generales de ensayos**

*Breve descripción:* Elementos teóricos que rigen los procesos de la corrosión química y de la electroquímica que permitan interpretar los diferentes procesos corrosivos y sus características elementales; conocimientos sobre los tipos y características de los ensayos específicos para cada tipo de corrosión. *Fecha de iniciación:* Octubre. *Duración:* 28 días. *Calificaciones:* Graduado universitario. Español. *Fecha límite de inscripción:* Septiembre. *Derechos de inscripción:* \$US 1,120.

*Organizador:* Escuela Superior de Cuadros del Ministerio de la Industria Básica  
Carretera de Vento, Km 10<sup>1/2</sup>  
Municipio Boyeros  
La Habana, Cuba

### **Ingeniería de mantenimiento**

*Breve descripción:* Aplicación de los métodos de ensayos no-destructivos en el mantenimiento industrial; balanceo dinámico. *Fecha de iniciación:* Mayo. *Duración:* 15 días. *Calificaciones:* Graduado universitario. Español. *Fecha límite de inscripción:* 4 meses antes del curso. *Derechos de inscripción:* Para ser acordado.

*Organizador:* Instituto Cubano de Investigaciones Azucareras (ICINAZ)  
Apartado 10 154  
Quivicán 33 500  
La Habana, Cuba

### **Mantenimiento por diagnóstico computarizado**

*Breve descripción:* Aplicación de la computadora en el diagnóstico y prescripción técnica del estado de funcionamiento o deterioro de los equipos industriales así como su profilaxis correctiva. *Fecha de iniciación:* Mayo. *Duración:* 20 días. *Calificaciones:* Nivel medio y superior de enseñanza técnica. Español. *Fecha límite de inscripción:* —. *Derechos de inscripción:* Para ser acordado.

*Organizador:* UIP Cuba-9 (CAI)  
Pablo Noriega  
Quivicán  
La Habana, Cuba

### **Maintenance**

*Short description:* Maintenance and workshop technology; production engineering; production management. *Commencing date:* Throughout the year. *Duration:* 3-6 months. *Qualifications:* Bachelor's degree in engineering. English. *Deadline for application:* —. *Fees:* —.

*Organizer:* El Nasr-Casting Company  
P.O. Box 949  
Alexandria, Egypt

### **Preventive maintenance system and its application**

*Short description:* Preventive maintenance; organization of maintenance activities; major repair planning; predictive maintenance. *Commencing date:* To be arranged. *Duration:* 4 weeks. *Qualifications:* Degree from a technical university. Arabic, English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 350 per week.

*Organizer:* Egyptian Iron and Steel (EISCO)  
Maintenance Development Centre  
El-Tabbin  
Cairo, Egypt

### **Corrosion**

*Short description:* Basic concepts, main theoretical aspects, application in industry, field training. *Commencing date:* To be arranged. *Duration:* 2-4 weeks. *Qualifications:* Bachelor's degree (engineering or science) or technicians. English, French. *Deadline for application:* —. *Fees:* \$US 500 per week.

*Organizer:* Tabbin Institute for Metallurgical Studies (TIMS)  
P.O. Box 109  
Helwan  
11421 Cairo, Egypt

**Quality control, materials testing/Contrôle de la qualité, essai des matériaux/Control de calidad, ensayo de materiales**

**Mejora de la calidad**

*Breve descripción:* Desarrollar habilidades para hacer mejoras anuales y reducción de costos mediante un proceso estructurado para la realización de cambios radicales en la industria y los servicios. *Fecha de iniciación:* Marzo. *Duración:* 21 días. *Calificaciones:* Graduado universitario. Español. *Fecha límite de inscripción:* Febrero. *Derechos de inscripción:* \$US 945.

*Organizador:* Escuela Superior de Cuadros del Ministerio de la Industria Básica  
Carretera de Vento. Km 10<sup>1/2</sup>  
Municipio Boyeros  
La Habana, Cuba

**Laboratory training**

*Short description:* Chemical and spectral analysis of iron, copper and aluminium compounds. *Commencing date:* July-December. *Duration:* 6 weeks. *Qualifications:* Professional qualifications. Arabic, English. *Deadline for application:* —. *Fees:* \$US 300.

*Organizer:* Egyptian Copper Works  
Hagar El-Nawattia  
Alexandria, Egypt

**Technical laboratory instrumentation**

*Short description:* Practical understanding of modern instrumentation used in technological laboratories, including maintenance and repair. *Commencing date:* Throughout the year. *Duration:* 4 months. *Qualifications:* Professional qualifications. English. *Deadline for application:* 6 months before commencing date. *Fees:* To be arranged.

*Organizer:* NOVOPROJECT Consulting Engineering Co.  
1151 Csóvár u. 1/F  
Budapest, Hungary

**La qualité et l'indicateur de la qualité**

*Brève description :* Méthodologie de la qualité; les outils nécessaires; indicateurs; coûts de la qualité et de son défaut; qualité et productivité. *Début du cours :* Avril-juin. *Durée :* 15 jours. *Qualifications :* Cadres, agents de maîtrise. Français, roumain. *Date limite d'inscription :* Février. *Droits d'inscription :* \$US 40 par jour.

*Organisateur :* Institut de recherches métallurgiques  
Centre de formation  
39, rue Méhadia, sector 6  
Bucarest, Roumanie

**Mechanization, robotics, automation/Mécanisation, robotique et automation/  
Mecanización, robótica, automatización**

**Measuring equipment and automatic control**

*Short description:* Basic concepts, main theoretical aspects, application in industry, field training. *Commencing date:* To be arranged. *Duration:* 2-4 weeks. *Qualifications:* Technicians. English. *Deadline for application:* —. *Fees:* \$US 500 per week.

*Organizer:* Tabbin Institute for Metallurgical Studies (TIMS)  
P.O. Box 109  
Helwan  
11421 Cairo, Egypt

**Information technology in control engineering**

*Short description:* Introduction to the theory and praxis of computer controlled systems; system programming, control system engineering and robotics. *Commencing date:* June. *Duration:* 5 weeks. *Qualifications:* Relevant degree in engineering or computer science. English. *Deadline for application:* February. *Fees:* To be arranged.

*Organizer:* Budapest Technical University  
Faculty of Electrical Engineering  
Department of Process Control  
Müegyetem rkp. 9  
1111 Budapest, Hungary

**Electricité, automatisation industrielle et automates**

*Brève description :* Installations électriques et électromécaniques; principes de base, composants des automates; maintenance et dépannage; fonctionnement d'un automate programmable. *Début du cours :* Avril-juin. *Durée :* 15 jours. *Qualifications :* Formation fondamentale en électromécanique. Français, roumain. *Date limite d'inscription :* Février. *Droits d'inscription :* \$US 40 par jour.

*Organisateur :* Institut de recherches métallurgiques  
Centre de formation  
39, rue Méhadia, sector 6  
Bucarest, Roumanie

**Management industriel et des technologies**

*Brève description :* Logistique dans l'entreprise industrielle; automatisation de la production; systèmes informatiques. *Début du cours :* Janvier-juin. *Durée :* 1-4 semaines. *Qualifications :* Responsables de la production, directeurs ou responsables techniques. Français. *Date limite d'inscription :* 2 mois avant le début du cours. *Droits d'inscription :* \$US 2 500.

*Organisateur :* Centre africain d'études supérieures en gestion (CESAG)  
B.P. 3802  
Dakar, Sénégal

## **Occupational and product safety/Sécurité du travail et sûreté des produits/ Seguridad profesional y de los productos**

### **Occupational health and safety**

*Short description:* Modern tools and techniques for the prevention of industrial accident and occupational diseases. *Commencing date:* February, September. *Duration:* 3 weeks. *Qualifications:* English. *Deadline for application:* 1 month before commencing date. *Fees:* \$US 1,000.

*Organizer:* Bangladesh Management Development Centre (BMDC)  
4, Sobhanbag, Mirpur Road  
Dhaka 1207, Bangladesh

### **Training of trainers and human resource development/Formation de formateurs et mise en valeur des ressources humaines/Formación de profesionales de capacitación y perfeccionamiento de recursos humanos**

#### **Craft Instructors**

*Short description:* Train instructors in the following trades: fitter, turner, machinist, diesel mechanic, motor vehicle mechanic, moulder, electrician, wireman, welder, civil draughtsman. *Commencing date:* August. *Duration:* 1 year. *Qualifications:* Certificate or diploma in the relevant trade, with 3 years of professional experience; between 18 and 40 years of age. English. *Deadline for application:* June. *Fees:* Rs 500 per month.

*Organizer:* The Director of Training  
Directorate General of Employment and Training  
2 and 4 Rafi Marg  
Shram Shakti Bhavan  
New Delhi 110 001, India

*Venue:* Central Training Institute for Instructors  
Directorate General of Employment and Training  
Guindy, Madras 600 032, India

#### **Entrepreneur trainers'/motivators' programme for developing countries**

*Short description:* Knowledge, skills and attitudes for entrepreneur trainers/motivators enabling them to carry out effectively activities related to entrepreneurship development. *Commencing date:* November. *Duration:* 6 weeks. *Qualifications:* Relevant professional experience. English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 3,000 (including accommodation and meals).

*Organizer:* Entrepreneurship Development Institute of India  
Bhat, P.O. Chandkheda 382 424  
Dist. Gandhinagar, Gujarat, India

#### **Entrepreneurship for teachers of technical institutions**

*Short description:* Knowledge and skills for teachers of polytechnics/engineering and science colleges, to help them in initiating and implementing courses on entrepreneurship in their educational institution, in order to encourage students to look at the entrepreneurial activity as an effective alternative to employment. *Commencing date:* December. *Duration:* 4 weeks. *Qualifications:* Professional experience in an educa-

tional institution. English. *Deadline for application:* 6 weeks before commencing date.  
*Fees:* \$US 2,000 (including accommodation and meals).

*Organizer:* Entrepreneurship Development Institute of India  
Bhat, P.O. Chandkheda 382 424  
Dist. Gandhinagar, Gujarat, India

#### **Training of trainers**

*Short description:* Dynamics of training process, managing of training, assessment of training needs, communication and audio-visual aids in training, training methods, curriculum, preparation of training material, trainer's role and skills, evaluation; hands-on experience in preparation of curriculum and training material. *Commencing date:* To be arranged. *Duration:* 6 weeks. *Qualifications:* Engineers/managers with 5-8 years of experience. English. *Deadline for application:* 2 months before commencing date.  
*Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

*Venue:* Railway Staff College  
Vadodara, India

#### **Training of trainers**

*Short description:* Objectives of training; learning theories; training needs identification; training methods and audio-visual aids and training evaluation. *Commencing date:* September-December. *Duration:* 4 weeks. *Qualifications:* University graduates. Arabic, English. *Deadline for application:* —. *Fees:* \$US 1,200.

*Organizer:* Sudan Academy for Administrative Sciences  
P.O. Box 2003  
Khartoum, Sudan

#### **Management of training centres**

*Short description:* Human resource development and the training function; human relations and organizational behaviour; strategic planning and programme development for training; budgeting and financial records management; training records and information systems; training delivery systems; training needs assessment; evaluation of training. *Commencing date:* April. *Duration:* 6 weeks. *Qualifications:* University degree, with relevant experience. English. *Deadline for application:* 6 weeks before commencing date. *Fees:* \$US 2,700.

*Organizer:* Director  
Continuing Education Center  
Asian Institute of Technology  
G.P.O. Box 2754  
Bangkok 10501, Thailand



## 6. MANAGEMENT/GESTION/GESTIÓN

### Factory management/Gestion de l'unité de production/Gestión de fábricas

#### Supervisory training

*Short description:* Supervisory skill for front-line managers of industrial establishments based on the TWI and ILO module. *Commencing date:* January, June. *Duration:* 4 weeks. *Qualifications:* English. *Deadline for application:* 1 month before commencing date. *Fees:* \$US 1,500.

*Organizer:* Bangladesh Management Development Centre (BMDC)  
4, Sobhanbag, Mirpur Road  
Dhaka 1207, Bangladesh

#### Diagnosing and nursing of sick industries

*Short description:* Diagnosing in various areas of management, integrated plant survey, analytical tools for diagnostic study, methodology of diagnostic study; solutions for smooth running of the enterprise. *Commencing date:* August. *Duration:* 4 weeks. *Qualifications:* University graduates. Bengali, English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 150 per week.

*Organizer:* Principal  
Small and Cottage Industries Training Institute  
c/o Bangladesh Small and Cottage Industries Corporation  
137-138, Motijheel Commercial Area  
Dhaka, Bangladesh

#### Gestion des entreprises

*Brève description :* Gestion des ressources humaines, des finances, audit opérationnel, comptabilité analytique et générale, marketing. *Début du cours :* A arranger. *Durée :* 5 jours à 6 mois. *Qualifications :* Enseignement supérieur et/ou grande expérience en entreprise. Français. *Date limite d'inscription :* 2 semaines avant le début du cours. *Droits d'inscription :* FCFA 50 000-400 000.

*Organisateur :* Centre de perfectionnement et d'assistance en gestion des entreprises  
(CEPAG)  
B.P. 1468  
Cotonou, Bénin

#### Foundations of business

*Short description:* Marketing management, operations management, financial accounting and financial management, with the overall objective of providing participants with basic management skills. *Commencing date:* January. *Duration:* 4 weeks. *Qualifications:* Bachelor's degree or equivalent. English. *Deadline for application:* 1 month before commencing date. *Fees:* £C 1,000.

*Organizer:* Cyprus International Institute of Management  
P.O. Box 378  
Nicosia, Cyprus

## Management

*Short description:* Framework of concepts, analytical methods and techniques which, coupled with company visits and on-the-job training, will equip participants to execute effectively the duties of "assistant general manager" or "functional manager". *Commencing date:* September. *Duration:* 11 months. *Qualifications:* University degree or equivalent. English. *Deadline for application:* May. *Fees:* £C 1,100.

*Organizer:* The Mediterranean Institute of Management  
P.O. Box 536  
Nicosia, Cyprus

## Inspector of works

*Short description:* General rules, building materials, carpentry, use of levelling instruments, distribution of labour, preparation of pay sheets, leave and pass rules, discipline and appeal rules; issue of stores, upkeep of stores and ledgers, monthly stores, returns, preparation of work orders and contractors' bills; measurements, requirement of labour and materials, preparation of completion reports, maintaining account of expenditures. *Commencing date:* To be arranged. *Duration:* 26 weeks. *Qualifications:* Senior staff with 5 years of experience. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India  
*Venue:* Zonal Training School  
Western Railway  
Udaipur, India

## Audit de la production industrielle

*Brève description :* Système des ratios utilisés dans l'analyse économique des entreprises industrielles; gestion des standards des produits utilisés dans l'analyse des ventes et l'audit de coûts. *Début du cours :* Printemps, automne. *Durée :* 5 semaines. *Qualifications :* Etudes universitaires et au moins 3 ans d'expérience pratique en entreprise. Français. *Date limite d'inscription :* Février, septembre. *Droits d'inscription :* A arranger.

*Organisateur :* Institut de management et informatique  
Calea Grivitei No. 21, sector 1  
78101 Bucarest, Roumanie

## Management industriel et des technologies

*Brève description :* Diagnostic technique, étude de l'environnement de l'entreprise, gestion de la production, approvisionnement et stocks. *Début du cours :* Mars-juin. *Durée :* 1-3 semaines. *Qualifications :* Gestionnaires de production, directeurs techniques. Français. *Date limite d'inscription :* Février. *Droits d'inscription :* \$US 2 (XX).

*Organisateur :* Centre africain d'études supérieures en gestion (CESAG)  
B.P. 3802  
Dakar, Sénégal

### **Financial and marketing management**

*Short description:* Consumer and market, marketing research and information, production, pricing promotion, distribution, extension and service decisions, industrial marketing, exploring marketing opportunities, financial analysis, managerial and cost accounting, planning and control and working capital management, capital budgeting and investment selection, forecasting and financial planning, appraisal and financial consultancy. *Commencing date:* To be arranged. *Duration:* 8 weeks. *Qualifications:* Bachelor's degree or equivalent in a related area; working as industrial extension officer. English. *Deadline for application:* 3 months before commencing date. *Fees:* —.

*Organizer:* Department of Industrial Promotion  
Ministry of Industry  
Bangkok, Thailand

*Contact address:*

Department of Technical and Economic Cooperation  
962 Krung Kasem Road  
Bangkok 10100, Thailand

### **Production management**

*Short description:* Recording techniques, production planning and control, plant location, plant layout and material handling, inventory control, quality control, maintenance management, human factors. *Commencing date:* To be arranged. *Duration:* 4 weeks. *Qualifications:* Bachelor's degree in a relevant area; working as industrial extension officer. English. *Deadline for application:* 3 months before commencing date. *Fees:* —.

*Organizer:* Department of Industrial Promotion  
Ministry of Industry  
Bangkok, Thailand

*Contact address:*

Department of Technical and Economic Cooperation  
962 Krung Kasem Road  
Bangkok 10100, Thailand

### **Gestion des stocks et des approvisionnements**

*Brève description :* Différentes méthodes de gestion des stocks, point de commande, stock minimum, niveau de la commande. *Début du cours :* Octobre. *Durée :* 12 semaines. *Qualifications :* Maîtrise ou diplôme équivalent; baccalauréat avec 5 ans d'expérience professionnelle. Français. *Date limite d'inscription :* Septembre. *Droits d'inscription :* A arranger.

*Organisateur :* Centre d'administration des entreprises (CAE)  
FASEG Université du Bénin  
P. 1515  
Lomé, Togo

### **Gestion des ressources humaines**

*Brève description :* Importance des ressources humaines dans l'entreprise; analyse de poste; recrutement, sélection, embauche, gestion prévisionnelle des ressources humaines. *Début du cours :* Octobre. *Durée :* 8 semaines. *Qualifications :* Maîtrise ou diplôme équivalent; baccalauréat avec 5 ans d'expérience professionnelle. Français. *Date limite d'inscription :* Septembre. *Droits d'inscription :* A arranger.

*Organisateur :* Centre d'administration des entreprises (CAE)  
FASEG Université du Bénin  
B.P. 1515  
Lomé, Togo

### **Industrial management/Gestion industrielle/Gestión industrial**

#### **Management consultancy**

*Short description:* Modern tools and techniques for productivity improvement in industrial establishments. *Commencing date:* April. *Duration:* 8 weeks. *Qualifications:* University degree. English. *Deadline for application:* 2 months before commencing date. *Fees:* US\$ 3,000.

*Organizer:* Bangladesh Management Development Centre (BMDC)  
4, Sobhanbag, Mirpur Road  
Dhaka 1207, Bangladesh

#### **Office and administrative management**

*Short description:* Enhance participants' ability to manage the office and staff. *Commencing date:* To be arranged. *Duration:* 6 weeks. *Qualifications:* Graduation degree. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Management Development Program  
Institute of Business Administration  
University of Dhaka  
Dhaka 1000, Bangladesh

#### **Personnel management**

*Short description:* Develop skills in personnel management. *Commencing date:* To be arranged. *Duration:* 4 weeks. *Qualifications:* Graduation degree. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Management Development Program  
Institute of Business Administration  
University of Dhaka  
Dhaka 1000, Bangladesh

#### **Strategic management**

*Short description:* Competitive analysis, managing information, managing human resources and managing change. *Commencing date:* September. *Duration:* 4 weeks. *Qualifications:* Bachelor's degree or equivalent. English. *Deadline for application:* August. *Fees:* £C 1,000.

*Organizer:* Cyprus International Institute of Management  
P.O. Box 378  
Nicosia, Cyprus

### **Administrative management**

*Short description:* The environment of organizations; management principles; the manager's function; interpersonal skills; administrative skills. *Commencing date:* January. *Duration:* 3 weeks. *Qualifications:* Middle-level managers with at least 3 years of experience. English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 390.

*Organizer:* The Director  
Ghana Institute of Management and Public Administration (GIMPA)  
P.O. Box 50  
Achimota, Ghana

### **Chief executive programme**

*Short description:* General management; strategic business planning; leadership and motivation; personnel skills; managing change; manpower planning and development; finance and accounting; marketing management; the role of computers in modern business. *Commencing date:* May. *Duration:* 5 weeks. *Qualifications:* Chief executives of public or private organizations. English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 650.

*Organizer:* The Director  
Ghana Institute of Management and Public Administration (GIMPA)  
P.O. Box 50  
Achimota, Ghana

### **Personnel administration**

*Short description:* Management and organization; the human factor in management; the supervisory role of the personnel manager/officer; industrial relations; work of the personnel department; effective communication and management; personnel selection process; personnel training and development; personnel records and reports; job evaluation and salary policy; discipline, insubordination and grievance. *Commencing date:* November. *Duration:* 5 weeks. *Qualifications:* Officers charged with the responsibility of administering personnel. English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 650.

*Organizer:* The Director  
Ghana Institute of Management and Public Administration (GIMPA)  
P.O. Box 50  
Achimota, Ghana

### **Production management**

*Short description:* Overview of management; production functions; marketing and distribution; design of production systems; facilities planning; operations planning and control; production cost control; quantitative techniques/methods. *Commencing date:* November. *Duration:* 6 weeks. *Qualifications:* Production managers, works managers, plant/maintenance engineers. English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 780.

*Organizer:* The Director  
Ghana Institute of Management and Public Administration (GIMPA)  
P.O. Box 50  
Achimota, Ghana

### Senior management development

*Short description:* The internal and external environment of organizations; human resource management; the management process; project planning and management; business policy; financial management; quantitative management; personnel management/industrial relations; leadership; personal development, interrelationships among sectors of the national economy. *Commencing date:* January. *Duration:* 10 weeks. *Qualifications:* Managers not below the rank of deputy directors in public or private organizations. English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 1,300.

*Organizer:* The Director  
Ghana Institute of Management and Public Administration (GIMPA)  
P.O. Box 50  
Achimota, Ghana

### Strategic planning and management

*Short description:* The nature and scope of strategy; strategy and policy formulation; strategy implementation — strategic business plans; team building for strategic planning and management; international relations; field work. *Commencing date:* May. *Duration:* 3 weeks. *Qualifications:* Senior managers or departmental heads. English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 390.

*Organizer:* The Director  
Ghana Institute of Management and Public Administration (GIMPA)  
P.O. Box 50  
Achimota, Ghana

### Industrial engineering

*Short description:* Shop layout and material handling, work study, material management, operation planning, scheduling and control, quality control, value engineering, operation management, industrial engineering, investment, maintenance, job evaluation, grievance handling, computer applications. *Commencing date:* To be arranged. *Duration:* 4 weeks. *Qualifications:* Engineers/managers with 14-18 years of experience. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India  
*Venue:* Railway Staff College  
Vadodara, India

### Materials management

*Short description:* Integrated materials management, policy aspects of procurement, scientific inventory management, warehousing cost reduction, financial aspects, purchasing strategies, buying in government departments and in the public sector. *Commencing date:* To be arranged. *Duration:* 4 weeks. *Qualifications:* Engineers/managers with 9-13 years of relevant experience. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

**Organizer:** RITES  
New Delhi, India  
*Contact address:*  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

**Venue:** Railway Staff College  
Vadodara, India

### **Management exécutif**

*Brève description :* Le programme offre aux participants l'opportunité d'acquérir le profil de manager dont la fonction est caractérisée par sa multidisciplinarité. *Début du cours :* Janvier, juillet. *Durée :* 70 jours. *Qualifications :* Directeurs généraux ou directeurs généraux adjoints. Français. *Date limite d'inscription :* 1 semaine avant le début du cours. *Droits d'inscription :* \$US 7 000 y compris les repas mentionnés dans le programme et l'hébergement.

*Organisateur :* Direction des relations avec les entreprises  
c/o Institut national des sciences comptables et de l'administration  
d'entreprises (INSCAE)  
Maison des produits, 67 hectares  
B.P. 946  
Antananarivo, Madagascar

### **Gestion**

*Brève description :* Recyclage et/ou former des cadres pour les secteurs publics et privés aux techniques de management. *Début du cours :* A arranger. *Durée :* 1 an. *Qualifications :* Cadres. Français. *Date limite d'inscription :* —. *Droits d'inscription :* A arranger.

*Organisateur :* Institut supérieur de commerce et d'administration des entreprises  
km 9,500, route de Nouaceur  
B.P. 8114  
Casablanca, Maroc

### **Management systems**

*Short description:* Courses on: management; investment analysis and management for African countries; regional economic development; financial management; human resource development; management systems and methods. *Commencing date:* To be arranged. *Duration:* 5 days-18 weeks. *Qualifications:* Graduates or post graduates. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Pakistan Administrative Staff College  
Shahrah-E-Quaid-E-Azam  
Lahore, Pakistan

### **Consultants Industriels**

*Brève description :* Promouvoir la profession "consultant dans le management industriel" pour aider l'implantation de la réforme économique en Roumanie; développer les aptitudes pratiques des futurs consultants, en résoudre les problèmes complexes de la transition vers l'économie de marché. *Début du cours :* A arranger. *Durée :* 12 mois.

*Qualifications* : Etudes universitaires, 5 ans d'expérience pratique en entreprise et 2 ans dans des fonctions de gestion. Français. *Date limite d'inscription* : —. *Droits d'inscription* : A arranger.

*Organisateur* : Institut de management et informatique  
(en coopération avec FEACO et l'Université technique de Bucarest)  
Calea Grivitei, No. 21, sector 1  
78101 Bucarest, Roumanie

#### **Business management**

*Short description*: Knowledge and skills for executives enabling them to perform their current managerial duties more effectively and to maximize opportunities for their career advancement and development. *Commencing date*: To be arranged. *Duration*: 1 year. *Qualifications*: Bachelor's degree or professional qualifications; applicants will be expected to pass an admission test and a selection interview. English. *Deadline for application*: 4 weeks before commencing date. *Fees*: To be arranged.

*Organizer*: Sri Lanka Business Development Centre  
4-1/22 Sir Mohammed Macan Markar Mawatha  
Galle Face Court 2  
Colombo 3, Sri Lanka

#### **Statistiques de gestion**

*Brève description* : Statistiques descriptives appliquées à la gestion; inférence statistique. *Début du cours* : Octobre. *Durée* : 8 semaines. *Qualifications* : Maîtrise ou diplôme équivalent, baccalauréat avec 5 ans d'expérience professionnelle. Français. *Date limite d'inscription* : Septembre. *Droits d'inscription* : A arranger.

*Organisateur* : Centre d'administration des entreprises (CAE)  
FASEG Université du Bénin  
B.P. 1515  
Lomé, Togo

#### **Management development/Développement des capacités de gestion/ Perfeccionamiento de la gestión**

##### **Office management and administration for women**

*Short description*: To enhance and improve office management capabilities of women. *Commencing date*: To be arranged. *Duration*: 4 weeks. *Qualifications*: Graduation degree. English. *Deadline for application*: —. *Fees*: To be arranged.

*Organizer*: Management Development Program  
Institute of Business Administration  
University of Dhaka  
Dhaka 1000, Bangladesh

##### **Industrial sociology**

*Short description*: Standard problems of industrial organizations, manpower, technical innovation, technical culture, power structure within enterprises. *Commencing date*: September. *Duration*: 6 months. *Qualifications*: Bachelor's or Master's degree. English. *Deadline for application*: May. *Fees*: —.



**Organizer:** Technical University of Budapest  
Department of Sociology  
Attn.: János Farkas  
Egry József u. 1  
1111 Budapest, Hungary

#### **Senior management development programme**

**Short description:** Finance management, investment planning, marketing, public relations, computerization, industrial relations, law, modern operating strategies, stores management, corporate planning, manpower planning, delegation, quality management, communication skills, time management, role of managers, MBO, creative thinking, decision-making. **Commencing date:** To be arranged. **Duration:** 6 weeks. **Qualifications:** Engineers/managers with 19-23 years of relevant experience. **English.** **Deadline for application:** 2 months before commencing date. **Fees:** To be arranged.

**Organizer:** RITES  
New Delhi, India  
**Contact address:**  
Group General Manager (Training)  
New Delhi House  
27 Barakhamba Road  
New Delhi 110 001, India

**Venue:** Railway Staff College  
Vadodara, India

#### **Management de la productivité et de la qualité**

**Brève description :** Application des techniques d'augmentation de la productivité et du contrôle total de la qualité; diagnostic de la productivité et de la qualité; relation productivité-qualité; quantification de la productivité au niveau de l'entreprise; objectifs et stratégies du management de la productivité; tableau de bord de la productivité; techniques et méthodes de croissance de la productivité; l'ingénierie industrielle et étude des méthodes; concept de qualité totale; qualité du marketing, des projets de la fabrication; qualité des sous-fournisseurs et des services après-vente; système qualité; stratégies de la qualité totale; informatique du management de la productivité et de la qualité. **Début du cours :** Avril. **Durée :** 6-8 semaines. **Qualifications :** Etudes universitaires avec 5 ans d'expérience pratique en entreprise et 2 ans dans les fonctions de gestion. **Français.** **Date limite d'inscription :** Février. **Droits d'inscription :** A arranger.

**Organisateur :** Institut de management et informatique  
Calea Grivitei, No. 21, sector 1  
78101 Bucarest, Roumanie

#### **Operations research/Recherche opérationnelle/Investigación operativa**

##### **Systems, computers, management**

**Short description:** Mathematical foundations of systems theory, mathematical models of complex systems; methods of operations research; theory and applications of computerized optimization methods; theory and applications of computerized decision-support

systems. *Commencing date:* September. *Duration:* 6 months. *Qualifications:* Polish, English. *Deadline for application:* 1 month before commencing date. *Fees:* To be arranged.

*Organizer:* Systems Research Institute of the Polish Academy of Sciences  
Newelska 6  
01-447 Warsaw, Poland

## **Chapter II. Other training opportunities and short courses**

### **Chapitre II. Autres possibilités de formation et sessions d'étude de brève durée**

### **Capítulo II. Otras oportunidades de capacitación y cursos cortos**

#### **A. DEVELOPED COUNTRIES AND AREAS/PAYS ET ZONES DÉVELOPPÉS/PAÍSES Y ZONAS DESARROLLADOS**

##### **Mineral industry**

*Short description:* Short courses on: mineral processing; mineral industry management; mining engineering; information and library technology; metallurgy. *Commencing date:* February-November. *Duration:* 3-12 days. *Qualifications:* Professional qualifications. English. *Deadline for application:* 1 month before commencing date. *Fees:* \$A 1,000-2,000.

*Organizer:* Australian Mineral Foundation Inc.  
63 Conyngham Street  
Glenside, S.A. 5065, Australia

##### **Upgrading of skills in different industrial activities**

*Short description:* Short courses on: leadership principles and practice; high voltage switching operations; failure analysis of metals; industrial instrumentation fundamentals; noise control officers course; process control fundamentals. *Commencing date:* To be arranged. *Duration:* 1-5 days. *Qualifications:* Professional qualifications. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$A 500-1,500.

*Organizer:* Brodie-Hall Research and Consultancy Centre  
Office of University Planning and Development  
Curtin University of Technology  
G.P.O. Box U1987  
Perth, Western Australia 6001, Australia

##### **R and D management**

*Short description:* Research leadership, team building, research planning and evaluation, technology transfer and related topics. *Commencing date:* June. *Duration:* 2 weeks. *Qualifications:* Professional qualifications. English. *Deadline for application:* April. *Fees:* \$A 4,000 (including accommodation and meals).

*Organizer:* CSIRO International Training Officer  
P.O. Box 225  
Dickson ACT 2602, Australia

##### **Temperature measurement**

*Short description:* Physics of temperature measurement, modelling of temperature distributions, thermocouples and their calibration, instrumentation and control, unconventional

pyrometry, laboratory management, laboratory accreditation. *Commencing date:* November. *Duration:* 2 weeks. *Qualifications:* Degree in engineering or science. English. *Deadline for application:* August. *Fees:* \$A 3,200 (including accommodation and meals).

*Organizer:* CSIRO International Training Officer  
P.O. Box 225  
Dickson ACT 2602, Australia

*Venue:* CSIRO Division of Applied Physics  
Lindfield, Sydney, Australia

#### **Trainer training for vocational teachers**

*Short description:* Workshops; microteaching; materials production; teaching methods. *Commencing date:* April, July, October. *Duration:* 2 weeks. *Qualifications:* Background in industry or teaching. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$A 1,350.

*Organizer:* SAGRIC International  
70 Hindmarsh Square  
Adelaide, South Australia 5000, Australia

*Venue:* Centre for International Education and Training  
100 Smart Road  
Modbury  
Adelaide, South Australia 5092, Australia

#### **Perfectionnement du personnel**

*Brève description :* Cours de courte durée sur : introduction du changement — aspects psychologiques; efficacité de l'acheteur industriel; perfectionnement du personnel administratif. *Début du cours :* Février-octobre. *Durée :* 4-8 jours. *Qualifications :* Qualifications professionnelles. Français, anglais, néerlandais. *Date limite d'inscription :* 2 semaines avant le début du cours. *Droits d'inscription :* FB 31 900-51 900.

*Organisateur :* AGESOC — FABRIMETAL  
21, rue des Drapiers  
1050 Bruxelles, Belgique

*Adresse de l'organisme à contacter :*

AGESOC — FABRIMETAL  
22, rue Léopold  
6000 Charleroi, Belgique

#### **Fabrication du papier**

*Brève description :* Partie humide de la fabrication du papier. *Début du cours :* A arranger. *Durée :* 1 semaine. *Qualifications :* Expérience dans l'industrie des pâtes et papiers. Français. *Date limite d'inscription :* —. *Droits d'inscription :* \$Can 2 000.

*Organisateur :* ACP  
Programme de développement professionnel  
1155 Metcalfe; Immeuble Sun Life, 19<sup>e</sup> étage  
Montréal, Québec H3B 4T6, Canada

### **Pulp and paper**

*Short description:* Papermaking, mechanical pulping, environment control, recycling, kraft pulp bleaching and wet-end chemistry. *Commencing date:* March-November. *Duration:* 1 week. *Qualifications:* Experience in the pulp and paper industry. English. *Deadline for application:* —. *Fees:* \$Can 2,000.

*Organizer:* CPPA  
Professional Development Activities  
1155 Metcalfe, Sun Life Bldg., 19th Floor  
Montreal, Quebec H3B 4T6, Canada

### **Applied physics**

*Short description:* Short courses on: liquid penetrants; magnetic particle; weld inspection and quality control; radiography; ultrasonics; eddy current. *Commencing date:* Throughout the year. *Duration:* 5-10 days. *Qualifications:* English. *Deadline for application:* To be arranged. *Fees:* \$Can 920-2,250.

*Organizer:* NDE Institute of Canada  
135 Fennell Avenue West  
Hamilton, Ontario L8N 3T2, Canada

### **Calcul pratique des charpentes en bois**

*Brève description :* Maîtrise des techniques manuelles et informatisées de calcul des charpentes en bois. *Début du cours :* Septembre. *Durée :* 10 jours. *Qualifications :* Charpentiers, métreurs, personnel de bureaux d'études. Français. *Date limite d'inscription :* Août. *Droits d'inscription :* FF 14 500.

*Organisateur :* CTBA  
10, avenue de Saint-Mandé  
75012 Paris, France

### **Le dessin assisté par ordinateur**

*Brève description :* Informatiser le savoir-faire d'un bureau d'étude. *Début du cours :* Mai. *Durée :* 8 jours. *Qualifications :* Techniciens de bureaux d'études. Français. *Date limite d'inscription :* Avril. *Droits d'inscription :* FF 15 000.

*Organisateur :* CTBA  
10, avenue de Saint-Mandé  
75012 Paris, France

### **Corrosion and corrosion prevention and other degradations**

*Short description:* Corrosion forms and mechanisms, industrial case studies, corrosion prevention, other degradations (fractures, wear). *Commencing date:* September. *Duration:* 1 week. *Qualifications:* Engineers involved in inspection and maintenance in the petroleum and chemical industries. English. *Deadline for application:* 2 months before commencing date. *Fees:* F 7,700.

*Organizer:* ENSPM — Formation Industrie  
232, avenue Napoléon Bonaparte  
92506 Rueil-Malmaison, France

### **Petrochemical industry**

*Short description:* Short courses on: catalysts in the refining and heavy petrochemical industries; oil refining; petrochemical economics; petroleum economics; refining operation planning. *Commencing date:* March-October. *Duration:* 2 weeks. *Qualifications:* Professionals in the petroleum industry or related fields. *English.* *Deadline for application:* 2 months before commencing date. *Fees:* F 7,900-19,300.

*Organizer:* ENSPM — Formation Industrie  
232, avenue Napoléon Bonaparte  
92506 Rueil-Malmaison, France

### **Qualité des aliments**

*Brève description :* Cours de courte durée sur : microbiologie des boissons, microbiologie des produits de la mer, microbiologie des laits et produits laitiers. *Début du cours :* Mai-juin. *Durée :* 2 semaines. *Qualifications :* Diplômes de l'enseignement supérieur. Français. *Date limite d'inscription :* 2 semaines avant le début du cours. *Droits d'inscription :* FF 8 500.

*Organisateur :* Michel Catteau  
Institut Pasteur de Lille - Domaine du CERTIA  
369, rue J. Guesde  
59650 Villeneuve d'Ascq, France

### **Qualité des aliments — microbiologie-hygiène pour techniciens de laboratoire**

*Brève description :* Etude des principaux micro-organismes rencontrés dans les aliments. *Début du cours :* Octobre. *Durée :* 1 semaine. *Qualifications :* Diplôme de technicien de laboratoire. Français. *Date limite d'inscription :* 2 semaines avant le début du cours. *Droits d'inscription :* FF 5 500.

*Organisateur :* Michel Catteau  
Institut Pasteur de Lille - Domaine du CERTIA  
369, rue J. Guesde  
59650 Villeneuve d'Ascq, France

### **Port management**

*Short description:* Short courses on: the challenge of increased port competition; port finance; the management of port equipment maintenance. *Commencing date:* May, June, December. *Duration:* 1-2 weeks. *Qualifications:* Terminal operators/managers of port operations, port authority staff. *English, French.* *Deadline for application:* 1 month before commencing date. *Fees:* F 6,800-12,300.

*Organizer:* IPER  
9, rue Emile Zola  
76087 Le Havre Cedex, France

### **Instrumentation et mesures**

*Brève description :* Cours de courte durée sur : mesures d'environnement : air et eau; instrumentation et régulation; automatismes complexes; contrôle commande des procédés discontinus. *Début du cours :* A arranger. *Durée :* 5 jours-2 semaines. *Qualifications :* Ingénieurs et techniciens supérieurs. Français. *Date limite d'inscription :* —. *Droits d'inscription :* FF 7 500-13 000.

*Organisateur :* IRA  
Chemin des Moines  
13644 Arles-en-Provence, France

### **Matières plastiques, chimie des polymères**

*Brève description* : Matières premières, outillage, injection, extrusion, techniques de décoration, fabrication, applications. *Début du cours* : A arranger. *Durée* : 2-5 jours. *Qualifications* : Expérience professionnelle. Français. *Date limite d'inscription* : —. *Droits d'inscription* : FF 5 000-15 000.

*Organisateur* : ITECH - Lyon  
Formation continue  
181-203, avenue Jean Jaurès  
69007 Lyon, France

### **Matières textiles**

*Brève description* : Filature, matières premières, tissages, ennoblissement. *Début du cours* : A arranger. *Durée* : 2-5 jours. *Qualifications* : Expérience professionnelle. Français. *Date limite d'inscription* : —. *Droits d'inscription* : FF 5 000-15 000.

*Organisateur* : ITECH - Lyon  
Formation continue  
181-203, avenue Jean Jaurès  
69007 Lyon, France

### **Peintures, encres, adhésifs, cosmétiques colorés**

*Brève description* : Matières premières, formulation, application. *Début du cours* : A arranger. *Durée* : 2-5 jours. *Qualifications* : Qualifications professionnelles. Français. *Date limite d'inscription* : —. *Droits d'inscription* : FF 5 000-15 000.

*Organisateur* : ITECH - Lyon  
Formation continue  
181-203, avenue Jean Jaurès  
69007 Lyon, France

### **Building technology**

*Short description*: Short courses on: raw materials, building materials; mortars; concrete technology; concrete buildings; concrete pavements; concrete bridges; barrages; planning; management; quality control. *Commencing date*: Throughout the year. *Duration*: 2-5 days. *Qualifications*: Professional qualifications. English, French, Spanish. *Deadline for application*: —. *Fees*: To be arranged.

*Organizer*: Haus der Technik e.V.  
P.O. Box 101543  
4300 Essen 1, Germany

### **Estándarización en la impresión offset**

*Breve descripción*: Medios de control necesarios para la película, manejo y aplicación; estandarización de la confección de materiales para impresión; copia, verificación de películas; densitometría, líneas de referencia, reglas de impresión práctica; influencia en el aumento de tonalidad, atono pleno y tolerancias; balance de color y medición del mismo; prueba de progresiva, introducción de la estandarización. *Fecha de iniciación*: Para ser acordado. *Duración*: 3 días. *Calificaciones*: Calificación profesional. Español, inglés, francés. *Fecha límite de inscripción*: —. *Derechos de inscripción*: Para ser acordado.

*Organizador*: Haus der Technik e.V.  
P.O. Box 101543  
4300 Essen 1, Germany

### **Production management under free market conditions**

*Short description:* Direction of companies in business; competition in free market economies; the company and its market; production costs and formation of prices, procurement of orders; staff motivation and employment of new technologies; future-oriented computer-aided plant management. *Commencing date:* To be arranged. *Duration:* 3-5 days. *Qualifications:* Professional qualifications. English, French, Spanish. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Haus der Technik e.V.  
P.O. Box 101543  
4300 Essen 1, Germany

### **Project management**

*Short description:* Types of projects; criteria for selection, planning and supervision of projects; successful methods; instruments for integrated control of time, costs and efficiency. *Commencing date:* To be arranged. *Duration:* 3-14 days. *Qualifications:* Professional qualifications. English, French, Spanish. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Haus der Technik e.V.  
P.O. Box 101543  
4300 Essen 1, Germany

### **Finance and accounting in a power utility**

*Short description:* Enterprise efficiency, financial statements, financial ratios, working capital management, financial projections, financial policy, management accounting, auditing, customer accounting, supply, meter reading, billing, customer service, computerized accounting systems. *Commencing date:* To be arranged. *Duration:* 2 weeks. *Qualifications:* Power utility managers. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Oliver McDonnell  
ESB International Ltd.  
Stephen Court  
18/21 St. Stephen's Green  
Dublin 2, Ireland

### **Water engineering applications**

*Short description:* Short courses on: drinking and waste water, network analysis, optimization and mains rehabilitation; drinking water systems; advanced waste-water treatment and technologies. *Commencing date:* To be arranged. *Duration:* 3 days. *Qualifications:* Background in water distribution engineering. Italian, with English translation if needed. *Deadline for application:* 1 month before commencing date. *Fees:* ECU 1,000-1,500.

*Organizer:* Roberto Bazzano  
Regional TECHWARE Bureau  
Azienda Municipal Gas and Water (AMGA)  
Via SS. Giacomo e Pillipo, 7  
16122 Genova, Italy

*Contact address:*

Technology for Water Resources (TECHWARE)  
c/o CIBE/BIWM  
Wolstraat 70  
1000 Brussels, Belgium

*Venue:* Genova, Italy and Wallingford, United Kingdom



#### **Computer applications and modelling in water resources**

*Short description:* Short courses on: new modelling strategies for water resources; advanced analyses of water resources phenomena. *Commencing date:* To be arranged. *Duration:* 2 days. *Qualifications:* Degree in engineering or equivalent. Italian, with English translation if necessary. *Deadline for application:* 1 month before commencing date. *Fees:* ECU 1,000-1,500.

*Organizer:* Gualtiero Baldi  
ISMES Spa  
Viale Giulio Cesare 29  
24100 Bergamo, Italy  
*Contact address:*  
Technology for Water Resources (TECHWARE)  
c/o CIBE/BIWM  
Wolstraat 70  
1000 Brussels, Belgium  
*Venue:* Bergamo, Italy

#### **Computer applications and advanced technologies in the water environment**

*Short description:* Short courses on: reuse of freshwater resources in groundwater systems; flood hazards in Mediterranean countries. *Commencing date:* To be arranged. *Duration:* 3-5 days. *Qualifications:* Degree or equivalent in engineering. Italian, with English translation if needed. *Deadline for application:* 1 month before commencing date. *Fees:* ECU 1,000-1,500.

*Organizer:* F. Siccardi  
University of Genova  
Faculty of Engineering/Institute of Hydraulics  
Via Montallegro 1  
16145 Genova, Italy  
*Contact address:*  
Technology for Water Resources (TECHWARE)  
c/o CIBE/BIWM  
Wolstraat 70  
1000 Brussels, Belgium  
*Venue:* Genova, Italy

#### **APO-IEDP seminar on regional economic cooperation**

*Short description:* Describe and assess regional economic configurations (e.g. ASEAN, EEC, SAARC, APEC etc.) as to past performance and the potential these arrangements hold for promoting and sustaining economic growth and cooperation; evaluate the success and performance of free trade and trade preference agreements and weigh their impact on patterns of international trade. *Commencing date:* October. *Duration:* 5 days. *Qualifications:* English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 50.

*Organizer:* Asian Productivity Organization  
8-4-14, Akasaka, Minato-ku  
Tokyo 107, Japan  
*Venue:* Philippines

#### **Automation for small and medium industries**

*Short description:* Knowledge and techniques for designing and installing automated production systems for small and medium industries. *Commencing date:* July. *Duration:* 2 weeks. *Qualifications:* English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 50.

*Organizer:* Asian Productivity Organization  
8-4-14, Akasaka, Minato-ku  
Tokyo 107, Japan

*Venue:* China

#### **Banking management**

*Short description:* Acquaint participants with the way of managing banks in Japan, focusing on specific areas of interest. *Commencing date:* To be arranged. *Duration:* 2 weeks. *Qualifications:* English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 50.

*Organizer:* Asian Productivity Organization  
8-4-14, Akasaka, Minato-ku  
Tokyo 107, Japan

#### **Communication within enterprise**

*Short description:* Importance of keeping employees informed of corporate activities and plans; relationship to work performance. *Commencing date:* To be arranged. *Duration:* 2 weeks. *Qualifications:* English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 50.

*Organizer:* Asian Productivity Organization  
8-4-14, Akasaka, Minato-ku  
Tokyo 107, Japan

#### **Human resource development and productivity**

*Short description:* Planning and implementation of a human resource development function and how to use it to enhance productivity. *Commencing date:* To be arranged. *Duration:* 2 weeks. *Qualifications:* English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 50.

*Organizer:* Asian Productivity Organization  
8-4-14, Akasaka, Minato-ku  
Tokyo 107, Japan

*Venue:* India

#### **Increasing productivity of small industries**

*Short description:* Identification and analysis of productivity problems and elaboration of effective strategies for improved productivity of small industries. *Commencing date:* To be arranged. *Duration:* 2 weeks. *Qualifications:* English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 50.

*Organizer:* Asian Productivity Organization  
8-4-14, Akasaka, Minato-ku  
Tokyo 107, Japan

*Venue:* India

### **Informal sector**

*Short description:* The informal sector, its role and problems, incentives and limitations, experiences of MCs, government policies, role of voluntary organizations, recommendations for the development and enhancement of the sector. *Commencing date:* To be arranged. *Duration:* 5 days. *Qualifications:* English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 50.

*Organizer:* Asian Productivity Organization  
8-4-14, Akasaka, Minato-ku  
Tokyo 107, Japan

*Venue:* Pakistan

### **Information technology applications in service industries**

*Short description:* Develop and adapt information technology as applicable to service industries, with particular emphasis on information networks. *Commencing date:* To be arranged. *Duration:* 2 weeks. *Qualifications:* English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 50.

*Organizer:* Asian Productivity Organization  
8-4-14, Akasaka, Minato-ku  
Tokyo 107, Japan

### **Management of energy demand**

*Short description:* Energy security; economic competitiveness; environmental quality. *Commencing date:* To be arranged. *Duration:* 5 days. *Qualifications:* English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 50.

*Organizer:* Asian Productivity Organization  
8-4-14, Akasaka, Minato-ku  
Tokyo 107, Japan

*Venue:* India

### **Management of urban industries and services**

*Short description:* Overview of the French system of providing and managing urban services for deriving useful lessons for improved management and productivity of urban services in the participants' home countries. *Commencing date:* To be arranged. *Duration:* 2 weeks. *Qualifications:* English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 50.

*Organizer:* Asian Productivity Organization  
8-4-14, Akasaka, Minato-ku  
Tokyo 107, Japan

*Venue:* France

### **Managing organizational change**

*Short description:* Organizational change and its management. *Commencing date:* To be arranged. *Duration:* 2 weeks. *Qualifications:* English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 50.

*Organizer:* Asian Productivity Organization  
8-4-14, Akasaka, Minato-ku  
Tokyo 107, Japan

*Venue:* Philippines

### **Productivity and wage income policy**

*Short description:* Linkage between wages and productivity. *Commencing date:* To be arranged. *Duration:* 2 weeks. *Qualifications:* English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 50.

*Organizer:* Asian Productivity Organization  
8-4-14, Akasaka, Minato-ku  
Tokyo 107, Japan

*Venue:* Malaysia

### **Productivity promotion through interlinkages between large and small industries**

*Short description:* The interrelationship and interdependency between large and small industries with a view to improving productivity. *Commencing date:* February. *Duration:* 5 days. *Qualifications:* English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 50.

*Organizer:* Asian Productivity Organization  
8-4-14, Akasaka, Minato-ku  
Tokyo 107, Japan

*Venue:* Bangladesh

### **Total management in the service sector**

*Short description:* Knowledge and skills for total management in the service sector. *Commencing date:* July. *Duration:* 5 1/2 days. *Qualifications:* English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 50.

*Organizer:* Asian Productivity Organization  
8-4-14, Akasaka, Minato-ku  
Tokyo 107, Japan

*Venue:* Malaysia

### **Executive programme on corporate management (EPCM)**

*Short description:* Management philosophy, corporate strategy, marketing/personnel management/financial management, production policy, total quality control. *Commencing date:* November. *Duration:* 2 weeks. *Qualifications:* 3 years of experience at the executive level. English. *Deadline for application:* 6 months before commencing date. *Fees:* ¥ 213,000.

*Organizer:* The Association for Overseas Technical Scholarship  
30-1, Senju-azuma 1-chome, Adachi-ku  
Tokyo, Japan

### **Handling and storage of agricultural products and minerals in ports and inland**

*Short description:* Agribulk and mineral terminals: unloading/loading operations; storage; preservation of quality; maintenance and repair; safety; environmental aspects; information systems; financial and commercial aspects. *Commencing date:* Throughout the year. *Duration:* 1-3 weeks. *Qualifications:* Managerial or technical qualifications. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* G.E.M. Consultants B.V.  
P.O. Box 23055  
3001 KB Rotterdam, Netherlands

### Human resources development

*Short description:* Human resources development, management training/in-company training. *Commencing date:* To be arranged. *Duration:* To be arranged. *Qualifications:* Post-graduate level. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Grabowsky and Poort B.V. Consulting Engineers  
P.O. Box 84319  
2508 AH Den Haag, Netherlands

### Water supply

*Short description:* Advanced treatment technologies for water supply: membrane technologies; nutrient control and removal; corrosion control. *Commencing date:* To be arranged. *Duration:* 5 days. *Qualifications:* Background in water-treatment engineering. English. *Deadline for application:* 1 month before commencing date. *Fees:* ECU 1,000-1,500.

*Organizers:* P.J.M. de Laat, IHE  
P.O. Box 3015  
2601 DA Delft, Netherlands  
and  
H. J. Vinkers, KIWA  
P.O. Box 1072  
3430 BB Nieuwegein, Netherlands

*Contact address:*

Technology for Water Resources (TECHWARE)  
c/o CIBE/BIWM  
Wolstraat 70  
1000 Brussels, Belgium

*Venue:* Denmark, Netherlands and Portugal

### Telecommunications

*Short description:* Short courses on: designing wide area networks; telecommunication for the EDP-staff; designing a mobile communications plan; designing, implementation and operational control of an integrated data and telecommunication plan; mobile communications; business telecommunications. *Commencing date:* To be arranged. *Duration:* 1-4 days. *Qualifications:* Professional qualifications. English. *Deadline for application:* —. *Fees:* f. 750-2,500.

*Organizer:* Intercai Training Services  
P.O. Box 9256  
3506 GG Utrecht, Netherlands

### CAD — CAM — CIM

*Short description:* Computer-aided design, computer-aided manufacturing, computer-integrated manufacturing. *Commencing date:* To be arranged. *Duration:* 5-10 days. *Qualifications:* Technical education. English, German, Dutch. *Deadline for application:* —. *Fees:* ECU 80 per hour.

*Organizer:* Regionaal Technologie Centrum Zuid-West Nederland (RTC-ZWN)  
P.O. Box 619  
4600 AP Bergen op Zoom, Netherlands

### **Pollution prevention**

*Short description:* Prevention of wastes, emissions and discharges: methods, examples, interactive exercises. *Commencing date:* To be arranged. *Duration:* 2 days. *Qualifications:* Managers, line managers, heads of technical service departments. English. *Deadline for application:* 3 months before commencing date. *Fees:* To be arranged.

*Organizer:* Tebodin Consultants and Engineers  
Attn: H. B. Gels  
P.O. Box 16029  
2500 BA The Hague, Netherlands

### **Groundwater flow paths and pollutant transport**

*Short description:* Chemical processes in groundwater, groundwater quality evolution along flow paths. *Commencing date:* To be arranged. *Duration:* 6 days. *Qualifications:* Degree in engineering or equivalent. English. *Deadline for application:* 1 month before commencing date. *Fees:* ECU 1,000-1,500.

*Organizer:* J. W. Lyklema  
TNO — Institute of Applied Geoscience  
Schoemakerstraat 97  
2600 JA Delft, Netherlands

*Contact address:*  
Technology for Water Resources (TECHWARE)  
c/o CIBE/BIWM  
Wolstraat 70  
1000 Brussels, Belgium

*Venue:* Wallingford, United Kingdom

### **Modelling groundwater resources**

*Short description:* Conceptual understanding of hydrogeological systems to be modelled; adequacy of data; logical steps involved in modelling groundwater. *Commencing date:* To be arranged. *Duration:* 5 days. *Qualifications:* Background in engineering, mathematics or groundwater hydrology. English, with French translation if necessary. *Deadline for application:* 1 month before commencing date. *Fees:* ECU 1,000-1,500.

*Organizer:* J. W. Lyklema  
TNO — Institute of Applied Geoscience  
Schoemakerstraat 97  
2600 JA Delft, Netherlands

*Contact address:*  
Technology for Water Resources (TECHWARE)  
c/o CIBE/BIWM  
Wolstraat 70  
1000 Brussels, Belgium

*Venue:* Angers, France

### **Process metallurgy of aluminium**

*Short description:* Updated and comprehensive review of the state of the art in aluminium production. *Commencing date:* May. *Duration:* 1 week. *Qualifications:* English. *Deadline for application:* April. *Fees:* Nkr 12,000 (including lunches).

*Organizer:* Institute of Inorganic Chemistry  
The Norwegian Institute of Technology  
7034 Trondheim, Norway

### **Management development**

*Short description:* Short courses on: project evaluation and management; financial management; general management development; integrated management. *Commencing date:* February-October. *Duration:* 10-20 days spread over 3-10 sessions. *Qualifications:* Portuguese. *Deadline for application:* 2 months before commencing date. *Fees:* Esc 380,000-530,000.

*Organizer:* CIFAG  
Av. Júlio Dinis 11  
1000 Lisbon, Portugal

### **Cutting with laser CO<sub>2</sub>**

*Short description:* Use of laser CO<sub>2</sub> for cutting of metal, plastics and wood. *Commencing date:* June. *Duration:* 2 days. *Qualifications:* Professional experience. Portuguese. *Deadline for application:* 2 weeks before commencing date. *Fees:* Esc 100,000.

*Organizer:* Instituto de Soldadura e Qualidade  
Rua Tomás de Figueiredo 16A  
1500 Lisbon, Portugal

### **Generating and using steam**

*Short description:* Selection of equipment; procedures for energy saving. *Commencing date:* May. *Duration:* 8 days (3 hours per day). *Qualifications:* Professional experience. Portuguese. *Deadline for application:* 2 weeks before commencing date. *Fees:* Esc 100,000.

*Organizer:* Instituto de Soldadura e Qualidade  
Rua Tomás de Figueiredo 16A  
1500 Lisbon, Portugal

### **Industrial automation and robotics**

*Short description:* Different approaches to manufacturing in industry under the impact of robots and plant automation. *Commencing date:* April. *Duration:* 3 days. *Qualifications:* Graduation in engineering. English. *Deadline for application:* 2 weeks before commencing date. *Fees:* Esc 150,000.

*Organizer:* Instituto de Soldadura e Qualidade  
Rua Tomás de Figueiredo 16A  
1500 Lisbon, Portugal

### **Industrial safety**

*Short description:* Technical and organizational measures for the prevention of dangerous situations in the industrial environment. *Commencing date:* April. *Duration:* 3 days. *Qualifications:* Professional experience. Portuguese, English. *Deadline for application:* 2 weeks before commencing date. *Fees:* Esc 100,000.

*Organizer:* Instituto de Soldadura e Qualidade  
Rua Tomás de Figueiredo 16A  
1500 Lisbon, Portugal

### Quality costs

*Short description:* Training of trainers in the quality field. *Commencing date:* May. *Duration:* 3 days. *Qualifications:* Professional experience. Portuguese, English. *Deadline for application:* 2 weeks before commencing date. *Fees:* Esc 120,000.

*Organizer:* Instituto de Soldadura e Qualidade  
Rua Tomás de Figueiredo 16A  
1500 Lisbon, Portugal

### Welding with high-density energy beams (electrons and laser beam)

*Short description:* Latest technologies for welding, e.g. steels. *Commencing date:* June. *Duration:* 3 days. *Qualifications:* Professional experience. Portuguese. *Deadline for application:* 2 weeks before commencing date. *Fees:* Esc 100,000.

*Organizer:* Instituto de Soldadura e Qualidade  
Rua Tomás de Figueiredo 16A  
1500 Lisbon, Portugal

### Leadership development

*Short description:* Short courses on: leading projects effectively; leading major and strategic projects; advanced marketing; marketing management; leadership development. *Commencing date:* To be arranged. *Duration:* 6 days-2 weeks. *Qualifications:* Managers involved in project leading. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Ashridge Management College  
Berkhamsted, Hertfordshire HP4 1NS, United Kingdom

### Training of trainers

*Short description:* Short courses on: foundation course for trainers; identification and analysis of training needs; training design; training evaluation; participative methods; advanced participative methods; organizational behaviour and behavioural sciences; internal consultancy; training staff effectively; debriefing learning activities; training the trainers of assessors; training and development managers' workshop; overseas training officers' programme; influencing skills; training the information technology trainer; training administration; effective presentation. *Commencing date:* To be arranged. *Duration:* 2-5 days. *Qualifications:* English. *Deadline for application:* 1 month before commencing date. *Fees:* To be arranged.

*Organizer:* British Association for Commercial and Industrial Education (BACIE)  
16 Park Crescent  
London W1N 4AP, United Kingdom

### Production of cotton knitted fabrics with low shrinkage — starfish technology

*Short description:* Detailed appreciation of production, processing and quality assurance techniques required for the production of cotton circular knitted fabrics and garments having guaranteed performance specifications. *Commencing date:* July. *Duration:* 5 days. *Qualifications:* Production supervisors, technical and quality control managers. English. *Deadline for application:* April. *Fees:* £2,000 (residential).

*Organizer:* Cotton Technology International  
Suite 200, Scotscroft Building  
856 Wilmslow Road  
Didsbury, Manchester M20 8RX, United Kingdom



### **DC and LF metrology**

*Short description:* Better understanding of metrology practices. *Commencing date:* To be arranged. *Duration:* 5 days. *Qualifications:* Standards and calibration managers, technicians and quality assurance managers. *English.* *Deadline for application:* 6 weeks before commencing date. *Fees:* £1,000.

*Organizer:* Datron Instruments Limited  
Hurricane Way  
Norwich Airport  
Norwich NR6 6JB, United Kingdom

### **Production control**

*Short description:* Short courses on: management; basics for supervisors; total quality management; managing people effectively; finance for non-financial managers; training instructors; planning and control principles; safety officers; the fundamentals of project management. *Commencing date:* Throughout the year. *Duration:* 2-10 days. *Qualifications:* *English.* *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Fielden House Ltd.  
Mersey Road  
West Didsbury  
Manchester M20 8QA, United Kingdom

### **Furniture production**

*Short description:* Short courses on: alternatives to ecologically sensitive timbers; improving supervisory performance; product management, design and marketing for furniture companies; dimensional control through measurement; effective panel construction; upholstery fabrics. *Commencing date:* To be arranged. *Duration:* 1-2 days. *Qualifications:* *English.* *Deadline for application:* 2 weeks before commencing date. *Fees:* £250.

*Organizer:* Furniture Industry Research Association  
Maxwell Road  
Stevenage, Hertfordshire SG1 2EW, United Kingdom

### **Groundwater pollution management**

*Short description:* Use of modelling techniques to investigate groundwater flow and contaminant migration problems. *Commencing date:* To be arranged. *Duration:* 6 days. *Qualifications:* Professional qualifications. Portuguese, with English translation if needed. *Deadline for application:* 1 month before commencing date. *Fees:* ECU 1,000-1,500.

*Organizer:* John Milns, Education Coordinator  
Regional TECHWARE Bureau  
Hydraulics Research Ltd.  
Wallingford, Oxfordshire OX10 8BA, United Kingdom

*Contact address:*

Technology for Water Resources (TECHWARE)  
c/o CIBE/BIWM  
Wolstraat 70  
1000 Brussels, Belgium

*Venue:* Lisbon, Portugal

### **Water engineering**

*Short description:* Short courses on: (a) real time control in urban drainage; (b) irrigation hydraulics; (c) instrumentation and measurement techniques; (d) computational modelling. *Commencing date:* To be arranged. *Duration:* 5 days. *Qualifications:* Degree in engineering or equivalent. English. *Deadline for application:* 1 month before commencing date. *Fees:* ECU 1,000-1,500.

*Organizer:* John Milns, Education Coordinator  
Regional TECHWARE Bureau  
Hydraulics Research Ltd.  
Wallingford, Oxfordshire OX10 8BA, United Kingdom

*Contact address:*

Technology for Water Resources (TECHWARE)  
c/o CIBE/BIWM  
Wolstraat 70  
1000 Brussels, Belgium

*Venue:* Course (a): Wallingford, United Kingdom  
Course (b): Athens and Thessaloniki, Greece; Bristol, United Kingdom  
Course (c): Calabria, Italy  
Course (d): Vienna, Austria

### **Operations management in ammonia, methanol and hydrogen plants**

*Short description:* Start-up and shut-down procedures; energy management; plant optimization; catalyst operations; safety and environmental management; turnaround management; plant reliability; organization and training of personnel. *Commencing date:* July. *Duration:* 2 weeks. *Qualifications:* Graduate engineers and experienced personnel involved in the management of chemical plant operations. English. *Deadline for application:* 3 weeks before commencing date. *Fees:* To be arranged.

*Organizer:* ICI Chemicals and Polymers Ltd.  
Process Plant Services  
P.O. Box 1  
Billingham, Cleveland TS23 1LB, United Kingdom

### **Predictive maintenance in chemical plants**

*Short description:* Comparison of predictive and preventative maintenance; data gathering techniques; data analysis and maintenance policy implementation. *Commencing date:* April. *Duration:* 2 weeks. *Qualifications:* Graduate engineers or experienced maintenance personnel. English. *Deadline for application:* 3 weeks before commencing date. *Fees:* To be arranged.

*Organizer:* ICI Chemicals and Polymers Ltd.  
Process Plant Services  
P.O. Box 1  
Billingham, Cleveland TS23 1LB, United Kingdom

### **Specialist engineering and maintenance in chemical plants**

*Short description:* Specialist techniques required for the safe and efficient operation of chemical plants; engineering of vessels, boilers and heat exchangers; vessel inspection; corrosion monitoring and prevention; non-destructive testing techniques; stress analysis and structural integrity assessment technique. *Commencing date:* October. *Duration:* 2 weeks. *Qualifications:* Graduate engineers or experienced engineering managers. English. *Deadline for application:* 3 weeks before commencing date. *Fees:* To be arranged.

**Organizer:** ICI Chemicals and Polymers Ltd.  
Process Plant Services  
P.O. Box 1  
Billingham, Cleveland TS23 1LB, United Kingdom

#### **Applied pneumatics**

*Short description:* Comprehensive introduction to applied pneumatics, using a simulator panel to give experience of practical circuits. *Commencing date:* Throughout the year. *Duration:* 6 days. *Qualifications:* English. *Deadline for application:* —. *Fees:* To be arranged.

**Organizer:** METCOM Training  
Savoy Tower  
77 Renfrew Street  
Glasgow G2 3BZ, Scotland, United Kingdom

#### **Industrial hydraulics**

*Short description:* Comprehensive introduction to industrial hydraulics using a simulator panel to give experience of practical circuits. *Commencing date:* Throughout the year. *Duration:* 5 days. *Qualifications:* English. *Deadline for application:* —. *Fees:* To be arranged.

**Organizer:** METCOM Training  
Savoy Tower  
77 Renfrew Street  
Glasgow G2 3BZ, Scotland, United Kingdom

#### **Practical metallurgy**

*Short description:* Short courses on: casting defects; casting design; cupola control; electric melting; foundry appreciation; practical ferrous metallurgy; practical non-ferrous metallurgy. *Commencing date:* Throughout the year. *Duration:* 3-10 days. *Qualifications:* English. *Deadline for application:* —. *Fees:* —.

**Organizer:** METCOM Training  
Savoy Tower  
77 Renfrew Street  
Glasgow G2 3BZ, Scotland, United Kingdom

#### **Supervision**

*Short description:* Short courses on: basic supervisory skills; instructional techniques; quality assurance. *Commencing date:* Throughout the year. *Duration:* 3-10 days. *Qualifications:* English. *Deadline for application:* —. *Fees:* —.

**Organizer:** METCOM Training  
Savoy Tower  
77 Renfrew Street  
Glasgow G2 3BZ, Scotland, United Kingdom

#### **Warehouse management**

*Short description:* Short courses on: warehouse layout and methods; warehouse management; physical distribution; parts stores system design. *Commencing date:* March-

October. *Duration:* 4 1/2 days. *Qualifications:* English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* National Materials Handling Centre  
Cranfield Institute of Technology  
Cranfield, Bedford MK43 0AL, United Kingdom

#### **Introduction to chemical engineering**

*Short description:* Mass and energy balances; fluid mechanics; heat transfer; filtration; distillation; instrumentation and control. *Commencing date:* May. *Duration:* 5 days. *Qualifications:* Degree or equivalent qualification in chemistry. English. *Deadline for application:* 2 weeks before commencing date. *Fees:* £500.

*Organizer:* Technology and Business Centre  
Paisley College  
Attn.: Carol MacDonald, Course Coordinator  
High Street  
Paisley PA1 2BE, Scotland, United Kingdom

#### **Industrial instrumentation**

*Short description:* Short courses on: instrumentation for process control; measurement and control appreciation; instrumentation and measurement; process control; analogue electronics; digital electronics and logic; microprocessor technology and applications; distributed control systems appreciation. *Commencing date:* Throughout the year. *Duration:* 3-10 days. *Qualifications:* Relevant engineering background. English. *Deadline for application:* —. *Fees:* £300-770 + VAT.

*Organizer:* Roxby Engineering International Ltd.  
Lagonda Road  
Billingham, Cleveland TS23 4JA, United Kingdom

#### **Environmental engineering**

*Short description:* A series of 14, self-contained modules covering technology of energy utilization, water treatment and quality and resource conservation in materials and manufacture. *Commencing date:* January. *Duration:* 5 days for each module. *Qualifications:* Graduate or higher professional qualifications. *Deadline for application:* 3 months before commencing date. English. *Fees:* £600 per module.

*Organizer:* School of Systems Engineering  
Portsmouth Polytechnic  
Attn.: M. R. I. Purvis  
Anglesea Road  
Portsmouth PO1 3DJ, United Kingdom

#### **Techniques of instruction**

*Short description:* Theoretical and practical training to develop skills and understanding of principles of learning, creation of training programmes and lesson plans; courses of general nature or for specific industry (e.g. fork truck instructors). *Commencing date:* To be arranged. *Duration:* 10 days. *Qualifications:* English. *Deadline for application:* 4 weeks before commencing date. *Fees:* £780 + VAT.

*Organizer:* TDT Management Services Ltd.  
London Road  
Kelvedon, Colchester  
Essex CO5 9AU, United Kingdom

### **Instructional techniques**

*Short description:* Planning and preparation of individual and group training sessions; learning methods, logical progression, use of resources and instructional styles.  
*Commencing date:* To be arranged. *Duration:* 2 weeks. *Qualifications:* English. *Deadline for application:* —. *Fees:* £665 + VAT.

*Organizer:* Teesside Transport Training Association Ltd.  
Hamilton House  
Cargo Fleet Lane  
Middlesbrough, Cleveland TS3 8DJ, United Kingdom

### **National (dangerous substances) driver training scheme**

*Short description:* A training course for people moving or handling dangerous substances, basically in transport or distribution. *Commencing date:* Throughout the year. *Duration:* Hazfreight 3 days; hazpack 2 days. *Qualifications:* English. *Deadline for application:* To be arranged. *Fees:* £152 for 3-day course; £111 for 2-day course.

*Organizer:* Teesside Transport Training Association Ltd.  
Hamilton House  
Cargo Fleet Lane  
Middlesbrough, Cleveland TS3 8DJ, United Kingdom

### **Training of trainers in the transport industry**

*Short description:* Learning styles, analysis and implementation of training plans; design and presentation of training programmes; evaluation and analysis of learning. *Commencing date:* February, May, August, November. *Duration:* 2 weeks. *Qualifications:* English. *Deadline for application:* 8 weeks before commencing date. *Fees:* To be arranged.

*Organizer:* Teesside Transport Training Association Ltd.  
Hamilton House  
Cargo Fleet Lane  
Middlesbrough, Cleveland TS3 8DJ, United Kingdom

### **Transport management**

*Short description:* Business and financial management of a transport company, including vehicle selection, safe loading of vehicles, marketing and vehicle maintenance. *Commencing date:* March, June, September, October. *Duration:* 2 weeks. *Qualifications:* English. *Deadline for application:* 8 weeks before commencing date. *Fees:* £665 + VAT.

*Organizer:* Teesside Transport Training Association Ltd.  
Hamilton House  
Cargo Fleet Lane  
Middlesbrough, Cleveland TS3 8DJ, United Kingdom

### **Timber processing**

*Short description:* Short courses on: timber drying; timber grading; timber processing; timber engineering design. *Commencing date:* To be arranged. *Duration:* To be arranged. *Qualifications:* Background knowledge of timber. English. *Deadline for application:* 3 months before commencing date. *Fees:* To be arranged.

*Organizer:* Head of Overseas Operations  
Trada Technology Limited  
Stocking Lane  
Hughenden Valley  
High Wycombe, Buckinghamshire HP14 4ND, United Kingdom

### **Modern technologies in the water environment**

*Short description:* Short courses on: assessment and control of river pollution; coastal defence; flood mitigation. *Commencing date:* To be arranged. *Duration:* 5 days. *Qualifications:* Background in engineering or equivalent. English. *Deadline for application:* 1 month before commencing date. *Fees:* ECU 1,000-1,500.

*Organizer:* R. H. Sellin  
University of Bristol  
Department of Civil Engineering  
Queen's Building, University Walk  
Bristol BS8 1TR, United Kingdom

*Contact address:*  
Technology for Water Resources (TECHWARE)  
c/o CIBE/BIWM  
Wolstraat 70  
1000 Brussels, Belgium

*Venue:* Bristol, United Kingdom

### **Solid-liquid separation in waste-water treatment and sludge handling**

*Short description:* Modern and future technologies for solids handling in waste-water treatment systems: thickeners; centrifuges; belt presses; dissolved air flotation; aerobic and anaerobic digestion. *Commencing date:* To be arranged. *Duration:* 6 days. *Qualifications:* Background in engineering and/or management in the fields of waste-water treatment. English. *Deadline for application:* 1 month before commencing date. *Fees:* ECU 1,000-1,500.

*Organizer:* Albert Rushton  
University of Manchester  
Institute of Science and Technology  
Department of Chemical Engineering  
Colynwood, Claremont Drive  
Timperley, Cheshire WA14 5NE, United Kingdom

*Contact address:*  
Technology for Water Resources (TECHWARE)  
c/o CIBE/BIWM  
Wolstraat 70  
1000 Brussels, Belgium

*Venue:* Manchester, United Kingdom

### **Instructional techniques**

*Short description:* Short courses on: instructional techniques for operator instructors and skills instructors; design and presentation of basic training programmes. *Commencing date:* To be arranged. *Duration:* 5 days. *Qualifications:* English. *Deadline for application:* —. *Fees:* £962 (including accommodation).

*Organizer:* Webton Court Management and Training Centre  
Allerton Park  
Leeds LS7 4ND, United Kingdom

### **Managing the training function**

*Short description:* Basic management concepts for, and problems faced by, newly appointed training managers in achieving credibility and selling training successfully. *Commenc-*

*ing date:* To be arranged. *Duration:* 5 days. *Qualifications:* English. *Deadline for application:* —. *Fees:* £962-1,079 (including accommodation).

**Organizer:** Webton Court Management and Training Centre  
Allerton Park  
Leeds LS7 4ND, United Kingdom

#### **Supervisory management**

*Short description:* Programme accredited by the Institute of Supervisory Management for the award of their certificate. *Commencing date:* To be arranged. *Duration:* 4 modules of 5 days each. *Qualifications:* English. *Deadline for application:* —. *Fees:* £2,798 (including accommodation).

**Organizer:** Webton Court Management and Training Centre  
Allerton Park  
Leeds LS7 4ND, United Kingdom

#### **Training and development**

*Short description:* Core competences required to meet training needs of any organization. Programme accredited by the Institute of Training and Development for the award of their certificate. *Commencing date:* To be arranged. *Duration:* 4 modules of 5 days each. *Qualifications:* English. *Deadline for application:* —. *Fees:* £2,784 (including accommodation).

**Organizer:** Webton Court Management and Training Centre  
Allerton Park  
Leeds LS7 4ND, United Kingdom

#### **Training management**

*Short description:* Advanced programme dealing with the practice and management of training at a senior level. *Commencing date:* To be arranged. *Duration:* 4 modules of 5 days each. *Qualifications:* English. *Deadline for application:* —. *Fees:* £2,784 (including accommodation).

**Organizer:** Webton Court Management and Training Centre  
Allerton Park  
Leeds LS7 4ND, United Kingdom

#### **Maintenance**

*Short description:* Short courses on: computers in maintenance; modern maintenance strategies; up-to-date systems for information processing in relation to maintenance; condition-based maintenance; vibration monitoring. *Commencing date:* To be arranged. *Duration:* 2-5 days. *Qualifications:* English. *Deadline for application:* —. *Fees:* To be arranged.

**Organizer:** Wolfson Maintenance  
Attn.: S. A. Howorth, General Manager, Training  
Enterprise House  
Manchester Science Park  
Lloyd Street North  
Manchester M15 4EN, United Kingdom

### **Electronics**

*Short description:* Short courses on: small terminal satellite communications; electromagnetic compatibility; reconfigurable logic; flight control; neural computing; computational electromagnetics. *Commencing date:* March-July. *Duration:* 4-5 days. *Qualifications:* Engineers and technologists with a basic understanding of the relevant subjects. English. *Deadline for application:* 2 weeks before commencing date. *Fees:* £920-950 + VAT (including board and meals).

*Organizer:* The Secretary  
York Electronics Centre  
University of York  
Heslington  
York YO1 5DD, United Kingdom

### **Metalworking and engineered materials**

*Short description:* Broad range of topics designed to meet the needs of technicians, engineers, management and/or administrative personnel. *Commencing date:* Throughout the year. *Duration:* 3-5 days. *Qualifications:* Professional qualifications. English. *Deadline for application:* 1 week before commencing date. *Fees:* To be arranged.

*Organizer:* ASM International  
Education Department  
Materials Park, Ohio 44073-0002, United States of America

### **Analysis and negotiation of BOO and BOT projects**

*Short description:* Alternative strategies for infrastructure development; planning, analysis, negotiation, financing and regulation of public- and private-sector infrastructure projects. *Commencing date:* July, December. *Duration:* 2 weeks. *Qualifications:* English, Spanish. *Deadline for application:* 2 weeks before commencing date. *Fees:* \$US 3,250.

*Organizer:* Center for Financial Engineering in Development  
1255 23rd Street, N.W.  
Suite 870  
Washington, D.C. 20037, United States of America

### **Financial liberalization — strategies for managing an open economy**

*Short description:* Design and implementation of financial, economic and trade-liberalization policies. *Commencing date:* April, October. *Duration:* 2 weeks. *Qualifications:* English, Spanish. *Deadline for application:* 2 weeks before commencing date. *Fees:* \$US 3,250.

*Organizer:* Center for Financial Engineering in Development  
1255 23rd Street, N.W.  
Suite 870  
Washington, D.C. 20037, United States of America

### **Privatización — organización, estructura y ejecución**

*Breve descripción:* Para funcionarios y ejecutivos responsables de la planificación, administración e implementación de programas de privatización. *Fecha de iniciación:* Mayo. *Duración:* 2 semanas. *Calificaciones:* Español. *Fecha límite de inscripción:* 2 semanas antes del curso. *Derechos de inscripción:* \$US 3,550.



**Organizador:** Center for Financial Engineering in Development  
1255 23rd Street, N.W.  
Suite 870  
Washington, D.C. 20037, United States of America

#### **Restructuring industrial enterprises — strategies for market-based competition**

**Short description:** For managers and officials responsible for developing comprehensive strategic, operational and financial restructuring initiatives. **Commencing date:** March, September. **Duration:** 2 weeks. **Qualifications:** English, Spanish. **Deadline for application:** 2 weeks before commencing date. **Fees:** \$US 3,250.

**Organizer:** Center for Financial Engineering in Development  
1255 23rd Street, N.W.  
Suite 870  
Washington, D.C. 20037, United States of America

#### **Valuation strategies and techniques — critical factors in successful privatization transactions**

**Short description:** Planning, implementation and management of valuation projects; privatization or restructuring of state-owned assets. **Commencing date:** April, November. **Duration:** 2 weeks. **Qualifications:** English, Spanish. **Deadline for application:** 2 weeks before commencing date. **Fees:** \$US 3,250.

**Organizer:** Center for Financial Engineering in Development  
1255 23rd Street, N.W.  
Suite 870  
Washington, D.C. 20037, United States of America

#### **Utilization of fertilizers**

**Short description:** Short courses on: fertilizer marketing; phosphates, agrominerals and byproduct utilization; plant nutrient management for sustainable agriculture; agro-economic evaluation for development of fertilizer recommendations; nitric acid, nitric phosphate/ammonium nitrate; privatization of agri-inputs supply and delivery systems; computer simulation for crop growth and nutrient management. **Commencing date:** February-December. **Duration:** 1-2 weeks. **Qualifications:** Professionals involved in the relevant fields of fertilizer utilization. English; course on computer simulation for crop growth and nutrient management also in Spanish. **Deadline for application:** 1 month before commencing date. **Fees:** \$US 700-1,400.

**Organizer:** International Fertilizer Development Center (IFDC)  
P.O. Box 2040  
Muscle Shoals, Alabama 35662, United States of America

#### **Efficient use of welded steel**

**Short description:** Short courses on: design of steel structures; design of steel weldments. **Commencing date:** To be arranged. **Duration:** 5 days. **Qualifications:** Designers and engineers working in construction industry. English. **Deadline for application:** —. **Fees:** \$US 295.

**Organizer:** The Lincoln Electric Company  
22801 St. Clair Ave.  
Cleveland, Ohio 44117-1199, United States of America

## B. DEVELOPING COUNTRIES AND AREAS/PAYS ET ZONES EN DÉVELOPPEMENT/PAÍSES Y ZONAS EN DESARROLLO

### Cursos cortos con temas propuestos por el interesado

*Breve descripción:* Cursos en las áreas de procesos y de control de calidad. *Fecha de iniciación:* Para ser acordado. *Duración:* 1 semana-1 mes. *Calificaciones:* Español, inglés. *Fecha límite de inscripción:* 15 días antes del curso. *Derechos de inscripción:* Para ser acordado.

*Organizador:* Centro de Investigación Tecnológica de la Industria del Caucho (CITIC) del Sistema INTI  
Av. General Paz entre Albarelos y Constituyentes  
C.P. 1650 San Martín  
Provincia de Buenos Aires, Argentina

### Prevención de la corrosión

*Breve descripción:* Cursos breves sobre: aceros inoxidable; corrosión y prevención de la corrosión; corrosión y protección del acero en hormigón armado; identificación y prevención de la corrosión. *Fecha de iniciación:* Mayo-noviembre. *Duración:* 3 días. *Calificaciones:* Título terciario o universitario. Español. *Fecha límite de inscripción:* 4 semanas antes del curso. *Derechos de inscripción:* \$US 70-100.

*Organizador:* Instituto Nacional de Tecnología Industrial (INTI)  
Sector Electroquímica Aplicada  
CC 157 San Martín  
1650 Buenos Aires, Argentina

### Performance improvement programming

*Short description:* Identification and assessment of problems; drawing up of action plan to solve identified problems and improve performance of individual enterprises. *Commencing date:* May. *Duration:* 1 week. *Qualifications:* Managers/executives of public or private enterprises. English. *Deadline for application:* 1 month before commencing date. *Fees:* \$US 300.

*Organizer:* Bangladesh Management Development Centre (BMDC)  
4, Sobhanbag, Mirpur Road  
Dhaka 1207, Bangladesh

### Transactional analysis

*Short description:* Identification and analysis of transactions during verbal and non-verbal communication. *Commencing date:* January. *Duration:* 1 week. *Qualifications:* Managers/executives. English. *Deadline for application:* 1 month before commencing date. *Fees:* \$US 300.

*Organizer:* Bangladesh Management Development Centre (BMDC)  
4, Sobhanbag, Mirpur Road  
Dhaka 1207, Bangladesh

### **Boiler operation and maintenance**

*Short description:* Operation and maintenance of boilers; types of boilers, their mountings and accessories. *Commencing date:* To be arranged. *Duration:* 10 days. *Qualifications:* Boiler operators and mechanics. Bengali. *Deadline for application:* —. *Fees:* Tk 1,500.

*Organizer:* BUET  
Department of Mechanical Engineering  
Dhaka, Bangladesh

### **Production management, inventory planning and quality control**

*Short description:* Improve production management skills. *Commencing date:* To be arranged. *Duration:* 2 weeks. *Qualifications:* Graduation degree. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Management Development Program  
Institute of Business Administration  
University of Dhaka  
Dhaka 1000, Bangladesh

### **Training of trainers**

*Short description:* Improve training capability and training management skills. *Commencing date:* To be arranged. *Duration:* 2 weeks. *Qualifications:* Graduation degree. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Management Development Program  
Institute of Business Administration  
University of Dhaka  
Dhaka 1000, Bangladesh

### **Improving effectiveness of industrial enterprises**

*Short description:* Short courses on: industrial credit management; productivity improvement techniques; costing and pricing; financial management; office management; production management and productivity improvement; export marketing. *Commencing date:* February-December. *Duration:* 1-2 weeks. *Qualifications:* University graduates. English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 150 per week.

*Organizer:* Principal  
Small and Cottage Industries Training Institute  
c/o Bangladesh Small and Cottage Industries Corporation  
137-138, Motijheel C/A  
Dhaka 1000, Bangladesh

### **Small and cottage industries development**

*Short description:* Short courses in market study for SCI products; field survey techniques; marketing and sales promotion of SCI products; starting a small enterprise; quality control in small industries; management of industrial estates. *Commencing date:* Throughout the year. *Duration:* 1-2 weeks. *Qualifications:* University graduates. English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 150 per week.

*Organizer:* Principal  
Small and Cottage Industries Training Institute  
c/o Bangladesh Small and Cottage Industries Corporation  
137-138, Motijheel C/A  
Dhaka 1000, Bangladesh

### **Boiler instrumentation and burner management system**

*Short description:* Operation parameters and interlock system; alarm and trip annunciation system; boiler control and burner management. *Commencing date:* July. *Duration:* 2 weeks. *Qualifications:* Supervisory personnel engaged in plant operation. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 600.

*Organizer:* Training Institute for Chemical Industries  
(Central Training Institute of Bangladesh Chemical Industries Corporation)  
P.O. Sarkarkhana  
Ghorasal, Narsingdi, Bangladesh

### **Industrial safety and environmental pollution control**

*Short description:* Industrial hazards and use of protective gear; prevention and control of fire; prevention and control of gas, chemicals and other industrial hazards; air and water pollution. *Commencing date:* January. *Duration:* 2 weeks. *Qualifications:* Supervisory personnel engaged in operation, maintenance or quality control. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 600.

*Organizer:* Training Institute for Chemical Industries  
(Central Training Institute of Bangladesh Chemical Industries Corporation)  
P.O. Sarkarkhana  
Ghorasal, Narsingdi, Bangladesh

### **On-line troubleshooting of high-speed rotating machines by spectro-mech-analysis technique (level I)**

*Short description:* Machine vibration and measurement of vibration parameters; displacement and velocity probes; on-line vibration monitoring; vibration data acquisition and presentation; machine trend tracking. *Commencing date:* October. *Duration:* 2 weeks. *Qualifications:* Supervisory personnel engaged in machinery maintenance. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 600.

*Organizer:* Training Institute for Chemical Industries  
(Central Training Institute of Bangladesh Chemical Industries Corporation)  
P.O. Sarkarkhana  
Ghorasal, Narsingdi, Bangladesh

### **On-line troubleshooting of high-speed rotating machines by spectro-mech-analysis technique (level II)**

*Short description:* Advanced dynamic data acquisition techniques; spectrum, bode, polar and cascade plots, shaft centre line orbit analysis, vibration analysis and on-line troubleshooting of rotating machine; establishing of vibration signature base line. *Commencing date:* October. *Duration:* 2 weeks. *Qualifications:* Supervisory personnel engaged in machinery maintenance; completion of level I course. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 600.

*Organizer:* Training Institute for Chemical Industries  
(Central Training Institute of Bangladesh Chemical Industries Corporation)  
P.O. Sarkarkhana  
Ghorasal, Narsingdi, Bangladesh

### **Preventive maintenance**

*Short description:* Concept of preventive maintenance; preparation of maintenance schedule book; planned maintenance wall chart, maintenance master plan, planning board etc.; maintenance costing; preventive maintenance system operation. *Commencing date:*

July. *Duration:* 2 weeks. *Qualifications:* Supervisory personnel engaged in maintenance. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 600.

*Organizer:* Training Institute for Chemical Industries  
(Central Training Institute of Bangladesh Chemical Industries Corporation)  
P.O. Sarkarkhana  
Ghorasal, Narsingdi, Bangladesh

#### **Process quality control and monitoring of industrial water**

*Short description:* Analysis of water using different titrimetric and instrumental methods; analytical techniques of quality and process control. *Commencing date:* July. *Duration:* 2 weeks. *Qualifications:* Degree in chemistry or chemical engineering. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 600.

*Organizer:* Training Institute for Chemical Industries  
(Central Training Institute of Bangladesh Chemical Industries Corporation)  
P.O. Sarkarkhana  
Ghorasal, Narsingdi, Bangladesh

#### **Reactive power compensation and voltage regulations**

*Short description:* Methods of compensation for reactive power; selection, installation, maintenance and operational performance of capacitor banks; voltage regulations; limitations and precautions. *Commencing date:* August. *Duration:* 2 weeks. *Qualifications:* Degree in electrical engineering. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 600.

*Organizer:* Training Institute for Chemical Industries  
(Central Training Institute of Bangladesh Chemical Industries Corporation)  
P.O. Sarkarkhana  
Ghorasal, Narsingdi, Bangladesh

#### **Troubleshooting of rotary machine and predictive maintenance**

*Short description:* Troubleshooting of rotary machines with the help of conventional and analytical techniques; trend monitoring and predictive maintenance. *Commencing date:* November. *Duration:* 2 weeks. *Qualifications:* Supervisory personnel engaged in maintenance. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 600.

*Organizer:* Training Institute for Chemical Industries  
(Central Training Institute of Bangladesh Chemical Industries Corporation)  
P.O. Sarkarkhana  
Ghorasal, Narsingdi, Bangladesh

#### **Logistics and distribution**

*Short description:* Logistics as an end to increase business efficiency and raise profits; vehicle routing and scheduling in physical distribution; distribution audit. *Commencing date:* June. *Duration:* 3-6 days. *Qualifications:* University degree related to logistics, physical distribution, or administration. Portuguese, Spanish. *Deadline for application:* April. *Fees:* \$US 100.

*Organizers:* Associação Nacional de Pesquisa e Ensino em Transportes (ANPET)  
and  
Instituto de Pesquisas Tecnológicas do Estado de São Paulo (IPT)  
Cid. Universitária  
P.O. Box 7141  
01051 São Paulo, Brazil

### **Automatic and manual fire detection, alarm and signalling systems and emergency illumination**

*Short description:* Basic problems of automatic smoke and heat detection in closed areas with individual spot-type detectors and linear detectors; components of an automatic and a manual detection and alarm system; control of automatic extinguishing systems; activation of smoke and heat control devices installed in buildings, emergency illumination in case of a normal energy blackout or in case of a fire hazard. *Commencing date:* June, September. *Duration:* 40 hours. *Qualifications:* Basic knowledge of security systems. Portuguese. *Deadline for application:* 10 days before commencing date. *Fees:* \$US 450.

*Organizer:* Instituto de Pesquisas Tecnológicas do Estado de São Paulo S.A. (IPT)  
Agrupamento de Tecnologia de Equipamentos Elétricos  
P.O. Box 7141  
01051 São Paulo, Brazil

### **Servo-systems for modern automation**

*Short description:* Modern automation, modern control theory, servo motors, power supplies, microprocessor control, system simulation, parameter measurements, laboratory experiments. *Commencing date:* May. *Duration:* 2 weeks. *Qualifications:* Electrical or mechanical engineers, technicians with long experience. English. *Deadline for application:* March. *Fees:* \$US 800.

*Organizer:* Instituto de Pesquisas Tecnológicas do Estado de São Paulo S.A. (IPT)  
Agrupamento de Tecnologia de Equipamentos Elétricos  
P.O. Box 7141  
01051 São Paulo, Brazil

### **Preparación y evaluación de proyectos**

*Breve descripción:* Incrementar la capacidad técnica e institucional de los organismos regionales para administrar y controlar la inversión pública regional; capacitar en términos prácticos y aplicados a los profesionales que están abocados a la preparación y evaluación de proyectos para mejorar e incrementar la cartera de proyectos del nivel regional y municipal. *Fecha de iniciación:* Noviembre. *Duración:* 2 semanas. *Calificaciones:* Título universitario. Español. *Fecha límite de inscripción:* —. *Derechos de inscripción:* Para ser acordado.

*Organizadores:* Subsecretaría de Desarrollo Regional y Administrativo (SUBDERE), Instituto Latinoamericano del Caribe de Planificación Económica y Social (ILPES) y MIDEPLAN, Departamento de Inversiones

*Contact address:*  
MIDEPLAN  
Ahumada 48, piso 6  
Santiago, Chile

### **Industria azucarera**

*Breve descripción:* Cursos de corta duración sobre: la corrosión en la industria azucarera; quimificación en la industria azucarera; energía en la industria azucarera; tecnología de la cristalización; eficiencia agro-industrial; aplicación de radioisótopos en la industria azucarera; contabilidad azucarera. *Fecha de iniciación:* Enero-junio. *Duración:* 15 días. *Calificaciones:* Graduado universitario. Español. *Fecha límite de inscripción:* 2-6 meses antes del curso. *Derechos de inscripción:* Para ser acordado.

*Organizador:* Instituto Cubano de Investigaciones Azucareras (ICINAZ)  
Apartado 10 154  
Quivicán 33 500  
La Habana, Cuba

#### **Análisis de inversiones para celulosa y papel y derivados de la celulosa del bagazo**

*Breve descripción:* Técnicas de diseño de procesos, estudios pre-inversionistas y pre-ingeniería para inversiones basadas en el aprovechamiento de bagazo de la caña de azúcar para la producción de celulosa papel y derivados de la celulosa. *Fecha de iniciación:* Marzo. *Duración:* 2 semanas. *Calificaciones:* Ingenieros químicos, industriales, mecánicos, técnicos de producción. Español. *Fecha límite de inscripción:* 2 meses antes del curso. *Derechos de inscripción:* Para ser acordado.

*Organizador:* Unión de Investigación-Producción de la Celulosa del Bagazo "Cuba-9"  
Apartado Postal 8  
Quivicán  
La Habana, Cuba

#### **Computer applications in mechanical engineering**

*Short description:* Short courses on: CAD applications; CNC machine programming; customizing AUTOCAD. *Commencing date:* November. *Duration:* 1 week. *Qualifications:* Degree in engineering or equivalent. English. *Deadline for application:* July. *Fees:* £C 240.

*Organizer:* Mechanical Engineering Department  
Higher Technical Institute  
P.O. Box 2423  
Nicosia, Cyprus

#### **Quality control**

*Short description:* Setting up quality-control programmes in industrial firms; modern management aspects of quality control. *Commencing date:* November. *Duration:* 1 week. *Qualifications:* Degree in engineering or equivalent. English. *Deadline for application:* July. *Fees:* £C 240.

*Organizer:* Mechanical Engineering Department  
Higher Technical Institute  
P.O. Box 2423  
Nicosia, Cyprus

#### **Database systems**

*Short description:* Establishment, utilization, table relations. *Commencing date:* March, October. *Duration:* 2 weeks. *Qualifications:* Basic knowledge of PCs. English. *Deadline for application:* February, September. *Fees:* \$US 800.

*Organizer:* IDEA Ltd.  
Pražská 12  
305 11 Plzeň, Czechoslovakia

#### **Desktop publishing**

*Short description:* Utilization of PC systems for preparation of printing documents; Ventura Corel Draw programmes. *Commencing date:* April, November. *Duration:* 2 weeks. *Qualifications:* Professional experience. English. *Deadline for application:* March, October. *Fees:* \$US 800.

**Organizer:** IDEA Ltd.  
Pražská 12  
305 11 Plzeň, Czechoslovakia

#### **Production of structural ceramics**

*Short description:* Production technologies for wall tiles, floor tiles, facade tiles; quality control, machinery, raw materials. *Commencing date:* May, September. *Duration:* 2 weeks. *Qualifications:* Professional experience. English. *Deadline for application:* April, August. *Fees:* \$US 1,100.

**Organizer:** IDEA Ltd.  
Pražská 12  
305 11 Plzeň, Czechoslovakia

#### **Brick production technologies and testing**

*Short description:* Production technologies for clay building materials; laboratory testing of raw materials and products; quality control. *Commencing date:* October. *Duration:* 2 weeks. *Qualifications:* Professional experience. English. *Deadline for application:* September. *Fees:* \$US 1,000.

**Organizer:** UNIDO-Czechoslovakia Joint Programme for Cooperation  
Non-metallic Industries  
Pražská 12  
305 11 Plzeň, Czechoslovakia

#### **Natural sorbents for environmental engineering**

*Short description:* Utilization of bentonite, perlite and diatomite for environmental protection; wastewater treatment; pollution monitoring; environmental problems of urban and industrial areas. *Commencing date:* June. *Duration:* 2 weeks. *Qualifications:* Professional experience. English. *Deadline for application:* May. *Fees:* \$US 1,000.

**Organizer:** UNIDO-Czechoslovakia Joint Programme for Cooperation  
Non-metallic Industries  
Pražská 12  
305 11 Plzeň, Czechoslovakia

#### **Machinery for leather industry**

*Short description:* Technology and machinery for leather industry; equipment and technology for tanneries. *Commencing date:* November. *Duration:* 2 weeks. *Qualifications:* University degree with 5 years of relevant experience. English. *Deadline for application:* April. *Fees:* —.

**Organizer:** UNIDO-Czechoslovakia Joint Programme for Cooperation  
Metallic Industries  
Národní 35  
110 00 Prague 1, Czechoslovakia

#### **Machinery for tropical and subtropical agriculture**

*Short description:* Crop production, animal husbandry, agricultural engineering, economics and farm management; theoretical and laboratory instructions. *Commencing date:* May. *Duration:* 2 weeks. *Qualifications:* University degree with 5 years of relevant experience. English. *Deadline for application:* 5 months before commencing date. *Fees:* —.



**Organizer:** UNIDO-Czechoslovakia Joint Programme for Cooperation  
Metallic Industries  
Národní 35  
110 00 Prague 1, Czechoslovakia

#### **Melting and casting of rock, especially molten basalt**

*Short description:* Basalt processing: melting, casting, cooling and use of castings. *Commencing date:* June. *Duration:* 2 weeks. *Qualifications:* University degree with 5 years of relevant experience. English. *Deadline for application:* 5 months before commencing date. *Fees:* \$US 1,500.

**Organizer:** UNIDO-Czechoslovakia Joint Programme for Cooperation  
Metallic Industries  
Národní 35  
110 00 Prague 1, Czechoslovakia

#### **Metallurgical industries**

*Short description:* Short courses on: process control; mineral beneficiation; high-quality steel production; CAD and CAM application in basic industries; software for production management; production of drop forgings; precision casting. *Commencing date:* March-October. *Duration:* 1-2 weeks. *Qualifications:* University degree with relevant practical experience. English. *Deadline for application:* 5 months before commencing date. *Fees:* To be arranged.

**Organizer:** UNIDO-Czechoslovakia Joint Programme for Cooperation  
Metallic Industries  
Národní 35  
110 00 Prague 1, Czechoslovakia

#### **Production of tools for small-scale industry**

*Short description:* Hand tools, tool dies, moulds etc. for small-scale industry. *Commencing date:* May. *Duration:* 2 weeks. *Qualifications:* University degree, preferably in mechanical engineering, with 5 years of relevant experience. English. *Deadline for application:* 5 months before commencing date. *Fees:* \$US 1,500.

**Organizer:** UNIDO-Czechoslovakia Joint Programme for Cooperation  
Metallic Industries  
Národní 35  
110 00 Prague 1, Czechoslovakia

#### **Water treatment**

*Short description:* Annual conference on water treatment; modern technologies; solution of industrial problems. *Commencing date:* May. *Duration:* 3 days. *Qualifications:* Bachelor's degree in science or engineering. Arabic, English. *Deadline for application:* March. *Fees:* —.

**Organizer:** Abu Qir Fertilizers and Chemical Industries Company  
El-Tabia, Rasheed Road  
Private Box  
Alexandria, Egypt

### **Cost control, purchasing and sales techniques**

*Short description:* Short courses on: cost control for first-line supervisors; purchasing and inventory planning and control; sales techniques and skills. *Commencing date:* October, November. *Duration:* 1-2 weeks. *Qualifications:* High school or university graduates with several years of practical experience. Arabic. *Deadline for application:* 1 month before commencing date. *Fees:* \$US 300 per week.

*Organizer:* Continuing Education Department, PVTD  
6, Ahmed Amin Street  
Dokky, Giza, Egypt

*Contact address:*

Sayed Abdel Kader El Sayed, Chairman  
Productivity and Vocational Training Department  
7, Kuwait Street  
Dokky, Giza, Egypt

### **Improving factory management**

*Short description:* Short courses on: industrial costing for specialists; performance rating and incentives schemes; material management and control; performance evaluation models; production planning and inventory control. *Commencing date:* Throughout the year. *Duration:* 1-2 weeks. *Qualifications:* University degree and several years of industrial experience. Arabic, English. *Deadline for application:* 1 month before commencing date. *Fees:* \$US 300 per week.

*Organizer:* Continuing Education Department, PVTD  
6, Ahmed Amin Street  
Dokky, Giza, Egypt

*Contact address:*

Sayed Abdel Kader El Sayed, Chairman  
Productivity and Vocational Training Department  
3, Kuwait Street  
Dokky, Giza, Egypt

### **Industrial safety**

*Short description:* Short courses on: industrial safety; statistical safety control. *Commencing date:* November, December. *Duration:* 1-2 weeks. *Qualifications:* Safety specialists and supervisors. Arabic. *Deadline for application:* 1 month before commencing date. *Fees:* \$US 300 per week.

*Organizer:* Continuing Education Department, PVTD  
6, Ahmed Amin Street  
Dokky, Giza, Egypt

*Contact address:*

Sayed Abdel Kader El Sayed, Chairman  
Productivity and Vocational Training Department  
3, Kuwait Street  
Dokky, Giza, Egypt

### **Industrial management**

*Short description:* Short courses on: feasibility studies; total quality management; effective manager; effective consultant; project evaluation; manpower planning and development; integrated preventive maintenance systems. *Commencing date:* March-May.

*Duration:* 1-2 weeks. *Qualifications:* University degree with relevant professional experience. Arabic, English. *Deadline for application:* 1 month before commencing date. *Fees:* \$US 500-1,000.

*Organizer:* Management Consultancy Institute (MCI), PVTD  
6, Ahmed Amin Street  
Dokky, Giza, Egypt

*Contact address:*

Sayed Abdel Kader El Sayed, Chairman  
Productivity and Vocational Training Department  
3, Kuwait Street  
Dokky, Giza, Egypt

### **Plastic materials**

*Short description:* Short courses on: tests for plastic films; tests for PVC pipes; injection moulding; plastisols; properties of plastic materials; blow moulding; principles of polymer science. *Commencing date:* July-November. *Duration:* 1-2 weeks. *Qualifications:* Engineers, chemists and technicians. English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 300-500.

*Organizer:* Plastic Development Center  
P.O. Box 11, Eskan El Senaay  
Victoria, Alexandria, Egypt

### **Microcomputer applications in management**

*Short description:* Introduction to DOS; spreadsheet (Lotus 123); word processing (Word Perfect); database management (DBASE II Plus); statistical analysis (statgraphics). In three modules. *Commencing date:* March, August, December. *Duration:* 2 weeks. *Qualifications:* Middle-level managers. English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 260 for each module.

*Organizer:* The Director  
Ghana Institute of Management and Public Administration (GIMPA)  
P.O. Box 50  
Achimota, Ghana

### **Women in management (WIM)**

*Short description:* Management skills; personal skills; influencing the environment; work-home interface. WIM I (first-level managers); WIM II (middle-level managers); WIM III (senior-level managers). *Commencing date:* WIM II: February; WIM I: June; WIM III: December. *Duration:* WIM I and III: 1 week; WIM II: 2 weeks. *Qualifications:* Women in managerial positions. English. *Deadline for application:* 3 months before commencing date. *Fees:* \$US 130 per week.

*Organizer:* The Director  
Ghana Institute of Management and Public Administration (GIMPA)  
P.O. Box 50  
Achimota, Ghana

### **Quality management and quality assurance standards**

*Short description:* ISO 9000 as a strategic weapon; understand ISO 9000 standards; 5 steps of implementation; common problems encountered during implementation; internal quality system audit; certification and maintenance. *Commencing date:* January, May and November. *Duration:* 2 days. *Qualifications:* English. *Deadline for application:* 10 days before commencing date. *Fees:* \$HK 2,800.

**Organizer:** The Hong Kong Management Association  
14/F Fairmont House  
8 Cotton Tree Drive  
Central, Hong Kong

#### **Seminar on just-in-time**

*Short description:* Just-in-time today; the manufacturing dimension; quality as a business strategy; the purchasing decision; partnership in supply and supplier selection. *Commencing date:* June. *Duration:* 1 day. *Qualifications:* English. *Deadline for application:* 10 days before commencing date. *Fees:* \$HK 2,100.

**Organizer:** The Hong Kong Management Association  
14/F Fairmont House  
8 Cotton Tree Drive  
Central, Hong Kong

#### **SAS and its application in statistical areas**

*Short description:* Basic SAS programming, full screen applications, report writing. *Commencing date:* April. *Duration:* 5 days. *Qualifications:* English. *Deadline for application:* February. *Fees:* \$US 500.

**Organizer:** Central Statistical Office  
Keleti Károly 5-7  
1024 Budapest, Hungary

#### **Management of instrumentation service centres**

*Short description:* Planning, establishment and management of an instrumentation service centre and its organizational units; systemic approach to improve efficiency of national instrument pools in developing countries. *Commencing date:* To be arranged. *Duration:* 2 weeks. *Qualifications:* Chief executives/general managers or heads of departments. English. *Deadline for application:* —. *Fees:* To be arranged.

**Organizer:** Instruments and Measuring Technique Service of the Hungarian Academy of Sciences (MTA-MMSZ)  
P.O. Box 58  
1502 Budapest, Hungary

#### **Design and evaluation experiments**

*Short description:* Use of mathematically well-established methods for treating experimental data; methods for optimal design of experimentation. *Commencing date:* June. *Duration:* 2 weeks. *Qualifications:* Bachelor's degree. English. *Deadline for application:* May. *Fees:* To be arranged.

**Organizer:** Technical University of Budapest  
Department of Chemical Engineering  
Attn.: Sándor Kemény  
1521 Budapest, Hungary

#### **Electromagnetic compatibility**

*Short description:* Electromagnetic influence: inductive, capacitive and conductive effect; electromagnetic pulses: lightning and nuclear electromagnetic pulses; electrostatic discharges; radio frequency influence. *Commencing date:* January. *Duration:* 2 weeks.

*Qualifications:* Knowledge of basic electrical engineering. English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* Technical University of Budapest  
Department of High Voltage Engineering and Equipment  
Attn.: István Berta  
1521 Budapest, Hungary

#### **Local area networks**

*Short description:* Functions of a network; network topologies; layered architectures; open systems; local area network standards; IEEE 802.3/ethernet/networks; configuration rules; transceivers; repeaters; bridges; routers; fibre and twisted pair in ethernet. *Commencing date:* January. *Duration:* 2 weeks. *Qualifications:* Familiarity with basic communications concepts. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 2,000.

*Organizer:* Technical University of Budapest  
Department of Measurement and Instrument Engineering  
Attn.: Csaba Tóth  
1521 Budapest, Hungary

#### **Molecular spectroscopy**

*Short description:* Theoretical background; structure of spectrometers, application in chemistry. *Commencing date:* April. *Duration:* 2 weeks. *Qualifications:* University degree in chemistry or chemical engineering. English. *Deadline for application:* January. *Fees:* To be arranged.

*Organizer:* Technical University of Budapest  
Department of Inorganic Chemistry  
Attn.: T. Veszprémi  
1521 Budapest, Hungary

#### **Research and development in organic chemical technology**

*Short description:* Stages in research and development from conceiving an idea, through laboratory and pilot plant experiments, to implementation in a plant; technical and product development. *Commencing date:* To be arranged. *Duration:* 2 weeks. *Qualifications:* University degree. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Technical University of Budapest  
Organic Chemical Technology Department  
Attn.: József Petró  
1521 Budapest, Hungary

#### **Computer programming and environmental education**

*Short description:* Computer programming languages; computer-based training; role of environment for creative mental growth; environmental education; visit to tropical rain forest. *Commencing date:* January, June. *Duration:* 1 week-1 month. *Qualifications:* English. *Deadline for application:* 2 months before commencing date. *Fees:* Rs 2,500 per month.

*Organizer:* Aakash Computer Training Institute  
Bungalow No. 1/637, Opposite City Municipal Council  
Township, Dandeli 581 325,  
Karnataka, India

### **Development of industrial skills**

*Short description:* Short courses on: development of managerial skills; management and industrial administration; trainers' development; entrepreneurship development for small-scale industries; investment portfolio and industrial financing; industrial planning and programming. *Commencing date:* May, December. *Duration:* 5-7 days. *Qualifications:* Industrial/organizational experience. English. *Deadline for application:* 1 month before commencing date. *Fees:* \$US 500, including board and lodging.

*Organizer:* Director  
Advanced Institute of Management  
Asian Regional Institute for Advanced Management, Research, Training  
and Consultancy  
Hat Hill, Santi Siddartha  
Mangalore 575 06, India

*Venue:* Bangalore, India

### **Assessing entrepreneurial competencies**

*Short description:* For appraisal officers of banks or financial institutions to improve their capabilities of assessing entrepreneurial competencies of potential or existing entrepreneurs. *Commencing date:* November. *Duration:* 5 days. *Qualifications:* Graduates, involved in project appraisal. English. *Deadline for application:* 6 weeks before commencing date. *Fees:* \$US 800.

*Organizer:* Entrepreneurship Development Institute of India  
Bhat, P.O. Chandkheda 382 424  
Dist. Gandhinagar (Gujarat), India

### **Performance improvement for entrepreneurs**

*Short description:* Growth strategies, entrepreneurial competencies, technology and other key functional areas for improved performance. *Commencing date:* To be arranged. *Duration:* 50 hours. *Qualifications:* Entrepreneurs operating a small-scale unit for at least 3 years. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Entrepreneurship Development Institute of India  
Bhat, P.O. Chandkheda 382 424  
Dist. Gandhinagar (Gujarat), India

### **Succession planning for entrepreneurial continuity**

*Short description:* To inculcate and reinforce entrepreneurial aspirations and capabilities among future inheritors of family enterprises. *Commencing date:* January, July. *Duration:* 2 weeks. *Qualifications:* English. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* Entrepreneurship Development Institute of India  
Bhat, P.O. Chandkheda 382 424  
Dist. Gandhinagar (Gujarat), India

### **Fertilizer promotion**

*Short description:* Short courses on: marketing management; advertising and sales promotion; agricultural services and market development; maintenance of fertilizer plants. *Commencing date:* March, June. *Duration:* 6-12 days. *Qualifications:* Managers and

engineers. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 400-800, including board and lodging.

*Organizer:* The Fertilizer Association of India  
10, Shaheed Jit Singh Marg  
New Delhi 110 067, India

*Venue:* Different plants in India and Nepal

#### **Improving the operation of fertilizer plants**

*Short description:* Short courses on: raw water, cooling water and boiler feed water treatment; revamp/retrofit options for ammonia and urea plants; improving the productivity of phosphatic fertilizer plants. *Commencing date:* May, August, October. *Duration:* 2 days. *Qualifications:* Middle- and senior-level technical personnel of the fertilizer industry. English. *Deadline for application:* 3 weeks before commencing date. *Fees:* \$US 25.

*Organizer:* The Fertiliser Association of India  
10, Shaheed Jit Singh Marg  
New Delhi 110 067, India

#### **Packaging**

*Short description:* Short courses on: modern trends in packaging; packaging principles and developments; packaging of pharmaceuticals; packaging of engineering goods; quality control—testing and evaluation of packaging materials. *Commencing date:* June-November. *Duration:* 2 days. *Qualifications:* Middle- and senior-level managers. English. *Deadline for application:* 1 month before commencing date. *Fees:* \$US 250.

*Organizer:* Indian Institute of Packaging  
E-2, MIDC, P.B. No. 9432  
Andheri (East)  
Bombay 400 093 India

#### **Managerial effectiveness**

*Short description:* Decision-making, leadership, team building, human relations, interpersonal skills, role negotiation and communication skills. *Commencing date:* September. *Duration:* 1 week. *Qualifications:* Graduate/diploma holder, with 5 years of experience in a supervisory position. English. *Deadline for application:* July. *Fees:* \$US 200.

*Organizer:* Divisional Manager  
Human Resource Development  
NGEF Ltd.  
P.O. Box 3876  
Byappanahalli  
Bangalore 560 038, India

#### **Operation and maintenance of power stations**

*Short description:* Short courses on: maintenance management; energy conservation in thermal power plants; environmental pollution and pollution control; electricity for administrators; training of trainers in the power sector; fire prevention, protection and safety related to industry; computer application. *Commencing date:* To be arranged. *Duration:* 1-2 weeks. *Qualifications:* Professional qualifications. English. *Deadline for application:* 15 days before commencing date. *Fees:* \$US 150 per week.

**Organizer:** Power Engineers Training Society  
207-212 A, Chiranjiv Tower  
43 Nehru Place  
New Delhi 110 019, India

**Venue:** Badapur, Nagpur, Durgapur, Neyveli, India

#### **Mechanical engineering**

**Short description:** Short courses on: metrology and calibration; mould and die making; foundry technology; welding technology. **Commencing date:** May-September. **Duration:** 2 weeks. **Qualifications:** Degree in mechanical or metallurgical engineering. **English.** **Deadline for application:** 3 months before commencing date. **Fees:** To be arranged.

**Organizer:** Metal Industries Development Centre  
Jl. Sangkuriang 12  
Bandung, Indonesia

**Contact address:**  
Metal Industries Development Centre  
c/o Agency for Industrial Research and Development  
Ministry of Industry  
Jl. Gatot Subroto Kav. 52-53  
Jakarta Selatan, Indonesia

#### **Islamic banking**

**Short description:** Basis of Islamic banking; Islamic banking in practice; philosophical and theoretical aspects of Islamic banking; Islamic banking experiences in the context of the international banking system. **Commencing date:** October. **Duration:** 2 weeks. **Qualifications:** Middle-level employees of central banks, commercial banks and financial institutions with university degree in banking, finance, economics or related subjects. **English.** **Deadline for application:** July. **Fees:** All costs, including board and lodging to be borne by the Central Bank.

**Organizer:** The Central Bank of the Islamic Republic of Iran  
Training and Manpower Studies Department  
203, Pasdaran Avenue  
Tehran 16, Islamic Republic of Iran

**Venue:** Babolsar, Iran

#### **Computer applications**

**Short description:** Course comprises three modules: systems analysis; programming; micro-computer usage. **Commencing date:** January, April, September. **Duration:** 24-30 hours for each module. **Qualifications:** IMP-administered aptitude test. **English.** **Deadline for application:** —. **Fees:** Microcomputer \$J 4,500; programming \$J 7,600; systems analysis \$J 9,700.

**Organizer:** Institute of Management and Production (IMP)  
17 Worthington Avenue  
Kingston 5, Jamaica

#### **Gestion**

**Brève description :** Cours de courte durée sur : marketing; comptabilité; finances; informatique; gestion. **Début du cours :** A arranger. **Durée :** 3-7 jours. **Qualifications :**



Français. *Date limite d'inscription* : 10 jours avant le début du cours. *Droits d'inscription* : FF 2 000-4 000.

*Organisateur*: INSCAE  
DRE Maison des produits  
67 Ha - B.P. 946  
Antananarivo, Madagascar

#### **Gestion**

*Brève description* : Cours de courte durée sur : transfert de technologie; organisation; management du temps; conduite de réunions; innovation technologique; marketing et ventes; management/finances; développement personnel et communication interpersonnelle; fiscalité; mathématiques financières. *Début du cours* : A arranger. *Durée* : 20-40 heures. *Qualifications* : Qualifications professionnelles. Français. *Date limite d'inscription* : 15 jours avant le début du cours. *Droits d'inscription* : FMG 150 000-300 000.

*Organisateur* : Institut Supérieur de la Communication, des Affaires et du Management (ISCAM)  
B.P. 8224  
Antananarivo, Madagascar

#### **Conduite des installations de climatisation**

*Brève description* : Fonctionnement d'une centrale de climatisation; économie d'énergie; organisation d'un service de maintenance; conduite optimale des équipements. *Début du cours* : Mars, décembre. *Durée* : 2 semaines. *Qualifications* : Techniciens frigoristes avec 2 ans d'expérience. Français. *Date limite d'inscription* : 3 mois avant le début du cours. *Droits d'inscription* : FCFA 48 000.

*Organisateur* : ECICA  
B.P. 1828  
Bamako, Mali  
*Adresse de l'organisme à contacter* :  
DNESGTP-MEN  
B.P. 71  
Bamako, Mali

#### **Management**

*Short description*: Annual conference on an important management topic. *Commencing date*: March. *Duration*: 3 days. *Qualifications*: Managers, executives, decision makers. English. *Deadline for application*: 1 month before commencing date. *Fees*: \$US 400.

*Organizer*: The Malta Institute of Management  
Management House  
Medisle Village  
St. Andrews, Malta

#### **Contrôle microbiologique dans les sucreries de canne et de betterave**

*Brève description* : Formation de base en microbiologie; points d'infection à divers stades du processus de fabrication; mesures préventives; moyens de contrôle efficaces au laboratoire. *Début du cours* : Octobre. *Durée* : 10 jours. *Qualifications* : Bac + 2 (formation scientifique). Français. *Date limite d'inscription* : 15 jours avant le début du cours. *Droits d'inscription* : DH 1 500 par jour.

**Organisateur :** ISERF  
67, rue Jaafar as Sadik Agdal  
Rabat, Maroc

### **Management development**

*Short description:* Short courses on: productivity and quality improvement; strategic marketing; activity-based costing; grievance procedures and termination of employment; emerging financial institutions and investment opportunities; mobilizer, supervisory development; management accounting for non-financial managers; action learning for improving company's competitive edge; Mauritian industrial relations system; managing change and stress in organization; understanding labour laws; export processing zones; sugar industry; hotel and catering; distributive trades; factory workers; construction industry; effective management of absenteeism; managing people; effective store management and stock control; information technology; improve your business; collective bargaining. *Commencing date:* To be arranged. *Duration:* 1-7 days. *Qualifications:* Professional qualifications. English. *Deadline for application:* —. *Fees:* To be arranged.

*Organizer:* Mauritius Employers' Federation  
Management Centre  
5th Floor, Rainbow House  
Brown Sequard Street  
Port-Louis, Mauritius

### **Capacitación de dirigentes**

*Breve descripción:* Cursos de corta duración sobre: integración de grupos de aprendizaje; calidad en el servicio; liderazgo hacia la calidad. *Fecha de iniciación:* Abril-octubre. *Duración:* 20-24 horas. *Calificaciones:* Niveles gerenciales de empresas. Español. *Fecha límite de inscripción:* 3-6 meses antes del curso. *Derechos de inscripción:* \$US 750-1,400.

*Organizador:* Dantus y Asociados, S.C.  
Manuel Ma. Contreras No. 66-7  
Col. San Rafael  
06470 México, D.F., México

### **Production management**

*Short description:* Augment the knowledge of production executives and develop their skills to perform their functions more effectively. *Commencing date:* To be arranged. *Duration:* 1 week. *Qualifications:* Diploma in textile technology, mechanical or electrical engineering. English. *Deadline for application:* To be arranged. *Fees:* To be arranged.

*Organizer:* Textile Industry Research and Development Centre  
M. T. Khan Road  
G.P.O. Box 479  
Karachi, Pakistan

### **Spinning**

*Short description:* Short courses on: spinning operative's instructors; quality control; spinning supervisors. *Commencing date:* To be arranged. *Duration:* 15 days. *Qualifications:* Professional qualifications. English. *Deadline for application:* To be arranged. *Fees:* To be arranged.

**Organizer:** Textile Industry Research and Development Centre  
M. T. Khan Road  
G.P.O. Box 479  
Karachi, Pakistan

#### **Statistical quality control in textiles**

*Short description:* Statistical analysis and its application to various quality-control processes in textiles. *Commencing date:* To be arranged. *Duration:* 1 week. *Qualifications:* Diploma in textiles with 2-3 years of experience in quality control. English. *Deadline for application:* To be arranged. *Fees:* To be arranged.

**Organizer:** Textile Industry Research and Development Centre  
M. T. Khan Road  
G.P.O. Box 479  
Karachi, Pakistan

#### **Weaving**

*Short description:* Short courses on: upgrading the skills of weaving masters; quality control; upgrading the technical know-how of weaving-shed supervisors; operative's instructors. *Commencing date:* To be arranged. *Duration:* 2 weeks. *Qualifications:* Diploma in weaving technology with 2-3 years of experience in a weaving mill. English. *Deadline for application:* To be arranged. *Fees:* To be arranged.

**Organizer:** Textile Industry Research and Development Centre  
M. T. Khan Road  
G.P.O. Box 479  
Karachi, Pakistan

#### **Banca y comercio internacional**

*Breve descripción:* Resaltar la importancia del comercio exterior para las empresas y los países en desarrollo, y la actividad de las instituciones financieras como agentes de un cambio empresarial que oriente la integración económica, por la vía de las operaciones comerciales internacionales. *Fecha de iniciación:* Para ser acordado. *Duración:* 2 semanas. *Calificaciones:* Profesionales, ejecutivos en actual ejercicio, con experiencia en instituciones financieras. Español. *Fecha límite de inscripción:* 2 semanas antes del curso. *Derechos de inscripción:* \$US 500.

**Organizador:** Asociación Latinoamericana de Instituciones Financieras de Desarrollo (ALIDE)  
Av. Paseo de la República 3211  
San Isidro  
Lima 27, Perú

#### **Exploitation des gisements de pétrole**

*Breve description :* Récupération secondaire; méthodes de stimulation des puits; diagraphie dans les sondages. *Début du cours :* Mai. *Durée :* 2 semaines. *Qualifications :* Ingénieurs des mines. Français. *Date limite d'inscription :* Mars. *Droits d'inscription :* A arranger.

**Organisateur :** Académie des mines et de la métallurgie  
Faculté de forage et de pétrole  
Al. Mickiewicza 30  
30-059 Cracovie, Pologne

### **Bodies for electrical engineering**

*Short description:* Physical and mechanical properties of bodies; technical specifications and acceptance requirements; standardization and conformity certification. *Commencing date:* March. *Duration:* 2 weeks. *Qualifications:* Electrical engineers. English. *Deadline for application:* 3 months before commencing date. *Fees:* To be arranged.

*Organizer:* Instytut Elektrotechniki  
Oddział Technologii i Materialoznawstwa Elektrotechnicznego  
ul. M. Skłodowskiej-Curie 55/61  
50-950 Wrocław, Poland

### **Soft magnetic materials and sintered contact materials for electrical engineering**

*Short description:* Anisotropic and isotropic electrical sheets; thermo-magnetic treatment of stator and rotor irons for electric motors; preparation methods of sintered contact materials and their connecting performance testing. *Commencing date:* March. *Duration:* 2 weeks. *Qualifications:* Electrical engineers. English. *Deadline for application:* 3 months before commencing date. *Fees:* To be arranged.

*Organizer:* Instytut Elektrotechniki  
Oddział Technologii i Materialoznawstwa Elektrotechnicznego  
ul. M. Skłodowskiej-Curie 55/61  
50-950 Wrocław, Poland

### **Advanced computing methods**

*Short description:* UNIX, DBMS informix and advanced text processing (Tex); beginners, intermediate and advanced levels. *Commencing date:* March-July, September-December. *Duration:* 1-2 weeks. *Qualifications:* For basic courses: familiarity with basic computer concepts; for advanced levels: experience with any UNIX system at the user level. English, Polish. *Deadline for application:* 2 months before commencing date. *Fees:* To be arranged.

*Organizer:* Polish Academy of Sciences  
Systems Research Institute  
Newelska 6  
01-447 Warsaw, Poland

### **Non-destructive testing of materials**

*Short description:* Theory, methodology, and practice of materials evaluation using ultrasonic, acoustic emission and radiographic methods; courses on various levels, depending on request of participants. *Commencing date:* May-December. *Duration:* 2 weeks. *Qualifications:* Engineers or technicians. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 1,000.

*Organizers:* Polish Academy of Sciences  
Institute of Fundamental Technological Research  
Centre for Acousto-electronics  
and  
Biuro Pascal, Warsaw, Poland

*Contact address:*

Institute of Fundamental Technological Research  
Attn.: Jerzy Ramachowski  
ul. Świetokrzyska 21  
00-049 Warsaw, Poland

### **Numerical methods in modelling of technical systems**

*Short description:* Integration methods for ordinary and partial differential equations; interpolation and approximation methods; introduction to FEM, BIEM and examples.  
*Commencing date:* To be arranged. *Duration:* 2 weeks. *Qualifications:* University degree in engineering or equivalent. English, French. *Deadline for application:* —.  
*Fees:* To be arranged.

*Organizer:* Polish Academy of Sciences  
Institute of Fundamental Technological Research  
Attn.: Jacek F. Macynski  
ul. Swietokrzyska 21  
00-049 Warsaw, Poland

### **Ultrasonic material testing**

*Short description:* Physics of ultrasonic testing; flaw detection; flaw sizing; material state characterization; computer-aided registration and analysis of testing results. *Commencing date:* May, October. *Duration:* 2 weeks. *Qualifications:* Degree in physics or engineering. English, German. *Deadline for application:* 3 months before commencing date. *Fees:* To be arranged.

*Organizer:* Polish Academy of Sciences  
Institute of Fundamental Technological Research  
ul. Swietokrzyska 21  
00-049 Warsaw, Poland

### **Rope testing using Polish defectographs**

*Short description:* Theoretical rudiments of magnetic defectoscopy; equipment for steel wire rope testing; methods for testing and rope wear calculation; rope testing on various installations. *Commencing date:* To be arranged. *Duration:* One week. *Qualifications:* Degree in engineering. English, French, German. *Deadline for application:* 6 weeks before commencing date. *Fees:* To be arranged.

*Organizer:* Stanislaw Staszic University of Mining and Metallurgy  
Interbranch Laboratory for Wire Rope Testing and Rope  
Transport Equipment  
Al. Mickiewicza 30  
30-059 Krakow, Poland

### **Explosion and control of industrial dusts**

*Short description:* Properties of dusts, kinetics of chemical reactions, limits, ignition, flame propagation, explosion, detonation, blast waves, evaluation of explosive parameters; prevention, protection and suppression of explosion. *Commencing date:* April-June. *Duration:* 3 days. *Qualifications:* University degree in mechanical or chemical engineering. English, Polish. *Deadline for application:* January. *Fees:* \$US 500.

*Organizer:* Warsaw University of Technology  
Institute of Heat Engineering  
Attn.: Piotr Wolanski  
ul. Nowowiejska 25  
00-665 Warsaw, Poland

### **Automatic assembly systems**

*Short description:* Rigid and flexible automatic and mechanized assembly systems for mechanical and electrotechnical subassemblies and products; standard assembly equip-

ment: new assembly processes; handling systems with manipulators and robots for manufacturing, assembly, plating, painting and storage. *Commencing date:* May. *Duration:* 2 weeks. *Qualifications:* University degree in mechanical engineering. *English.* *Deadline for application:* 8 months before commencing date. *Fees:* \$US 2,000.

*Organizer:* ICICM S.A.  
Sos. Oltenitei 103, sector 4  
P.O. Box 75651  
Bucharest, Romania

#### **Mechanical transmissions**

*Short description:* Mechanical transmissions (reducers, speed variators, gear boxes); machine components; magnetic power breaks; fitting electro-valves; tribology; noise and vibration research; test stands. *Commencing date:* March. *Duration:* 2 weeks. *Qualifications:* University degree in mechanics. *English.* *Deadline for application:* 6 months before commencing date. *Fees:* \$US 1,200.

*Organizer:* ICICM S.A.  
Sos. Oltenitei 103, sector 4  
P.O. Box 75651  
Bucharest, Romania

#### **Metal machining systems**

*Short description:* Electrodischarge, electrochemical, laser, ultrasonics and plasma machining technologies; technique of very high hydrostatic pressure processing. *Commencing date:* March. *Duration:* 2 weeks. *Qualifications:* University degree in fine mechanics. *English.* *Deadline for application:* 6 months before commencing date. *Fees:* \$US 2,000.

*Organizer:* ICICM S.A.  
Sos. Oltenitei 103, sector 4  
P.O. Box 75651  
Bucharest, Romania

#### **Protection anticorrosive par peinture**

*Brève description :* Technologie de protection anticorrosive et de finissage des surfaces métalliques par peinture, pour des climats tropicaux; préparation de la surface du support avant peinture; technologies d'insonorisation à mastic; applications dans les laboratoires de recherche et dans l'atelier de microproduction à l'aide des équipements type pistolet à pulvérisation pneumatique, airless, robots de peinture. *Début du cours :* Mai. *Durée :* 2 semaines. *Qualifications :* Etudes supérieures techniques (chimie ou mécanique). *Français.* *Date limite d'inscription :* 6 mois avant le début du cours. *Droits d'inscription :* \$US 1 200.

*Organisateur :* ICICM S.A.  
Sos. Oltenitei 103, sector 4  
B.P. 75651  
Bucarest, Roumanie

#### **Quality engineering**

*Short description:* Diagnosis of technological lines and systems, reliability of control systems; independent or integrated quality control technologies; manufacturing capability testing; product quality; application of control automata, computer-aided control

equipment, test stands. *Commencing date:* April. *Duration:* 2 weeks. *Qualifications:* Degree from a technical university. English. *Deadline for application:* 7 months before commencing date. *Fees:* \$US 1,200.

*Organizer:* ICICM S.A.  
Sos. Oltenitei 103, sector 4  
P.O. Box 75651  
Bucharest, Romania

### **Revêtements métalliques**

*Brève description :* Technologies et installations pour les dépôts métalliques; électrochimiques et chimiques; préparation du support métallique; neutralisation des eaux résiduaires; récupération des métaux; applications dans les laboratoires de recherche et dans l'atelier; microproduction des dépôts métalliques décoratifs et anticorrosifs; étude métallographique et essai du support métallique pour la protection métallique. *Début du cours :* Mai. *Durée :* 2 semaines. *Qualifications :* Etudes supérieures en chimie, électrochimie ou mécanique. Français. *Date limite d'inscription :* 6 mois avant le début du cours. *Droits d'inscription :* \$US 1 200.

*Organisateur :* ICICM S.A.  
Sos. Oltenitei 103, sector 4  
B.P. 75651  
Bucarest, Roumanie

### **Maintenance management**

*Short description:* Advanced techniques in maintenance management; reduction of downtime; minimizing costs and raising productivity. *Commencing date:* To be arranged. *Duration:* 2 weeks. *Qualifications:* Maintenance and production engineers. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 1,200.

*Organizer:* PERCONS S.A.  
202 A. Splaiul Independentei  
Bucharest, Romania

### **Quality control and quality assurance**

*Short description:* Introduction of quality system; tasks and responsibilities of the personnel involved; quality manual; measurement of quality; quality cost analyses; quality system audit. *Commencing date:* To be arranged. *Duration:* 1 week. *Qualifications:* University degree. English. *Deadline for application:* 2 months before commencing date. *Fees:* \$US 500.

*Organizer:* PERCONS S.A.  
202 A. Splaiul Independentei  
Bucharest, Romania

### **Information industrielle, technologie et promotion de la PME/PMI**

*Brève description :* Information industrielle comme élément essentiel à intégrer dans la dynamique de la promotion de la PME/PMI. *Début du cours :* Février. *Durée :* 1 semaine. *Qualifications :* Qualifications professionnelles. Français. *Date limite d'inscription :* Janvier. *Droits d'inscription :* A arranger.

*Organisateur :* Société nationale d'études et de promotion industrielle (SONEPI)  
Avenue Bourguiba  
B.P. 100  
Dakar, Sénégal

### **Maintenance industrielle**

*Brève description* : L'importance et l'impact de la maintenance industrielle dans la gestion des normes de qualité. *Début du cours* : Juin. *Durée* : 1 semaine. *Qualifications* : Ingénieurs industriels, responsables de production des entreprises. Français. *Date limite d'inscription* : Avril. *Droits d'inscription* : A arranger.

*Organisateur* : Société nationale d'études et de promotion industrielle (SONEPI)  
Avenue Bourguiba  
B.P. 100  
Dakar, Sénégal

### **Normes de qualité**

*Brève description* : Amélioration des produits et des prestations de services à l'extérieur de l'entreprise; résolution des problèmes rencontrés par les entreprises et faisant leur compétitivité. *Début du cours* : Avril. *Durée* : 1 semaine. *Qualifications* : Dirigeants d'entreprises responsables de la production. Français. *Date limite d'inscription* : Février. *Droits d'inscription* : A arranger.

*Organisateur* : Société nationale d'études et de promotion industrielle  
(SONEPI)  
Avenue Bourguiba  
B.P. 100  
Dakar, Sénégal

### **Essential functions of managers**

*Short description*: Concept of management; managerial process and management functions: planning, organizing, leadership and control. *Commencing date*: June. *Duration*: 1 week. *Qualifications*: University degree with 5 years of managerial experience. Arabic. *Deadline for application*: May. *Fees*: None.

*Organizer*: Management Development and Productivity Centre  
P.O. Box 5244  
Damascus, Syrian Arab Republic

### **Network planning**

*Short description*: Project study and network building; network analysis; computing time indices; network rationalization. *Commencing date*: November. *Duration*: 1 week. *Qualifications*: University degree in economics, engineering or related field, with 2 years of experience in project planning and execution. Arabic. *Deadline for application*: October. *Fees*: None.

*Organizer*: Management Development and Productivity Centre  
P.O. Box 5244  
Damascus, Syrian Arab Republic

### **Productivity management**

*Short description*: Basic concepts of production and productivity; impact of work and production problems on company goals; productivity management; productivity measurement and increase; developed countries' experience in productivity management; role of data systems and computers in productivity management. *Commencing date*: May. *Duration*: 1 week. *Qualifications*: University degree with 5 years of experience in production or technical management. Arabic. *Deadline for application*: March. *Fees*: None.



**Organizer:** Management Development and Productivity Centre  
P.O. Box 5244  
Damascus, Syrian Arab Republic

### **Management**

**Short description:** Short courses on: management of change and conflict in organization; AIT-VC Berkeley strategic management programme for Asia-Pacific managers; international marketing management; HRD skills for functional managers; advanced management programme for Asia-Pacific managers; human resource management; information technology and management; cross-cultural management; manufacturing resource planning and just-in-time manufacturing management; industrial robotics; computer-integrated manufacturing; productive plant operations management; rational use of energy. *Commencing date:* February-October. *Duration:* 1-2 weeks. *Qualifications:* University degree with related work experience. English. *Deadline for application:* 6 weeks before commencing date. *Fees:* \$US 700-2,700.

**Organizer:** Director  
Continuing Education Center  
Asian Institute of Technology  
G.P.O. Box 2754  
Bangkok 10501, Thailand

### **Management tools and techniques to improve productivity**

**Short description:** Short courses on: quality of working life; quality control; human resource management; training of trainers; personnel productivity improvement; working capital management; productivity improvement in small- and medium-scale industries; productivity measurement and assessment; work study; industrial engineering and organizational management tools and techniques to improve productivity. *Commencing date:* Throughout the year. *Duration:* 3-5 days. *Qualifications:* Middle and top managers, experts. Turkish. *Deadline for application:* —. *Fees:* To be arranged.

**Organizer:** National Productivity Centre of Turkey  
Güvenevler, Gelibolu Sokak 5  
06690 Kavaklıdere  
Ankara, Turkey

### **Study tour for decision makers in the cement industry**

**Short description:** Foster cooperation between developing countries' cement industries; introduce participants to Turkish capacity and technical availabilities; exchange of information and ideas among participants and Turkish colleagues in respective plants. *Commencing date:* June, September. *Duration:* 2 weeks. *Qualifications:* Senior development planners, policy and decision makers in the cement industry or in a ministry/organization responsible for the development of the cement industry. English. *Deadline for application:* 3 months before commencing date. *Fees:* To be arranged.

**Organizer:** Turkish Cement Manufacturers' Association  
P.K. 2  
Bakanlıklar, Ankara, Turkey

**Venue:** Cement Research and Development Centre of the Turkish Cement Manufacturers' Association, cement plants and industries related to the cement industry.

### **Supervision**

*Short description:* Short courses on: principles and practice of supervision; train the trainer; management development. *Commencing date:* To be arranged. *Duration:* 5 days.

*Qualifications:* English. *Deadline for application:* One month before commencing date. *Fees:* \$Z 950-1,270.

*Organizer:* Zimbabwe Institute of Management  
P.O. Box 3733  
Harare, Zimbabwe

### **Chapter III. Training opportunities offered by UNIDO**

UNIDO organizes group-training programmes for technical and managerial personnel in industry and industrial institutions in developing countries, in cooperation with Governments, firms and organizations having specialized knowledge and experience in a particular field. The training offered includes in-plant group-training programmes, which last from two to five months, and seminars and other group-training programmes, lasting for several weeks.

The objectives of the in-plant group-training programmes are to furnish the participants with intensive practical experience in a relatively short time and to upgrade their theoretical knowledge. The programmes are monitored by experts and usually include four elements: a theoretical introduction, lectures, in-plant training and study tours. During an evaluation session at the end of each programme, participants assess the value and applicability of their newly acquired skills and knowledge in the light of conditions in their home country. Seminars and other group-training programmes have the same objectives: they offer theoretical instruction and, to the extent feasible, practical work.

This chapter contains UNIDO training activities scheduled for 1993, their implementation being subject to the availability of funds. For each training event it is indicated whether the programme is regional or interregional, as well as the language in which it will be conducted; participants must be proficient in that language in order to derive maximum benefit from the programme.

Formal applications should be submitted to UNIDO through appropriate government channels and UNDP resident representatives only after the official invitation requesting nomination of candidates has been received. Apart from that, however, Governments are requested to notify UNIDO as early as possible of their interest in participating, and any queries regarding these programmes should reach UNIDO as far in advance as possible.

The general requirements for admission are a university degree or equivalent and several years of practical experience in the particular field.

Further information may be obtained from:

Industrial Human Resource Development Branch  
Department of Industrial Operations  
United Nations Industrial Development Organization  
P.O. Box 300  
A-1400 Vienna, Austria

### Chapitre III. Possibilités de formation offertes par l'ONUDI

L'ONUDI organise, en coopération avec les gouvernements des pays hôtes et avec le concours d'entreprises industrielles et d'institutions spécialisées dans les domaines considérés, des stages de formation en groupe à l'intention du personnel technique et des cadres de gestion des entreprises et instituts industriels des pays en développement. La formation proposée comprend des stages de formation collective en entreprise, qui durent de deux à cinq mois, et des séminaires ou autres stages de formation collective, qui durent plusieurs semaines.

Les stages de formation collective en entreprise ont pour objectifs de permettre aux participants d'acquérir, dans un laps de temps relativement court, une solide expérience pratique et de parfaire leurs connaissances théoriques. Ils sont dirigés par des experts et comprennent en général quatre parties, à savoir une introduction théorique, des conférences, une formation pratique dans des entreprises et des visites d'établissements. Tous les stages se terminent par une session d'évaluation au cours de laquelle les participants évaluent l'intérêt et la valeur pratique des compétences et des connaissances qu'ils viennent d'acquérir à la lumière des conditions existant dans leurs pays d'origine. Les séminaires et autres stages de formation collective répondent aux mêmes objectifs et comportent une formation théorique et, dans la mesure du possible, des travaux pratiques.

Le présent chapitre mentionne toutes les activités de formation de l'ONUDI prévues pour 1993 sous réserve que l'ONUDI dispose des fonds nécessaires à leur exécution. Les programmes sont organisés sur une base régionale ou interrégionale; ceci est clairement indiqué pour chacun des programmes figurant dans la liste, de même que la langue dans laquelle il se déroulera; il est essentiel que les participants maîtrisent cette langue pour retirer le maximum de bénéfice du programme.

Les candidatures ne doivent être présentées par l'intermédiaire des services officiels compétents et du représentant résident du PNUD qu'après réception de l'invitation officielle demandant l'envoi de candidatures. Les gouvernements sont en outre priés de faire savoir le plus rapidement possible à l'ONUDI s'ils envisagent de présenter des candidats à tel ou tel stage. Toute demande d'information concernant les programmes doit parvenir à l'ONUDI le plus tôt possible.

Les conditions générales d'admission sont les suivantes : être titulaire d'un diplôme universitaire (ou l'équivalent) et justifier de plusieurs années d'expérience dans le domaine sur lequel porte la formation.

De plus amples renseignements peuvent être obtenus à l'adresse suivante :

Service de la mise en valeur des ressources humaines pour l'industrie  
Département des opérations industrielles  
Organisation des Nations Unies pour le développement industriel  
B.P. 300  
A-1400 Vienne, Autriche

### **Capítulo III. Oportunidades de capacitación ofrecidas por la ONUDI**

La ONUDI, con la colaboración de diversos gobiernos así como empresas y organizaciones poseedoras de experiencia y conocimientos especializados en determinadas esferas, organiza programas de capacitación colectiva destinados a personal administrativo y técnico de categoría superior de la industria y las instituciones industriales de países en desarrollo. La capacitación ofrecida incluye programas de capacitación colectiva en el trabajo, que duran de dos a cinco meses, y seminarios y otros programas de capacitación colectiva, de varias semanas de duración.

Los objetivos de los programas de capacitación colectiva en el trabajo consisten en dar a los participantes, en un espacio de tiempo relativamente corto, la posibilidad de adquirir experiencia práctica intensiva y de ampliar sus conocimientos teóricos. Los programas son supervisados por expertos y, en general, constan de cuatro elementos: una introducción teórica, conferencias, capacitación en el trabajo y viajes de estudio. En una sesión de evaluación que tiene lugar al final de cada programa, los participantes juzgan, a la luz de las circunstancias existentes en sus respectivos países, la utilidad y posibilidad de aplicación de la competencia y conocimientos recién adquiridos. Los seminarios y demás programas de capacitación colectiva tienen los mismos objetivos: ofrecen enseñanza teórica y, en la medida de lo posible, estudios prácticos.

Este capítulo contiene actividades de capacitación de la ONUDI previstas para 1993, si bien su realización está sujeta a la disponibilidad de fondos. Se indica, para cada actividad de capacitación ofrecida, si el programa tiene carácter regional o interregional, así como la lengua que se usará para dicha actividad; los participantes han de conocer bien esta lengua para sacar el máximo provecho del programa.

Las solicitudes oficiales de participación deben presentarse a la ONUDI a través de los conductos gubernamentales apropiados y por medio de los representantes residentes del PNUD, pero sólo después de recibida la invitación oficial en la que se pide la designación de candidatos. No obstante, se ruega a los gobiernos que notifiquen a la ONUDI, lo antes posible, su interés por participar en estos programas; asimismo, cualquier pregunta concerniente a los programas debe ser recibida en la ONUDI con la mayor antelación posible.

Los requisitos generales de admisión son un título universitario (o su equivalente) y varios años de experiencia práctica en la esfera respectiva.

Puede obtenerse información más amplia escribiendo a:

Subdivisión de Perfeccionamiento de Recursos Humanos Industriales  
Departamento de Operaciones Industriales  
Organización de las Naciones Unidas para el Desarrollo Industrial  
P.O. Box 300  
A-1400 Viena, Austria

## JANUARY/JANVIER/ENERO

### Quality improvement of industrial products

*Short description:* Fundamental concepts and techniques of quality control, quality assurance and inspection; standardization and implementation of quality management; in-plant study on process improvements; plant visits and study tour. *Duration:* 6 weeks. *Invited countries:* Interregional programme. *Qualifications:* Quality managers, production managers or managers having responsibility for quality improvement of manufactured products; at least 3 years of managerial experience. English.

*Host institution:* Association for Overseas Technical Scholarship  
Tokyo, Japan

### Rational use of energy-saving technologies in the pulp and paper and glass industries

*Short description:* Expand the awareness of government officials, managers, engineers and technicians of ASEAN countries of the rational use of energy saving technologies. *Duration:* 3 days for each seminar, one in the Philippines, one in Thailand. *Invited countries:* Philippines, Thailand. *Qualifications:* Top executives, middle-level managers, government officials, engineers and technicians of the pulp and paper and glass industries, people responsible for the production process and policies for energy conservation. English.

*Host institution:* Philippines Office of Energy Affairs  
Manila, Philippines

## FEBRUARY/FÉVRIER/FEBRERO

### State-of-the-art information technology developed by India

*Short description:* Selected heads of informatics centres from developing countries will be trained on NICNET, one of the largest government informatics networks among developing countries, and on a large number of databases and information systems developed by India in various sectors. *Duration:* 1 week. *Invited countries:* Regional programme for Africa and Asia. *Qualifications:* University degree; 5-7 years of experience in the field of technology information networks. English.

*Host institution:* National Informatics Centre  
New Delhi, India

## MARCH/MARS/MARZO

### Rehabilitation of railway equipment

*Short description:* Upgrading of the practical experience and theoretical knowledge of managers and engineers responsible for stock rehabilitation. *Duration:* 12 weeks.

*Invited countries:* Regional programme for Asia. *Qualifications:* Engineers in railway maintenance and repair. English.

*Host institution:* British Rail Engineering Ltd. (BREL)  
Derby, United Kingdom

*Venues:* Derby, United Kingdom  
Bangkok, Thailand

#### **Training in technology transfer negotiations**

*Short description:* Seminars/workshops to be conducted by a roving team of experts. Enhance the awareness of negotiators for the importance of technology transfer in the development process; characteristics of the technology market and the motivations of parties involved; legal foundations of contracting and contractual structures; range of issues and their implications which have to be considered at the stage of contract preparation and drafting, contract negotiation and contract implementation. Also addressed to potential trainers of negotiators with a view to establishing the conditions for self-sustained training capacities in the region. *Duration:* 4-5 days. *Invited countries:* National programmes in six selected African TIES countries, both, English-speaking and French-speaking. *Qualifications:* Government officials, project managers, entrepreneurs dealing with technology transfer acquisition, evaluation and negotiation; HRD managers and lecturers/trainers as potential trainers for technology transfer negotiations. English and French.

*Host institution:* To be identified at the national level. The African Regional Centre on Technology (ARCT) is the regional cooperating agency.

#### **Workshop on technology transfer negotiations**

*Short description:* Different types of technology transfer operations; preparation of tender documents, assessment and selection of technologies, drafting and negotiation of different types of contracts; training methods and techniques. *Duration:* 1 week. *Invited countries:* CESAG member countries (Benin, Burkina Faso, Côte d'Ivoire, Mali, Mauritania, Niger and Senegal). *Qualifications:* University degree; experience in management or development of entrepreneurial activities; experience in evaluation of technology transfer and analysis of industrial projects. French and English.

*Host institution:* Centre africain d'études supérieures en gestion (CESAG)  
Dakar, Senegal

### **APRIL/AVRIL/ABRIL**

#### **Cement industry technology**

*Short description:* Technical aspects of cement industry including feasibility studies, raw materials, production management technologies, quality control, maintenance, energy conservation, pollution and pollution control. *Duration:* 5 weeks. *Invited countries:* Interregional programme. *Qualifications:* Degree in chemical, mechanical, electrical or other relevant branch of engineering; 1-5 years of experience; employed in cement industry. English.

*Host institution:* Cement Research and Development Centre  
Ankara, Turkey

### **Design and manufacture of spare parts**

*Short description:* Theoretical and practical laboratory and in-plant training, study visits, presentation of papers and professional discussions, with emphasis on the identification of causes for worn parts and technologies for the production of spare parts. *Duration:* 10 weeks. *Invited countries:* Interregional programme. *Qualifications:* University degree or equivalent in foundry technology, metallurgy, mechanical engineering or related fields; employed in the foundry industry with 2-8 years of experience in the design or production of spare parts; between 25 and 40 years of age. Preference will be given to candidates who have supervisory responsibilities. English.

*Host institution:* Foundry Research Institute  
Krakow, Poland

### **Iron and steel industry**

*Short description:* Theoretical and practical training and study visits with emphasis on: individual practical training in basic oxygen furnaces and slab casting; hot and cold rolling mills operation, including finishing; blast furnace operations; hot rolling mill process control; quality control; industrial safety; electrical and mechanical maintenance. *Duration:* 12 weeks. *Invited countries:* Interregional programme. *Qualifications:* Degree in metallurgy, chemistry, mechanical or electrical engineering; 1-5 years of experience in one of the above-mentioned specializations within the iron and steel industry; between 25 and 35 years of age. English.

*Host institution:* Ereğli Iron and Steel Works  
Karadenizereğlisi, Turkey

## **MAY/MAI/MAYO**

### **Small-scale foundry operations for least developed countries**

*Short description:* Theoretical and practical training in small-scale foundry technology, study visits to foundries near Istanbul and Bursa. *Duration:* 8 weeks. *Invited countries:* Least developed and other selected countries. *Qualifications:* University degree or equivalent in foundry technology, metallurgy or chemical engineering; employed in the foundry industry, preferably in a supervisory position. Candidates with direct responsibilities for the planning and establishment of small-scale foundries in an industrial organization or relevant ministry, and who have worked in the foundry industry, are also qualified. All candidates should have up to 4 years of practical experience in the foundry industry. English.

*Host institution:* Marmara Research Centre  
Gebze-Kocaeli, Turkey

### **Training of trainers in development finance institutions**

*Short description:* Various phases of a project cycle: the entire process of training, e.g. systematic assessment of training needs, curriculum design and development, delivery of training courses, training methods and techniques. *Duration:* 5 weeks. *Invited countries:* Regional programme for Africa. *Qualifications:* University degree; middle- and senior-level trainers in development finance institutions; at least 1-2 years of experience as trainers. English.

*Host institution:* Centre for Financial Assistance to African Countries (FINAFRICA)  
Milan, Italy



## JUNE/JUIN/JUNIO

### Maintenance des installations portuaires

*Brève description :* Maintenance et gestion des ports; exposés théoriques et cas de démonstrations pratiques; visites suivies de discussions et d'échanges de vues professionnels.  
*Durée :* 4-5 semaines. *Pays invités :* Programme régional pour l'Afrique. *Qualifications :* Ingénieur gestionnaire et haut responsable technique de port justifiant au moins de 5 années d'expérience pratique dans la répartition des bateaux et dans la gestion et la maintenance des installations portuaires. Français.

*Organisme hôte :* Association de gestion des ports de l'Afrique de l'Ouest et du Centre (AGPAOC)  
Port autonome de Marseille, France

*Lieux :* Marseille, France  
Abidjan, Côte d'Ivoire  
Lagos, Nigéria

### Study tour in the cement industry

*Short description:* Technical aspects of cement industry, raw materials, production management technologies, quality control, maintenance and energy conservation. *Duration:* 3 weeks. *Invited countries:* Interregional programme. *Qualifications:* Senior development planners, policy and decision makers in the cement industry or in a ministry/organization responsible for the development of the cement industry. English.

*Host institution:* Cement Research and Development Centre  
Ankara, Turkey

## AUGUST/AOÛT/AGOSTO

### Fruit and vegetable processing

*Short description:* Various subjects of fruit and vegetable technology; fruit and vegetable processing operations: mechanical processes, pasteurization, sterilization, canning, drying, cooling, freezing, packaging; quality control, biochemistry and microbiology of fruits and vegetables, marketing and economics. *Duration:* 6 weeks. *Invited countries:* Interregional programme. *Qualifications:* University or equivalent academic background in food technology, nutrition, chemical or agricultural engineering; 1-5 years of experience. English.

*Host institution:* Marmara Scientific Industrial Research Institute  
Gebze-Koacaeli, Turkey

## SEPTEMBER/SEPTEMBRE/SEPTIEMBRE

### Entretien du matériel ferroviaire

*Brève description :* Le programme portera essentiellement sur les problèmes liés à l'achat et au stockage du matériel, les activités dans les ateliers, la surveillance des travaux, l'utilisation d'ordinateurs, la formation pratique de personnel et les principes éco-

nomiques fondamentaux de l'entretien et de la réparation du matériel roulant; visites d'étude dans des entreprises spécialisées dans la fabrication de matériel ferroviaire. *Durée* : 8 semaines. *Pays invités* : Programme régional pour l'Afrique. *Qualifications* : Diplôme d'ingénieur (ou équivalent), ayant une expérience pratique de 2 ans au moins et occupant un poste de cadre technique ou administratif. Préférence sera donnée aux candidats avec expérience pratique de l'entretien et de la réparation du matériel roulant de chemin de fer. Français.

*Organismes hôtes* : Société nationale des chemins de fer belges (SNCB)  
Bruxelles, Belgique  
Union africaine des chemins de fer (UAC)  
Afrique

*Lieux* : Belgique  
Cameroun

#### **Utilization of medicinal and aromatic plants in pharmaceutical industry**

*Short description*: Upgrading of knowledge and skills in industrial processing of medicinal herbs. *Duration*: 3 weeks. *Invited countries*: Interregional programme. *Qualifications*: Degree in pharmacy, chemistry or chemical engineering; at least 2 years of experience in the field of medicinal and aromatic plants. English.

*Host institution*: Medicinal Plant Research Centre  
Eskishir, Turkey

### **OCTOBER/OCTOBRE/OCTUBRE**

#### **Advanced information technology applications and networks**

*Short description*: Selected heads of information/informatics centres from developing countries will be trained in the advancement of hardware and software applications related to teleinformatics, electronic mail systems and computer networks to establish on- and off-line linkages with UNIDO and other databases. *Duration*: 1 week. *Invited countries*: Selected developing countries. *Qualifications*: University degree; 5-7 years of experience in the field of industrial information. English.

*Host institution*: Institute for Automated Systems (IAS)  
Moscow, Russian Federation

#### **Management d'entreprises industrielles**

*Brève description* : Augmenter la qualification professionnelle des cadres en matière de gestion industrielle; développer chez des dirigeants d'entreprises industrielles l'aptitude à mettre en place dans leur entreprise un management adapté aux divers stades de la transition de l'économie planifiée à l'économie de marché; connaissances en matière de gestion de production, prise de décisions, règles de l'économie de marché. *Durée* : 3 semaines. *Pays invités* : Europe centrale et orientale; pays de la CEI. *Qualifications* : Cadres de niveau supérieur ou moyen appartenant à des entreprises industrielles, à des organismes de formation en gestion, de formation professionnelle ou à un centre de promotion ou d'assistance aux petites et moyennes industries. Français.

*Organisme hôte* : Institut supérieur de gestion  
Paris, France

### **Sugar (sugar-beet) production**

*Short description:* The programme will be carried out in sugar plants and in a sugar research institute and consists of theoretical and specialized practical in-plant training as well as study visits. It will deal with economic and technical aspects, including feasibility studies, raw material surveys, maintenance, production technologies and quality control. *Duration:* 8 weeks. *Invited countries:* Interregional programme. *Qualifications:* Degree in chemical, agricultural, mechanical or electrical engineering; at least 2 years of experience; presently employed in the sugar industry. English.

*Host institution:* Sugar Research Institute  
Ankara, Turkey

### **Textile manufacturing**

*Short description:* Steps from textile raw materials to the finished product; process and quality control; dyestuffs and finishing materials used in Turkey and comparison with materials used in participants' home country; printing techniques; environmental problems; effluent treatment. *Duration:* 3 weeks. *Invited countries:* Interregional programme. *Qualifications:* Degree in textile technology or chemical engineering; at least 2 years of practical experience in the field of textiles. English.

*Host institution:* SAGEM Sumerbank Holding  
Bursa, Turkey

## **NOVEMBER/NOVEMBRE/NOVIEMBRE**

### **Promotion and needs assessment on standardization and quality control**

*Short description:* The objective of this seminar is the promotion, among ASEAN countries, of the most important elements of standardization and quality control; develop awareness for and assess the needs to achieve competitive quality through standardization and quality control; ensure adequate application of ISO 9000 to be prepared for the export process. *Duration:* 1 week. *Invited countries:* Indonesia, Malaysia, Philippines, Singapore and Thailand. *Qualifications:* Top executives, middle-level managers, executive engineers of enterprises and government officials who are responsible for promoting and implementing standardization and quality control in the Philippines and other ASEAN countries. English.

*Host institution:* Philippine Standardization Association (PSA)  
Manila, Philippines

## **DATES NOT YET SPECIFIED/DATES NON ENCORE PRÉCISÉES/ FECHAS TODAVÍA NO DETERMINADAS**

### **Basic petrochemicals and production technologies**

*Short description:* Theoretical and practical training and study visits with emphasis on production management and production processes for pyrolysis for ethylene production, downstream petrochemical products, polyolefins, aromatic hydrocarbons etc.; product quality, plant safety, maintenance, environmental control and energy management. *Duration:* 6 weeks. *Invited countries:* Interregional programme. *Qualifications:* Degree in chemical, petrochemical or related engineering; 1-5 years of experience in the petrochemical industry; between 25 and 35 years of age. English.

*Host institution:* Training Centre of the Ministry of Petrochemical Industry  
Bucharest, Romania

### **Formation à la fonction maintenance**

*Brève description* : Dans le cadre de la deuxième Décennie pour le développement industriel de l'Afrique, la formation à la fonction maintenance est une priorité vu la faible disponibilité des machines, le taux insuffisant de productivité et la dégradation prématurée des équipements. *Durée* : 4 semaines. *Pays invités* : Programme régional pour les pays africains francophones. *Qualifications* : Ingénieurs et techniciens supérieurs responsables de la fonction maintenance des différents sous-secteurs de l'industrie des PME. Français.

*Organisme hôte* : Ecole Mohammadia d'ingénieurs  
Rabat, Agdal, Maroc

### **Formation des formateurs dans les institutions de financement dans le secteur des petites et moyennes entreprises**

*Brève description* : Formation des formateurs; évaluer les besoins en formation; établir les objectifs; élaborer des programmes en fonction de l'analyse des objectifs et des besoins; mettre en œuvre et suivre les programmes de formation; en évaluer l'incidence. *Durée* : —. *Pays invités* : Programme sous-régional pour l'Afrique. *Qualifications* : Cadres supérieurs des banques de développement, des institutions de financement, des offices de promotion chargés de l'exécution et de l'évaluation des programmes de formation. Français.

*Organisme hôte* : Union douanière et économique de l'Afrique centrale  
Bangui, République centrafricaine

### **Industrial planning and development**

*Short description*: Macro-planning and strategy-oriented course; long-term development issues of industrialization, industrial strategies and planning, industrial incentives and promotional policies, issues of technology transfer and labour employment, issues of financing industrial development, project preparation, project appraisal; field trip and workshop. *Duration*: 4 weeks. *Invited countries*: Regional programme for selected Asian countries. *Qualifications*: University degree or equivalent; at least 3 years of experience in industrial development; industrial development economists in government organizations and public institutions for industrial development and implementation; between 30 and 45 years of age. English.

*Host institution*: International Development Centre  
Tokyo, Japan

### **Utilisation des micro-ordinateurs dans la gestion et le management des petites et moyennes entreprises**

*Brève description* : Le programme envisage de former un noyau de responsables de gestion à l'utilisation de la micro-informatique et des logiciels. Il s'adresse aux chefs d'entreprise, directeurs financiers, créateurs d'entreprise, experts et conseils financiers, analystes financiers, formateurs et responsables de formation en gestion d'entreprise et analystes de dossiers de crédit dans les banques. *Durée* : 4 semaines. *Pays invités* : Programme interrégional. *Qualifications* : Diplôme universitaire ou diplôme équivalent; quelques années d'expérience pratique dans une institution financière ou dans une banque à un poste élevé. Français.

*Organisme hôte* : Agence pour la coopération technique, industrielle et économique  
(ACTIM)  
Paris, France

## **Training programme of the Technology Policy, Acquisition and Negotiation (TPAN) Unit**

The TPAN Unit of UNIDO is regularly organizing training programmes addressed to government officials, entrepreneurs and professionals in charge of conducting technology transfer negotiations or evaluating technology transfer agreements. They are arranged upon request of interested counterparts in developing countries and designed to meet specific needs of the target groups concerned.

Two examples should illustrate the different formats of workshops on technology transfer negotiations which UNIDO can offer:

### *A. Basic technology transfer workshop*

Duration: 3-4 days. Addressed to a mix of participants, i.e. officers of government institutions dealing with technology acquisition as well as enterprise managers and professionals.

#### Topics covered:

- The role of transfer of technology in the development process
- Technological infrastructure for development
- Technology market characteristics
- Structure and types of contracts
- Principles of contract drafting
- Payments in transfer of technology agreements
- Guarantees and warranties
- Technology transfer through joint ventures
- Success factors for technology transfer

### *B. Specialized workshop*

Duration: 1 week. Intensive training, focusing on the acquisition of equipments and processes for industrial projects.

#### Topics covered:

- General issues related to the technology transfer process; the characteristics of the technology market; proprietary nature of technology: patents, know-how and trade secrets
- Anatomy of an industrial project and possible forms of contracting, e.g. turnkey contracts, cost-reimbursable schemes; unpackaging; advantages and disadvantages of different types of contractual arrangements
- The bidding process; pre-qualification; bidding systems and procedures and explanation of cases; screening and evaluation of offers; bidding systems and international financing mechanisms; implications of financing schemes
- Contract structures and the negotiation process; meaning, content and implications of different contractual clauses (for example: obligations of the parties; bonds and guarantees; payments; possible forms of payment and respective assessment; price escalation formulas; claim procedures; penalties; resolution of disputes)
- The implementation of the project and its relation to the negotiation process; the project team; time and cost controls; expediting; commissioning and start-up procedures; management and post-contractual responsibility

## *Annex*

The National Placement and Supervising Agencies (NPSAs) listed below assist UNIDO in many ways throughout the execution of fellowships and study-tour programmes. They help in placing fellows and study-tour participants at training institutions indicated by UNIDO or in suggesting appropriate training institutions and arranging placement in the country of their residence. At the request of UNIDO, NPSAs provide administrative assistance before and during the training of UNIDO fellows or study-tour participants by arranging and reserving appropriate accommodation; by paying stipends or daily subsistence and other allowances, registration fees, tuition fees etc.; by meeting travellers at the airport or other point of arrival; by arranging and booking local transportation; by giving information on visa and vaccination requirements and assisting in obtaining visas; by arranging for interpretation/translation services, when requested; by informing UNIDO on the cost of accommodation, tuition fees, and on any other costs which may arise during the training; by providing information to trainees on the terms of medical insurance and providing assistance in the case of accident or illness; by giving any assistance fellows or study-tour participants may need with local authorities and, where possible, by arranging leisure time activities; and by informing UNIDO on all major changes or anticipated changes of conditions which may affect UNIDO fellows and study-tour participants staying in or planning to travel to their country.

NPSAs act as the focal point in the country of study where fellows and study-tour participants can turn for assistance in all matters during their training assignment.

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## *Annexe*

Les agences nationales de placement et de supervision dont la liste figure ci-dessous apportent leur concours à l'ONUDI de nombreuses façons pour l'exécution des programmes de bourses et de voyages d'étude. Ainsi, elles aident à placer des boursiers et des participants à des voyages d'étude dans les institutions de formation indiquées par l'ONUDI, ou encore elles recommandent des institutions appropriées et s'occupent du placement dans le pays où elles sont implantées. A la demande de l'ONUDI, ces agences fournissent une assistance administrative avant et pendant la formation des boursiers ou des participants à des voyages d'étude de l'ONUDI en assurant de multiples services: réservation d'un logement approprié; paiement des salaires ou indemnités journalières de subsistance et autres, des frais d'inscription, frais de scolarité, etc.; accueil des voyageurs à l'aéroport ou autres points d'arrivée; réservation des moyens de transport locaux; information sur les formalités nécessaires en matière de visas et de vaccinations et assistance pour obtenir les visas; organisation, sur demande, de services d'interprétation et de traduction; communication à l'ONUDI de renseignements sur le prix des logements, les frais de scolarité et toutes autres dépenses auxquelles pourrait donner lieu la formation; informations aux stagiaires sur les conditions de l'assurance médicale et assistance en cas d'accident ou de maladie; aide aux boursiers ou aux participants à des voyages d'étude pour leurs démarches éventuelles auprès des autorités locales et, dans la mesure du possible, organisation d'activités de loisirs; enfin, communication à l'ONUDI de tous les changements importants ou prévus des conditions intéressant les boursiers et les participants à des voyages d'étude qui séjournent dans leur pays ou qui comptent s'y rendre.

Les agences nationales de placement et de supervision constituent, dans le pays où se rendent les boursiers et les participants à des voyages d'étude, un centre de liaison où ceux-ci peuvent trouver une aide dans tous les domaines au cours de leur affectation.

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### *Anexo*

Los Organismos Nacionales de Colocación y Supervisión (ONCS) que más adelante se indican proporcionan asistencia a la ONUDI de muy diversas maneras durante la ejecución de los programas de becas y viajes de estudios. Tales organismos ayudan a colocar becarios y participantes en viajes de estudios en instituciones de capacitación indicadas por la ONUDI, o sugieren instituciones de capacitación apropiadas y disponen lo necesario para la colocación de los becarios en el país de residencia. A petición de la ONUDI, los ONCS proporcionan asistencia administrativa antes y durante la capacitación de los becarios o de los participantes en viajes de estudios de la Organización, y ello de la siguiente manera: haciendo las necesarias gestiones y las reservas del alojamiento adecuado; pagando estipendios o dietas y otros subsidios, derechos de inscripción, honorarios de enseñanza, etc.; ocupándose de recibir a los viajeros en el aeropuerto o en cualquier otro punto de llegada; organizando y reservando el transporte local; proporcionando información sobre requisitos de vacunación y visados y prestando ayuda para la obtención de estos últimos; organizando servicios de interpretación/traducción cuando tales servicios sean solicitados; informando a la ONUDI sobre el costo del alojamiento, los honorarios de enseñanza y sobre cualesquiera otros costos en que pueda incurrirse durante la capacitación; facilitando información a los capacitandos sobre las condiciones del seguro médico y proporcionándoles asistencia en caso de accidente o enfermedad; prestando a los becarios o a los participantes en viajes de estudios cualquier asistencia que puedan necesitar en relación con las autoridades locales y, cuando ello sea posible, organizando actividades recreativas; y, por último, informando a la ONUDI acerca de todos los cambios importantes, o de los cambios previstos, de las condiciones que puedan afectar a los becarios y a los participantes en viajes de estudios de la ONUDI que se encuentren en el país huésped o que proyecten trasladarse al mismo.

Los ONCS actúan como centro de coordinación en el país en que se cursen los estudios, y los becarios y participantes en viajes de estudios pueden dirigirse a ellos en solicitud de asistencia de todo tipo mientras dure su capacitación.

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