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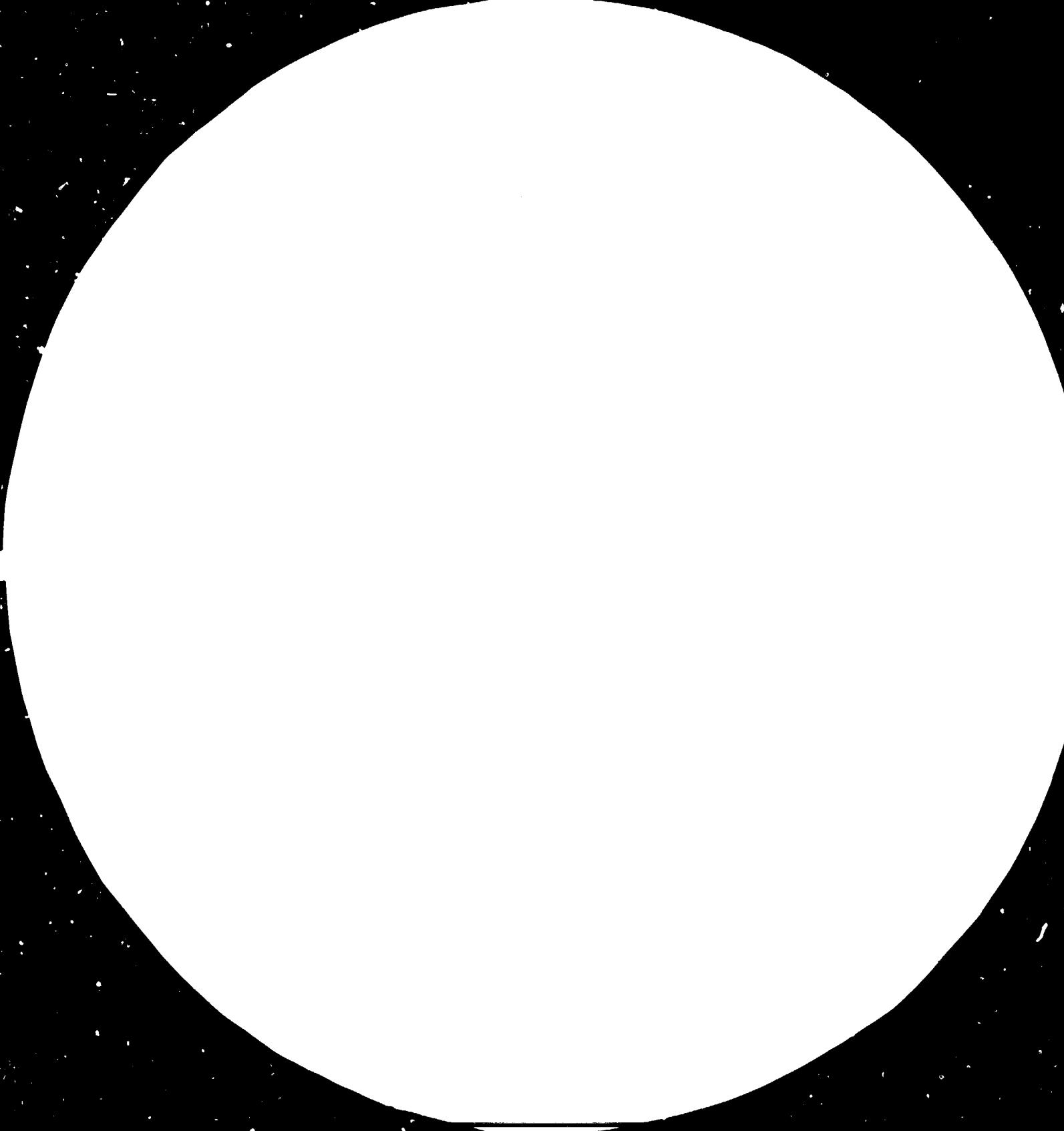
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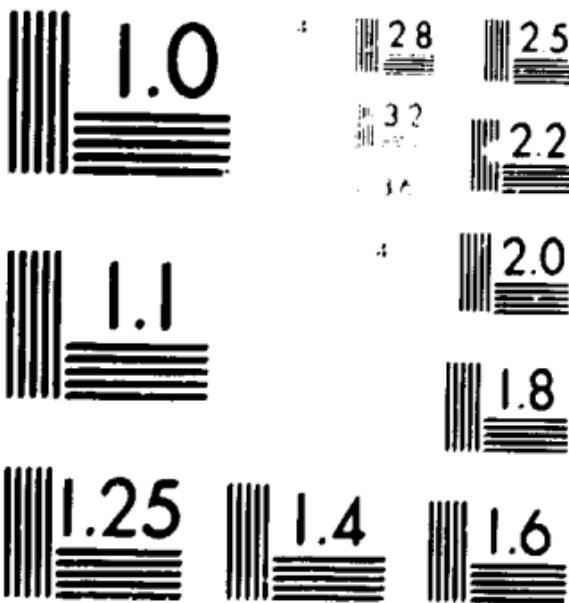
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### MICROCOPY RESOLUTION TEST CHART

PRINTED IN U.S.A. BY THE AMERICAN MICROSCOPE COMPANY

13073



Distr. GENERAL  
PI/90  
18 August 1983  
ENGLISH/FRENCH/SPANISH



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

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**Guide to Training Opportunities  
for Industrial Development** (Twelfth issue)

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**Aperçu des moyens de formation  
pour le développement industriel** (Douzième édition)

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**Repertorio de Oportunidades de Capacitación  
para el Desarrollo Industrial** (Duodécima edición)

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84

Training Branch—Division of Industrial Operations  
UNIDO  
P.O. Box 300, A-1400 Vienna, Austria

1263

**Please read preface carefully**

**Veuillez lire la préface attentivement**

**Por favor, leáse el prefacio detenidamente**

(i)

#### PREFACE

This compilation of industrial training opportunities for personnel from developing countries is the twelfth edition of a UNIDO publication that first appeared in 1972. It is based on the replies to a questionnaire soliciting information about training facilities, sent to Governments, organizations, institutions and other bodies concerned with industrial training. To reduce the size of this edition, entries listed in earlier issues have not been repeated without a specific request by the organizer to do so. Likewise, a single entry frequently covers several courses given by the same organization. Consequently, the current edition is smaller than earlier ones but contains considerably more information. Its approximately 500 entries cover more than 3,000 training courses. It should be emphasized that while these are but a fraction of the facilities existing globally for industrial training, they are possibilities that Governments and organizations believe are of particular interest to UNIDO.

Reflecting the increasing importance of technical co-operation among developing countries, the number of entries covering training opportunities in those countries continues to grow, and this increase is indicative of the attractiveness and benefit to personnel from developing countries of receiving training in circumstances that are similar to those in their home countries. Moreover, greater use of the facilities in developing countries helps to mitigate the difficulties that sometimes arise in arranging suitable training programmes in industrialized countries, where facilities are often strained.

The Guide is divided into four chapters: (1) training opportunities organized and offered by UNIDO; (2) training opportunities offered by institutions other than UNIDO classified according to A. industrial branches and B. industrial functions, excluding short-term courses of less than half-a-month duration; (3) other courses, and short-term courses that may be of interest as part of longer, more comprehensive training programmes; and (4) fields of training by host country. The training opportunities listed are suitable mainly for technical, managerial and administrative personnel, including entrepreneurs, at the level of engineers (or equivalent) and above, engaged in industry and its development. With a few exceptions, courses in the regular curricula of universities or similar institutions are not included, nor is information on ad hoc training in industry or elsewhere. Part-time courses are also not included.

Chapter (1) follows chronological order, while the entries in chapters (2) and (3) are listed by country in English alphabetical order.

UNIDO is not in a position to give further details on courses offered by other institutions. Readers desiring more information are asked to contact the institutions directly, using the mailing address given in each entry.

The training opportunities listed in the Guide are not limited to holders of UNIDO fellowships. Any qualified individual from a developing country who has not applied for or won a UNIDO fellowship may apply for a course or be nominated to attend. Such applications and nominations may go direct to the organizer of the course. Applicants for UNIDO fellowships, however, must be nominated by their Governments, and the nominations must be sent through the Resident Representative of the United Nations Development Programme (UNDP) to UNIDO. Further information on UNIDO training activities is available from the UNIDO Industrial Training Offer Programme, 1984.

Information on training facilities in a wide range of subjects may be requested from the secretariats of the Economic Commission for Africa (ECA), Addis Ababa; the Economic and Social Commission for Asia and the Pacific (ESCAP), Bangkok; the United Nations Office at Geneva; the United Nations Conference on Trade and Development (UNCTAD), Geneva; the International Labour Organisation (ILO), Geneva; the International Centre for Advanced Technical and Vocational Training in Turin, Italy; the International Maritime Organization (IMO), London; the Food and Agriculture Organization (FAO), Rome; the United Nations Educational, Scientific and Cultural Organization (UNESCO), Paris; the World Intellectual Property Organisation (WIPO), Geneva; and other international organizations.

It is hoped that this publication will continue to benefit those in developing countries who are in need of industrial training. The thirteenth edition of the Guide is scheduled to appear in late 1984 and will cover courses to be offered in 1985 and, to the extent possible, 1986.

## PREFACE

Le présent répertoire des possibilités de formation industrielle offertes aux cadres de pays en développement est la douzième édition d'un document de l'ONUDI publié pour la première fois en 1972. Il 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. Il est également fréquent qu'une rubrique englobe plusieurs stages mis sur pied par une même organisation. En conséquence, la présente édition, moins volumineuse que les précédentes, contient néanmoins beaucoup plus d'informations. Elle compte quelque 500 rubriques concernant plus de 3 000 stages de formation. Il convient de souligner que ces possibilités de formation ne représentent qu'une infime partie de celles qui sont offertes dans le monde entier mais que les organisations et les gouvernements estiment qu'elles présentent un intérêt particulier pour l'ONUDI.

Du fait de l'importance croissante de la coopération technique entre pays en développement, le nombre des possibilités de formation offertes dans ces pays ne cesse d'augmenter, ce qui témoigne des avantages que présente, pour leurs ressortissants, une formation dans des conditions proches de celles de leur pays d'origine. En outre, le recours accru aux moyens dont disposent les pays en développement contribue à atténuer les difficultés que soulève parfois l'organisation de stages de formation appropriés dans les pays industrialisés, où les services compétents ne sont souvent plus en mesure d'accepter un surcroît de travail dans ce domaine.

Le présent répertoire comprend quatre chapitres : 1) possibilités de formation offertes par l'ONUDI elle-même ; 2) possibilités de formation offertes par des institutions autres que l'ONUDI, classées par A. secteurs industriels et B. fonctions industrielles, à l'exception des stages de courte durée (moins de 15 jours) ; 3) stages qui n'entrent pas dans les catégories précitées et stages de courte durée qui peuvent utilement s'insérer dans des programmes de formation plus longs et plus vastes ; 4) domaines de formation, par pays. Les possibilités de formation énumérées sont destinées avant tout au personnel technique et administratif (ingénieurs ou équivalents et personnel de rang supérieur) et aux chefs d'entreprise qui travaillent dans l'industrie et participent à son développement. A quelques exceptions près, les matières figurant ordinairement au programme des universités et des établissements similaires n'ont pas été retenues, non plus que les renseignements concernant des programmes spéciaux de formation organisés notamment dans l'industrie. Il en a été de même pour les stages à temps partiel.

Pour le chapitre premier, on a adopté l'ordre chronologique, tandis que dans les chapitres II et III, les possibilités de formation énumérées sont classées dans l'ordre alphabétique anglais des pays hôtes.

Pour obtenir de plus amples renseignements sur les stages autres que ceux organisés par l'ONUDI elle-même, on se mettra en rapport directement avec les institutions intéressées ; leurs adresses figurent dans les rubriques consacrées aux stages qu'elles organisent.

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 le cas des personnes n'ayant pas sollicité ou obtenu une bourse des Nations Unies, les demandes ou les candidatures peuvent être présentées directement à l'organisateur du stage considéré. Les candidats à des bourses de l'ONUDI doivent être désignés par leurs gouvernements et leurs dossiers doivent être soumis à l'Organisation par l'intermédiaire du Programme des Nations Unies pour le développement (PNUD). Pour tous renseignements complémentaires sur les activités de formation de l'ONUDI, prière de consulter la brochure intitulée "Programme de formation industrielle proposé par l'ONUDI pour 1984".

Des renseignements sur les possibilités de formation dans de nombreux domaines peuvent être obtenus auprès du secrétariat de la Commission économique pour l'Afrique (CEA), à Addis-Abeba ; de la Commission économique et sociale pour l'Asie et le Pacifique (CESAP), à Bangkok ; de l'Office des Nations Unies à Genève ; de la Conférence des Nations Unies sur le commerce et le développement, (CNUCED) à Genève ; de l'Organisation internationale du travail (OIT), à Genève ; du Centre international de perfectionnement professionnel et technique de Turin (Italie) ; de l'Organisation maritime internationale (OMI), à Londres ; de l'Organisation des Nations Unies pour l'alimentation et l'agriculture (FAO), à Rome ; de l'Organisation des Nations Unies pour l'éducation, la science et la culture (UNESCO), à Paris ; de l'Organisation mondiale de la propriété intellectuelle (OMPI), à Genève ; et d'autres organisations internationales.

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 treizième édition du répertoire, qu'il est prévu de publier à la fin de 1984, indiquera les possibilités de formation offertes pour l'année 1985 et, dans la mesure du possible, pour l'année 1986.

#### PREFACIO

La presente compilación de oportunidades de capacitación industrial para personal de países en desarrollo constituye la décimo segundo edición de una publicación de la ONUDI que apareció por vez primera en 1972. Está basada en las respuestas a un cuestionario enviado a gobiernos, organizaciones e instituciones y otras entidades que se ocupan de capacitación industrial, solicitando información sobre servicios e instalaciones para este objeto. A fin de reducir las dimensiones de esta edición, no se ha repetido ninguna entrada que figurase en ediciones anteriores sin una solicitud expresa de la entidad organizadora. Asimismo, una sola entrada sirve, a menudo, para reseñar diversos cursos impartidos por la misma organización, lo que explica que la presente edición, pese a ser más pequeña, contenga bastante más información que las anteriores. El Repertorio contiene aproximadamente 500 entradas y facilita información sobre más de 3.000 cursos de capacitación. Si bien estas cifras no pasan de ser una fracción de las oportunidades de capacitación industrial existentes en todo el mundo, cabe señalar que se trata de oportunidades consideradas por los gobiernos y las organizaciones competentes como de particular interés para la ONUDI.

Como resultado de la creciente importancia de la cooperación técnica entre países en desarrollo, sigue en aumento el número de entradas sobre oportunidades de capacitación en esos países, lo que denota también el atractivo y los beneficios que presenta para personal de países en desarrollo el recibir capacitación en condiciones similares a las del propio país. Además, el recurrir en mayor medida a los servicios de esta índole indicados en los países en desarrollo contribuye a aliviar las dificultades que a veces entraña la organización de cursos de capacitación adecuados en los países industrializados, cuyos servicios están ya excesivamente recargados.

El Repertorio está dividido en cuatro capítulos: 1) oportunidades de capacitación organizada y ofrecida por la ONUDI; 2) oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI y clasificadas de la siguiente manera: A. ramas industriales y B. funciones industriales, que no sean cortos, de menos de medio mes de duración; 3) otros cursos, y cursos cortos que puedan ofrecer interés como componentes de programas de capacitación de contenido más amplio y de mayor duración y 4) esferas de capacitación facilitada por el país huésped. Las oportunidades de capacitación aquí compiladas corresponden principalmente a las necesidades del personal técnico, directivo y administrativo, incluidos los empresarios, a nivel de ingenieros (o equivalente), que realiza actividades relacionadas con la industria y su desarrollo. Con escasas excepciones, no se han incluido los cursos que forman parte de los planes de estudio ordinarios de universidades o instituciones similares, como tampoco la información relativa a la capacitación especial impartida en la industria o en otros centros. Tampoco se han incluido los cursos de tiempo parcial.

En el capítulo 1) se sigue el orden cronológico, mientras que en los capítulos 2) y 3), las entradas se presentan en el orden alfabético inglés de los países en que se ofrece la capacitación.

A la ONUDI no le es posible dar más detalles sobre los cursos que ofrecen otras instituciones. Se ruega a los lectores que deseen información adicional al respecto que se dirijan directamente a esas instituciones, cuyas direcciones figuran junto a cada entrada.

Las oportunidades de capacitación compiladas en el Repertorio no se ofrecen sólo a becarios de la ONUDI. Cualquier persona calificada de un país en desarrollo que no haya solicitado u obtenido una beca de la ONUDI puede solicitar su admisión o ser presentada como candidato para participar en uno de estos cursos. Esta solicitud y su candidatura pueden 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 del Programa de las Naciones Unidas para el Desarrollo (PNUD). En el Programa de Ofertas de Capacitación Industrial, de la ONUDI, para 1983, se ofrece más información sobre las actividades de capacitación de la ONUDI.

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Puede solicitarse información sobre servicios de capacitación, en un amplio espectro de materias, a las secretarías de la Comisión Económica para África (CEPA), Addis Abeba, la Comisión Económica y Social para Asia y el Pacífico (CESPAP), Bangkok, la Oficina de las Naciones Unidas en Ginebra, la Conferencia de las Naciones Unidas sobre Comercio y Desarrollo (UNCTAD), Ginebra, la Organización Internacional del Trabajo (OIT), el Centro Internacional de Perfeccionamiento Profesional y Técnico, de Turín (Italia), la Organización Marítima Internacional (OMI), Londres, la Organización de las Naciones Unidas para la Agricultura y la Alimentación (FAO), Roma, la Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura (UNESCO), París, la Organización Mundial de la Propiedad Intelectual (OMPI), Ginebra, y otras organizaciones internacionales.

Se espera que esta publicación siga beneficiando a aquellas personas de los países en desarrollo que requieran capacitación en la esfera industrial. La publicación de la décimo tercero edición de este Repertorio está prevista para finales de 1984; comprenderá los cursos que se ofrecerán en 1985 y, en la medida de lo posible, en 1986.

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CHAPTER 1: TRAINING OPPORTUNITIES OFFERED BY UNIDO  
CHAPITRE : 1 POSSIBILITES DE FORMATION OFFERTES PAR L'ONUDI  
CAPITULO 1: OPORTUNIDADES DE CAPACITACION OFRECIDAS POR LA ONUDI

<u>Field of study</u> <u>Sujet d'étude</u> <u>Materia de estudio</u>	<u>General description</u> <u>Description générale</u> <u>Descripción general</u>	<u>Venue and host institution</u> <u>Lieu et organisme hôte</u> <u>Lugar e institución huésped</u>	<u>Duration</u> <u>Durée</u> <u>Duración</u>	<u>Invited countries</u> <u>Pays invités</u> <u>Paises invitados</u>	<u>Qualifications</u>
<u>Language</u> <u>Langue</u> <u>Lengua</u>					
<b>JANUARY - JANVIER - ENERO</b>					
Energy efficiency	Participants from least developed countries will gain from the experience of another developing country and the advances achieved thus providing participants with more working knowledge on the various aspects of energy management and efficiency and equipping them with various tools and techniques in achieving fuel efficiency and in increasing energy productivity.	Technical Assistance Council (TAC) of the Philippines Bureau of Energy Utilization Productivity and Development Centre Manila Philippines	09/01-02/02	Interregional programme English	University degree in mechanical, electrical or chemical engineering (or equivalent) with at least two years of experience in plant or production engineering, or consultancy in energy management at the plant level. Preference will be given to candidates who could generate a "multiplier" effect, provided that such candidates meet the stipulated qualifications.
Maintenance industrielle	Organisation de la maintenance, pièces de rechange, diagnostiques de maintenance, documentation technique, ateliers de maintenance, disposition à prendre lors de l'achat de nouveaux équipements industriels, formation du personnel de maintenance, coûts de budgets de maintenance.	Centre Universitaire de Douala République Unie du Cameroun	09/01-27/01 et 20/02-03/03	Programme national République Unie du Cameroun Français	Ingénieurs/techniciens (chef de maintenance, chefs d'exploitation, chef de production, directeurs techniques, chefs d'entreprises).

Application of dyes and chemicals	The application of dyes and chemicals to textiles (pre-treatment, dyeing and finishing or printing and finishing of cellulosic and polyester fibres and blends.	UNIDO and the Government of Switzerland in corporation with companies Ciba-Geigy Ltd. and Sandoz Ltd. Basel, Switzerland	16/01-30/03	Interregional programme English	Secondary education. Sound practical experience in textile processing and optionally a degree from technical college, university or course attendance. Selection finalized: course complete.
Production management in manufacturing industry	Theory in production planning and control, industrial engineering, ergonomics, quality control in Japan, fundamental QC technique, cost control and procurement, motivation and training, corporate strategy, problem solving, systems engineering. Practical in-plant training, study tour and plant visits.	The Association for Overseas Technical Scholarship (AOTS) Tokyo, Japan	19/01-14/03	Interregional programme English	Factory managers, production managers or other personnel having production management responsibilities.
<b>FEBRUARY - FEVRIER - FEBRERO</b>					
Production of machine components in metalworking industry	Planning, executing and supervising of the manufacturing processes of machine parts; design of jigs and mixtures, design and use of cutting tools; operation and maintenance, quality control and economics of metalworking operations, etc. Practical studies in laboratories and in-plant training in metalworking industry.	Lumumba University Moscow Union of Soviet Socialist Republics	06/02-01/06	Interregional programme English	A degree in mechanical engineering (or equivalent) with at least three years of practical experience in a supervisory or managerial capacity in metalworking, particularly machine tool operations, planning, manufacture and maintenance and repair.

MARCH - MARS - MARZO

Technology and equipment in electric welding	Technology and equipment for electric fusion, resistance, welding processes, modern welding, arc power resources, welding material and structures, constructive technological designing of welded material, etc. In-plant training in plants manufacturing electric welding equipment, metal-working industry as well as laboratories.	E.O. Paton Electric Welding Institute Kiev Ukrainian Soviet Socialist Republic	05/03- 22/06	Interregional programme English	A university degree (or equivalent) in electrical, mechanical, metallurgical or structural engineering with at least 3 years of practical experience related to electric welding.
Technology and training methodology in diesel engines	Practical know-how and experience in technological, economical and managerial aspects on the utilization; operation and maintenance, design and production of diesel engines and spare parts. In-plant training in the production plants on manufacturing of diesel engines and spare parts or on maintenance operations (with training methodology aspects).	TES-Institute Prague Czechoslovakia	13/03- 07/06	Interregional programme English	A university level degree in mechanical engineering (or equivalent) and a few years of practical experience in a responsible capacity in state-owned or private enterprise in operation and/or overall maintenance and repair of diesel engines, design or production of such engines or spare parts.
Techniques de conception et de création de modèles dans l'industrie du cuir et du soulier	Le programme a pour objectif d'augmenter les connaissances professionnelles du personnel de conception des entreprises industrielles, centres de formation, instituts de recherches bureaux de consultance travaillant dans l'industrie du cuir et du soulier. Il sera suivie divisé en une partie commune qui sera par tous les participants qui seront ensuite répartis soit dans le groupe production de souliers, soit dans le groupe production de produits en cuir. Le programme comprendra des exposés, discussions, études de cas, travaux de laboratoire, visites et stages en entreprise.	ONUDI en collaboration avec PISIE (Politecnico Internazionale per la Sviluppo Industriale et Economico) JESI Ancona Italie	14/03- 10/06	Programme interrégional Français	Education secondaire au moins , complété par un cours de spécialisation dans le domaine du cuir ou des produits en cuir. Trois années d'expérience dans l'industrie du cuir, dans un centre de recherche ou dans un bureau d'études en tant que personnel de conception, d'encadrement ou de formation.

Iron and steel industry technology	Theory in technological process of equipment, economic planning, management, maintenance. In-plant training in foundry, blast furnace, sintering plant, open hearth plant, rolling mills, refractory maintenance.	Zaporoz Steel Zaporozhe Ukrainian Soviet Socialist Republic	23/03 18/07	Interregional programme English	Metallurgical, chemical, electrical, mechanical engineering degree and directly engaged in one of the production activities. Technical fields of iron and steel industry. Practical experience should not exceed three years.
Repair and maintenance of railroad equipment	Theoretical and practical training in fundamental factors affecting operation of diesel and electric motive power. Basic economic principles in maintenance of rolling stock, organization of maintenance schedules, repair and maintenance (workshop control), control of quality, purchasing of spares and stores organization, accounting methods, machinery, equipment and method of repair in maintenance workshops, application of computers, training methods.	British Rail Engineering Ltd., United Kingdom, in co-operation with UNIDO and the Union of African Railways United Kingdom of Great Britain and Northern Ireland	26/03- 08/06	Regional programme for Africa English	Diploma in engineering or equivalent with a minimum of two years' practical experience, preferably in the field of rolling stock maintenance and repair. Candidates should currently hold engineering or administrative posts.
Estructuras de madera	Destinado a fomentar la utilización de la madera en los países de América Central, mostrando a los arquitectos y a los ingenieros a cargo de obras cómo puede utilizarse la madera para construir estructuras económicas, seguras, firmes y eficaces. Se espera que el curso fomente el empleo de madera en la construcción, dando lugar al desarrollo de las industrias primarias y secundarias de elaboración de la madera, cree empleos, ayude al desarrollo rural y permita ahorrar divisas.	Instituto Tecnológico de Costa Rica Ministerio de Obras Públicas, SECOPT Cartago Costa Rica Tegucigalpa Honduras	Marzo tres semanas (dos semanas en Costa Rica y una en Honduras)	Regional América Latina Español	Ingenieros plenamente calificados, que participen en tareas de especificación y diseño en esferas tales como programas estatales de viviendas, escuelas, hospitales/clínicas y otros edificios institucionales, así como en obras públicas. Los candidatos deben participar activamente en estas esferas y, de ser posible, deben ocupar posiciones que les permitan influir en la formulación o interpretación de reglamentaciones y códigos de normas prácticas sobre edificación.

Iron and steel industry	The programme will cover iron-making processes, steel-making processes, hot and cold rolling processes, quality control activities, organization and management of steel plant maintenance.	Eregli Iron and Steel Works Eregli Turkey	March-June	Interregional programme  English	University degree or equivalent academic background in chemical, metallurgical, mechanical or electrical engineering with one to five years practical experience in iron and steel industry.
<b>APRIL - AVRIL - ABRIL</b>					
Technology of mineral fertilizer production	Technology and planning of mineral fertilizer production. Raw material, present development prospects of world production of mineral fertilizers. Key processes and operations and their economic evaluation. Scientific research work on fertilizer production with in-plant training in nitrogen fertilizer or phosphate fertilizer plants.	Ministry of Chemical Industry Moscow Union of Soviet Socialist Republics	01/04- 29/06	Interregional programme  English	A university degree (or equivalent) in chemical engineering or chemistry and at least 3 years of practical experience in a supervisory or managerial capacity in the fertilizer industry.
Expansion of small industrial enterprises	Seminar for women entrepreneurs on managerial and technical aspects of expansion of small industrial enterprises. The programme will focus on the strong and weak points of the selected industries; provide theoretical training in a scope of the basic principles in management of small industrial enterprises; provide actual on-the-spot practical training on technical aspects in the relevant factories; formulate action programme for expansion of participants' enterprises; monitor results and feed them back to the next seminar.	UNIDO in co-operation with the International Research and Training Institute for the Advancement of Women (INSTRAW) at the SERUJI Institute Dar-es-Salaam United Republic of Tanzania	02/04- 30/06	National programme United Republic of Tanzania  English	Women proprietors/managers of privately and publicly owned small enterprises belonging to one of the four selected groups of industries, i.e. leather garment manufacturing, textile garment manufacturing, ceramic (redware and whiteware), food processing/preservation.

Industrie du ciment	Le stage est consacré essentiellement aux aspects économiques et techniques de l'industrie du ciment ; son programme comprend notamment les sujets suivants : études de faisabilité, enquêtes sur les matières premières, gestion, entretien, techniques de production, contrôle de la qualité, conservation de l'énergie et mesures antipollution.	Direction générale de l'industrie du ciment Ankara Turquie	05/04-24/05	Programme interrégional Français	Formation universitaire ou une formation de niveau équivalent du chimie industrielle, mécanique appliquée ou électrotechnique ou dans un autre domaine technique avec un à quatre ans d'expérience pratique acquise dans l'industrie du ciment.
Grain milling and storage - technology trainers training	Techology part: technology and equipment of elevators processing of grain, production of loose and granulated mixed fodders, quality control of grain, flour and mixed fodders, etc. Practical studies in laboratories and in-plant training in selected enterprises.  Trainers training part: personnel management concept; management of the training function in the plant; determination and analysis of training needs; concepts of learning psychology; use and development of audio-visual equipment and materials for training; individualized and group training methods; curriculum development; evaluation and follow-up of training; training of managers and workers; practice in conducting training sessions.	Institute for Advanced Training of Managers and Specialists of the Ministry of State Purchases Moscow Union of Soviet Socialist Republics	06/04-29/07	Interregional programme English	Educational background related to technological science; managerial or supervisory post in a grain milling enterprise or in a governmental or semi-governmental body dealing with grain milling enterprises. Candidates are expected to carry out training activities in their home countries upon completion of the programme.
Repair and maintenance of diesel engines	The basic working principles, construction and general characteristics of high speed diesel engines, the basic work involved in the assembly, inspection and adjustment of such engines and the techniques of their installation, maintenance overhaul and repair.	Ministry of Agricultural Machinery, Shanghai Diesel Engines Works Shanghai China	17/04-11/07	Interregional programme English	Mechanical engineering degree, 3 to 5 years experience with supervisory responsibilities in maintenance, repair and overhead of diesel engines.

Modern foundry technology	The training programme will cover the following topics: the design of modern foundry processes (including economic and technical aspects); foundry materials, melting and casting technologies, pattern making practice, moulding materials and moulding technology, mechanization and automation of foundry processes, quality control and repair of castings, environmental protection including noise control and other safety and pollution problems.	Foundry Research Institute Kraków Polen	08/04- 31/05	Interregional programme English	Degree in foundry or metallurgy (or equivalent) with at least two years practical experience (preferably in a supervisory position) in at least one of the following fields: moulding sands, moulding technologies, melting technologies, pattern-making practice, casting technologies, mechanization and automatization of foundry processes, quality control.
Documentation and industrial information	Function of industrial information in industrial development, retrieval systems and its practical application, classification systems, information systems for industry. Practical training in industrial information and documentation and study visits to specialized institutes providing information services to industry.	VINITI All Union Institute for Scientific and Technical Information Moscow Union of Soviet Socialist Republics	12/04- 20/06	Interregional programme English or French	University degree or an equivalent educational background and a few years of practical experience in the field of industrial/technological information and documentation in the operation of existing information documentation centres.
Techniques de gestion dans l'industrie manufacturière	Techniques de gestion de la production, notamment normalisation : planification du contrôle de la qualité, eu égard plus particulièrement à la fabrication de produits pour l'exportation. Stages individuels de formation pratique dans l'industrie.	Ecole supérieure des sciences économiques et sociales (ESSEC) Université du Cameroun en coopération avec l'Institut d'administration et de gestion de l'Université de Louvain Douala, République Unie du Cameroun	30/04- 27/05	Programme régional pour l'Afrique Français	Être titulaire d'un diplôme d'ingénieur (ou d'un diplôme équivalent) justifier d'une expérience pratique de trois ans au moins et occuper un poste de responsabilité dans les services de production d'une entreprise industrielle privée ou publique.

Industrial planning	Technical aspects of industrial planning at different levels. Uniform system of industrial planning on national, sectorial and factory level (long-term forecasts, long-term, medium-term and annual plans). Organs of planning co-ordination of the national industrial development plans at international level.	Institute of Economy of Developing Countries Berlin (East)	April-May 4 weeks	Interregional programme English	Senior positions with government or public enterprises with academic background and/or extensive experience in industrial planning, preferably at national, sectoral and branch levels. Good English.
Production management of public sector mechanical wood processing industries	Give insight in the various factors to be considered in management of production of wood processing industries and recent technical developments. Also provide participants with access to impartial technical advice to assist existing industries to become more efficient as well as assist in the identification of alternatives open to potential investors or decision makers involved, with the possibility of discussing joint ventures to establish these industries.	SOZD UNILES Woodworking Industry and Trade Association in co-operation with the International Centre for Public Enterprises in Developing Countries (ICPE) Ljubljana Yugoslavia	April 3 weeks	Interregional programme English	Technical or general managers directly responsible for management in large public sector mechanical woodworking plants (primary and secondary woodprocessing industries)
Planification industrielle	Le programme couvrira les modules suivants: intérêt d'une planification nationale, cadre institutionnel, planification (prise de décision), instruments de réalisation du plan, mesures correctives, réalisation et suivi du plan, conclusions et recommandations pour les pays en voie de développement.	Ecole centrale de la planification industrielle Varsovie Pologne	12/05- 29/06	Programme régional pour l'Afrique Français	Cadres provenant d'institutions concernés par la planification industrielle.

Methods and techniques of pesticide production and formulation	Development of pesticide chemicals, plant design, environmental considerations, equipment used in pesticide formulation, testing of products, formulation of granular and wettable powders, dusts, aerosols, baits and emulsifiable compositons, packaging, quality control distribution. Study tours to major pesticide industries.	Karl Marx University Leipzig German Democratic Republic	14/05-23/06	Interregional programme English	A university degree (or equivalent) in agricultural or chemical engineering or chemistry and at least 3 years of practical experience in a supervisory or managerial capacity in the production and formulation of pesticides.
Organization and management of agro-industrial enterprises	Theoretical training on different aspects of agro-industrial enterprises. Organization planning, management financing and investment policy, economic infrastructure. Yugoslavia Practical training on organizational aspects of agro-industrial enterprises separate agro-industrial enterprises and food processing plants, study visits to agro-industrial enterprises.	Federal Centre for Agricultural and Industrial Managers' Training Novi Sad	May/ June	Interregional programme English	Engineering degree with managerial experience in food processing of at least 3 years.
Economie d'énergie dans l'industrie du ciment	Le première partie du cycle s'attachera à présenter les aspects industriels des différentes phases de la fabrication des ciments et chaux. Cette première partie sera complétée par des visites d'usines et de centres techniques cimentiers. La deuxième partie portera sur les questions de faisabilité théorique et technique. On cherchera à comprendre où et comment l'énergie se dégrade et on étudiera les diverses méthodes possibles pour réduire cette dégradation. Cette deuxième partie comportera un développement important des aspects technico-économiques. Les problèmes d'optimisation, de temps de récupération des surinvestissements économiseurs d'énergie, de compétition entre différents vecteurs énergétiques seront analysés et discutés.	Centre d'étude et de recherche de l'industrie des liants hydrauliques Paris Centre de recherche et d'innovation et de formation pour ingénieurs et cadres Nancy France	Mai 2 semaines	Programme interrégional Français	Etre titulaire d'un diplôme d'ingénieur (ou d'un diplôme équivalent), justifier d'une expérience pratique et occuper un poste de responsabilité dans l'industrie du ciment.

Gestion de la qualité	Le programme se concentrera par priorité sur les secteurs industriels suivants : agro-industrie, matériaux de construction, industrie mécanique et métallurgie. Le séminaire comportera 4 modules : les techniques de contrôle de la qualité ; les fonctions d'audit et de diagnostic de qualité ; les techniques modernes de gestion et d'assurance de la qualité ; un stage pratique dans une petite entreprise française permettant d'établir un diagnostic de qualité.	Agence pour la coopération technique, industrielle et économique (ACTIM) Paris France	Mai-juin 6 semaines	Programme régional Français	Ingénieurs ou techniciens ayant suivi des études supérieures. Les candidates devront justifier d'une expérience industrielle antérieure ; étant responsables dans les entreprises du contrôle de la qualité et de l'assurance de la qualité.
Small business consultancy	Definition and identification of the characteristic of the small-scale industries in Asia; general management concepts and principles (production management - financial management - personnel management); project study preparation (steps and tools involved in identifying and preparing a project feasibility study and to integrate and evaluate the data gathered); practicum (practical application of the principles of management consultancy using a small or medium scale enterprise as a laboratory); planning and managing a consulting organization; field visits (visits to small manufacturing enterprises in rural areas as well as to the Small Business Industry Center).	Technical Assistance Counsel (TAC) University of the Philippines Institute for Small Scale Industries (UP-ISSI) Manila, Philippines	May-June (8 weeks)	Asian and African LDC's English	Educational background oriented to technological or economical science. Officials from government or private sectors in providing services to small and medium scale industries.
Management of human resources development for industry	The programme in the management and administration of industrial training schemes and systems is intended for a core group of training specialists. The major subjects will be: education, training and advanced training, educational system and training system and their co-ordination for the industrial development process, manpower planning, in-company training concept, psychopedagogical foundations of the learning process, audio-visual aids, principal training techniques, training facilities and equipment, programme development, selection and training of training staff, evaluation of training, general training and advanced training legislation, acquaintance with the relevant USSR infrastructure in the field of training and advanced training, presentation of country papers, final practical exercise.	USSR State Committee for External Economic Relations (GKES) Ministry of Middle and Higher Education Moscow Union of Soviet Socialist Republics	May/June 6 weeks	Interregional programme English	University background oriented to technological or economic sciences. At least three years of practical experience in industrial training. Candidates must be responsible for the planning and co-ordination of training activities at regional or sectoral industrial level or advising the policy making organ dealing with industrial training.

Criteria for the selection of woodworking machines

Provide technical managers from developing countries with training in all aspects related to the purchase of woodworking machinery and equipment. To provide impartial advice to visitors at the fair in the selection machinery.

ACIMALL  
Milan  
Italy

May  
Three weeks  
(in con-  
junction with the INTER-  
BIMALL Fair)

Interregional programme  
Italian with simultaneous interpretation into English and French

Owners or technical managers directly responsible for the selection and subsequent operation of equipment in large woodworking plants (both primary and secondary woodworking industries) or Government and investment board officials directly responsible for the allocation of "pioneer status" to woodworking industries and/or the issuance of import licenses for woodworking equipment, though owners and technical managers will be preferred.

Methods of extraction and formulation of medicinal plants

Medicinal herbs from spontaneous flora and growing cultures; gathering, drying, conditioning and preservation of medicinal herbs; taxonomical methods for identification of species; methods of extraction; separation and purification of active principles.

UNIDO in co-operation with the Joint UNIDO-Romania Centre and with the Institute for Drug Control and Pharmaceutical Research

Bucharest  
Romania

June/ July

Programme for LDC's  
English or French

University degree in pharmacy and chemistry with at least 2 years of experience.

Furniture and joinery industries

Based on seminars held yearly in Lahti, Finland, this course will cater for the needs of the least developed countries and is intended to give the participants an insight into efficient industrial serial production and modern techniques of the furniture and joinery industries.

Methods for modernization and rationalization of the woodprocessing sector will be highlighted and the prerequisites for the establishment of this industry in developing countries on a sound basis will be identified.

Port Luis  
Mauritius

June  
3 weeks

Interregional programme  
English or French

Technical managers or persons holding a similar position in secondary woodprocessing industries (furniture, joinery, etc.) or planners of the wood industry sector and product designers, though the former will be preferred.

Project study preparation	The objectives of the course are to identify the data required and sources of such data in the preparations of each portion of the project feasibility study; to acquire a working knowledge of the steps and tools involved and the critical areas to consider in identifying a project opportunity and preparing a project feasibility study; to integrate and evaluate the data gathered into a complete project feasibility.	Technical Assistance Council (TAC) of the Philippines in collaboration with the Institute for Small-Scale Industries of the University of the Philippines (UP-ISSI) Manila Philippines	June/ July	Programme for LDC's English	Nationals of eligible countries who are officials from either government or private sector. Professional training and experiences must be related to the preparation and evaluation of industrial projects.
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JULY - JUILLET - JULIO

Design, manufacturing and operation of agricultural machinery	With emphasis on practical training, the programme will cover operations related to casting, heat treatment, moulding, design, manufacturing processes, construction and operation of agricultural machinery including walking tractors and quality control.	ZHENJIANG Institute of Agricultural Machinery Zhenjiang China	16/08- 15/11	Interregional programme English	Agricultural or mechanical engineering with 3 to 5 years practical experience in manufacturing or farm machinery implements and industry supervisory responsibilities
Iron and steel industry technology	Theory in technological process of equipment, economic planning, management, maintenance. In-plant training in foundry, blast furnace, sintering plant, open hearth plant, rolling mills, refractory maintenance.	Zaporoz-Steel Zaporozhe Ukrainian Soviet Socialist Republic	23/08- 17/11	Interregional programme English	Metallurgical, chemical, electrical, mechanical engineering degree and directly engaged in one of the production activities. Technical fields of iron and steel industry. Practical experience minimum 3 years.

Environmental control in chemical and pharmaceutical industries	Analysis of air, water and soil pollution and industrial waste. Theoretical instructions and practical exercises in laboratories study visits to purifications' plants and environmental control installations.	State University of Ghent Ghent Belgium	August/ September	Interregional programme	Degree either in chemistry, biology, geology, or pharmacy with experience and responsibilities related to environmental pollution problems.
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SEPTEMBER - SEPTEMBRE - SEPTIEMBRE

Entretien du matériel ferroviaire	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'ordonnateurs, la formation pratique de personnel et les principes économiques fondamentaux de l'entretien et de la réparation du matériel roulant. On prévoit également des visites d'études dans des entreprises spécialisées dans la fabrication de matériel ferroviaire.	Société Nationale des Chemins de Fer Belges (SNCB), Bruxelles Belgique et Régie du Chemin de Fer Abidjan-Niger en collaboration avec l'Union Africaine des Chemins de Fer (UAC) Abidjan, Côte d'Ivoire et Bobo Dioulasso Haute Volta	03/09 23/11	Programme régional pour l'Afrique	Etre titulaires d'un diplôme d'ingénieur (ou d'un diplôme équivalent), justifier d'une expérience pratique de deux ans au moins et occuper un poste de cadre technique ou administratif. Préférence sera donnée aux candidats ayant déjà une expérience pratique de l'entretien et de la réparation du matériel roulant de chemin de fer.
Technology and equipment in electric welding	Technology and equipment for electric fusion, resistance, welding processes, modern welding, arc power resources, welding material and structures, constructive technological designing of welded material etc. In-plant training in plants manufacturing electric welding equipment, metal-working industry as well as laboratories.	E.O. Paton Electric Welding Institute Kiev Ukrainian Soviet Socialist Republic	05/09- 21/12	Interregional programme	A university degree (or equivalent) in electrical, mechanical, metallurgical or structural engineering, with at least 3 years of practical experience related to electric welding.

Technologies textiles coton - laine	Le programme traitera au cours d'exposés théoriques, de visites d'entreprises, de cas pratiques et de stages des points suivants : techniques de fabrication, contrôle de qualité, productivité et économie des procédés de fabrication.	Centre de Recherche et de Contrôle Lainier et Chimique et Laboratoire de Meulemeester de Technologie des Matières Textiles Chaineux et Gand Belgique	10/09-22/12	Programme interrégional Français	Ingénieur ou technicien responsable de production ou du contrôle de qualité dans une entreprise textile ou travaillant dans un centre de recherches textile.
Technology and equipment in rice processing industry	The following topics will be covered by the curriculum: major trends in the development of the grain-elevator and rice-processing industry; characteristics and range of rice mill products; modern rice grain and hulled-rice starch technology; modern types of rice granaries; modern technological equipment for rice-processing enterprises; basic flow-charts for rice-processing; preventive maintenance of equipment at rice-processing enterprises; quality control.	Institute for Advanced Training of Managers and Specialists of the Ministry of State Purchases, Moscow (with visits to Kiev, Leningrad, Krasnodar, Slavyansk-na-Kubani and Krasnoarmeiskaya) Union of Soviet Socialist Republics	14/09-09/12	Interregional programme English	Engineers and technicians (a university level degree or equivalent) and at least 3 years of practical experience in a supervisory or managerial capacity in the rice processing industry.
Small-scale foundry operations	The following items will be covered by the curriculum: solidification in casting; feeder, riser and gating design; pattern making and pattern material; moulding and moulding materials; cast-iron and its melting and casting; steel and its melting and casting; copper alloys and their melting and casting; aluminium alloys and their melting and casting; special moulding and casting techniques such as investment casting, shell moulding, plaster mould casting; casting defects; quality control in foundries; vacuum melting and casting.	Marmara Scientific and Industrial Research Institute Istanbul and Technical Education Faculty Ankara Turkey	16/09-08/11	Programme for least developed countries English	Foundry or metallurgy degree, supervisory or planning functions for operating and establishing small-scale foundries with at least one year practical experience.

Organization and management of industrial co-operatives	Through theoretical and practical training it is expected to provide training in the organization, management of industrial co-operatives on areas such as food processing, garments, leather and leather goods, metalworking.	Central Co-operative Union Sofia Bulgaria	23/09- 31/10	Interregional programme English	University degree in economics, industrial management with at least 3 years practical experience in organization and management of industrial co-operatives and currently employed in these functions.
Methods and technology in the printing industry	Production of newspapers, periodicals, books (including text-books and other printed material); planning and design of printing houses; tasks and problems in the training of specialists for the graphic arts industry; standardization and quality control in the graphic arts industry. In addition to theoretical training, study visits, practical training will be arranged to plants manufacturing printing machinery and to printing houses.	VEB Polygraph Leipzig German Democratic Republic	24/09- 12/10	Interregional programme English	A university degree or equivalent in the field of printing industry. Managerial or high level technical positions in the printing industry or senior officials of a public or private printing organization with at least 2 years of practical experience.
Management of industrial training	The concept of education and training - manpower planning and in-company training concept - programme development - evaluation of training - training of trainers - applications in training - training as an investment role of government, employers and trade unions in training - participant lecturing. Study visits are planned to industrial plants training centres, technical schools and institutions in which it will be included training exercises.	The Austrian Institute for Assistance and Technical Cooperation with Developing Countries Vienna Austria	Sep- tember/ October	Programme for LDC's English	Educational background oriented to technological or economic science. Responsible for the planning and co-ordination of training activities at regional or sectoral industrial level or advisory to the policy making organ dealing with industrial training.

Industrial planning and development	Macro-planning and strategy oriented course. Long-term development issues of industrialization, industrial strategies and planning, industrial incentives and promotional policies, issues on technology transfer and labour employment, issues of financing industrial development, project preparation, project appraisal, field trip and workshop.	International Development Centre Tokyo Japan	Sep-tember/ December	Interregional programme English	Industrial development economists at government organizations and public institutions for industrial development and implementation. Applicants aged between 30 and 45 years. Good English. University or college graduates or equivalent with basic knowledge and more than three years of practical experience in industrial development.
Repair and maintenance of medium/small ships	Theory in ships, materials, engines, nubos, electronics, electricity, equipment, maintenance. Practical training on a medium ship-darf; building of small vessels, repairs, ship repair workshop, training on board of the ship in the port.	Antwerp Port Engineering and Consulting (APEC) Apec Belgium	Sep-tember - De-cember	Interregional programme English or French (to be decided)	Engineers and technicians (or equivalent) having at least 3 years of practical experience in the field of maintenance and repair of medium/small ships.
<b>OCTOBER - OCTOBRE - OCTOBRE</b>					
Cement industry technology	The programme concentrates on technical aspects of cement industry and includes technical subjects such as feasibility studies, raw materials, production management technologies, quality control, maintenance, energy conservation, pollution and polluted control.	Cement Research and Development Centre Ankara, Turkey	09/10- 25/10	Interregional programme English	Chemical, mechanical, electrical or relevant branch of engineering degree; one to five years practical experience and employed with cement industry.

Energy management in the glass industry	Awareness will be created in participants as well as their knowledge broadened required for the proper management of energy in the glass industry. Problems of energy conservation and efficiency will be explored with also a view to alternative sources of energy available in developing countries. Participants will be encouraged to join in the problem-solving process at the initial stage.	Comitato Nazionale per la Ricerca e per lo Sviluppo dell'Energia Nucleare e delle Energie Alternative (ENEA) Turin Italy	October 3 weeks	Interregional programme English or French	Personnel in responsible positions in plant operations, production, maintenance, utility control, or plant design and development in the glass industry.
Engineering and industrial design	Theoretical introduction on product design, tool design, production engineering and manufacturing of prototype products and tools. Practical study assignments in design offices and laboratories for metallurgical testing and/or workshops.	Engineering and Industrial Design Development Centre Cairo Egypt	October/ December	Interregional programme English	Degree in mechanical engineering or engineering degree with at least 3 years of experience.
Sugar (beet) production	The programme will be carried out both in sugar plants and a sugar research institute and consists of theoretical and specialized actual practical in-plant training as well as study visits and an evaluation seminar. It will concentrate on both economical and technical aspects, including feasibility studies, raw material surveys, maintenance, production technologies and quality control.	Sugar Research Institute Ankara Turkey	October/ November	Interregional programme English	Chemical, agricultural, mechanical or electrical engineering with at least 2 years practical experience and presently employed directly in the production of sugar.
Training of trainers for public enterprises	Training of trainers seminar on implementation of training in public enterprises in developing countries, with particular emphasis on training institutions of the developing countries involved in UNIDO's "Centres of Excellence" programme.	International Centre for Public Enterprises (ICPE) Ljubljana Yugoslavia	October/ November	Interregional programme English	Top manager of training institutions in developing countries. Extensive experience in the formulation as well as the conduct of training programmes courses designed for the personnel of public enterprises of developing countries.

Production and application of synthetic fibres	The programme will cover the latest technological developments in the field of synthetic fibres and will consist of a theoretical part and laboratory and in-plant studies to familiarize them with the production and processing equipment.	Vienna Austria	October/ November	Interregional English	University degree or equivalent higher educational background in synthetic fibres technology or chemical or mechanical engineering.
Plastics technology	The programme is designed mainly to emphasize plastics fabrication technology incl. the use and selection of modern processing equipment, quality control and testing as well as various applications of plastics. A special small group will also be trained in the field of mould design and mould making.	Vienna Austria	October/ November	Interregional English	University degree or equivalent educational background in plastics technology or chemical, mechanical engineering, with at least 3 years experience in industry.
Metallurgical industries	The programme in the field of computerized maintenance systems in metallurgy will be the third in a planned series and designed for maintenance managers, planners, engineers and computer specialists in the principles and techniques of computerized maintenance systems.	UNIDO and the Institute for Automation and Industrial Management (INORGA) Prague Czechoslovakia	October/ November (3 weeks)	Interregional programme English	Degree in metallurgy, mechanical, industrial or management engineering; position related to either maintenance or application computer information systems.
Application of low cost automation to the wood processing industry sector	After the satisfactory completion of this course participants will be able to explain how and where LCA can help increase productivity in the system; describe how automation can be achieved without computerizing or adapting "high change" electronic devices; design and install simple pneumatic/hydraulic LCA systems; and evaluate the soundness and business advantages of proposed simple LCA systems.	University of the Philippines Institute of Small-Scale Industries (UP-ISSI) Manila Philippines	November 3 weeks	Interregional programme English	Key personnel of wood processing plants composed of technicians and managerial personnel.

DECEMBER - DECEMBRE - DICIEMBRE

State intervention in the national economy	Management system of the state-held companies; their function at both enterprise level and at that of state's intervention formula; their characteristics and their operational mechanisms; relevance of the Italian example.	Istituto per la Formazione e l'Aggiornamento Professionale (IFAP/IRI) Rome Italy	December English	Interregional programme Participants should hold a senior managerial position in public enterprises or should be officials of Governmental or public institutions. Professionally or organizationally engaged in the management of public enterprises. Capacity to influence the establishment, promotion and expansion of management of public enterprises as an asset.
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DATES NOT YET SPECIFIED  
DATES NON ENCORE PRECISES  
FECHAS TODAVIA NO DETERMINADAS

I.S.O. technical committees meetings	The following fields will be covered by these meetings: steel, tractors and machinery for agriculture and forestry, solid mineral fuels, agricultural food products, paints and varnishes, textiles, rubber and rubber products, essential oils, sawn timber and sawn logs, applications of statistical methods, mining, fibre building boards, iron ores, freight containers, leather, packaging, tobacco and tobacco products, aluminium ores and minerals, fertilizers and soil conditioners, plywood, air quality, water quality, cycles, particle boards. quality assurance and solar energy.	UNIDO in co-operation with the International Organization for Standardization	Exact dates and duration depending on each meeting	Interregional programme English Officials of national standard bodies or specialists in standardization.
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Information des besoins de formation	Conception d'un système d'information relatif aux besoins et possibilités de formation sur le plan national/international. Etudes par pays des systèmes d'information portant sur les besoins et les possibilités de formation dans les pays participants. Eléments et caractéristiques communs que l'on devrait trouver dans les systèmes d'information nationaux. Mise en forme définitive du projet et de ses activités opérationnelles.	Agence de coopération culturelle et technique Ecole Internationale de Bordeaux, Bordeaux France	3 semaines	Programme interrégional Français	Planificateurs et décideurs de PVD chargés de la mise en valeur des ressources humaines.
Planification industrielle	Techniques et modèles de planification, problèmes liés à l'industrialisation à long terme, transfert et adaptation des techniques et technologies, financement, ressources humaines et énergétiques, stratégie globale, sectorielles et régionales de développement industriel, politiques pour l'intégration de l'industrie avec les autres secteurs de l'activité économique, politique de couragement des investissements industriels, critères pour la sélection des projets industriels.	Institut Africain de Développement Economique et Planification (I.D.E.P.) Dakar Sénégal	6 semaines	Programme régionale pour l'Afrique Français	Fonctionnaires en emploi disposant d'une expérience de plusieurs années.
Maintenance industrielle	Organisation de la maintenance, pièces de rechange, diagnostiques de maintenance, documentation technique ateliers de maintenance, dispositions à prendre lors de l'achat de nouveaux équipements industriels, formation du personnel de maintenance, fabrication de pièces d'usure avec installations locales existantes de machines-outils.	Agence de coopération culturelle et technique (ACCT) Bordeaux France	4 semaines	Programme interrégionale Français	Ingénieurs/techniciens (chef de maintenance, chefs d'exploitation, chefs de production directeurs technique ou chef d'entreprises).
Petrochemical industry	Sources of raw materials, basic technological processes, planning and organization, quality control, maintenance and repair, corrosion and corrosion prevention, labour protection, pollution and neutralization methods.	UNIDO in collaboration with the Joint UNIDO-Romania Centre Bucharest Romania	8 weeks	Interregional programme English or French	A degree in chemical engineering (or equivalent) with at least one year practical experience in a technological or engineering position in petrochemical industry.

Maintenance of gas and oil transportation networks	Theory and practice of designing oil and gas transportation systems. Operation, problems of operation and maintenance, telemetry and remote control of oil and gas pipelines. Technological instrumentation of oil and gas pipelines. Problems of operation and maintenance of remote control, telemetric and instrumentation systems. Telecommunication within the oil and gas pipeline system. Visits to plants and practical training.	Hungarian Gas and Oil Transportation Company's Educational Centre Siofok Siofok Hungary	6 weeks	Interregional programme English	Engineers and technicians with experience in the field of maintenance of gas and oil transportation networks and related telecommunications.
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CHAPTER 2: TRAINING OPPORTUNITIES OFFERED BY INSTITUTIONS OTHER THAN UNIDO  
CHAPITRE 2 : POSSIBILITES DE FORMATION OFFERTEES PAR DES INSTITUTIONS AUTRES QUE L'ONUDI  
CAPITULO 2: OPORTUNIDADES DE CAPACITACION OFRECIDAS POR INSTITUCIONES DISTINTAS DE LA ONUDI

A. INDUSTRIAL BRANCHES - SECTEURS INDUSTRIELS - RAMAS INDUSTRIALES

BUILDING MATERIALS INDUSTRIES  
INDUSTRIE DES MATERIAUX DE CONSTRUCTION  
INDUSTRIAS DE LOS MATERIALES DE CONSTRUCCION

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fees
Matériaux composites	Fabrication ; évaluation des propriétés ; applications. Le choix d'un ou de plusieurs matériaux provenant d'un pays en voie de développement déterminée est effectué sur place. Les matériaux choisis sont susceptibles d'être utilisés pour la fabrication de composites et présentent un intérêt économique pour le pays d'origine.	C.R.I.F. Rue du Chéra, 200 B-4000 Liège Belgique	A arranger 5 mois	Qualifications professionnelles et expérience de la construction. Français ou anglais	-	\$US 5,000
L'industrie de la construction	Recherche technique appliquée dans les domaines suivants : matériaux, structures, équipements et confort acoustique et thermique. Planification des chantiers et gestion des entreprises.	Centre Scientifique et Technique de la Construction Rue du Lombard 41 1000 Bruxelles Belgique	A arranger 3 mois	Ingénieur civil ou architecte. Français, anglais, néerlandais	-	A arranger
Urban development and low income housing	General introduction to Denmark; building technology; analysis of urban development and housing; urban design; development theory; housing systems; workshop: project for low income housing; study tour.	School of Architecture, Foreign Students Department Peder Skramsgade 2D DK-10j4 Copenhagen K Denmark	1 September 9 months	Professional qualification. English	-	To be arranged

## BUILDING MATERIALS INDUSTRIES (Cont'd)

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<u>Course or Seminar</u>	<u>General description</u>	<u>Organizer; Venue</u>	<u>Commencing date; Duration</u>	<u>Qualifications: Language requirements</u>	<u>Last date for receipt of applications</u>	<u>Fee</u>
Cement	Short courses on: concrete practice; raw materials requirements; X-ray analysers and computer controls; design and construction of tall concrete structures; N.D.T.; advances in precalcinator technology; sampling and analysis of coals; special and blended cements; limestone for cement manufacture; materials handling; use of limepozzolana mixtures; fluidization engineering; quality concrete; VSK mini-cement plants; environmental controls; clinker coolers; refractory practice; lime state design of concrete structures.	Cement Research Institute of India M10 South Extension II Ring Road New Delhi 110 049 India (Ballabgarh)	Throughout year 3-5 days	Professional qualification. English	-	Rs 300 - 500
Les materiaux de construction	Seminaire sur les materiaux de construction dans le Monde Arabe (disponibilite des matieres premières, traitement industrialisation, etc.).	Organisation Arabe des Ressources Minieres 22, Charia Omar Ibn Khattab Agdal - Rabat Maroc	A arranger en 1984 1 semaine	Qualifications professionnelles. Arabe	-	A arranger
Construction management	Post-graduate training in construction management at three levels.	Centre for Housing Planning and Building National Housing Secretariat 5 Chittampalam Gardiner Colombo 2, Sri Lanka, in co-operation with the Institute for Housing Studies BIE, P.O. Box 20718, 3001 JA Rotterdam, Netherlands	Several times a year 6, 8 or 12 weeks	Professional qualification. English	-	To be arranged

<u>Course or Seminar</u>	<u>General description</u>	<u>Organizer; Venue</u>	<u>Commencing date; Duration</u>	<u>Qualifications: Language requirements</u>	<u>Last date for receipt of applications</u>	<u>Fee</u>
Low-cost housing	44th International Course on Housing Building and Planning. Topics: a) planning and policy: housing policies and programmes; views of housing of low-income groups; evolution of urban structures; scope and scale of housing programmes; land tenure and development control; housing financing; financial analysis and evolution; community participation and organization; institutional relationships; communication techniques, b) design and technology: housing as an evolutionary process; users and professionals in the housing process; design tools; building materials and building technologies; views of project and construction management; programming and monitoring of construction; contracting; low-cost infrastructure and sanitation; alternative techniques and managerial implications; building materials production and delivery systems.	Institute for Housing Studies BIE P.O. Box 20718 3001 JA Rotterdam Netherlands	August 1984 5 months	Professional qualification. English	1 May 1984	To be arranged
Cement industry	The short in-plant training programmes are meant for cement engineers and technologists in various disciplines in order to update their knowledge and to improve their competency.	State Cement Corporation of Pakistan Ltd. Lahore Pakistan	To be arranged 2-24 weeks	Professional qualification. English	-	-
Energy saving in the cement industry	Energy saving in cement industry through the use of industrial wastes mixed and compound cements, raw materials with special reference to natural and artificial pozzolanas, future cement and lime prospects, energy conservation measures, energy saving measures in raw materials preparation and transportation, in cement making operations and in production.	Joint UNIDO Cement Manufacturers' Association of Turkey P.K. 2 Bakanliklar Ankara, Turkey	Early 1984 2 weeks	Professional qualification. English	-	-
Concrete and concrete constructions	Intended for people who are involved in concrete work in a supervisory or technological role, particularly personnel from the developing countries. a) Concrete laboratory work; b) site construction and supervision; c) pre-cast concrete.	Cement and Concrete Association Training Centre Fulmer Grange Fulmer Slough SL2 4QS United Kingdom	2 April 1984 and 1985 13 weeks	Professional qualification. English	-	To be arranged

## BUILDING MATERIALS INDUSTRIES (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Concrete technology, design, construction	Approximately 100 different short courses and seminars.	Cement and Concrete Association Training Centre Fulmer Grange Fulmer Slough SL2 4QS United Kingdom	Throughout year 1984 1 day - 13 weeks	Professional qualification. English	-	Normally £300 + 15% VAT, for 5 day residential course including accommodation
Construction materials	Technology and testing of construction materials including soils, cement, concrete, aggregates, asphalt. Part I: 13 weeks, covering basic technology and standard tests. Part II: 13 weeks, covering more advanced technology and testing followed by individually planned programmes for each participant.	Laing R + D Training Centre Manor Way Borehamwood Hertfordshire WD6 1LN United Kingdom	Part I 3rd week in September 1984 13 weeks Part II 1st week in January 1985 13 weeks	Technical or professional qualification. English	- 1984/85 Part I £5,950 + VAT (provisional) Part II £5,950 + VAT (provisional)	Fee includes food and accommodation

CHEMICAL INDUSTRIES  
INDUSTRIE CHIMIQUE  
INDUSTRIAS QUIMICAS

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Plastics technology and mould design	Technology transfer and development in plastics technology; plastics chemical technology; plastics physical technology; mechanical engineering and mould design; plastics engineering; polymer physics; control engineering; training methods; trouble analysis; compounding and calandring; computation engineering; control techniques; extrusion; finishing; foaming; injection and compression moulding; machining and forming; mould making; polymer chemical analysis; polymer physical analysis; quality control; reinforced plastics; trouble shooting.	LKT-TGM Laboratorium für Kunststofftechnik Wexstrasse 19-23 A-1200 Vienna Austria	October 2 months	Professional qualification. English	-	To be arranged
Plastics technology and polymer engineering	Applied R & D. 170 applied research projects in procedure engineering and control engineering (injection moulding, extrusion, foaming, compounding, forming, casting); plastics application (mechanical engineering, electrical engineering, agriculture, ecotechnology, marine technology, transformation and storage of energy, bio-medical application); testing (quality control methods); polymer physics (X-ray diffraction, electron microscopy, DSC); polymer chemistry (analysis); environmental technology (recycling, reuse of waste and litter, combustion, protection); training technology.	LKT-TGM Laboratorium für Kunststofftechnik Wexstrasse 19-23 A-1200 Vienna Austria	January, September 12 weeks	M.Sc., PhD. in science and 2 years in research experience. English, German, French	-	To be arranged

## CHEMICAL INDUSTRIES (Cont'd)

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<u>Course or Seminar</u>	<u>General description</u>	<u>Organizer; Venue</u>	<u>Commencing date; Duration</u>	<u>Qualifications: Language requirements</u>	<u>Last date for receipt of applications</u>	<u>Fee</u>
Transfer of chemical technology to developing countries	History, objectives, motivation and realization of the transfer of chemical technology. Costs of know-how and engineering, flow sheets of chemical processes, models for implementation. Measures to be taken by the developing country, based on infrastructure, natural resources, etc.	Technical University of Vienna, Institut f. Verfahrenstechnik u. Technologie der Brennstoffe Getreidemarkt 9 1060 Vienna, Austria	Summer semester 1984 28 hours	University degree. German	-	-
Application des matières plastiques dans l'emballage et le conditionnement (y compris les tuyaux)	Les polymères utilisables dans le conditionnement et l'emballage ; leur diverses propriétés chimiques, physiques rhéologiques ; le conditionnement des produits chimiques, bidons, fûts et réservoirs ; le transport des eaux résiduaires, le triaconnage alimentaire et industriel ; travaux de laboratoire ; visites d'usines et d'industries alimentaires ; l'emballage alimentaire ; notions de toxicologie ; l'étude de la migration des adjuvants (méthodes et analyses) ; le transport de l'eau potable (contrôle de migration) ; l'élimination des déchets de l'emballage en matières plastiques (pollution de l'air et du sol - biodégradabilité).	Centre d'Etudes des Matières Plastiques Université de Liège 2, rue Armand-Stevard 4000 Liège Belgique	Toute l'année sauf juillet et août 6 mois - 1 an	Ingénieur chimiste, licencié en sciences pharmaceutiques. Français	-	A arranger
Technologies nouvelles	Les technologies nouvelles comportant les technologies de mise en forme des matières plastiques, du moulage des alliages non-ferreux, du travail du verre, de la fabrication des outillages. Conception et dimensionnement de pièces en matériaux nouveaux. Contrôle de qualité - Traitement des données technologiques par l'informatique.	C.R.I.F. Rue du Chéra, 200 B-4000 Liège Belgique	A arranger 5 mois	Qualifications professionnelles. Français, anglais	-	\$US 5,000

## CHEMICAL INDUSTRIES (Cont'd)

- 31 -

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Pharmaceutical technology	Preparation of ampoules and perfusion solutions, ointments, solutions for ophtaline use. Study of granulation, manufacturing of capsules, tabletting. Control of the production of drugs. Planning for production of antibiotics, sulfonamides, antiseptics. Organisation and starting of semi-industrial pharmaceutical plants. Scientific visits to pharmaceutical plants.	Department of Toxicology State University of Ghent Hospitaalstraat 13 B-9000 Ghent Belgium	To be arranged 3 months approx.	Pharmacist, chemist or chemical engineer. English or French	-	Bf. 40,000 approx.
Chemical analysis of mineral samples	Course and practical training in chemical analysis of ores and mineral samples: titrimetry, electrolysis, polarography, spectrophotometry, atomic absorption, fluorimetry, plasma emission spectrometry, etc.	Université Catholique de Louvain Laboratoire de Traitement des Minéraux Place Ste Barbe 2 B-1348 Louvain-la-Neuve Belgique	To be arranged variable	Graduates in chemistry. English, French, Spanish	-	To be arranged
Plastiques	Conférences portant sur : connaissance générale des plastiques ; contrôle de la qualité des plastiques ; principes de la transformation des plastiques ; les plastiques face à leur environnement ; matières plastiques et applications techniques ; conception des pièces moulées.	Centre d'Etude des Matières Plastiques CEMP 65, rue de Prony 75854 Paris Cedex 17 France	Janvier, mars, avril, mai, Français juin, septembre et novembre 3-5 jours	Qualifications professionnelles.	-	F 2,860 - 3,780
Industrie chimique	Mathématiques : thermodynamique ; optimisation ; informatique ; mécanique des fluides ; transferts thermiques ; réacteurs ; dynamique des systèmes agitation mélange ; séparations ; énergétique industrielle ; génie biotechnologique ; automatisation des procédés ; travaux pratiques.	CRIFIC 1, rue Grandville F.54042 Nancy cedex France	1 octobre chaque année 9 mois	Qualifications professionnelles. Français	1 juin chaque année	F 50,000 (année scolaire 1983/84)

## CHEMICAL INDUSTRIES (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Chemistry and plastics	Chemistry including e.g. processing of basic materials and dyes, production of chemical fertilizers, pharmaceutic and cosmetic industry, manufacture of rubber products; plastics processing.	Carl Duisberg-Gesellschaft und Zentralstelle für Arbeitsvermittlung der Bundesanstalt für Arbeit Hohenstaufenring 30-32 D-5000 Köln 1 Federal Republic of Germany	To be arranged 12-18 months incl. language training	Technical and management personnel who have completed professional training and have practical professional experience. German	-	To be arranged
Fluidization technology	Lectures and practical works on fluidization and its application in industry. A review of advanced technique for chemical technologists working in chemical industries.	Department of Chemical Technology and Institute de Chemie Genie, Toulouse	26 July 1984 5 days	Professional qualification. English	June 1984	To be arranged
Fertilizer industry	Fertilizer technology; production processes; maintenance; instrumentation; pollution control; electronics and electricals; material handling; industrial safety; management concepts.	Azot Sanayii TAS Egitim Merkezi Kütahya, Turkey	October 1984 3 months	Professional qualification. English	February 1984	To be arranged
Polyester fibre technology	Polymer production; fibre extrusion; fibre finishes; filament and staple fibre processing; fibre blends; texturing processes; testing and quality control; colouration; end-uses and markets.	Shirley Institute Didsbury Manchester M20 8RX United Kingdom	May 1984 4 weeks	Professional qualification. English	-	£800
Plastics	Short courses on such subjects as: advances in adhesion sciences and adhesives; standardized testing of plastics; introduction to polymer science and technology; mixing and compounding of plastics/polymers; rheology of polymers; synthetic textile fibres.	Plastics Institute of America Stevens Institute Castle Point Station Hoboken, NJ 07030 United States of America	To be arranged 3 days	Professional qualification. English	-	\$US 545

ELECTRICAL AND ELECTRONIC INDUSTRIES  
 INDUSTRIES ELECTRIQUES ET ELECTRONIQUES  
 INDUSTRIAS ELECTRICAS Y ELECTRONICAS

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Electrical engineering and energy supply	Construction of electric machines and transformers; construction of electric equipment; projecting and designing, construction and commissioning as well as maintenance, overhaul and inspection of electric installations including equipment for energy generation and distribution; operation of energy generation and distribution equipment; electrical resp. electronic and control in all fields of application.	Carl Duisberg-Gesellschaft und Zentralstelle für Arbeitsvermittlung der Bundesanstalt für Arbeit (Central Office of the Federal Labour Exchange), CDG Postfach 190 325 D-5000 Köln, Federal Republic of Germany	To be arranged About 12-18 months	Professional qualification. German	-	To be arranged
Electromechanical equipment	Biomedical fundamentals; therapy equipment; equipment used during operations; lung function equipment; medical accessories and equipment.	MEDICOR Training Centre for Maintenance of Medical Equipment P.O. Box 150 1389 Budapest 62 Hungary	12 September 1984 4 weeks	Professional qualification. English	1 February 1984	\$US 1,200
Electromedical equipment	Biomedical fundamentals; electrocardiological equipment; intensive patient car units; electromyography equipment; electroencephalographs; blood-diagnostical equipment; laboratory automats; audiometers; complex diagnostic equipment.	MEDICOR Training Centre for Maintenance of Medical Equipment P.O. Box 150 1389 Budapest 62 Hungary	3 October 1984 5 weeks	Professional qualification. English	1 February 1984	\$US 1,500

## ELECTRICAL AND ELECTRONIC INDUSTRIES (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
General knowledge of X-ray equipment	Fundamentals of X-ray physics and photometry; terminologies of X-ray electrical components of drawing; radiation and electric shock protection; X-ray anatomical equipment and instruments in general; X-ray anatomical knowledge; facts influencing image quality; processing of X-ray films; electric network of hospitals for the installation of X-ray equipment; service instruments of X-ray equipment.	MEDICOR Training Centre for Maintenance of Medical Equipment P.O. Box 150 1389 Budapest 62 Hungary	8 November 1984 5 weeks	Professional qualification. English	1 February 1984	\$US 1,500
Rework and repair of circuit boards and electronic assemblies for supervisors staff	An introduction to the basic concepts of a universal system for reworking, modifying and repairing circuit boards and electronic assemblies. Provides an overview and description of typical circuit board construction and highlights the importance of non-destructive repair techniques as well as outlining the various skills that are to be learned.	Mapline Training Ltd. Graphic House 154 High Street Rayleigh Essex SS6 7BS United Kingdom	January, April, July and October each year 3 months	Professional qualification. English	-	To be arranged

**FOOD PROCESSING INDUSTRIES**  
**INDUSTRIE ALIMENTAIRE**  
**INDUSTRIAS ALIMENTARIAS**

Tecnología de alimentos	El curso comprende los fundamentos químicos de la tecnología de alimentos, las operaciones ingenieriles aplicadas a los procesos de preservación de alimentos; control químico y de calidad en la industria de alimentos, control microbiológico general y microbiología aplicada específicamente a los diferentes productos alimenticios.	Instituto de Tecnología de Alimentos c.c 428 - Paraje "El Pozo" 3000 Santa Fe Argentina	Marzo 1984 10 meses	Título superior universitario, ej. ing. químico. Español	-	\$US 2,000
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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Industrie sucrière de la betterave et technologie de la fabrication du sucre à partir de la betterave sucrière	Au cours de la campagne sucrière, un stage de formation technique orienté vers les aspects chimiques, technologiques et mécaniques de la fabrication du sucre au Centre de documentation technique de l'industrie sucrière : laboratoires d'analyses de contrôle de la fabrication du sucre ; laboratoire de la recherche appliqués ; différentes étapes de la fabrication en sucrerie et raffinerie.	S.A. Société Sucrière d'Etudes et de Conseils Aandorenstraat 1 3300 Tienen (Tirlemont) Belgique	Octobre à décembre (cette période correspondant à la campagne sucrière) variable	Diplôme universitaire ou équivalent. Français	-	A arranger
Microbiologie des aliments	Microbiologie des boissons (eaux, bière, jus de fruits), des coquillages et des poissons ; microbiologie des laits et des produits laitiers ; étude systématique des principaux micro-organismes des denrées alimentaires ; influence des traitements sur la microbiologie ; techniques d'analyses, de recherche et de dénombrement ; cours et travaux pratiques.	Institut Pasteur de Lille 15, rue Camille Guérin, B.P. 245 59019 Lille Cedex France	Mai et octobre 1984 1-4 semaines mai et septembre 1985 2 semaines	Qualifications professionnelles. Français	-	A fixer
Techno managerial programme for biscuit and bakery industry	To gain insight into technical and managerial aspects of biscuit and bakery industry; to stimulate thinking on the application of modern managerial techniques in the existing and prospective biscuit and bakery industrial units; to understand the scope for the range of products that can be promoted in biscuit and bakery industry; and to develop skills for preparation of feasibility reports.	Small Industry Extension Training (SIET) Institute Yousufguda Hyderabad-500 045 India	October 1984 8 weeks	Professional qualification. English	-	\$US 2,320

## FOOD PROCESSING INDUSTRIES (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Traditional Indonesian foods (kecap, tempe, oncom, tauco, tahu, etc.)	The course will cover the practical and theoretical aspects of processing of traditional Indonesian foods.	Institute for R&D of Agro-Based Industry Jl.Ir.H. Juanda 5-9 Bogor, Indonesia	To be arranged 1-2 months	Professional qualification. Indonesian and English	-	-
Fish technology and quality control	FAO/DANIDA regional workshop on fish technology and quality control.	FAO Via delle Terme di Caracalla 00100 Rome, Italy	February 1984 Rangoon Burma May 1984 Jakarta Indonesia November 1984 Egypt May 1985 Accra Ghana	Professional qualification. English Selection of participants to be made by Governments of countries in region	-	-
Fish utilization	FAO/DANIDA national workshop on fish utilisation.	FAO/DANIDA Entebbe Uganda Djaka Bangladesh Mogadishu Somalia Port Moresby Papua New Guinea	September 1984 and February 1985 September 1985 November 1985	Professional qualification. English Selection of participants to be made by Governments of countries in region	-	-

## FOOD PROCESSING INDUSTRIES (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Foodstuff industry	A. Plant design and construction: theoretical and practical training in the design and construction of industrial plant, engineering work, technologies and know-how in the agricultural foodstuff sector; the courses will be held in design and consulting firms, and in agricultural production and foodstuff companies. B. Production and marketing: training in agricultural production and foodstuff plants and farms, in the problem of linking agriculture and produce processing; and production, marketing and distribution problems relating to industrial agricultural products, and specific aspects of production and marketing technologies.	Istituto per la Ricostruzione Industrial (IRI) Direzione Esterio Ufficio Cooperazione Tecnica Internazionale Via Veneto 89 00187 Rome, Italy (Rome and other towns in Italy)	23 January 1984 5 months	Advanced technical education or university degree and 5 years experience. Italian, French, English, Spanish	-	To be arranged
Foodstuff processing	A. Fruit and vegetable sector; B. Techniques of production, preservation and processing of meat; C. Poultry-farming processes and installations; D. Techniques in the treatment of fishing resources.	Ministry of Foreign Affairs, Rome through Executing Agency P.I.S.I.E. Politecnico Internazionale per lo sviluppo industriale et economico P.O. Box 61 60035 Jesi (Ancona) Italy	To be decided Organized at regular intervals 3-9 months	Professional qualification. English, Italian	-	-
Technology of sugar and alcohol production	Cultivation of sugar beet; process and quality control; beet sugar technology; sugar plant engineering.	University of Ferrara Fondazione Serafino Cevasco, Via Luigi Borsari 46 44100 Ferrara, Italy	February 3 months	University degree in engineering, chemistry or agriculture. Italian	-	To be arranged

## FOOD PROCESSING INDUSTRIES (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Agro-based industry	Lectures related to the theory and practice of industrial development with special reference to agro-based industry.	Netherlands Universities Foundation for International Co-operation NUFFIC P.O. Box 90734 2509 LS The Hague Netherlands	May/June 1984 5 weeks	Professional qualification. English	-	f. 1,800
Food industries	General principles of cheese technology; applied microbiology; general issues; technical and scientifical bases for microbiological analysis interpretation.	Technical Training Department of the National Laboratory of Engineering and Industrial Technology Praça do Príncipe Real 19 Lisbon, Portugal	November 1984 2 weeks	Professional qualification. Portuguese (occasionally English and French)	-	-
Ciencia y tecnología de alimentos	Fundamentos científicos de la tecnología de alimentos, de sus procesos industriales, de las técnicas de control de fabricación y de los problemas específicos de las principales industrias de alimentación. Comprende cuatro asignaturas generales y una de las asignaturas de tecnología específica, con clases teóricas y prácticas, sesiones de seminario y visitas a fábricas. Además y con objeto de estimular la capacidad creadora y espíritu crítico del alumno cada uno de ellos desarrollará a lo largo del curso, un trabajo de investigación sobre un tema de interés en tecnología de alimentos. Las asignaturas que cursan son las siguientes: química de los alimentos; tecnología de la conservación de alimentos; control analítico y de calidad de alimentos; control microbiológico e higiene en la industria de alimentos. Tecnologías específicas: industrialización de frutas y hortalizas; tecnología postcosecha de los cereales.	Instituto de Agroquímica y Tecnología de Alimentos Jaime Roig 11 Valencia, España	Septiembre 10 meses	Título superior por una Universidad o escuela técnica superior. Español	Julio	45,000 Ptas (15,000 Ptas alumno, gasto por trabajo experimental)

## FOOD PROCESSING INDUSTRIES (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Especialización en grasas	Características generales de las grasas; análisis de las materias grasas; extracción del aceite de oliva, del aceite de orujo de aceitunas y de los aceites de semillas; transformaciones de grasas comestibles y de grasas industriales.	Instituto de la Grasa y sus Derivados, Avda. P. García Tejero 4 Sevilla-12, España	Noviembre 1985 15 semanas	Posse la formación básica que supone haber cursado estudios de escuelas técnicas de grado medio. Español	Octubre 1985	60,000 Ptas
Meat industry technology and management	Slaughterhouse, cutting, packing plant, sausage factory, canning, central kitchen, transportation; engineering and technology; administration and management.	Kristianstad-Blekinge Slakteriförening Box 568 S 291 25 Kristianstad Sweden	To be arranged 3-12 months	Basic education in engineering, technology, bio-chemistry and/or microbiology. Practice in meat plant operations. English or German	-	SKr 5,500 per month
Milling technology	Wheat, rye and maize milling technology (theoretical and practical courses); basic scientific subjects relating to milling technology (theoretical and practical courses); physics and mathematics with the main subunits in electrotechnics and pneumatics; course also covers brewing technology, oat milling technique; oil milling technique; plant management; technical drawing.	The Swiss School of Milling, Tellstr. 2 CH-9000 St. Gallen Switzerland	1st Monday in September each year 10 months	Professional qualification. German or English alternatively	1 year in advance	SwF 1,500

## FOOD PROCESSING INDUSTRIES (Cont'd)

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<u>Course or Seminar</u>	<u>General description</u>	<u>Organizer; Venue</u>	<u>Commencing date; Duration</u>	<u>Qualifications: Language requirements</u>	<u>Last date for receipt of applications</u>	<u>Fee</u>
Beet sugar technology	The course will cover the whole process i.e. beet storage, juice production, juice purification, evaporation, crystallization, heat economy, micro-biological control, pollution control, process control, both theoretically and practically.	Turkish Sugar Co. Sugar Institute Technological Research Division Etimesgut, Turkey	Early September 6 weeks	Engineering experience. English	-	To be arranged
Quality control in food industry	All major subjects in microbiological quality control of food.	University of Hacettepe Department of Food Engineering, Ankara Turkey	1 August 1984	University degree in food sciences. English	-	\$US 400
Aflatoxin analysis and mycotoxins	Lectures, practical work and demonstration of analytical methods of aflatoxin and mycotoxins and related problems.	Tropical Development and Research Institute 127 Clerkenwell Road London EC1R 5DB United Kingdom	26 March 1984 and 25 March 1985 11 weeks	Degree in chemistry or some years experience of chemical analysis. English	-	On application
Basic food microbiology	The principles of food microbiology with particular reference to quality control.	Tropical Development and Research Institute 127 Clerkenwell Road London EC1R 5DB United Kingdom	2 April 1984 and 1 April 1985 12 weeks	Professional qualification. English	-	On application
Post-harvest technology of fruits, vegetables and root crops	The principles of perishable crop handling and their application to commercial operation.	Tropical Development and Research Institute 127 Clerkenwell Road London EC1R 5DB United Kingdom	13 April 1984 and 12 April 1985 13 weeks	Degree or equivalent in biological science, agriculture or horticulture or several years experience of produce handling. English	-	To be arranged

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Storage of durable agricultural products in the tropics	Storage of cereals, grain, legumes, oilseeds, coffee, cocoa, etc. including: storage losses, inspection methods, climate and storage, insect identification, chemical control, fumigation, moisture content, storage systems and structures, rodents, packaging.	Tropical Development and Research Institute 127 Clerkenwell Road London EC1R 5DB United Kingdom (Slough, near London)	24 February and 31 August 1984 22 February and 30 August 1985 1-5 months	Degree or equivalent in biology, agriculture or engineering or some years experience in produce storage or handling. English	-	To be arranged
Food technology	Short courses on: sensory evaluation; flavor applications for product development; dough rheology and experimental bread baking; starch structure, properties and food uses.	American Association of Cereal Chemists 3340 Pilot Knob Road St Paul, MN United States of America	To be arranged in 1984	Professional qualification. English	-	To be arranged

**GLASS AND OPTICAL INDUSTRIES**  
**INDUSTRIE DE LA VERRERIE ET DE L'OPTIQUE**  
**INDUSTRIAS DEL VIDRIO Y OPTICAS**

Sciences et techniques verrières	Formation scientifique et technique dans le domaine du verre : enseignement dans les sciences existantes et dans les disciplines ou techniques nouvelles.	Ecole Supérieure du Verre - E.S.V. c/o C.I.F.O.P., 1b avenue Général Michel B-6000 Charleroi Belgique	A arranger 1-6 mois	Qualifications professionnelles. Français, anglais	-	A arranger
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LEATHER AND LEATHER PRODUCTS INDUSTRIES  
 INDUSTRIE DU CUIR ET DES ARTICLES EN CUIR  
INDUSTRIAS DEL CUERO Y DE LOS PRODUCTOS DE CUERO

<u>Course or Seminar</u>	<u>General description</u>	<u>Organizer; Venue</u>	<u>Commencing date; Duration</u>	<u>Qualifications: Language requirements</u>	<u>Last date for receipt of applications</u>	<u>Fee</u>
Tecnología del cuero	Curso teórico-práctico: piel animal; operaciones y procesos de precurtición; curtición, operaciones y procesos de pos. curtición; terminación; efluentes de curtiembre; propiedades del cuero; normas y métodos de ensayo.	Centro de Investigación de Tecnología del Cuero (CITEC) Camino Centenario 505 y 508 (Casilla de Correo No. 6) 1897-M.B. Gonnet Argentina	1 octubre 1984 1 mes	Ingeniero o licenciado en química, egresado de escuelas técnicas de curtiduría. Español	30 junio 1984	A convenir
Tecnología del cuero	Periodos de adiestramiento sobre: procesos de fabricación, control de calidad, efluentes de curtiembre.	Centro de Investigación de Tecnología del Cuero (CITEC) Camino Centenario 505 y 508 (Casilla de Correo No. 6) 1897-M.B. Gonnet Argentina	1 abril 1984 3-6 meses	Ingeniero o licenciado en química, egresado de escuelas técnicas de curtiduría. Español	1 febrero 1984	A convenir
Chimie et technologie de la fabrication du cuir	Bases de chimie générale, organique et analytique nécessaires à l'étude de la chimie du cuir et aux travaux de laboratoire, chimie et technologie de la fabrication du cuir : composition et structure de la peau, conservation, défauts, étude détaillée des travaux de rivière ; tannages chrome, végétal, fourrure, etc. ; opérations après tannage ; finissage des cuirs, machines de tannerie, épuration des eaux ; méthodes de fabrication des différents types de cuirs. Laboratoire d'analyses chimiques et d'essais physiques : produits utilisés en tannerie, eaux, cuirs, contrôle des opérations de fabrication des cuirs. Atelier de fabrication des principaux types de cuirs ; préparation d'un mémoire sur une fabrication choisie par le stagiaire.	Ecole Belge de Tannerie Quai Glosmer 6 B-4020 Liège Belgique	Septembre 9 mois	Qualifications professionnelles. Français	25 juin	Variables

## LEATHER AND LEATHER PRODUCTS INDUSTRIES (Cont'd)

- 43 -

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Leather goods manufacture	Pattern cutting and design development; fabrication of leathergoods using hand tools and simple machines; fabrication of leathergoods using modern machines and improved tools; training on various leathergoods machines including shaving machines; training on leather craftwork; theoretical classes on leathers, materials, tools, organization and trade practices and cost estimates. The Institute organizes other courses in leather technology from 3 to 12 months.	Central Leather Research Institute (CLRI), Adyar, Madras 600 020, India	March 1984 and 1985 48 weeks	University entrance. English	-	Rs 2,000 per month
Leather and leather goods	A. Leather goods design and pattern-making; B. Glove design and patternmaking; C. Leather and skins tanning processes and techniques.	Ministry of Foreign Affairs, Rome through Executing Agency P.I.S.I.E. Politecnico Internazionale per lo sviluppo industriale et economico, P.O. Box 61, 60035 Jesi (Ancona), Italy	To be decided Organized at regular intervals 3-9 months	Professional qualification. English, Italian	-	-
Leather quality control	Theoretical and practical training in laboratories covering leather and leather-goods quality control, physical as well as chemical, and environmental control activities.	Netherlands Organization for Applied Scientific Research TNO, Institute for Leather and Shoe Research 55, 5141 Er Waalwijk Netherlands	Throughout year. To be arranged	Engineering or chemistry degree. English	-	To be arranged

## LEATHER AND LEATHER PRODUCTS INDUSTRIES (Cont'd)

- 44 -

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Leather technology	Technical training courses for work and departmental managers in leather producing factories (tanneries). Practical training in the manufacture of the desired types of leather with regard to the chemical-technological part, to the mechanical operations and the environmental problems. Procedures are made available and discussed, attention is given to knowledge of sorting and judging hides, semi-manufactured and finished leather. In the mechanical operations knowledge and maintenance of machines and safety measures are treated. Alternately with the practical part of the training a theoretical course is given.	Netherlands Organization for Applied Scientific Research TNO, Institute for Leather and Shoe Research 55, 5141 Er Waalwijk Netherlands	April and September 1984 12 weeks	Professional qualification. English	-	To be arranged
Basic leather production techniques	The course provides an introduction to leather manufacture and offers the opportunity for course participants to make a number of leathers according to their particular interests e.g. shoe upper leathers; clothing leathers; vegetable tanned leathers; hair on leathers. Chemical suppliers will present information on new products available.	National Leather-sellers Centre Nene College Moulton Park Campus Northampton NN2 7AL United Kingdom	9 July 1984 and 8 July 1985 4 weeks	Professional qualification. English	27 April 1984	£625 and 685 (in 1985)
Effluent treatment and the recycling of process liquors	The course deals with the treatment of tannery waste liquors and current legislation for disposal in various countries. Course participants will have the opportunity to analyze effluents and to carry out small scale experiments in aeration, coagulation, filtration and recycling of lime sulphide and chrome liquors.	National Leather-sellers Centre Nene College Moulton Park Campus Northampton NN2 7AL United Kingdom	8 July 1985 4 weeks	Professional qualification. English	26 April 1985	£560

## LEATHER AND LEATHER PRODUCTS INDUSTRIES (Cont'd)

- 45 -

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Physical testing and chemical analysis of leathers, chemicals and process liquors	An introduction to testing and analysis in a leather control laboratory based on official methods of analysis of the International Union of Leather Technologists and Chemists Societies. Course will cover sampling, sample preparation, physical and fastness tests on selected leathers. Analysis of chromium and vegetable tanned leathers and chromium and vegetable tanning materials. Analysis of waste tanning liquors.	National Leather-sellers Centre Nene College Moulton Park Campus Technologists and Chemists Societies. Northampton NN2 7AL United Kingdom	9 July 1984 4 weeks	Professional qualification. English	27 April 1984	£500

**MECHANICAL AND METALWORKING INDUSTRIES**  
**INDUSTRIE DE CONSTRUCTION MECANIQUE ET DE TRANSFORMATION DE METAUX**  
**INDUSTRIAS MECANICAS Y DE TRANSFORMACION DE METALES**

Mécanique générale	Notions de base en mécanique générale ; opérations sur tous types de machines (classiques et à commande numérique) ; gestion d'atelier mécanique (maintenance, stocks).	Fabrique Nationale Herstal - F.N. 33, voie de Liège 4400 Herstal Belgique	A arranger 3-6 mois	Qualifications professionnelles. Français, anglais	-	A arranger
Construction métallique	Evaluation de la formation de base ; répétition éventuelle des connaissances de base ; lecture de plans ; métrologie ; postes de travail ; matériel ; contrôle du matériel ; sécurité ; entretien.	Spoorvegmaatierel en Metaalconstructies, BN Vaartdijkstraat 5 B-8200 Brugge Belgique	A arranger 3 mois approx.	Qualifications professionnelles. Français, anglais ou néerlandais	-	A arranger

## MECHANICAL AND METALWORKING INDUSTRIES (Cont'd)

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<u>Course or Seminar</u>	<u>General description</u>	<u>Organizer; Venue</u>	<u>Commencing date; Duration</u>	<u>Qualifications: Language requirements</u>	<u>Last date for receipt of applications</u>	<u>Fee</u>
Mécanique générale	Large éventail de sujets dans le domaine de la mécanique générale.	Spoorwegmaterial en Metaalconstructies Vaartdijkstraat 5 B-8200 Brugge Belgique	A fixer 3 mois en moyenne	Qualifications professionnelles. Français, anglais ou néerlandais	-	Arranger
Agricultural machinery utilization	Repair and maintenance, manufacturing technologies, prototype fabrication and testing.	TESCO, International Organization for Technical and Scientific Cooperation Rosenberg hazaspar u. 21, Budapest Hungary, and Agricultural University Gödöllő, suburb of Budapest	February and September 1984 8 weeks	Professional qualification. Arabic, English, French, German, Spanish, Portuguese	-	\$US 750
Non-destructive testing	NDT methods; basic metallurgy; quality control and testing of welds. Interpretation of codes and test procedures; specifications; practice of different techniques.	Welding Research Institute Tiruchirapali 620014 India	To be arranged 4 weeks	Professional qualification. English	-	To be arranged
Welding	Programme in manual metal arc TIG, MIG and submerged arc welding. With materials carbon steel, alloy steels, stainless steels, plate tube and pipe in all positions, to suit the requirement of the deputing organizations.	Welding Research Institute Tiruchirapali 620014 India	Throughout year To be arranged	Professional qualification. English	-	To be arranged
Welding	Various aspects of welding metallurgy; conventional and advanced processes; weld design; productivity; quality control.	Welding Research Institute Tiruchirapali 620014 India	Throughout year 3 days- 8 weeks	Professional qualification. English	-	To be arranged

## MECHANICAL AND METALWORKING INDUSTRIES (Cont'd)

- 47 -

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Welding technology and inspection	Design, metallurgical processes and inspection, aspects of welds.	Scottish School of Non-destructive Testing Paisley College High Street Paisley PA1 2BE, United Kingdom	Throughout year 2-4 weeks	Professional qualification. English	-	£270 (2 weeks) £450 (4 weeks)

**METALLURGICAL INDUSTRIES**  
**INDUSTRIE METALLURGIQUE**  
**INDUSTRIAS METALURGICAS**

Iron and steel production	The trainees can specialize in the following fields; ore-dressing; coke-production and by-products; blast furnace: technical knowledge and practical training; steel production: technical knowledge and practical training; continuous casting; rolling processes both hot and cold; manufacture of welded and weldless pipes; steel and pig-iron foundry; quality control; maintenance of the machinery; general factory facilities; latest methods adopted in organization and management.	Istituto per la Ricostruzione Industriale, (IRI) Direzione Esteri Ufficio Cooperazione Tecnica Internazionale Via Vento 89, Rome Italy (Rome and other towns in Italy)	23 January 1984 5 months	Advanced technical education or university degree and 5 years experience. Italian, French, English, Spanish	-	To be arranged
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## METALLURGICAL INDUSTRIES (Cont'd)

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<u>Course or Seminar</u>	<u>Gene..' description</u>	<u>Organizer; Venue</u>	<u>Commencing date; Duration</u>	<u>Qualifications: Language requirements</u>	<u>Last date for receipt of applications</u>	<u>Fee</u>
Foundry-technology	Special aim of the course is to enable the participants to solve the problem of producing modern cast irons within their country's restrictions regarding importations and facilities. Metallurgy; melting units, melting, melt treatment; preparation and control of clay-, cement- and resin-bounded moulding materials; coatings; patterns; casting quality control.	Netherlands Organization for Applied Scientific Research TNC, Metal Research Institute, Technical Foundry Centre P.O. Box 541 7300 AM Apeldoorn Netherlands	Upon request	Professional qualification. English	-	To be arranged
Iron casting by cupola	An introduction of modern practice in iron casting process.	Industrial Service Institute Soi Kluaynamthai Rama IV Rd Prakanong Bangkok 10110 Thailand	To be arranged 5 days	Professional qualification. English	-	200 Baht
Metals and materials technology	Courses covering a broad range of topics are designed to meet the needs of technicians, engineers, management or administrative personnel.	American Society for Metals Metals Park Ohio 44073 United States of America	To be arranged	Professional qualification. English	-	To be arranged

**PACKAGING INDUSTRIES  
INDUSTRIE DE L'EMBALLAGE  
INDUSTRIAS RELACIONADAS CON EL EMBALAJE**

<u>Course or Seminar</u>	<u>General description</u>	<u>Organizer; Venue</u>	<u>Commencing date;</u>	<u>Qualifications: Language requirements</u>	<u>Last date for receipt of applications</u>	<u>Fee</u>
Emballage	Les matières premières ; le carton ondulé et son utilisation ; le carton plat et son utilisation ; les emballages en bois ; les fûts, bidons, jerrycans, boîtes métalliques, rails ; les films en matière plastique et les complexes ; les sacs industriels ; les sollicitations lors du transport ; essais sur emballages ; méthodes d'essais ; appareils, normes, contrôle de la qualité ; les accessoires d'emballages ; le transport des marchandises dangereuses ; la corrosion ; les machines d'emballages ; visites d'usines et canaux de distribution.	Institut Belge de l'Emballage rue Picard 15 1020 Bruxelles Belgique	A fixer 3 mois en moyenne	Degré universitaire Français ou anglais	-	A arranger
Emballage et conditionnement	Les lignes fondamentales de ce cours consistent en une série d'exposés sur la technologie de l'emballage et les caractéristiques des matériaux mis en oeuvre ; de tables rondes et travaux de groupe avec les professionnels de d'emballage ; work-shop sur des cas précis et analyse des aspects économiques et de marketing (coût, investissement, choix des matériaux, récupération, recyclage) ; visites de laboratoires et d'entretiens, étude de cas et démonstrations ; participation aux expositions internationales et remise des trois tomes du Manuel de l'Emballage.	Institut Belge de l'Emballage rue Picard 15 1020 Bruxelles Belgique avec les instituts de design industriel, contrôle de qualité, marketing.	A fixer 3 mois en moyenne	Qualifications professionnelles. Français	-	A convenir
Les investissements dans l'industrie de l'emballage et du conditionnement pour les PVD	Séminaire organisé avec les producteurs des machines et matériaux, destiné aux industriels producteurs d'emballages de distribution de produits alimentaires ou emballages de contact. Les matériaux discutés seront les : emballages en métal (alu et fer) ; emballages en plastique rigide et souple ; emballages complexes y compris les techniques et technologies pour la fabrication des boîtes, bouteilles, barquettes, bidons, e.a. ainsi que les prescriptions légales et sanitaires. La séminaire sera complété par une visite à une exposition internationale de machines et systèmes d'emballage.	Institut Belge de l'Emballage rue Picard 15 1020 Bruxelles Belgique	A fixer 2 semaines	Qualifications professionnelles. Français	-	A convenir

## PACKAGING INDUSTRIES (Cont'd)

- 50 -

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Packing and conditioning of some alimentary liquis	The colloquy includes general information about materials (glass, plastics, laminates, metal), retail packages (goblets, bottles, cans, small bags) and automatic and semi-automatic machinery (fill- and closing machines). Attendance at International Packaging Exhibition (PAKEX 83) and Brewery Exhibition (BREWEX 83) at Birmingham.	Belgian Packaging Institute (B.P.I.) 15 rue Picard 1020 Brussels Belgium	To be arranged 2 weeks	Professional qualification and professional experience. English	-	To be arranged
Emballage et conditionnement	Stage de formation professionnelle continue.	IFTIM 11, place d'Aquitaine 94152 Rungis Cedex France	A arranger 3-8 jours selon les stages	Qualifications professionnelles. Français	-	A arranger
Packaging	Packaging: management, economics, techniques, etc.	Indian Institute of Packaging E-2 MIDC Area Chakala, Andheri (E) Bombay 400 093, India	1st week of July 3 months	Professional qualification. English	15 June	To be arranged
Packaging	Testing of packaging materials/packages (in-laboratory training).	Indian Institute of Packaging E-2 MIDC Area Chakala, Andheri (E) Bombay 400 093, India	To be arranged	Professional qualification. English	-	To be arranged
Packaging	All branches of packaging.	Indian Institute of Packaging E-2 MIDC Area Chakala, Andheri (E) Bombay 400 093, India (various Indian cities)	To be arranged 3 days	Executives. English	-	To be arranged

## PACKAGING INDUSTRIES (Cont'd)

- 51 -

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Packaging technology	Practical and theoretical training on general and specialized aspects of packaging technology. Packaging specifications, test methods and test equipment featured. Courses purpose-designed to meet individual requirements.	Pira - The UK Technical Centre for the Packaging Industries Randalls Road Leatherhead Surrey, United Kingdom	To be decided 2-6 weeks on average	Professional qualification. English	-	To be arranged

PRINTING INDUSTRIES  
INDUSTRIES GRAPHIQUES  
INDUSTRIAS GRAFICAS

Offset printing	Training courses specially designed for developing countries.	Printpromotion GmbH P.O. Box 71 01 09 6000 Frankfurt 71 Federal Republic of Germany	August 11 months	Basic knowledge of printing. English	-	DM 15,000 approx.
Photo composing	Training courses specially designed for developing countries.	Printpromotion GmbH P.O. Box 71 01 09 6000 Frankfurt 71 Federal Republic of Germany	Spring 5 months	Basic knowledge of composing. English	-	To be arranged
Reproduction	Training courses specially organized for developing countries.	Printpromotion GmbH P.O. Box 71 01 09 6000 Frankfurt 71 Federal Republic of Germany	August 11 months	Basic knowledge of photography. English	-	DM 15,000 approx.

## PRINTING INDUSTRIES (Cont'd)

- 52 -

Course or Seminar	General description	Organizer; Venue	Commencing date;	Qualifications: Language requirements	Last date for receipt of applications	Fee
Printing industry	Courses on electronic composition (using the latest equipment); colour reproduction and platemaking; micro-computers for printers; bar coding systems; basics of printing and finishing; paper and film assembly; quality control; sheet fed lithography; web offset newspapers.	PIRA - The UK Centre for Printing and Information Technology Randalls Road Leatherhead Surrey KT22 7RU United Kingdom	To be arranged 1-4 weeks	Professional qualification. English	-	To be arranged

**PULP AND PAPER INDUSTRIES**  
**INDUSTRIE DE LA PATE A PAPIER ET DU PAPIER**  
**INDUSTRIAS DE LA CELULOSA Y EL PAPEL**

Pulp and paper technology	Wood chemistry; pulp technology and paper technology including research training in the laboratory.	University of Trondheim Norwegian Institute of Technology (NTH) Laboratory of Pulp and Paper Technology, in collaboration with the Norwegian Agency for International Development (NORAD) N-7034 Trondheim Norway	August/ September 1984 10 months	B.Sc. or equivalent; some practical experience in pulp and paper industries. English	-	-
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## PULP AND PAPER INDUSTRIES (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
RCA/UNDP training demonstration workshop on the use of nucleonic control systems in the paper industry	Practical aspects of use of nucleonic control systems in the paper industry including technical, engineering and economic factors. Background will be provided in basis nucleonics, electronics, design engineering, operating characteristics and maintenance strategies to be followed for various types of industrial nucleonic systems.	IAEA/UNDP, Office of Atomic Energy for Peace and Siam Kraft Paper Company Thailand	First two weeks of March 1984 2 weeks	Nominating by RCA Member States through the International Atomic Energy Agency. English	To be announced by the IAEA	None
Pulp, paper and board technology	Pulping of raw materials; paper and pulp testing; papermaking technology; organization and management of research; wastepaper recycling; microbiological aspects of paper and board making; water and effluent treatment; energy conservation; water conservation; technical services; automation and computer control.	PIRA, Paper and Board Division Randalls Road Leatherhead Surrey KT22 7UR United Kingdom	To be arranged 2-6 weeks on average	Professional qualification. English	-	To be arranged

TEXTILE INDUSTRIES  
INDUSTRIE TEXTILE  
INDUSTRIAS TEXTILES

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
"Technologie textile"	<p>1. <u>Programme commun</u> Tests et contrôles de qualité et de la valeur technique des fabricats ; qualité et productivité des entreprises ; nouvelles techniques dans le domaine textile.</p> <p>2. <u>Cours spécialisés</u> Selon leur formation, les stagiaires sont subdivisés en 4 groupes :</p> <ul style="list-style-type: none"> <li>2.1. filature fibres courtes (coton)</li> <li>2.2. filature fibres longues</li> <li>2.3. tissage</li> <li>2.4. bonneterie</li> </ul> <p>3. <u>Visites et stages</u></p> <p>4. <u>Synthèse et rédaction du rapport de stage</u></p>	CELAC Centre d'Etudes et de Contrôle Lainier et Chimique Zoning du Petit-Rechain 4655 Chaineux (Herve) Belgique	Septembre 4 mois	Qualifications professionnelles. Français	30 avril	A arranger
Textiles	Métrologie du caractéristiques des fibres, fils et tissus ; filature de coton et de laine, processus de tissage ; procédés de tricotage ; examen de l'évolution des études en cours dans les laboratoires de recherche textile (coton, laine, lin, fibres chimiques) ; aide technique aux moyennes et petites entreprises textiles.	Centexbel 24, rue Montoyer 1040 Bruxelles Belgique	Toute l'année sauf juillet et août 3-6 mois	Qualifications professionnelles. Français, néerlandais	-	A arranger
Management	ATIRA organizes courses on management directly concerned with the textile industry.	Ahmedabad Textile Industry Research Association (ATIRA) P.O. Polytechnic Ahmedabad 380015 India	Throughout year 2-26 days	Professional qualification. English	-	To be arranged

## TEXTILE INDUSTRIES (Cont'd)

- 55 -

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Textiles	The Institute organizes 19 courses on various technical aspects of the textile industry.	Ahmedabad Textile Industry Research Association (ATIRA) P.O. Polytechnic Ahmedabad 380015 India	Throughout year 1-28 days	Professional qualification. English	-	To be arranged
Textile industry	Spinning, weaving including preparation yarn and piece dyeing, finishing, printing, testing.	Ten Cate Consultants Egbert Gorterstraat 3 P.O. Box 58 7600GD Almelo Netherlands	Throughout year (except July) 4-12 weeks	Graduate of technical school. English/German	-	To be arranged
Textile mill management	Theory and practice of industrial organization and management; costing; maintenance, production control; quality control; statistics; trouble shooting; operative selection and training. Theory and practice of textile manufacturing processes; cotton and synthetics spinning, weaving, knitting dyeing, finishing and printing. In-plant training; case study.	Ten Cate Consultants Egbert Gorterstraat 3 P.O. Box 58 7600 GD Almelo Netherlands in collaboration with the Textile Engineering College I.H.B.O. "De Maere" P.O. Box 1075 7500 BB Enschede Netherlands	September 4-5 months	Production managers and technical staff; minimum secondary level schooling, 2 years experience in textile industry. English	July	To be arranged
Textile evaluation	The course is designed to produce graduates with a thorough knowledge of textiles and polymers and the ability to assess their performance and value. As well as evaluation, students take classes in textile technology, physics and chemistry; they also undertake project work. Optional subjects can be taken if desired.	Fibre and Textile Research Unit Department of Pure and Applied Chemistry University of Strathclyde Glasgow G1 1XL United Kingdom	October 9 months	Professional qualification. English	-	To be arranged

## TEXTILE INDUSTRIES (Cont'd)

- 56 -

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Textile science and technology	A short post-experience course designed to enable technologists in the textile industry to obtain up to date advanced training in textile chemistry, physics and technology.	Fibre and Textile Research Unit Department of Pure and Applied Chemistry University of Strathclyde Glasgow G1 1XL United Kingdom	To be arranged	Professional experience in textiles and/or science degree. English	-	To be arranged
Cotton fibre technology, testing and evaluation	Basic statistics; general fibre technology; fibre structure; fibre properties in relation to end-use; fibre identification; cotton testing and evaluation; testing of cotton in process; analysis and evaluation of test results; cotton marketing.	International Institute for Cotton Kingston Road Didsbury Manchester M20 8RD United Kingdom (Bolton Institute of Technology)	April 1984 8 weeks	Education at least up to university entrance level and technical qualifications in either: (a) agricultural subjects, preferably related to cotton production, or (b) textile technology at least up to Higher National Diploma (or equivalent) level. English	February 1984	£750-800
Cotton knitting - recent developments in technology and quality control	Statistics and computing; general fibre technology; testing and preparation of cotton yarns for knitting; range of knitted fabrics; knitting technology; process control during knitting; fabric finishing; evaluation of end product; manufacture of garments knitted from cotton fabrics; garment testing; fabric and garment faults; quality control laboratory.	International Institute for Cotton Kingston Road Didsbury Manchester M20 8RD United Kingdom (School of Textile and Knitwear Technology of the Leicester Polytechnic)	May 1984 6 weeks	Professional qualification, English	March 1984	£575 - £675

## TEXTILE INDUSTRIES (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Cotton textiles - development of management potential	The dynamics of leadership; effectiveness of differing styles; increasing acceptance of written and verbal information; identifying types and sources of information for control purposes; developing fully trained staff and an analysis of productivity and profitability.	International Institute for Cotton Kingston Road Didsbury Manchester M20 8RD United Kingdom in conjunction with Fielden House Productivity Centre	June 1984 4 weeks	Professional qualification. English	April 1984	£600
Cotton textiles - management principles and techniques	Leadership; control data and procedure; work-force potential; selection; communications; training; health and safety.	International Institute for Cotton Kingston Road Didsbury Manchester M20 8RD United Kingdom (Fielden House Productivity Centre)	June 1984 4 weeks	A sound general education at least up to university entrance level; industrial experience in the textile industry. English	April 1984	£575-625
The sizing and weaving of cotton yarns	Basic statistics; general fibre technology; basic principles of yarn preparation and weaving; theory and practice of warp sizing - sizing agents, size mixes and preparation, sizing machines; weaving technology - factors influencing the choice of ancillary equipment for the loom, techniques to use in warp gaiting, control of weft, choice of drawing-in and denting; type of selvedge construction; techniques of weaving densely set warps; fault identification; fault prevention and correction; testing and quality control.	International Institute for Cotton Kingston Road Didsbury Manchester M20 8RD United Kingdom (Bolton Institute of Higher Education)	April 1984 8 weeks	Professional qualification. English	February 1984	£750 - 900

## TEXTILE INDUSTRIES (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date;	Qualifications: Language requirements	Last date for receipt of applications	Fee
Wet-processing of cotton textiles	The careful preparation of fabric for subsequent processes of dyeing, printing and finishing is essential if the final product is to be competitive in world markets. The purpose of the course is to provide up to date information and practical guidance on modern techniques of fabric preparation and easy-care finishing treatments. It will not deal in any detail with the techniques of dyeing and printing.	International Institute for Cotton Kingston Road Didsbury Manchester M20 8RD United Kingdom	April 1984 8 weeks	A sound general education preferably up to university entrance level; some practical experience in the wet processing of textiles is essential. English	February 1984	£900-1,000
Dyeing and printing	A practical course on dyeing and printing of cotton and man-made fibre fabrics for managers, supervisors and textile chemists. Covers batch and continuous dyeing; roller, flat-screen, rotary screen, and transfer printing; dyes and chemicals; machinery and equipment; faults; testing; quality control; effluent treatment; energy saving.	Shirley Institute Didsbury Manchester M20 8RX United Kingdom	Mid-June 1984 6 weeks	Professional qualification. English	-	£1,000
Spinning	An advanced practical course on the spinning of short staple fibres on ring and open-end systems for spinning managers, supervisors and technologists. Emphasis on testing and quality control.	Shirley Institute Didsbury Manchester M20 8RX United Kingdom	April 1984 4 weeks	Professional qualification. English	-	£800

WOOD PROCESSING AND WOOD PRODUCTS INDUSTRIES  
INDUSTRIE DU BOIS ET DES ARTICLES EN BOIS  
INDUSTRIAS DE ELABORACION DE LA MADERA Y DE PRODUCTOS DE MADERA

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Technologie du bois	Panneaux de particules ; utilisation des copeaux ; techniques de fabrication des panneaux de particules ; équipements employés ; contrôle de qualité des panneaux.	Station de Technologie Forestière Avenue Maréchal Juin 1 5800 Gembloux Belgique	Toute l'année sauf juillet à septembre 2 mois	Qualifications professionnelles. Français	-	Bf. 15,000 par mois
Management of forest industries	The main objective of the workshop is to train forest industries managers, supervisors and planners in industrial and commercial management of forest industries, so as to improve the efficiency of these industries.	Forest Industries Division Forestry Department FAO Via delle Terme di Caracalla 00100 Rome, Italy in co-operation with the Government of Finland, Kotka College of Forestry and Wood Technology, Kotka Finland	5 September 1984 3 weeks	Professional qualification. Participants must be from following institutions: forest industries corporations; forest industries planning authorities; forest industries marketing boards and should have a university degree. English	3 months before starting date	To be arranged

## WOOD PROCESSING AND WOOD PRODUCTS INDUSTRIES (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Wood working and processing	Wood working: sawmills, veneering and plywood factories, wood fibre and wood fibre board factories; wood processing: industrial production of wood furniture, cabinet making, building joinery, including wood construction elements.	Carl Duisberg-Gesellschaft und Zentralstelle für Arbeitsvermittlung der Bundesanstalt für Arbeit Hohenstaufenring 30-32 5000 Köln 1, Federal Republic of Germany	To be arranged 12-18 months including language training	Executives with completed practical experience. German	-	To be arranged
Training of technical-level forestry instructors	Training of forestry trainers in pedagogical skills and current technical forestry techniques such as logging.	FAO Via delle Terme di Caracalla 00100 Rome, Italy and the Government of the Philippines on the basis of a Trust Fund grant from SIDA (Centre of Forestry Education Development Los Baños)	June 1984 6 months	Professional qualification. English	3 months before starting date	To be arranged
Timber technology: timber engineering and wood protection	Timber technology; mechanical properties of timber; structural design of solid and glued-laminated beams and columns; structural timber joints; wood-based panels; timber in building; protection by design; protection against natural effects; followed by options in either timber engineering or wood protection.	Department of Civil Engineering and Department of Pure and Applied Biology Imperial College University of London London SW7 2 BU United Kingdom	October 1984 12 months	Degree or appropriate relevant experience. English	May 1984	£4,600
Timber drying	Practical training for persons engaged in timber drying especially kiln operation.	TRADA TRAINING Timber Research and Development Association Stocking Lane Hughenden Valley, High Wycombe, Bucks, United Kingdom	2 March 1984 several days	Professional qualification. English	-	£208

CHAPTER 2: TRAINING OPPORTUNITIES OFFERED BY INSTITUTIONS OTHER THAN UNIDO  
 CHAPITRE 2 : POSSIBILITES DE FORMATION OFFERTEES PAR DES INSTITUTIONS AUTRES QUE L'ONUDI  
 CAPITULO 2: OPORTUNIDADES DE CAPACITACION OFRECIDAS POR INSTITUCIONES DISTINTAS DE LA ONUDI

B. INDUSTRIAL FUNCTIONS - FONCTIONS DANS L'INDUSTRIE - FUNCIONES INDUSTRIALES

AUTOMATION AND DATA PROCESSING  
 AUTOMATISATION ET TRAITEMENT DES DONNEES  
 AUTOMATIZACION Y PROCESAMIENTO DE DATOS

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Automation, informatique et régulation dans les unités industrielles	Cours sur : les analyseurs industriels de procédés ; les automatismes logiques ; l'instrumentation et la régulation industrielle ; la commande pour calculateurs numériques.	Institut de Régulation et Automation chemin des Moines 13644 Arles France	Toute l'année 8-10 mois	Qualifications professionnelles. Français	-	A arranger
Software engineering and technology adaptation	Outline of the performance of micro-computers (hardware and software); connexion of microcomputers; development of new computer designs on the basis of microprocessors; general description language for complex organizations and operational procedures (experimental gaming); project model (experimental gaming); development of software packages; project management; project phase; tools; operational methods.	Centre for Technological Cooperation Technical University Berlin Str. des 17. Juni 135 D-1000 Berlin (West) 12	1 November 12 months	Professional qualification. German and English	31 August	-
Computer science - programming - data processing	SZAMOK organizes 21 courses on various aspects of computers and data processing.	SZAMOK 1115 Bp., Szakasits Arpad ut 68 Budapest, Hungary	April to November 5-20 days	Professional qualification. English	-	\$US 500 - 1,000
Computer aided engineering	Application of computers to engineering design particularly with respect to automobile engineering in the areas such as vehicle dynamics, finish element techniques, introduction to computer aided manufacture.	Automotive Research Association of India Post Box No. 832 Pune-411 004 (Survey No. 102) Vatal Hill, Off-Paud Road, Kothrud Poona-4, India	June 1984 3 months	Professional qualification. English	-	Rs 5,000

## AUTOMATION AND DATA PROCESSING (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Automatic process control	Pneumatics, oil hydraulics, mechanization, electrical and electronic controls.	Central Institute of Tool Design Balanagar Hyderabad 500 037 (A.P.) India	January 1985 4 weeks	Diploma in engineering and work experience. English	October 1984	\$US 800
Information storage and retrieval systems	Theoretical basis of information processing and organization; provide necessary tools in the application of information processing techniques, and in the use of information sources and provision of information services; identify information systems and services required for their organization; understanding of the application of modern management ideas and techniques in the management of information systems and services; computer applications in information processing and dissemination.	Small Industry Extension Training Institute Yousufguda Hyderabad 500 045 India	To be decided 10 weeks	University degree. English	-	\$US 2,800
Data processing	Two types of course can be offered. An advanced information systems design, construction and operations course is available covering the full 14-week period, through topic-based seminars and in-house training in selected EDP centres, to analyze the general method used and a number of advanced systems implemented in the sectors of interest to the person concerned (type A course). Persons interested in a advanced course in general purpose minicomputers for specialized uses and their programmes and applications can take shorter courses (2-4 weeks: type B course).	Istituto per la Ricostruzione Industriale Direzione Estero Ufficio Cooperazione Tecnica Internazionale Via Veneto 89 00187 Rome, Italy (Rome and other towns in Italy)	23 January 1984 5 months	Professional qualification. English, French, Spanish, Italian	-	To be arranged
Computer application development	Computer applications in business, scientific, governmental and industrial sectors. Courses include programming, information systems analysis and design, data base management, computer center management.	Asian Institute of Technology P.O. Box 2754 Bangkok 10501 Thailand	January, May and September 15 weeks	Professional qualification. English	-	To be arranged

<u>Course or Seminar</u>	<u>General description</u>	<u>Organizer; Venue</u>	<u>Commencing date; Duration</u>	<u>Qualifications: Language requirements</u>	<u>Last date for receipt of applications</u>	<u>Fee</u>
Microprocessors	Intensive course, with practical emphasis, in a range of microprocessor techniques; sessions in laboratory with Z80 floppy disk development systems. Experiments and projects cover sequencing to instrumentation and control. On completion participants should be able to advise on and implement microprocessor systems.	Department of Electrical Engineering University of Manchester Dover Street Manchester M13 9PL United Kingdom	4 times a year January, March, June and September 10 working days	Professional qualification. English	-	£425 approx.
Practical numerical analysis	Modern advanced techniques in numerical analysis, with particular reference to applications in industry and to the use of mathematical software.	Department of Mathematics University of Manchester Manchester M13 9PL United Kingdom	9 July 1984 5 days	Graduate level in science or engineering. English	-	To be arranged
Control engineering	The Department organizes courses in: multivariable control systems design; applied stochastic processes and process modelling; computer control; optimization methods and their applications; analysis and design of control systems.	Department of Control Engineering University of Sheffield Mappin Street Sheffield S1 3JD United Kingdom	January, February, March 1984 2-3 weeks	Professional qualification. English	-	To be arranged
Work study techniques including micro-computer applications	Training in the principles and techniques of work study plus remuneration, motivation and incentive schemes.	Fielden House Productivity Centre Limited 856 Wilmslow Road Didsbury Manchester M20 8RY United Kingdom	Throughout year 4-10 weeks	Professional qualification. English	-	£490-850
Industrial database - on-line and hard copy	Short courses on abstracting services and on the compilation of industrial data bases; use of electronic techniques, and how to operate and use on-line systems.	Pira - The UK Printing & Publishing Technical Centre Randalls Road Leatherhead, Surrey United Kingdom	To be arranged Average 1 week	Professional qualification. English	-	To be arranged

## AUTOMATION AND DATA PROCESSING (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Electronics, and computers and instrumentation	Short courses on: analogue electronics; digital electronics; fault finding; microprocessors and microcomputers; measurement and control appreciation; industrial instrumentation, measurement and process control.	Roxby Engineering International Ltd Roxby House Station Road Sidcup, Kent United Kingdom	12 times a year 2 weeks	A technical qualification in the electrical, mechanical or chemical disciplines. English	-	To be arranged
Measurement and control appreciation	Course designed to give senior engineers and managers from associated disciplines a broad outline of the principles and philosophy of instrumentation and control.	Roxby Engineering International Ltd. Roxby House Station Road Sideup Kent DA15 7EJ United Kingdom	16 January, and 12 March 1984 2 weeks	A technical qualification in the electrical, mechanical or chemical disciplines. English	-	£560 (does not include accommodation and food)
Computers in management and development	Introduction to electronic data processing concepts; computer hardware; computer software; selection of hardware; systems development; evaluation of software packages; management information systems; quantitative decision-making techniques; manpower planning.	Institute of Public Service, University of Connecticut 1380 Asylum Avenue Hartford, CT 06105 United States of America	1 June 1984 8 weeks	Bachelor's degree or equivalent experience. English	15 April 1984	\$US 4,000

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Modern energy	Energy systems for developing countries, energy conservation - renewable energy resources - energy supply - economics of energy - materials recycling.	ESAT K.U. Leuven Kard. Mercierln 94 3030 Heverlee, Belgium	October 1984 and 1985 9 months	Engineering or Bachelor in science. English	-	\$US 250
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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Photovoltaic solar energy conversion	1. Design of stand-alone photovoltaic systems. 2. Quality control and testing of photovoltaic modules. 3. Fabrication of silicon solar cells using screen printing technology.	ESAT K.U. Leuven Kard. Mercierln 94 3030 Heverlee Belgium	February 1984 September 1984 3 months	Electrical engineer or physicist. English	January	-
Energy conservation in the industrial sector	Methodology for the elaboration of the energetic diagnostics in industrial plants; conservation methods and technologies applied in energy-intensive industries; case studies on energy conservation and use of alternative energetic sources; cost-benefit analysis for energy saving investments.	Instituto Nacional de Tecnologia Avenida Venezuela 82 20.081 Rio de Janeiro Brazil	To be arranged twice a year 1 month	Professional qualification. English, Portuguese or Spanish	-	To be arranged
Energie	Les économies d'énergie dans l'utilisation de l'électricité.	AFNOR Asociation Français de Normalisation Tour Europe Cedex 7 92080 Paris La Défense France	Mai et décembre 1984 1 semaine	Ingénieurs et techniciens. Français	-	A fixer
Energy	The training programme can comprise the following areas: production, organization and planning in an electrical engineering plant; time and methods study, production costs, supplies, layout, labour, standardization criteria, etc.; study of basic criteria for the manufacture of electric plant; specifications, materials control and testing, assembly, final testing and trials; primary hydraulic and thermal power stations, and distribution substations; weak operating current techniques, transformers, trouble-shooting techniques; renewable energy sources, systems and components: renewal energy source research: solar, wind, biomass; manufacture of components (solar collectors, photovoltaic cells, solar boilers, wind-power generators, digesters, etc.).	Istituto per la Ricostruzione Industriale (IRI) Direzione Estero Ufficio Cooperazione Tecnica Internazionale Via Veneto 89 00187 Rome, Italy (Rome and other towns in Italy)	23 January 1984 5 months	Advanced technical education or university degree and 5 years experience. Italian, French English, Spanish	-	To be arranged

Course or Seminar	General description	Organizer; Venue	Commencing date;	Qualifications: Language requirements	Last date for receipt of applications	Fee
Hydropower development	A one year course consisting of lectures, exercises, excursion and individual projects aiming at providing a sound working background in planning, design and construction of hydropower plants.	The University of Trondheim, The Norwegian Institute of Technology (NTH) The River and Harbour Laboratory in collaboration with NORAD N-7034 Trondheim Norway	August, September 1984 10 months	Professional qualification. English	-	-
Power distribution engineering	Practical and formal training in modern distribution systems providing a wide range of experience on distribution networks at voltages up to and including 132 KV. Programme covers overhead lines, cables and jointing techniques, distribution plant and equipment, system design and planning, metering and protection, systems operation and control, job administration and organization, construction, maintenance, work planning and resources control.	British Electricity International Ltd. Thames House North Millbank London SW1P 4QF United Kingdom Venue: near Manchester or Nottingham	Late September 1984 To be arranged 51 weeks	Qualification in electrical engineering. English	-	To be arranged
Power station plant	Practical and formal training in modern power station plant, in particular the principles of operation, maintenance and planning. Programme covers development, layout and construction of power stations and plant, operation of steam raising plant and ancillaries, operation of turbo generator and ancillaries, maintenance planning, stores procedures, work planning, costing and control, computer applications, electrical protection systems, transmission and distribution.	British Electricity International Ltd. Thames House North Millbank London SW1P 4QF United Kingdom Venue: near Birmingham	Late September 1984 To be arranged 50 weeks	Electrical or mechanical engineering degree. English	-	To be arranged

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Heat pump technology for industrial purposes	The aim of the course is to give energy managers, research & development engineers, design & production engineers, various types of industrial engineers etc., a thorough training in heat pump technology and to enable them to use the theoretical and experimental data to reduce the energy requirements in industrial processes. Practical experience will be given on a wide variety of industrial size heat pumps together with lectures and tutorials in economic evaluations and feasibility studies.	Dept. of Chemical Engineering, University of Salford, UK, in collaboration with Industrial Cooling Equipment Ltd. Manchester United Kingdom	At the beginning of each month 2 months	Professional qualification. English	-	£1,600
Energy information systems	The course includes: an overview of current methods and practices for energy information storage, retrieval and dissemination; problem solving techniques for the acquisition of energy information; introduction to current energy information resources, services and products; techniques for improving information specialist-end user interface.	Denver Research Institute/IEM P.O. Box 10127 Denver, CO 80208 United States of America	6 August 1984 3 weeks	University degree. English	6 July 1984	\$US 2,400
Hydropower information resources	A general introduction to hydropower information resources. Designed for technical personnel or information specialists working with technical personnel. Formal and informal hydropower information resources, searching techniques, designing a search strategy and other tools for finding and using hydropower information will be covered and demonstrated.	Denver Research Institute/IEM P.O. Box 10127 Denver, CO 80208 United States of America	24 June 1984 3 days	University degree. English	-	\$US 300

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Industrial and commercial energy conservation	Analysis of commonly used energy resources; optimum use of prime movers for power generation and other applications; energy intensive industries analysis; conservation in common items of plant and commercial operations; energy recovery in common items of plant and commercial operations; waste heat recovery techniques; energy storage; new or specialized energy saving processes/ techniques; alternative sources of energy; energy demand management; the role of government in pricing and demand management; the role of information resources in energy conservation management; doing business with international contractors; conclusions and recommendations.	Denver Research Institute Industrial Economics and Management Division University of Denver P.O. Box 10127 Denver, Colorado 80208 United States of America	30 January 1984 2 months	University degree. English	-	\$US 2,400
Geothermal energy resource development management and engineering	Introduction to geothermal engineering; rationale for project development; management approach to geothermal project identification, planning and preparation; introduction to geothermal development economics; defining and comparing economic analysis approaches and alternatives; dealing with and compensating for risk and uncertainty; investigations for geothermal resource development: reconnaissance and project feasibility for dry steam, wet steam and geo-pressured resources; project design; project construction and engineering services; project operations and maintenance; geothermal projects financing; doing business with international firms; US manufacturers and suppliers presentations.	Office of International Programs Denver Research Institute/IEM University of Denver Denver, CO 80208 United States of America	11 June 1984 5 weeks	University degree. English	21 May 1984	\$US 4,100 includes tuition, materials extensive US travel costs
Industrial energy conservation management	Steps for national energy conservation planning; government steps for conservation programme implementation; industry steps for industrial energy conservation; energy audits and conservation opportunity analyses; industrial applications in food industries, textiles, mining, iron and steel; process industries (chemicals and oil, pharmaceuticals, beverages, cement, fertilizers, leather); and electricity generation; rationale for conservation; economics of conservation; feasibility assessments; financing conservation programmes; renewable resource applications; working with international firms; participant presentations; and field trips. Coverage of specific industrial cases and applications will be determined by considering the specific needs of the participants enrolled in this workshop.	Office of International Programs Denver Research Institute/IEM University of Denver Denver, CO 80208 United States of America	27 August 1984 6 weeks	University degree. English	1 August 1984	\$US 4,200 includes all tuition and materials

<u>Course or Seminar</u>	<u>General description</u>	<u>Organizer; Venue</u>	<u>Commencing date; Duration</u>	<u>Qualifications: Language requirements</u>	<u>Last date for receipt of applications</u>	<u>Fee</u>
Rural energy technology management	Energy consumption patterns; survey and assessment methodology; state-of-the-art technology developments as practical modern alternatives; resource information networks, technology R&D and marketing; extension training for rural development; over-all project planning, design and management; public relations planning with regional and national policy; relations with sponsoring agencies; proposal writing; reporting and accounting; programme evaluation and upgrading.	Office of International Programs Denver Research Institute/IEM University of Denver Denver, CO 80208 United States of America	9 April 1984 5 weeks	University degree. English	12 March 1984	\$US 4,200
Small-scale hydropower resource development management and engineering	Introduction to small hydro engineering; rationale for project development; management approach to small hydropower project identification and planning; introduction to small hydropower economics: defining and comparing alternative economic analysis approaches and methods; dealing with and compensating for risk and uncertainty; investigations for small-scale hydropower resource development; reconnaissance and project feasibility studies; project design; project engineering and construction services; project operations and maintenance; small hydropower projects financing; conducting engineering and construction services with international firms; manufacturers and suppliers presentations.	Office of International Programs Denver Research Institute/IEM University of Denver Denver, CO 80208 United States of America	21 May 1984 5 weeks	University degree. English	-	\$US 5,500 includes tuition, material, local room and board and local travel expenses
Energy project management and analysis	Both new and renewable and conventional sources of energy will be included for the household and agricultural sectors as well as for commercial and industrial needs. The programme addresses large-scale centralized projects and the development of networks of small-scale decentralized projects.	Institute of Public Service, University of Connecticut 1380 Asylum Avenue Hartford, Ct. 06105 United States of America	1 June 1984 10 weeks	University degree. English	15 April 1984	\$US 4,800
Power system engineering	Power systems engineering, and subjects of interest to industrial and utility power engineers; generation, transmission, distribution, utilization, and system planning; industrial and electric utility power problems subject to engineering and mathematical analysis.	Westinghouse Electric Corp. 777 Penn Center Boulevard Pittsburgh, PA 15235 United States of America	5 September 1984 13 weeks	Engineering degree. English	-	\$US 9,350 (includes housing)

ENVIRONMENT  
ENVIRONNEMENT  
MEDIO AMBIENTE

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Contrôle de l'environnement dans les industries chimiques et pharmaceutiques	Les points suivants seront abordés : microbiologie et pollution de l'eau, du sol et des déchets ; biologie et toxicologie de l'environnement ; analyse de la pollution de l'eau et de l'air ; écologie industrielle des sols et des déchets solides ; traitement des déchets ; épuration des eaux ; captage de l'eau ; traitement de l'eau potable.	Département de Toxicologie Rijksuniversiteit van Gent Hospitaalstraat 13 B-9000 Gent, Belgique	Août 1985 6 semaines	Qualifications professionnelles.	-	A arranger
Environmental control in chemical and pharmaceutical industries	Study of the natural and human environment; analysis of the principal sources of air, water and soil pollution; effects of the pollutants on human health; methods of prevention and control; visits to different plants.	Department of Toxicology State University of Ghent Hospitaalstraat 13 B-9000 Ghent, Belgium	August 6 weeks	Civil engineer, pharmacist, biologist, chemical engineer. English	-	To be arranged
Planificación de largo plazo y medio ambiente	Sociedad, ecología y medio ambiente; estilos de desarrollo y medio ambiente; políticas de largo plazo y consideraciones ambientales; planificación y medio ambiente; dimensión ambiental en los proyectos.	CIFCA - CEPAL e ILPES Edificio N.U. Av. Dag Hammarskjöld Vitacura, Santiago Chile	Julio 1984 3 semanas	Calificación profesional. Español	-	-
Environmental pollution monitoring	The course is designed for personnel from developing countries and emphasizes the correct choice of instrumentation and the correct use of analytical techniques for the identification and measurement of industrial and agricultural pollutants such as: heavy metals, chlorinated hydrocarbons, fertilizer residues, organic phosphates, petroleum distillates, biochemical oxygen demand, sewage pollutants, sulphur dioxide and radioactive residues.	Department of Science Bristol Polytechnic Coldharbour Lane Bristol BS16 1QY United Kingdom	April annually 3-6 months	Degree or equivalent in science, preferably biology or chemistry. English	-	To be arranged

## ENVIRONMENT (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fees
Environmental and water resource engineering	Short courses on: industrial waste water treatment; air pollution control; solid waste management; water quality management.	Department of Civil Engineering Imperial College London SW7 2BU United Kingdom	January 10 weeks	Professional qualification. English	-	To be arranged
Environment	Throughout 1984 ISVR's programme will include short courses on instrumentation and measurement techniques for noise and vibration control; engine noise and vibration control; time series analysis; noise and vibration control for environmental health officers; machinery design for noise control; industrial audiology and hearing conservation; vibrations series, including vibration theory and practice, computer techniques, testing and signal analysis, shock and vibration control; noise course for process plant engineers (with CONCAWE) and various clinical and technical audiology courses.	Institute of Sound and Vibration Research University of Southampton United Kingdom	March, June, July, September To be arranged	Professional qualification. English	-	To be arranged
Water quality management	Water quality objectives; biological examination and control; chemical and physical characteristics of water; microbiological aspects; water treatment, unit processes; industrial water supply; managing and monitoring water quality; job training/instruction techniques.	National Water Council Overseas Development Group James House 27 London Road Newbury, Berkshire RG13 1JL United Kingdom	To be arranged	Professional qualification. English	-	To be arranged
Environment	Environmental impact assessment.	Department of Town and Country Planning University of Manchester Manchester United Kingdom	To be arranged 3 days	Professional qualification. English	-	To be arranged

**INDUSTRIAL DESIGN  
DESIGN INDUSTRIEL  
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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Engineering and industrial design	Theoretical introduction on product design, tool design, production engineering and manufacturing of prototype products and tools, practical study assignments in design offices and laboratories for metallurgical testing and/or workshops.	Engineering and Industrial Design Development Centre Cairo, Egypt	October 1984 and 1985 3 months	Professional qualification. English	-	To be arranged
Design of jigs and fixtures	Design practice, material specifications and heat treatment, metrology, process planning, design exercises in jigs and fixtures.	Central Institute of Tool Design Balanagar Hyderabad 500 037 (A.P.) India	January 1984 15 weeks	Degree in mechanical engineering with one year's experience.	October 1983	\$US 3,000
Design of press tools	Theory and design exercises on press tools, analysis of shearing process, sizes and tolerances of die opening and punch, force, energy, power in shearing, types of shearing dies, elements of shearing dies, piercing and bending dies, drawing and drawing dies, forming and forming dies, progressive dies for multiple operations.	Central Institute of Tool Design Balanagar Hyderabad 500 037 (A.P.) India	October 1984 11 weeks	Degree in mechanical engineering with one year's experience. English	August 1984	\$US 2,200
Tool design	Gauges, jigs and fixtures, press tools, plastic moulds, die casting dies and cutting tools. Associated subjects: machine tools, design practice, materials and heat treatment, metrology process planning, etc.	Tool Room and Training Centre Wazirpur Ind. Area Delhi 110052, India	September every year 2 years	Engineering graduates. English	-	-
Design	The course is articulated in eight disciplines (theoretical and practical) under professionals.	Domus Academy Edificio 1/C Milano Fiori 20094 Assago MI, Italy	October 1984 9 months	Professional qualification. English	31 May 1984	\$US 10,000

## INDUSTRIAL DESIGN (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Computergraphic	A monographic course aiming at giving a basic preparation in using a computer expressly conceived for computergraphic.	Istituto Europeo di Design Piazza Diaz 6 20123 Milano, Italy	To be arranged seminars of 42 hours	Professional qualification. Italian	-	lire 1,000,000 for 1983/84
Plant engineering	<p>A. Design of industrial plants in general, with particular regard to: steel production and ancillary plants, general design of a steelworks (production capacity, siting, terrain, communications, energy supply, water resources); estimates and planning; raw material storage and supply depots, ore and coking-coal preparations; pig production; steel production; hot and cold rolling; lining castings; wire-drawing; cast-iron and steel foundries; ancillary plan for steelworks; oxygen factories; cleansing plant; pumping stations, etc.; thermo-electrical power stations; steam generators, heat turbines, transformers and other electrical equipment, control and monitoring devices.</p> <p>Cement production plants; water desalination plants; complete plants and automatic machinery for the preservation and storage of foodstuffs; general ecological research (water and gas cleansing and purification); storage systems; primary aluminium.</p> <p>B. General plant and industrial complex design, with particular reference to: economic and technical feasibility studies; compatibility of industrial projects with the socio-economic environment, and suitability in regard to national, regional or sectoral development objectives; scheduling, monitoring and evaluating industrial investment.</p>	Istituto per la Ricostruzione Industriale (IRI), Direzione Esteri Ufficio Cooperazione Tecnica Internazionale Via Veneto 89 00187 Rome, Italy (Rome and other towns in Italy)	23 January 1984 5 months	Advanced technical education or university degree and 5 years experience. Italian, French, English, Spanish	-	To be arranged
Industrial design	Introduction to basic understanding of techniques of design processes.	Japan International Cooperation Agency (JICA) 3rd Training Division Training Affairs Dept., P.O. Box 216, Shinjuku-Mitsui Bldg., 1-1, Nishi-shinjuku, 2-chome, Shinjuku-ku, Tokyo 160, Japan, in collaboration with Japan Industrial Design Promotion Organization (JIDPO)	September 1984 2 months	Professional qualification. English	-	-
Design engineer-ing for architectural draughtsman	Design and draughting techniques, construction methods, planning, project control and design office management for housing and industrial buildings.	Mapline Training Ltd. Graphic House 154 High Street Rayleigh Essex SS6 7BS United Kingdom	January and July 9 months	Professional qualification. English	-	To be arranged

## INDUSTRIAL DESIGN (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Production design engineering for manufacturing engineers and design draughtman	Design and draughting techniques, manufacturing methods, planning, project control and design office, management for industrial products in the mechanical, electronic, automotive and aircraft disciplines.	Mapline Training Ltd. Graphic House 154 High Street Rayleigh Essex SS6 7BS United Kingdom	January, April, July and October each year 9 months	Professional qualification. English	-	To be arranged

**INDUSTRIAL INFORMATION AND DOCUMENTATION**  
**INFORMATION ET DOCUMENTATION INDUSTRIELLES**  
**INFORMACION Y DOCUMENTACION INDUSTRIALES**

Use of patent documentation as a source of technological information	Introduction to industrial property protection, patent documentation, use of patent documentation as a search tool (for searches of the state of the art and other technical information purposes), survey of INPADOC services, transfer of technology within the framework of industrial property.	Organized jointly by the Austrian Patent Office Kohlmarkt 8-10 A-1014 Vienna, Austria and WIPO	Summer/autumn 1984 and 1985 4 weeks	Professional qualification. English	-	..
Documentation	Le Bureau organise des cours de courte durée sur : le management d'un service de documentation ; informatiser sa documentation ; l'accès à distance à l'information ; réseaux et serveurs ; le videotex ; promesses et réalités.	Bureau Marcel van Dijk 106 bis, rue de Rennes 75006 Paris, France	A arranger en 1984 2-3 jours	Qualifications professionnelles. Français	-	F 2,710 - " 110 'prix valables jusqu'au 30/6/1983) + TVA
On-the-job training programme on transfer and development of technology	Economic, legal and institutional aspects of the transfer and development of technology at the sectoral, national and regional levels.	UNCTAD Advisory Service on Transfer of Technology Palais des Nations CH-1211 Geneva 10 Switzerland	On-going	Participants are officials from developing countries nominated by their Governments upon invitation by UNCTAD. English	-	..

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Industrial property	WIPO organizes training courses, seminars, study tours and visits on or for: patent information; the use of patent documentation as a source of technological information; general aspects of industrial property; introduction to industrial property; theoretical and practical aspects of industrial property; patent information; trademarks; technical functions of industrial property offices; technical information in patent documents in support of inventions and innovative activities; technical information as an aid to industrial development; patent documentation; trainers in industrial property; patent agents. (Detailed information obtainable from WIPO.)	World Intellectual Property Organization (WIPO) 34, chemin des Colombettes 1211 Geneva 20 Switzerland in collaboration with various Governments, Patent Offices, similar institutions and foundations	June to November 2 days - 2 months (a few programmes take place throughout the year)	Professional qualifications. Candidates must be submitted through the official government authorities to the Director General of WIPO. Applicants must be government officials, preferably employed by a government office in charge of the administration of patent or trademark laws of the country (national industrial property or patent offices, or the like) or agencies in the science and technology sector or from institutions engaged in research and development or industrial and agricultural development.	-	-

**INDUSTRIAL PLANNING AND PROGRAMMING**  
**PLANIFICATION ET PROGRAMMATION INDUSTRIELLES**  
**PLANEAMIENTO Y PROGRAMACION INDUSTRIAL**

Projets industriels	Séminaire comprenant des exposés et des études de cas en relation avec la genèse, la sélection et la décision de réalisation de projets industriels : les marchés en amont et en aval ; les plans de développement ; la faisabilité ; le financement ; les interventions du secteur public ; les techniques d'organisation et de gestion des entreprises. Le séminaire peut être complété par des séjours guidés dans des organismes belges publics et privés. Les participants sont assistés dans la constitution de leur documentation personnelle. Le programme du séminaire est réglé en fonction de la formation, de l'expérience et du plan de carrière des participants.	Bureau d'Ingénieurs- Conseils Gombert Cadic-Gombert S.A. Chaussée de Charleroi 123a, Bte 7 B-1060 Bruxelles Belgique	A fixer	Humanités complètes plus formation spécialisée plus expérience professionnelle minimum de 2 ans. Français	-	A fixer
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## INDUSTRIAL PLANNING AND PROGRAMMING (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Planification industrielle	Planification ; prévisions et réalisations en matière de développement : relation entre la micro et la macro économie ; l'appareil conceptuel de la prévision économique et de la planification ; les comptes et statistiques ; le calcul de la rentabilité interne des projets ; l'analyse critique des postes du bilan ; les prix de revient, méthodes de calcul ; analyse des coûts.	Société Coopérative MISIFA 14 Pl. Albert Leemans 1050 Bruxelles Belgique	Toute l'année sauf juillet et août; variable (selon chaque cas)	Qualifications professionnelles. Français	-	Bf. 15,000 à 40,000 par mois
Problemas actuales y estrategias alternativas de desarrollo en América latina	El marco externo en el desarrollo latinoamericano; interpretación global del proceso de desarrollo latinoamericano; sociedad, estado y desarrollo; planificación y políticas públicas; problemas actuales y políticas en América latina; estrategias alternativas globales y nacionales.	ILPES con el apoyo de la CEPAL Edificio N.U. Av. Dag Hammarskjold Vitacura, Santiago Chile	Septiembre 1984 10 semanas	Formación universitaria. Español	-	-
Análisis económico y evaluación de proyectos	Introducción, evaluación privada de proyectos, evaluación social de proyectos, análisis de casos de evaluación privada y social.	Instituto Nacional de Capacitación Profesional (INACAP) Av. Chesterton 7028 Casilla 10205 Santiago, Chile	Junio 1984 2 semanas	Calificación profesional. Español	-	\$US 250
Planning and promotion of agro industries	Developing an insight into various groups of industries broadly categorized as agro-industries through a study of the scope for each of these under different agro-climatic environments, policies governing them in developing countries and institutional frame-work needed to encourage them; sharing the Indian experience and that of other developing countries in stimulating the growth of agro-industries in a planned manner; and developing skills of preparing feasibility studies for agro-industries and to study alternate technologies and different sizes of plants that can be considered for adoption in developing countries.	Small Industry Extension Training Institute Yousufguda Hyderabad 500 045 India	To be decided 8 weeks	Personnel engaged in industrial promotion, extension, management and technical counselling specially for agro industries. English	-	\$US 2,330

## INDUSTRIAL PLANNING AND PROGRAMMING (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Industrial estates development and promotion	The course will familiarise participants with the basic tools of analysis necessary to initiate, plan and evaluate proposals for the development, construction and management of industrial estates. It will draw on the experience of IDA Ireland in the planning, construction and management of industrial estates to service the needs of foreign and domestic investors.	Industrial Development Authority Lansdowne House Ballsbridge Dublin 4, Ireland	15 October 1984 6 weeks	Professional qualification. English	-	£3,375
Introduction to project appraisal	The course will equip participants with the basic tools of analysis in finance, marketing, production and management, and cost/benefit analysis.	Industrial Development Authority Lansdowne House Ballsbridge Dublin 4, Ireland	2 July 1984 8 weeks	Professional qualification. English	-	IR£4,500
Project identification and investment promotion	The course is designed to introduce participants to the principal sources of ideas for industrial investment opportunities and to equip them to develop and evaluate these ideas and to plan and implement a programme of industrial promotion.	Industrial Development Authority Lansdowne House Ballsbridge Dublin 4, Ireland	18 June 1984 8 weeks	Professional qualification. English	-	IR£4,500
Project management	This course is designed to develop the ability of the participants to review the proposal and prospect plans, to draw up implementation plans and to manage the implementation of all aspects of a project to the stage where the facility can be handed over to operative management.	Industrial Development Authority Lansdowne House Ballsbridge Dublin 4, Ireland	2 July 1984 8 weeks	Professional qualification. English	-	IR£4,500
Infrastructure	The in-plant training programmes are designed for executive grade civil servants from government departments and agencies responsible for territorial planning and infrastructure design, for managers of consulting engineering and construction companies and technical directors of individual infrastructure schemes and their maintenance.	Istituto per la Ricostruzione Industriale Direzione Estero Ufficio Cooperazione Tecnica Internazionale Via Veneto 89 00187 Rome, Italy (Rome and other towns in Italy)	23 January 1984 5 months	Professional qualification. English, French, Spanish, Italian	-	To be arranged

## INDUSTRIAL PLANNING AND PROGRAMMING (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Industrial planning and development	Macro-planning and strategy-oriented course. Long-term development issues of industrialization, industrial strategies and planning, industrial incentives and promotional policies, issues on technology transfer and labour employment, issues of financing industrial development, project preparation, project appraisal, field trip and workshop.	International Development Center of Japan Shuwa Daini Toranomon Building 21-19 Toranomon 1-chome, Minato-ku Tokyo, Japan	18 September 1984 8 weeks	Professional qualification. English	-	To be arranged
Regional industrial development	The basics of generating or accelerating the development process through industrialization in the context of a region in such a way that they will not only have the theoretical knowledge but also the practical skill to tackle the problems concerned.	Research Institute for Management Science (RVB) Delft, Netherlands	11 January 1984 5 months	Professional qualification. English	-	f. 9,700
National economic planning (advanced course)	Development theory of socialist economy; decision-making process in the centrally planned economy; Poland - host country; socio-economic development of LDC; macro-economic planning; sectoral planning and project evaluation.	Central School of Planning and Statistics, Research Institute for Developing Countries 24 Rakowiecka Street Warsaw, Poland	October 1984 6 months (English) January 1985 6 months (French)	Professional qualification. English or French	-	-
Planning and appraisal of agro-industrial projects	All aspects of the planning process from project identification to implementation, including a detailed examination of methods of preparing, appraising, financing and monitoring development projects, and looking at them from both a commercial, financial and national point of view. Emphasis on interdisciplinary co-operation and understanding throughout planning process.	University of Bradford Project Planning Centre for Developing Countries, Bradford West Yorkshire BD7 1DP United Kingdom	24 September 1984 12 weeks	University degree and several years experience of development and/or project work. English	-	£3,100 (estimate includes tuition and accommodation)

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Planning and appraisal of industrial projects	All aspects of the planning process from inception to project implementation, including detailed examination of methods of identifying, appraising, financing and monitoring development projects. Various types of industrial projects will be considered. Projects will be studied both from a commercial and a national point of view.	University of Bradford Project Planning Centre for Developing Countries, Bradford West Yorkshire BD7 1DP United Kingdom	January 1984 and 1985 12 weeks	University degree and several years experience of development planning and/or project work. English	-	£2,900 (1984) £3,100 (1985) (estimate includes tuition and accommodation)
Practical training for potential professional engineers	A course of instruction and practical training concerned with the principles in basic manufacturing processes, work planning and the principles of engineering design, culminating in a design and manufacture type of project activity.	The Centre for Industrial Studies University of Technology Loughborough Leicestershire LE11 3TU United Kingdom	January and September 24 weeks	Professional qualification. English	-	£150 per week
Choice of technology and industrial development	The course places the choice of technology in context of industrialization (including that of the employment problem), systematically develops a methodology for effective choice and examines the consequences of choice. The course also covers issues of adaptation, design and transfer of industrial technology, and the role of multi-national enterprises; major features in the world economy; and issues in development planning and industrialization in LDCs.	David Livingstone Institute of Overseas Development Studies University of Strathclyde 16 Richmond St. Glasgow G1 1XQ Scotland United Kingdom	April 1985 12 weeks	Professional qualifications and relevant experience. English	-	£3,750 (includes tuition, accommodation and meals, but excludes travel to and from Glasgow)
Project and programme evaluation	Context of evaluation research; uses of evaluation research; evaluation for programme planning, programme monitoring, and impact assessment; cost-benefit analysis; cost-effectiveness analysis; quantitative techniques in evaluation; qualitative techniques in evaluation; managing evaluation research.	Denver Research Institute/IEM P.O. Box 10127 Denver, Colorado 80208 United States of America	5 March 1984 6 weeks	University degree. English	5 February 1984	\$US 4,500

## INDUSTRIAL PLANNING AND PROGRAMMING (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Urban and regional studies of developing areas	Areas of special emphasis include development of urban and regional growth strategies; problems of low-income migrant housing and settlement in cities; social aspects of planning; rural development; environmental problems and policy; project evaluation; technology transfer; formal planning and programming techniques; and regional planning in mixed economies and socialist countries.	SPURS Massachusetts Institute of Technology Cambridge, MA 02139 United States of America	September 1984 9 months	Professional qualification. English	-	\$US 13,600

INVESTMENT PROMOTION AND INDUSTRIAL FINANCING  
PROMOTION DES INVESTISSEMENTS ET FINANCEMENT INDUSTRIEL  
PROMOCION DE LAS INVERSIONES Y FINANCIACION INDUSTRIAL

Zones franches et développement industriel	Exposé introductif et visite du port d'Anvers ; étude et prospection ; prise en charge par la capitainerie du port afin d'être confronté dans la pratique avec les systèmes appliqués ; séances d'information complémentaires à la Direction des Douanes et Accises à Bruxelles.	Havenbedrijf van de Stad Antwerpen Stadhuis 2000 Antwerpen Belgique	Toute l'année sauf juillet et août 1-2 semaines (éventuellement 1-2 mois)	Niveau universitaire. Français, anglais	-	-
Formation de cadres supérieurs et moyens de holdings et d'institutions financières de développement	Elaboration d'une stratégie d'investissement ; détection et analyse des projets ; contrôle des participations ; organisation interne.	IBF dans les locaux de la Société Nationale d'Investissement (S.N.I.) 63, rue Montoyer 1040 Bruxelles Belgique	A arranger	Qualification professionnelles. Français, anglais	-	A arranger

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Industrial development	Asian Productivity Organization (APO) organizes courses and seminars on: computer applications in manufacture and commerce; productivity measurement and analysis; small industries development; project feasibility, appraisal and implementation; corporate planning; tools for managerial decision-making; systematic problem solving; production management; quality control in the machinery parts industry; productive maintenance; motivation for productivity; supervisory development; energy management; agro-industry management; appropriate technology for small and rural industries; tool engineering; packaging engineering; value engineering; environmental engineering; construction management.	Asian Productivity Organization 4-1 <sup>4</sup> Akasaka, 8-chome Minato-ku Tokyo 107, Japan various cities of Asia	To be decided 1984 (and in 1985) 1-11 weeks	Professional qualification. APO member country. English	-	To be arranged
Banca de fomento	Con la colaboración de bancos de desarrollo de América Latina e instituciones financieras y otras entidades de Europa y Asia ALIDE organiza el Programa de Adiestramiento en Servicio PAS-ALIDE, en el cual se ofrecen anualmente más de 24 oportunidades de capacitación en cualquiera de los temas siguientes: banca de desarrollo y problemas de financiamiento; mercado de capitales; movilización de recursos; administración bancaria; informática; recursos humanos; comercio exterior; desarrollo agro-industrial; desarrollo industrial; desarrollo pesquero; desarrollo rural; vivienda; pre-inversión; promoción de proyectos de inversión; transferencia de tecnología.	Alide Paseo de la Repú- blica 3211 San Isidro Lima, Perú Europa y Asia	Diversas durante el añ variable de 2 semanas a 8 meses	Ser funcionario permanente de entidad miembro de ALIDE. Poseer título o grado de nivel superior o haber recibido entrenamiento teórico relacionado con la actividad y/o materia de la beca. Tener un año de trabajo como experiencia mínima en el área del entrenamiento en su entidad de origen Español, inglés, francés, portugués, alemán, italiano	-	\$US 50 - 1,500
Trade and tec'nology	UNCTAD organizes training courses or seminars on technology policies and planning, transfer and development of technology; trade and technology in the pharmaceutical sector, in food sector, energy sector, capital goods and equipment sector.	Advisory Service on Transfer of Technology UNCTAD Geneva, Switzerland	To be arranged in 1984 and 1985	Professional qualifications. English or French (participants nominated by their governments - developing countries - upon invitation of UNCTAD)	-	-

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Investment planning and appraisal for development banks and financial institutions	The course covers the organization, management and financing of development finance institutions, and the contribution they make to development in the industrial and agricultural sectors.	University of Bradford, Project Planning Centre for Developing Countries Bradford, West Yorkshire BD7 1DP United Kingdom	30 April 1984 12 weeks	University degree and several years experience of development and/or project work. English	-	£2,900 (includes tuition and accommodation)

**MAINTENANCE AND REPAIR**  
**ENTRETIEN ET REPARATION**  
**MANTENIMIENTO Y REPARACION**

Entretien de l'équipement portuaire	Partie théorique : 1 mois. Stage pratique concernant l'entretien de l'équipement portuaire : 6 mois.	Antwerp Port Engineering & Consulting (APEC) Van Schoonbekeplein 6 2000 Anvers, Belgique	A fixer 7 mois	Qualifications professionnelles. Français	-	Bf. 112,500
Maintenance port equipment	Theoretical part: 1 month. Practical part: 6 months	Antwerp Port Engineering & Consulting (APEC) Van Schoonbekeplein 6 2000 Anvers, Belgique	To be arranged 7 months	Professional qualification. English	-	Bf. 112,500
Maintenance - réparation navires	Programme et stage pratique sur l'entretien et la réparation de navires.	Antwerp Port Engineering & Consulting (APEC) Van Schoonbekeplein 6 2000 Anvers, Belgique	A fixer 3 mois	Qualifications professionnelles. Français	-	A déterminer
Maintenance ship repair	Practical training course for maintenance and ship repair in 'the port of' Antwerp.	Antwerp Port Engineering & Consulting (APEC) Van Schoonbekeplein 6 2000 Antwerp, Belgium	To be arranged 3 months	Professional qualification. English	-	To be arranged

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Corrosion et lutte contre la corrosion	Corrosion électrochimique ; diagrammes d'équilibres électro-chimiques ; études cinétiques de la corrosion ; méthodes expérimentales ; théorie et applications à la lutte contre la corrosion ; principes de protection et cas particuliers de corrosion.	Centre Belge d'Etude de la Corrosion CEBELCOR Avenue Paul Héger Grille 2 B-1050 Bruxelles Belgique	2 semaines ou 3 mois toute l'année sauf juillet et août	Diplôme de l'enseignement universitaire ou technique supérieur. Français, anglais	-	A arranger
Maintenance industrielle	Séminaire a sur les systèmes de gestion de maintenance adaptés aux conditions d'exploitation dans les pays en voie de développement, en particulier la problématique des pièces de rechange, la documentation technique, l'organisation et la planification de la maintenance ainsi que les mesures à prendre lors de l'achat d'équipement. Atelier de maintenance. Stage pratique complète par des visites d'usines.	DGS International S.A. Kortrijksepoortstraat 79, B-9000 Gent Belgique	Toute l'année sauf juillet et août 1-3 mois	Technicien supérieur ou ingénieur	-	A fixer
Maintenance industrielle	Formation méthodologique et pratique à la maintenance des équipements de froid et climatisation : rappel des principes théoriques en matière de froid et de climatisation ; visite technique d'une installation ; travaux pratiques avec les techniciens d'exploitation et de maintenance.	Fabrique National Herstal - F.N. 33, voie de Liège 4400 Herstal Belgique	A arranger	Qualifications professionnelles. Français, anglais	-	A arranger
Maintenance industrielle	Formation méthodologique et pratique à la maintenance des équipements de stations de traitement des eaux : révision des notions de base en matière de traitement des eaux ; visite technique d'une station de traitement des eaux ; travaux pratiques avec les techniciens d'exploitation et de maintenance.	Fabrique National Herstal - F.N. 33, voie de Liège 4400 Herstal Belgique	A arranger	Qualifications professionnelles. Français, anglais	-	A arranger
Mini et micro informatique appliquées à la maintenance industrielle	Connaissances de base ; applications concrètes sur les "packages" ; utilisation du traitement de texte ; vocabulaire anglais ; expérience industrielle.	Fabrique National Herstal - F.N. 33, voie de Liège 4400 Herstal Belgique	A arranger 3-6 mois	Qualifications professionnelles. Français, anglais	-	A arranger

## MAINTENANCE AND REPAIR (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Corrosion fundamentals and corrosion protection	Thermosetting resins reinforced with fiber glass, use in aggressive environment; fundamentals and basic mechanisms of corrosion; materials selection; influence of mechanical and metallurgical factors on corrosion; corrosion inhibitors; application and specification of industrial paints; cathodic protection; aspects of corrosion in alcoholic media.	INT/ABRACO Instituto Nacional de Tecnologia and Associação Brasileira de Corrosão Avenida Venezuela 82 20.081 Rio de Janeiro Brazil	April 1984 4 weeks	Professional qualification. Portuguese or Spanish	28 February 1984	To be arranged
Repair and maintenance of prime movers	Short courses on: internal combustion engines; tractors; electrical installations; electrical circuitry and connections; electric drives; pumps.	Deutsche Lehranstalten für Agrartechnik Bartningstrasse 49 D-6100 Darmstadt 12 Federal Republic of Germany	To be arranged 2-8 days	Professional qualification. English or German	-	To be arranged
Maintenance and repair of bio-medical electronic equipment	Three weeks refresher course. Practical training in maintenance at different factories producing bio-medical electronic equipment.	TESCO, Technical University of Budapest Hungarian Instrument Manufacturers Association and four industrial enterprises; Rosenberg hazaspar u. 21, Budapest, Hungary	January 1984 12 weeks	Professional qualification. English	-	To be arranged
Corrosion science and technology	Thermodynamics and kinetics of corrosion processes; materials science; electrochemistry; corrosion of ferrous- and non-ferrous materials; corrosion in industrial plants; corrosion protection; testing methods in corrosion and corrosion protection.	Corrosion Study Center "A. Daccò" Faculty of Sciences University of Ferrara Via L. Borsari, 46 I-44100 Ferrara, Italy	February 45 days	University degree in chemistry, engineering or physics. Italian	30 November 1984	lire 130,000
Industrial maintenance mechanical equipment	To provide participants with an exposure to the strategy and techniques of identifying and eliminating troubles in mechanical equipment, thus aiding them in minimizing production downtime and maximizing productivity.	PETROMAN 1st floor Musarrat Building Sultan Ahmed Shah Road Off: Shaheed-e-Millat Road, Karachi, Pakistan	27 May to 31 May 1984 (tentative)	Engineering personnel at middle and junior levels with responsibility of maintenance of mechanical equipment. Senior electrical or instrumentation engineers desirous of broadening their insight in multidisciplinary maintenance.	26 April 1984	\$US 330

## MAINTENANCE AND REPAIR (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Corrosion	Corrosion basic issues; corrosion detection and control; anti-corrosive protection; inspection and control of coating; corrosion and materials protection technics.	Technical Training Department of the National Laboratory of Engineering and Industrial Technology Praça do Príncipe Real 19, Lisbon Portugal	February 1984 1 month	Professional qualification. Portuguese (occasionally English, French, Spanish)	-	-
Science laboratory equipment	Course designed for technical staff in developing countries who are directly involved in the use, maintenance and repair of science and laboratory equipment. Spectroscopy, UV-vis, IR, AA; gas chromatography; HPLC; electrochemical equipment; specialized equipment. Instrumentation science: basic electronics and optics for instrumentation, analytical techniques, scientific glassblowing, photography.	Department of Science Bristol Polytechnic Coldharbour Lane Bristol BS16 1QY United Kingdom	5-12 months as appropriate	Scientific or technical education with 4-5 years experience. English	-	To be arranged
Corrosion monitoring and measurement	Detection and measurement of corrosion in high capital cost process plant.	Corrosion Monitoring Consultancy - CMC St. Pirans, Denchworth Road, Wantage Oxfordshire OX12 9AU United Kingdom	To be arranged 2-4 days	Professional qualification. English	-	To be arranged
Asset and maintenance management	To equip participants to introduce or develop maintenance policies in their organizations, and to ensure that, at minimum cost, plant and equipment is available, operating to agreed standards.	Crown Agents Training Services 4 Millbank London SW1P 3JD United Kingdom	16 January and 1 October 1984 12 weeks	Professional qualification. English	-	£4,900 (fully residential)

## MAINTENANCE AND REPAIR (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Planned maintenance management	Aims, vehicle and equipment types and selection, inspection, servicing and preventive maintenance safety at work, work methods and appreciation of method study, work measurement and application of work standards/time standards in maintenance, external maintenance facilities, planning and implementation of a planned maintenance facility, activity sampling, workshop design, layout, equipping, costing and control. Stock management and stores provision and control. In-company visits-attachments for special projects. Preparation of action plan for use in own organization.	Rayfield Consultancy and Training (OSG) Ltd. Melrose House Broadlays, Woolton Hill, Nr. Newbury Berks. RG15 9TT United Kingdom	January, April, August and October 1984 4 weeks	Professional qualification. English	-	£2,465 + VAT
Corrosion engineering and control	Unspecified as yet.	Corrosion and Protection, UMIST Manchester M60 1QD United Kingdom	16 April 1984 4 days	Professional qualification. English	-	To be arranged

MANAGEMENT AND INDUSTRIAL ADMINISTRATION  
GESTION ET ADMINISTRATION INDUSTRIELLE  
GESTION Y ADMINISTRACION INDUSTRIAL

Management	Courses are organized on: finance and investment strategies; training systems for supervisors; training methodology; quantitative business management; professional practice management; executive management; advanced training of executives; small-scale industry management; retail enterprise management; financial management; business administration; mini-computers and business applications; marketing strategies; computers in business management.	Financial Management Research Centre University of New England Armidale, NSW 2351 Australia	Throughout year 2-12 weeks	Professional qualification. English	-	\$A 550 - 6,000 (includes accommodation)
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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Design and development of training programmes	Meeting with the training and development needs of individuals and organizations; understanding how adults learn; improving the learning environment for training and staff development programmes; administration and documentation of training and development programmes; supervising training personnel; application and evaluation of practical training skills, methods, low cost materials and design techniques.	International Training Institute, Australian Development Assistance Bureau, P.O. Box 887 Canberra City 2601 Australia	5 September 1984 12 weeks	Professional qualification. English	-	To be arranged
Management and development	It is proposed that the course will be organized on the basis of common elements plus a series of specializations which will relate either to fields of employment (e.g., public enterprises, government departments, private sector) or particular areas of interest (e.g., finance, personnel, planning, extension, etc.). This approach is intended to enable the provision of a suitable balance between skills/techniques on the one hand and concepts on the other as well as an appropriate balance between theory and practice.	International Training Institute, Australian Development Assistance Bureau, P.O. Box 887 Canberra City 2601 Australia	23 May 1984 12 weeks	Professional qualification. English	-	To be arranged
Management and finance	Public finance and budgeting; financial administration; cost concepts and decision making; cash flow management; internal audit and control; project evaluation.	International Training Institute, Australian Development Assistance Bureau, P.O. Box 887 Canberra City 2601 Australia	February and September 1984 12 weeks	Professional qualification. English	-	To be arranged
Orientation et gestion des centres de management d'Amérique latine	Organiser un transfert d'informations et d'expériences adaptables à la pratique et à la formation en gestion privée ou publique. Notamment mise au point de projets de programmes ou de pédagogies à implanter dans les centres latino-américains.	Fonds Léon A. Bekaert rue Bréderode 2 1000 Bruxelles en collaboration avec des centres de management de Belgique et d'autres pays d'Europe	15 septembre 3 mois	Qualifications professionnelles. Français	-	\$US 1,000
Gestion	Compléments de formation "non-technique" pour techniciens : raisonnement économique de base ; gestion de la production ; relations humaines.	Fabrimétal Hainaut-Namur, rue Puissant 15 B-6000 Charleroi Belgique	Février 1984 11 jours	Qualifications professionnelles. Français	-	Bf.25,000

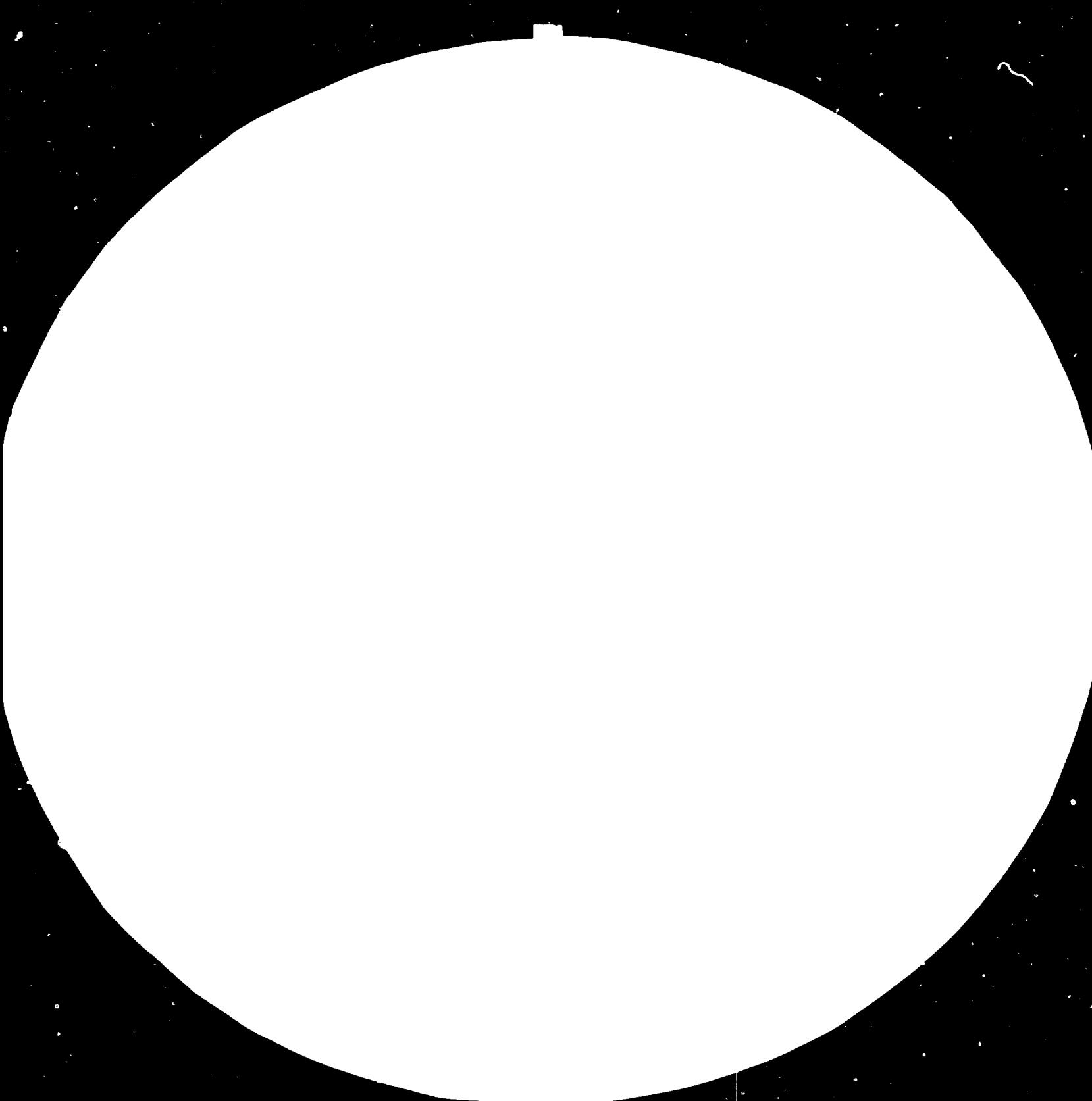
Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Leadership adapté en milieu industriel	Apprentissage et mise en pratique de grilles d'évaluation des situations en vue d'y apporter la meilleure réponse en terme de leadership en milieu industriel.	Fabrimétal Hainaut-Namur, rue Puissant 15 B-6000 Charleroi Belgique	Novembre 1985 6 jours	Dirigeants et cadres de direction. Français	-	Bf.29,000
Gestion des entreprises	Séminaire organisé par des ingénieurs-conseils spécialisés en organisation et gestion des entreprises. Exposés et études de cas suivant un programme réglé d'après les domaines d'intérêt des participants, par exemple : gestion du personnel ; comptabilité, recherche opérationnelle, gestion budgétaire ; gestion des approvisionnements et des stocks ; organisation de la production ; étude du travail ; gestion des équipements, choix des investissements, organisation des ventes. Le séminaire peut être complété par des séjours guidés dans des entreprises et organismes publics belges.	Bureau d'Ingénieurs-Conseils Gombert Cadic-Gombert S.A. Chaussée de Charleroi 123a, Bte 7 B-1060 Bruxelles Belgique	A fixer	Humanités complètes plus formation spécialisée plus expérience professionnelle minimum de deux ans. Français	-	A fixer
Organisation et gestion des entreprises	Stage individuel organisé par des ingénieurs-conseils spécialisés en organisation et gestion des entreprises. Comprend des exposés et discussions, des lectures dirigées d'ouvrages généraux et de rapports d'études, des séjours guidés dans des entreprises et organismes publics belges, la constitution d'une documentation personnelle, la rédaction du rapport de stage. Programme du stage fixé de commun accord en fonction de la formation et de l'expérience du stagiaire ainsi que de son plan de carrière. Sujets pouvant relever des divers domaines de la gestion tels que la direction générale, la direction du personnel, la production, les ventes, la gestion des équipements, la gestion des approvisionnements.	Bureau d'Ingénieurs-Conseils Gombert Cadic-Gombert S.A. Chaussée de Charleroi 123a, Bte 7 B-1060 Bruxelles Belgique	A fixer	Humanités complètes plus formation spécialisée plus expérience professionnelle minimum de deux ans. Français	-	A fixer
Management	Short courses and seminars on: technological management; structure and organizational changes in R&D; research management; industrial property and contracts negotiation; R&D; development of research project groups.	School of Economics and Administration University of Sao Paulo, Brazil	May and June 1984 3 days - 2 weeks	Professional qualification. Portuguese or English	-	To be arranged

## MANAGEMENT AND INDUSTRIAL ADMINISTRATION (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Management	The course includes detailed training with seven modules covering: training of trainers, managing the industrial enterprise, industrial engineering and production management, organization for management, management, administration and study visits to plants and training centres.	Centre for Professional Development complex "Chervena zvezda" 172 str. No. 11 Sofia 1156, Bulgaria	10 May 1985 8 weeks	Professional qualification. English	31 January 1985	To be arranged
Techniques de gestion dans l'industrie manufacturière	Techniques de gestion de la production, notamment normalisation ; planification du contrôle de la qualité, en égard plus particulièrement à la fabrication de produits pour l'exportation. Stages individuels de formation pratique dans l'industrie.	Ecole Supérieure des Sciences Economiques et Sociales (ESSEC) Université du Cameroun en coopération avec l'Institut d'Administration et de Gestion de l'Université de Louvain, Douala République Unie du Cameroun	18 avril - 13 mai programme régional pour l'Afrique	Etre titulaire d'un diplôme d'ingénieur (ou d'un diplôme équivalent), justifier d'une expérience pratique de 3 ans au moins et occuper un poste de responsabilité dans les services de production d'une entreprise industrielle privée ou publique. Français	-	-
Análisis de problemas y toma de decisiones	Conceptos básicos; las decisiones dentro del ámbito de la empresa; el proceso de toma de decisiones; distintos modelos para la toma de decisiones; resumen y conclusiones.	Instituto Nacional de Capacitación Profesional (INACAP) Av. Chesterton 7028 Casilla 10205 Santiago, Chile	Julio 1984 2 semanas	Calificación profesional. Español	-	\$US 250
Ingeniería económica	Principios de ingeniería económica; conceptos fundamentales; decisión; alternativas múltiples; retiros y reemplazos; evaluación de un proyecto.	Instituto Nacional de Capacitación Profesional (INACAP) Av. Chesterton 7028 Casilla 10205 Santiago, Chile	Mayo 1984 2 semanas	Sólidos conocimientos de matemáticas. Español	-	\$US 250

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## MANAGEMENT AND INDUSTRIAL ADMINISTRATION (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Industrial project management	Syllabus: basic concepts of industrial projects; project definition, establishment of priorities; different ways of implementation; engineering and procurement; construction, erection and start-up; project organization and staffing; project budget and financing; managing the contracts; project planning and control tools; cost planning and control; schedule planning and control; performance planning and control; project documentation; know-how transfer and training; co-operation, project meetings; leadership, team building; conflict management; project finishing; project evaluation. Classroom 3 weeks, case studies 1 week. The emphasis of the course is on planning and control, case studies are from forest industries.	F. Blanz & Co OY Training Consultants in co-operation with Helsinki University of Technology Höyläämötie 5 SF-00380 Helsinki 38 Finland	30 July 1984 4 weeks	Post graduate or equal. English	-	\$US 2,000 including accommodation and tuition
Développement de l'innovation (produits nouveaux, activités nouvelles)	L'objectif est de former des participants de l'innovation de haut niveau, capables de prendre en compte l'ensemble des éléments permettant de mener à un succès commercial : stratégies d'entreprise, marketing industriel, gestion de la qualité, analyse de la valeur, design industriel, faisabilité technique, gestion des transferts de technologie, gestion des projets. Formation méthodologique 50%, formation pratique sur des projets réels 50%.	Centre d'Etudes en Gestion de l'Innovation et de la Qualité Groupe Ecole Supérieure de Commerce 32 rue de la Dalbade 31068 Toulouse et Centre de Formation Continue Polytechnique Institut National Polytechnique, Place des Hauts Murats 31006 Toulouse France	Octobre durée 1 an ou durée 2 ans ( poursuite du projet)	Diplôme de 2ème cycle de l'enseignement supérieur ou expérience professionnelle. Français	10 juin	A arranger
Gestion	Techniques de gestion ; contrôle de gestion ; action commerciale à l'exportation.	Institut Français de Gestion, Chemin de la Rossignole, B.P. 14 69390 Vernaison, France	De janvier à octobre 13-23 semaines	Qualifications professionnelles. Français	-	A arranger
Gestion des entreprises industrielles	Divers programmes concernant la formation et le perfectionnement des cadres, futurs cadres et dirigeants à la gestion des entreprises industrielles, avec l'accent mis sur la formation des formateurs, le management de la production et l'utilisation de l'informatique.	Institut Français de Gestion 37, quai de Grenelle 75738 Paris Cedex 15 France	A fixer	Français	-	A débattre

## MANAGEMENT AND INDUSTRIAL ADMINISTRATION (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
General management	For candidates from English speaking African countries with 8/10 years of management experience. Introduction to basic knowledge governing the management of the fundamental areas of management. (ISSEC also organizes many other courses in management.)	ISSEC (groupe ESSEC) 35, bd de Sébastopol 75001 Paris, France	15 May 1984 5 weeks	Professional qualification. English	-	F 44,000 (tuition + full residence)
Works management at the executive level	Specialized practical, individual further training in business administration at the management level.	Carl Duisberg-Gesellschaft and Zentralstelle für Arbeitsvermittlung der Bundesanstalt für Arbeit Hohenstaufenring 30-32 D-5000 Köln 1 Federal Republic of Germany	To be arranged 12-18 months incl. language training	Technical and management personnel who have completed professional training and have practical professional experience. German	-	To be arranged
Industrial management	Training courses for industrial management: economy energy resources; economics financing; planning; lay out design; production engineering; maintenance and reliability; auxiliary plants; safety engineering; environmental protection.	University of Rome Palazzo Baleani Corso Vittorio Emanuele 244 Rome, Italy	To be arranged 1 year	University degree in engineering sciences (bachelor or equivalent). English	-	About \$US 200
Industrial engineering	Short courses are arranged on: programme for advancement of management and productivity; executive effectiveness; working capital management; performance appraisal and counselling; creativity in organizations; integrated materials management; project management; managing small units; decision-making technology in agriculture and agro-based industry; corporate strategic planning; management information system; electronic data processing for managers; effective management for training; worker and productivity; quantitative techniques for decision-making; corporate energy plans; industrial boilers: design operation and maintenance; air pollution control; utility management; design, operation and maintenance of furnaces and kilns; water treatment for boilers; condition monitoring; advanced maintenance management; corrosion control; low cost devices for improving productivity.	National Productivity Council Productivity House Lodi Road New Delhi 110003 India (various cities in India)	Throughout year 3-15 days	Professional qualification. English	-	To be arranged

## MANAGEMENT AND INDUSTRIAL ADMINISTRATION (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Management	Seminars to meet the needs of Arab states on technological, managerial and administrative staff: management; training of instructors; production management; cost accounting; management by objectives; stock control; maintenance; industrial safety; industrial planning; industrial statistics; project evaluation; quality control.	Arab Industrial Development Organization (AIDO) P.O. Box 3156 Al-Saadoon, Baghdad Iraq	To be arranged 1-2 weeks in 1984	Professional qualification. Arabic	-	To be arranged
Supervision	Desinged to meet the needs of managers and supervisors in industry. The course is designed specifically to individual company needs. The following is only a sample of the topics covered: motivation; communications; team building; stock control; cost control; etc.	ANCO - The Industrial Training Authority F.O. Box 456 27/33 Upper Baggot Street, Dublin 4 Ireland	To be arranged according to demand 2 weeks	For managers and supervisors directly responsible for staff. English	-	To be arranged
Advanced management	The chief executive programme combines practical study visits in Irish companies with formal training in advanced management techniques at the National Management Centre.	Irish Management Institute Sandyford Road Dublin 14, Ireland	3 April 1984 10 weeks	Chief executives of private, co-operative and parastatal organizations in the manufacturing service and distribution sectors. English	28 February 1984	IR£6,770 (to be adjusted)
Chief executive programme	Management problems in a developing economy; the corporate plan; the organization; marketing management; finance and accounting; operations; managing people at work; personnel; personal skills. Participants will send up to two weeks in one or more Irish companies, where possible, chosen to match their own firm.	Irish Management Institute National Management Centre Sandyford Road Dublin 14, Ireland	3 April 1984 10 weeks	Chief executives of parastatal co-operative or organizations. English	28 February 1984	IR£7,300

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Management development	The programme will concentrate on a number of distinct but interrelated subject areas such as: business policy; business management; marketing management; finance and accounting; operations; managing people at work; personnel and personal skills.	Irish Management Institute National Management Centre Sandyford Road Dublin 14, Ireland	18 September 1984 8 weeks	Senior and middle level managers. English	14 August 1984	IR£6,400
Operations management	The management of manufacturing operations. The programme will cover: the fundamentals of the operations function; tools for operations management; operations planning and control; materials management; physical distribution and transport; managing people; quality assurance; maintenance; project planning; operations management in the organizational context; attachments to matching Irish companies.	Irish Management Institute National Management Centre Sandyford Road Dublin 14, Ireland	25 September 1984 9 weeks	Managers and directors of operations and production in parastatal, co-operative and private organizations. English	21 August 1984	IR£7,020
Management development	Particular emphasis on the nature of management; the management environment planning; organization and organizing; people in organizations; communications; control; problem solving; personal skills and management techniques.	Institute of Public Administration 57-61 Lansdowne Road Ballsbridge Dublin 4, Ireland	12 June 1984 8 weeks	Professional qualification. English	-	IR£2,156
Public enterprise management	To increase the capacity of each participant to manage effectively a functional or technical (e.g. planning, personnel, maintenance) unit in his/her present organization. The programme will be highly participative and the main module will consist of a four-week in-plant assignment specifically designed to meet the participants own particular needs.	Irish State Agencies Development Co-operation Organization (DEVCO) and Institute of Public Administration 57-61 Lansdowne Road Ballsbridge Dublin 4, Ireland	6 August 1984 7 weeks	Senior managers with total responsibility in own organization for the area to be studied. English	End June 1984	To be arranged

## MANAGEMENT AND INDUSTRIAL ADMINISTRATION (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Cross cultural management	Participants with different cultural backgrounds can get a clue to develop new management styles of their own through a comparison between the Japanese management system and theirs, observation tours and discussions with lecturers and Japanese managers.	The Association for Overseas Technical Scholarship, Japan 30-1, Senju Azuma 1-chome, Adachi-ku, Tokyo, Japan	May, October November 1984 and 1985 3 weeks	Junior and senior managers of developing countries with approx. 10 years of practical experience in trans-national business activities. English	5 months before the commencement of the programme	Y 272,000
Production management	Participants will review the whole process of production from planning to delivery, through production simulation, exercises and in-plant practices and study how to increase total production efficiency in a factory.	The Association for Overseas Technical Scholarship, Japan 30-1, Senju Azuma 1-chome, Adachi-ku, Tokyo, Japan	February 1984 and 1985 6 weeks	Engineers and managerial staff who are (or expected to be) in charge of the control or factory management in industries of developing countries. English	5 months before the commencement of production programme	Y 458,000
Production management in manufacturing industry	Role of factory managers, scientific production management techniques, problem solving and decision making, human motivation and training, practical application in industry in developing countries.	The Association for Overseas Technical Scholarship, Japan 30-1 Senju Azuma 1-chome, Adachi-ku Tokyo, Japan	19 January 1984 8 weeks	Professional qualification. English	-	To be arranged
Financial management	Advanced training in managerial finance, emphasizing managerial accounting; working capital management; financial planning and control; investment appraisal to individuals currently performing a financial function or aspiring to do so.	Research Institute for Management Science (PVB) P.O. Box 143 2600 AC Delft Netherlands	18 July 1984 5 1/2 months	Professional qualification and 5 years business experience. English	3 months before start of course	f. 9,700 (tuition only)

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
General management	To develop executives with general management capabilities for small and medium sized enterprises in developing countries.	Research Institute for Management Science (RVB) P.O. Box 143 2600 AC Delft Netherlands	11 January 1984 5 1/2 months	Professional qualification and business experience. English	3 months before start of course	f. 9,700 (tuition only)
General management for state enterprises	To develop executives with general management capabilities for state enterprises in developing countries; to develop specialists in business planning for state enterprises in developing countries; to develop civil servants with a high degree of awareness of managerial functions and processes.	Research Institute for Management Science (RVB) P.O. Box 143 2600 AC Delft Netherlands	18 July 1984 5 months	Professional qualification and business experience. English	-	f. 9,700 (tuition only)
Institutional management consultancy	To widen the experience and increase the resourcefulness of senior consultants and those who are (potentially) responsible for institution-building and development of consulting organizations.	Research Institute for Management Science (RVB) P.O. Box 143 2600 AC Delft Netherlands	19 September 1984 3 months	Professional qualification and at least 5 years experience in consultancy. English	-	f. 9,700 (tuition only)
Production management	To provide plant supervisors and industrial officers with an exposure to the different aspects of production management; to create an awareness of the role of the function in the overall management of industrial enterprises.	Research Institute for Management Science (RVB) P.O. Box 143 2600 AC Delft Netherlands	11 January 1984 5 1/2 months	Professional qualification and 5 years business experience. English	3 months before start of course	f. 9,700 (tuition only)
Advanced management programme	Business policy; finance and control; profit planning; budgetary control; financial strategy; administrative practices; management system.	Pakistan Institute of Management, Shahrah Iran, Clifton Karachi-6, Pakistan	19 August 3 weeks	Professional qualification. English	-	Prs 5,000
Management	Production management and training of trainers.	National Refinery Ltd. 7.B Industrial Zone Korangi Karachi, Pakistan	March, September and November 1984 2 weeks	Engineering degree. English	-	-

## MANAGEMENT AND INDUSTRIAL ADMINISTRATION (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Management	Management process; personnel management; financial analysis; production management; marketing management. (The Institute organizes many other courses in management.)	Pakistan Institute of Management Shahrah Iran Clifton Karachi 6, Pakistan	Twice every year 5 weeks	Junior and middle managers from business and industry.	-	Rs 1,600 - 2,500
Business management	Develop the capabilities of general management in organizations; formulation and implementation of a business strategy; management and information; audio-visual materials in business management.	Technical Training Centre of the National Laboratory of Engineering and Industrial Technology Praça do Príncipe Real 19, Lisbon, Portugal	October 1984 4 weeks	Professional qualification. Portuguese	-	-
Management	Short courses on: organization and production management; industrial maintenance; electronics (micro-processors).	Technical Training Centre of the National Laboratory of Engineering and Industrial Technology Praça do Príncipe Real 19, Lisbon, Portugal	April 1984 2 weeks - 2 months	Professional qualification. Portuguese (sometimes English and French)	-	-
Modern management in small and medium companies	Management in a changing context; the fundamental bases of a modern management; management and human resources; financial management; planning and business strategy.	Technical Training Centre of the National Laboratory of Engineering and Industrial Technology Praça do Príncipe Real 19, Lisbon, Portugal	October 1984 3 weeks	Professional qualification. Portuguese	-	-
Gestion	Management, etc., finance-controle, gestion des ressources humaines, gestion commerciale et import-export.	Ecole Supérieure de Gestion des Entreprises (ESGE) Bd Général de Gaulle Av. Malick Sy, B.P. 3802 Dakar, Sénégal	A arranger	Qualifications professionnelles. Français	-	A arranger

## MANAGEMENT AND INDUSTRIAL ADMINISTRATION (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Management	General management programme for managers responsible for planning and operation of industrial activities in the developing countries. Particular emphasis: strategic issues, creation and management of joint business activities, managerial control and accounting, finance, marketing, production and logistic, technology transfer, multicultural management, international contracts and procurement.	Swedish Institute of Management Box 6501 113 83 Stockholm Sweden	July 1984 6 weeks	Minimum 10 years work experience in business or administration. English	1 May 1984	To be arranged
Advanced management	To increase knowledge of the basic functions and disciplines of management; to examine significant trends in the environment; to take a general management perspective of the functioning of the enterprise; to develop decision-making skills.	International Management Institute (IMI) 4, chemin de Conches CH-1231 Geneva Switzerland	7 May 1984 8 weeks	Professional qualification. English	-	SwF 15,000
International executive programme	The objectives are to improve decision-taking and long-term policy making capabilities through an examination of how major trends in the social, political and economic environment impact on the organization and through acquisition of management tools and concepts with which to meet new challenges.	International Management Institute (IMI) 4 chemin de Conches CH-1231 Geneva Switzerland	20 February 1984 4 weeks	Experienced general managers and senior executives. English	-	SwF 10,500
Management	The IMI organizes short courses: innovation in board practices on both sides of the Atlantic; international programme for senior executives; international executive programme; seminar on corporate structure; seminar on management of research and development; personnel management; financial management; marketing; environment management; management development; accounting and control; marketing of technology and know-how.	International Management Institute (IMI) 4, chemin de Conches CH-1231 Geneva Switzerland	Throughout year 3 days - 14 days	Professional qualification. English	-	SwF 4,000 - 6,700

## MANAGEMENT AND INDUSTRIAL ADMINISTRATION (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
General management	Business strategy; business contracts; translating policy into actions; financial planning; project appraisal; capital investment; materials management; production planning; capacity utilization; maintenance programmes; marketing strategy; organization structuring; manpower planning; performance improvement programme.	National Institute for Productivity P.O. Box 2021 DSM Tanzania (Arusha, Tanzania)	January 1984 and 1985 6 weeks	Professional qualification. English	-	To be arranged
Implementation of national productivity income and price policy	Productivity and economic growth; labour productivity; productivity and income distribution; national economic survival programme; agricultural policy and rural development strategy; price mechanism and trade; incentive schemes in industry and agriculture; role of productivity institutions and national policy.	National Institute for Productivity P.O. Box 2021 DSM Tanzania (Arusha, Tanzania)	September 1984 and 1985 1 week	Professional qualification. English	30 June 1984 and 1985	To be arranged
Industrial management	Production management; materials management; product quality management; project management; economic and financial analysis; model building for industrial planning.	Industrial Engineering and Management Division, Asian Institute of Technology P.O. Box 2754 Bangkok, Thailand	To be arranged 4 weeks	Professional qualification. English	-	To be arranged
Industrial production	Production planning techniques; quantitative techniques in decision making; inventory control; quality control; project planning techniques.	Industrial Engineering and Management Division, Asian Institute of Technology P.O. Box 2754 Bangkok, Thailand	To be arranged 2-3 days	Professional qualification. English	-	To be arranged
Management development	Planning techniques for managers; introduction to operations research techniques in decision making; statistics for managers; managerial economics; systems approach to decision making; managerial finance; marketing management; organizational management; information systems.	Industrial Engineering and Management Division, Asian Institute of Technology P.O. Box 2754 Bangkok, Thailand	To be arranged 4-6 weeks	Professional qualification. English	-	To be arranged

<u>Course or Seminar</u>	<u>General description</u>	<u>Organizer; Venue</u>	<u>Commencing date; Duration</u>	<u>Qualifications: Language requirements</u>	<u>Last date for receipt of applications</u>	<u>Fee</u>
Management	Courses are arranged in: marketing management and business development; corporate strategy; senior management; transport management; management development; improving managerial performance.	Ashbridge Management College, Berkhamsted Hertfordshire HP4 1NS United Kingdom	Throughout year 1-8 weeks	Professional qualification. English	-	To be arranged
Management	Broad introduction to a wide variety of management skills. Suitable for newly appointed managers.	Blackwood Hodge Management Centre Nene College Moulton Park Northampton NN2 7AL United Kingdom	21 November 1984 4 days	Professional qualification. English	-	£480
Management	Short courses are organized on: multi-cultural effectiveness; management techniques; management development; management communication; training management; international selling.	Cagill Attwood International 8 Teddington Park Teddington Middlesex TW11 8DA United Kingdom	Throughout year 2-14 days	Professional qualification.	-	To be arranged
Management	Courses are organized in general management for specialists; for young managers; middle managers; senior managers.	Cranfield School of Management, Cranfield Bedford MK4 30AL United Kingdom	Throughout year 3-9 weeks	Professional qualification. English	-	£2,325 - 5,850
Site management	Communications in the construction industry; industrial relations; working conditions; health and safety; contractual procedures; management planning; productivity techniques; site surveying and levelling.	Crown Agents Training Services 4 Millbank London SW1P 3JD United Kingdom	9 April and 20 August 1984 12 weeks	Managers/officers in the field of construction. English	-	£4,900 fully residential
Supply and materials management	To equip middle and senior management personnel to develop existing supplies procedures, plan new supplies systems and to integrate existing but diversified supply activities.	Crown Agents Training Services 4 Millbank London SW1P 3JD United Kingdom	16 January, 9 April, 2 July and 24 Sep- tember 1984 12 weeks	Professional qualification. English	-	£4,500 (fully residential)

## MANAGEMENT AND INDUSTRIAL ADMINISTRATION (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Management	EITB organizes over 40 short courses on: developing managerial and supervisory skills; managing the training function; management of engineering training centres; Allerton Park managing people; coaching and appraisal skills; customer relations; communication skills; training design; introduction to principles of numerical control; computer numerical control; computer programming robotics.	Engineering Industry Training Board (EITB) Webton Court Allerton Park Leeds LS7 4ND United Kingdom	Throughout 1984 5 days	Professional qualification. English	-	To be arranged
Personal career development	Executive and managerial re-deployment. Includes a review of strengths, job search strategies, inter-personal presentation and management skills.	Fielden House Productivity Centre Limited 856 Wilmslow Road Didsbury Manchester M20 8RY United Kingdom	Throughout year 3 weeks	Professional qualification. English	-	£500
Start a business programme	To develop an existing idea and put a business project into operation. The course covers assessing the market potential, providing an action plan, financial controls and procedures, marketing techniques and business skills.	Fielden House Productivity Centre Limited 856 Wilmslow Road Didsbury Manchester M20 8RY United Kingdom	Throughout year 10 weeks	Professional qualification. English	-	£950
Industrial engineering	Courses on: foundry engineering; industrial metallurgy; materials selection for design engineers; analytic procedures for testing laboratories; investigation of the failure of metallic components and structures; design, construction and maintenance of precision engineering and equipment; product design and development for injection moulded plastic parts; basic drawing techniques and drawing office practice; testing of plastics and other polymeric materials; specialized product design/production engineering; design, manufacture and operation of injection moulds for plastics; injection mould design; product planning and control for research managers.	Fulmer Research Institute Ltd and Yarsley Technical Centre Stoke Poges Slough SL2 4QD United Kingdom	1984 3-6 months	Professional qualification. English	-	£1,500 - 2,000 per month

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Management today	At the completion of the programme delegates will be able to: identify those actions they need to take upon returning to work, that will improve the effectiveness and efficiency of their area of responsibility; produce a realistic, prioritised plan of action for implementation upon returning to work; utilise the appropriate management skills and techniques required to cover most situations; appreciate more the relationship between various business functions and thereby contribute more to the overall success of the organization; ensure the appropriate steps are taken to maximize the efficiency of their subordinates.	International Department, The Industrial Society Robert Hyde House 48 Bryanston Square London W1H 7LN United Kingdom	16 January, 30 April and 17 September 1984 12 weeks	Professional qualification. English	-	£2,295 (+ VAT)
Sharing British production management expertise	To help participants to develop a detailed understanding of current production management and industrial engineering techniques; to develop participants' skill in the management of production facilities within industrial enterprises; to examine and discuss the potential for applications of UK - based production technology to the operating needs of participants companies/organizations.	Industrial Training Service Limited 43 Market Place Wetherby, West Yorkshire LS22 4LN United Kingdom	24 September 1984 and 23 September 1985 12 weeks	Professional qualification. English	-	1984: £4,250 1985: £4,500 (estimate)
Industrial administration	Factory organizational arrangements; human aspects; planning/controlling production; maintaining quality standards; controlling manufacturing costs; basis of computers and computer systems; additional material aids; communications.	Institute of Production Control National Westminster House, Wood Street Stratford-upon-Avon Warwickshire United Kingdom	January, August 4 weeks	Professional qualification. English	-	£2,200 (including accommodation and course documentation)
Materials management	Course refers to that grouping of material-related executive functions which regulate the complete system of material flow embracing procurement, storage and handling, production and inventory control, packaging, warehousing and distribution.	Institute of Production Control National Westminster House, Wood Street Stratford-upon-Avon Warwickshire United Kingdom	January, August 16 weeks	Professional qualification. English	-	£8,800 (including accommodation and course documentation)

## MANAGEMENT AND INDUSTRIAL ADMINISTRATION (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Production control	Organization and management; communications; production planning and documentation; material control; statistics and operational research; computers and systems analysis.	Institute of Production Control National Westminster House, Wood Street Stratford-upon-Avon Warwickshire United Kingdom	January, August 16 weeks	Professional qualification. English	-	£8,800 (including accommodation and course documentation)
Production control	Production planning; communications; organization and management; work study; materials and stock control; principles of factory management and sound industrial relations; costing and budgetary control; critical path analysis; computers; information and report writing; statistics and operational research.	Institute of Production Control National Westminster House, Wood Street Stratford-upon-Avon Warwickshire United Kingdom	April, June, September, November 4 weeks	Professional qualification. English	-	£2,200 (including accommodation and course documentation)
Production management	Capacity management and production control; marketing and sales management; analyzed techniques; materials and inventory management; human relationships and communications; transport planning and physical distribution; organization and management; quality and reliability; the modern approach to computerization; financial and accounting management; policy and boardroom procedures; understanding the balance sheet.	Institute of Production Control National Westminster House, Wood Street Stratford-upon-Avon Warwickshire United Kingdom	April, June, September, November 4 weeks	Professional qualification. English	-	£2,200 (including accommodation and course documentation)
Production management	Production management concepts; analytical techniques - work study; network analysis; valve analysis; statistical methods; operational research; data processing; economics management accounting; industrial psychology and sociology; terotechnology; policy and practice; production planning and control; cost analysis and control; plant layout and materials handling; management of quality and reliability; marketing aspects; manpower management; industrial relations; design of work systems.	Institute of Production Control National Westminster House, Wood Street Stratford-upon-Avon Warwickshire United Kingdom	January, August 16 weeks	Professional qualification. English	-	£8,800 (including accommodation and course documentation)

## MANAGEMENT AND INDUSTRIAL ADMINISTRATION (Cont'd)

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<u>Course or Seminar</u>	<u>General description</u>	<u>Organizer; Venue</u>	<u>Commencing date; Duration</u>	<u>Qualifications: Language requirements</u>	<u>Last date for receipt of applications</u>	<u>Fee</u>
Production management and control	The Institute organizes throughout the year courses on: production management; production control; materials and stock control; computers and systems analysis for production; principles of factory management; operational research; industrial development and administration.	Institute of Production Control National Westminster House Wood Street, Stratford-upon-Avon, Warwickshire, United Kingdom (Stratford-upon-Avon, Malta, Hong Kong, Singapore, Cyprus)	Throughout year 16 weeks	Professional qualification. English	-	From £8,800
Purchasing and materials management	12 weeks course specially designed for developing countries: purchasing practice and techniques; purchasing and supply management; stores management and stock control; materials management; business studies; shipping. The Institute also organizes many short courses throughout the year.	Institute of Purchasing and Supply Easton House Easton on the Hill Stamford United Kingdom (Brighton, Sussex)	6 February, 7 May and 3 September 1984 and senior personnel. 12 weeks	Middle management English	-	£4,500
Management	The School organizes courses on management and operational management. It also organizes a course for senior executives and an executive development course.	Manchester Business School Booth Street West Manchester M15 6PB United Kingdom	Throughout year 4 days - 10 weeks	Professional qualification. English	-	To be arranged
General management	A course in two parts, with an optional third part, a project leading to the Oxford University Certificate in Management Studies.	Oxford Centre for Management Studies Kennington Oxford OX1 5NY United Kingdom	January 1984 and 1985 9 weeks	Professional qualification. English	-	£5,500 for 1984
General management	A course using the case method of teaching, given by American professors mostly from the Harvard Business School. (The Centre also organizes individual courses ranging in length from 1 day to 2 months or longer.)	Oxford Centre for Management Studies Kennington Oxford OX1 5NY United Kingdom	July 1984 and 1985 6 weeks	Professional qualification. English	-	£4,400 for 1984

## MANAGEMENT AND INDUSTRIAL ADMINISTRATION (Cont'd)

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<u>Course or Seminar</u>	<u>General description</u>	<u>Organizer; Venue</u>	<u>Commencing date; Duration</u>	<u>Qualifications: Language requirements</u>	<u>Last date for receipt of applications</u>	<u>Fee</u>
Management	More than 325 courses and in-company training programmes are organized in such subjects as: communications; management; supervision; sales; design; maintenance; electronics; production technology; quality.	PERA Melton Mowbray Leicestershire LE13 OPB United Kingdom	Throughout year Variable	Professional qualification. English	-	To be arranged
Supervisor development	Supervisors role and functions, handling people, motivation, delegation, leadership, dealing with staff and customers, advertising and recruiting, interviewing, training, industrial relations, safety, communication, effective use of time and resources. Maintenance and its importance and application. Problems and their solution. Making the right decision. Action planning.	Rayfield Consultancy and Training (OSG) Ltd Melrose House Broadlays, Woolton Hill, Nr Newbury Berks. RG15 9TT United Kingdom	January, April, August and October 1984 4 weeks	Professional qualification. English	-	£2,465 + VAT
Management	Short courses on: finance for non-financial managers; management communication approaches; employment interviewing; industrial relations approaches; marketing and selling; business strategy; public sector management.	Management Centre University of Aston Gosta Green Birmingham United Kingdom	Throughout year 1-4 weeks	Professional qualification. English	-	£80-1,200
Management	Management and operation of large-scale projects.	Management Centre University of Aston Gosta Green Birmingham United Kingdom	To be arranged in 1984 12 weeks	Professional qualification. English	-	£3,750
Management	Managing the development of public sector activities.	Management Centre University of Aston Gosta Green Birmingham United Kingdom	Summer 1984 12 weeks	Professional qualification. English	-	£250

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Innovation	<p>A. <u>Product identification.</u> The use of idea-generating methods, e.g. trigger words, brainstorming, synectics, to produce new product ideas; and in the evaluation of these ideas to the stage where they could form the basis for new manufacturing activity relevant to community needs.</p> <p>B. <u>Creating of manufacturing activity.</u> The basic business skills required to set up a new manufacturing activity; requirements for financial planning, marketing and production planning.</p>	Centre for Development of Innovation Training Department of Education University College Cardiff United Kingdom	Autumn 1984 and 1985 1 month	Professional qualification.	-	£350
International management	An intensive career development programme for professors, administrators and trainers in management education and development. Programme concentrates on the design, implementation and evaluation of management education programmes within an international setting.	Centre for the Study of Management, University of Lancaster Lancaster LA1 4YX United Kingdom Sponsored by the International School of Business Management (London Business School: 1984 and New York University: 1985)	July 1984 and 1985 6 weeks	Professional qualification. English	30 April 1984 and 1985	£2,600 approx.
Development administration, public finance, training for trainers, communications, etc.	The Department organizes courses in administrative studies for overseas visiting fellows.	Department of Administrative Studies for Overseas Visiting Fellows, University of Manchester Oxford Road Manchester M13 9QS United Kingdom	January, April and September 6 weeks - 9 months	Professional qualification. English	-	To be arranged
Small business management	A course for those who are considering the possibility of setting up their own business, developing a business idea or those who are seriously considering taking on what is for them a new field of endeavour in small business management.	Extra-mural Department University of Manchester Manchester United Kingdom	27 February 1984 10 weeks	Professional qualification. English	-	To be arranged
Finance for managers	Finance for non-financial managers.	Urwick Management Centre, Stoke Pages Lane, Slough Berks SL1 3PF United Kingdom	July, October, November, January, February, May, 1 week	Senior and middle level managers. English	-	£420 + VAT and accommodation

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Management	A general management course which concentrates on a limited number of key issues and stimulates participants to improve their performance on return to work. In two parts: coping with change; getting results.	Urwick Management Centre Stoke Poges Lane Slough Berks SL1 3PF United Kingdom	February, April, June, September, November 4 weeks	Middle to upper middle managers. English	-	£1,545 + VAT and accommo- dation
Management	Short courses are organized during the year in: finance for non-financial managers; leadership in management; marketing in focus; production management; understanding computers; business systems analysis; managing large-scale projects; production management in construction.	Urwick Management Centre Stoke Poges Lane Slough, Berks SL1 3PF United Kingdom	Throughout year 1-10 weeks	Senior and middle level managers. English	-	£420 - 2,650 + VAT and accommo- dation
Senior management	To improve ability to understand and analyse the structure and performance of a complete business and to diagnose business problems. A unique course devoted to a participative exercise in small groups, each group forming the senior executive team of a hypothetical company.	Urwick Management Centre Stoke Poges Lane Slough, Berks SL1 3PF United Kingdom	February, May and October 3 weeks	Senior managers. English	-	£840 + VAT and accommo- dation
R&D management	Participants will learn how to apply principles and techniques of productive R&D management in these areas: philosophy of management; planning; organizing; staffing and staff development; directing and leading; evaluating and controlling.	Battelle 505 King Avenue Columbus, OH 43201 United States of America	6 August 1984 and 5 August 1985 18 days	Middle manager in R&D. English	1 June 1984 1 June 1985	\$US 2,500 for tuition, lunches, 3 dinners, and course material

## MANAGEMENT AND INDUSTRIAL ADMINISTRATION (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
R&D project and institute management	Project management: planning, organizing, monitoring and controlling, co-ordinating, and evaluating R&D projects Institute management: planning, organizing, monitoring and controlling, co-ordinating, and evaluating R&D organizations.	Denver Research Institute Industrial Economics and Management Division, University of Denver, P.O. Box 10127, Denver, Colorado 80208, United States of America	30 July 1984 2 months	University degree. English	-	\$US 2,400
Workshop on R&D institute management	Introduction to R&D management; institutional policies and procedures; institutional goals, plans, and strategies; organizational structure; the institutional management information system; leadership and motivation; personnel management; R&D institute-client relationships; extension activities; the scientific and technological information system; institutional evaluation; a systems approach to R&D management.	Denver Research Institute/IEM P.O. Box 10127 Denver, CO 80208 United States of America	5 November 1984 4 weeks	University degree. English	5 October 1984	\$US 3,300
Workshop on R&D project management	The nature of R&D projects; project planning; project organization and staffing; project monitoring and control; project staff and client relationships; project conclusion and termination; project evaluation.	Denver Research Institute/IEM P.O. Box 10127 Denver, CO 80208 United States of America	24 October 1984 3 weeks	University degree. English	15 September 1984	\$US 2,500
Management development	Designed and individually tailored to develop managerial skills. Areas of specialization include: agribusiness, health finance, public administration, nutrition, energy, natural resources and industry. Primarily for people from developing nations.	Graduate School, USDA International Programs 600 Maryland Ave. SW Washington, DC 20024 United States of America	1 September 1984 9 months	Professional qualification. English	1 July 1984	\$US 9,500
Fundamentals of management	A programme designed for professionals (such as engineers, lawyers, health professionals, educators, agri-culturalists, accountants, or economists) who have not received formal training in the managerial aspects of their work, but who are expected to assume managerial responsibilities.	Institute of Public Service, University of Connecticut 1380 Asylum Ave. Hartford, CT 06105 United States of America	1 June 1984 6 weeks	Professional qualification. English	-	\$US 4,000

## MANAGEMENT AND INDUSTRIAL ADMINISTRATION (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
National development	The systems approach; fundamentals of management; management by objectives; principles of learning; instructional systems design; performance improvement planning; project management; communications; transactional analysis; experiential learning; training programme evaluation.	Institute of Public Service, University of Connecticut 1380 Asylum Ave. Hartford, CT 06105 United States of America	1 June 1984 12 weeks	Professional qualification. English	-	\$US 4,800
Project management for local development	Methodology of project preparation and analysis; project monitoring and control; systems analysis; methodologies of data gathering and interpretation; techniques in local development planning; budgeting systems; management processes and techniques for local development; management by objectives (MBO) and performance improvement planning-PIP; training for local development economics; implementation of change.	Institute of Public Service, University of Connecticut 1380 Asylum Ave. Hartford, CT 06105 United States of America	1 June 1984 10 weeks	Professional qualification. English	-	\$US 4,800
Public management development programme	Financial management; management science; project analysis; local development administration; personnel management; management of training.	Institute of Public Service, University of Connecticut 1380 Asylum Ave. Hartford, CT 06105 United States of America	21 September 1984 7 months	Professional qualification. English	-	\$US 6,900
Dirección y gestión empresarial	Administración de personal; organización y métodos; principios fundamentales de la venta profesional; supervisión industrial; planificación y control de la producción; principios fundamentales de la capacidad para dirigir.	CNTPI Sarandí 690 D 2° E., Montevideo Uruguay	Varias A discutir	Graduado universitario. Español	-	A discutir
Public enterprise management	The course which will be organized in the form of modules, covers various subjects such as nature and role of public enterprises, human resource development, planning financing, control systems, etc. in public enterprises in developing countries.	International Centre for Public Enterprises in Developing Countries (ICPE) Titova 104 P.O. Box 92 Ljubljana, Yugoslavia	2 July 1984 4 weeks	Professional qualification. English	1 March 1984	\$US 1,500

**MARKETING AND EXPORT PROMOTION**  
**MARKETING ET PROMOTION DES EXPORTATIONS**  
**COMERCIALIZACION Y PROMOCION DE LAS EXPORTACIONES**

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Commerce extérieur	Les relations économiques internationales marketing international ; droit des contrats internationaux ; transports internationaux - transit ; douane - réglementation des échanges ; procédures bancaires et financement des opérations commerciales; garanties des exportations ; implantation de filiales à l'étranger ; étude de marchés étrangers ; gestion.	Institut de Formation au Commerce Extérieur SIFOP B.P. 70 Avenue de la Gironde 59640 Dunkerque France	Février et octobre de chaque année 30 semaines	Expérience professionnelle de 3 ans. Français et connaissance de l'anglais ou de l'allemand	-	A arranger
Import-export	Relations économiques internationales ; organisation du commerce extérieur français ; organisation de l'entreprise en import-export ; transit - transports internationaux ; douane ; contrats de vente ; gestion et facturation ; initiation à l'informatique ; financement et garantie des exportations ; correspondance internationale ; dactylo - télex ; langues.	Institut de Formation au Commerce Extérieur SIFOP B.P. 70 Avenue de la Gironde 59640 Dunkerque France	Octobre de chaque année 9 mois	Etudiants de niveau baccalauréat plus 2 ans, ayant une bonne connaissance de la langue anglaise ou allemande. Français	-	A arranger
Export promotion	Export product management, export organization within the enterprise sales methods in export, export market research, export publicity, export financing and pricing policies, reporting and information organization, transportation, import duties and taxes, factors controlling imports. The course programme is supplemented by excursions to major industrial, commercial and public institutions.	Carl Duisberg-Gesellschaft e.V. Hohenstaufenring 30-32 D-5000 Köln 1 Federal Republic of Germany	April and October 5 weeks	Practical experience in a responsible managerial position in export-oriented industry or commerce. English	-	To be arranged

## MARKETING AND EXPORT PROMOTION (Cont'd)

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<u>Course or Seminar</u>	<u>General description</u>	<u>Organizer; Venue</u>	<u>Commencing date; Duration</u>	<u>Qualifications: Language requirements</u>	<u>Last date for receipt of applications</u>	<u>Fee</u>
International trade	International marketing; scope and tasks; organization and management; behavioural sciences; economic analysis; economic systems and foreign trade; India's foreign trade; quantitative methods; international marketing and management; marketing research; financial management; costing and pricing; marketing logistics; export-import procedures and documentation; export marketing of products and market characteristics of trading areas; research projects.	Indian Institute of Foreign Trade Ashok Bhawan 93 Nehru Place New Delhi-110019 India	Mid-July 1 year	Professional qualification. English	-	To be arranged
International marketing and export for small and medium-sized firms	The course is oriented towards small and medium-sized firms in developing countries. Topics dealt with are: principles and basic concepts; strategic decisions in international marketing; international market research; international product decisions; international distribution decisions; international pricing decisions; international communications; organization for international market; successful exporting; case studies and visits.	International Centre for Quality and Management Sciences P.O. Box 2082 3000 CB Rotterdam Netherlands	27 February 7 May 15 October 1984 and 4 March 13 May 21 October 1985 8 weeks	Bachelor degree or equivalent and experience in a relevant field of study. English	-	f. 6,000
Marketing management and physical distribution	Managerial training in marketing policy and practice, an exposure to marketing conditions and action through marketing workshops and a skill at handling physical distribution problems.	Research Institute for Management Science (RVB) Delft, Netherlands	11 January 1984 5 months	Professional qualification and business experience. English	-	f. 9,700 (tuition only)
Marketing management and export promotion	Includes special interest seminars about problems characteristic of different areas: tourism, the arts/services, exporting, etc. Six-week academic segment followed by an optional four-week marketing field study trip to visit marketing executives of American corporations.	International Marketing Institute 29 Garden St. Cambridge, MA 02138 United States of America	18 June 1984 6 or 10 weeks	Professional qualification. English	-	\$US 3,200 + room and board

QUALITY CONTROL AND STANDARDIZATION  
CONTROLE DE LA QUALITE ET NORMALISATION  
CONTROL DE CALIDAD Y NORMALIZACION

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Company standardization	Principles of standardization. National standardization systems, international and regional standardization. Organization and procedures for development of company standards department. Participation in national standardization, role of company standards in maintenance, organization of documentation and information services. Inventory control value analysis and evaluation of economic benefits.	INMETRO Instituto Nacional de Metrologia, Normalização e Qualidade Industrial SAS Quadra 2 Lotes 1/2 70.070 Brasilia D.F. Brazil	27 August 6 weeks	Professional qualification. Spanish and Portuguese	-	To be arranged
Metrology	Principles of legal, scientific and industrial metrology. Development and application of the procedures and laws in developing countries. Co-operation and linkage with metrological centres of other developed countries. Industrial calibration services. Practical training in the laboratories of the INMETRO in the specialized fields. Introduction to precision measurements in the fields of mechanics, electricity, heat and acoustics.	INMETRO Instituto Nacional de Metrologia, Normalização e Qualidade Industrial SAS Quadra 2 Lotes 1/2 70.070 Brasilia D.F. Brazil	July 3 months	Professional qualification. Spanish and Portuguese	-	To be arranged
Standardization and industrial quality	Essentials of standardization basic principles, methodology for preparation of national standards, implementation, organization of national standards systems. Regional and international standards activities and participation of developing countries in these activities. Essentials of principles and application of statistical quality control concepts and methods in industrial enterprises. The development of national standards in this field, application of quality certification. Procedures and their importance for national economy.	INMETRO Instituto Nacional de Metrologia, Normalização e Qualidade Industrial SAS Quadra 2 Lotes 1/2 70.070 Brasilia D.F. Brazil	15 October 1984 2 months	Professional qualification. Spanish and Portuguese	-	To be arranged

<u>Course or Seminar</u>	<u>General description</u>	<u>Organizer; Venue</u>	<u>Commencing date; Duration</u>	<u>Qualifications: Language requirements</u>	<u>Last date for receipt of applications</u>	<u>Fee</u>
Analyse de la valeur et autres méthodes de maîtrise des coûts	Analyse de la valeur : principes et méthodes ; normalisation et conception des produits ; le rôle de la qualité dans l'analyse de la valeur ; analyse de la valeur : mise en oeuvre, exploitation, résultats ; étude de cas.	AFNOR - AFAV Tour Europe Cedex 7 92080 Paris La Défense France	Mars, juin et octobre 1984 et 1985 1 semaine	Qualifications professionnelles. Français	-	A fixer
Contrôle de qualité	Cours sur : la micro-informatique au service du contrôle qualité ; la qualité au moindre coût ; la normalisation et l'entreprise ; la qualité aux études, au marketing et à l'après-vente ; la qualité à la production ; concepts de qualité ; formation à l'audit qualité ; la fonction qualité dans les petites et moyennes industries ; normalisation et gestion de la qualité (détails sur demande à AFNOR).	AFNOR - Association Française de Normalisation Tour Europe Cedex 7 92080 Paris La Défense France	Toute l'année 3 jours - 2-3 semaines	Qualifications professionnelles. Français	-	A fixer
Contrôle de réception et relations clients fournisseurs	Le contrôle de réception chez le client et chez le fournisseur ; contrôle unitaire et par prélevement ; les enquêtes qualité ; le contrôle réception dans le contexte des relations clients/fournisseurs ; homologation et suivi des composants électroniques par le service qualité.	AFNOR - AFCIQ Tour Europe Cedex 7 92080 Paris La Défense France	Mars et juin 1984 et 1985 3 jours	Qualifications professionnelles. Français	-	A fixer
Méthodes d'usinage et de production	Cotation fonctionnelle ; méthode analytique de cotation d'usinage ; liaison pièce-machine ; les matériaux face au mécanisme de l'usure ; les outils ultra durs ; les outils adaptés à l'automatisation ; tournage et cellules flexibles ; du centre d'usinage à la cellule flexible ; informatisation des fabrications mécaniques.	AFNOR - AFCIQ Tour Europe Cedex 7 92080 Paris La Défense France	Septembre 1984 et 1985 3 jours	Qualifications professionnelles. Français	-	A fixer
Métrologie industrielle	Les besoins métrologiques de l'industrie ; place de la métrologie dans l'organisation qualité de l'entreprise ; visite de services de métrologie d'entreprises industrielles de différents secteurs (mécanique, électricité, pétrole, etc). Etude d'une organisation métrologique nationale depuis l'atelier industriel jusqu'aux étalons primaires : organisation de chaînes d'étalonnage. Présentation des institutions françaises concernées : Bureau National de Métrologie, Service des Instruments de Mesure, laboratoires primaires, centres d'étalonnage agréés, services de métrologie habilités. Visite du Bureau International des Poids et Mesures. Promotion de la métrologie : formation et information ; la maintenance des instruments de mesure.	CERLAB (Centre Inter Laboratoires d'Etudes et de Réalisations) Tour Europe Cedex 7 92080 Paris La Défense France	Mai 1984 6 semaines	Qualifications professionnelles. Français	-	F 18,000

## QUALITY CONTROL AND STANDARDIZATION (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Metrology	Introduction to precision measurement in laboratories of the PTB corresponding to the planned area of study; participation in precision measurement activities; independent measurements in the PTB and possibly licensing tests of measuring equipment at the manufacturers' premises; informational visits to metrological institutes, bureaus of standards, testing offices, etc.; participation in meetings, conferences, exhibitions; topic-oriented visits of plants as prescribed by the PTB; participation in courses for calibration inspectors or chief adjustors can be approved upon recommendation by the PTR.	Carl Duisberg-Gesellschaft and the Zentralstelle für Arbeitsvermittlung der Bundesanstalt für Arbeit in co-operation with Physikalisch-Technische Bundesanstalt (PTB) CDG P.O. Box 190 325 D-5000 Köln 1 Federal Republic of Germany	To be arranged 17 months including 1 month introduction and 4 months language training	Professional qualification and experience in metrology. German	-	To be arranged
Standardization	Lectures covering different aspects of standardization. Application of the principles and methodology of standardization in the work of ISI. Attendance at meetings of ISI Technical Committees engaged in the formulation of national standards. Visits to industrial establishments, test houses, etc. for assessment of the impact of standardization and certification marking efforts on trade and industry. The Institution also is prepared to organize 4-6 weeks training courses outside India starting in June each year.	Indian Standards Institution 9 Bahadur Shah Zafar Marg New Delhi 110 002 India	To be arranged 11 weeks	Graduates in science, engineering or technology, and must have been engaged in standardization activities to be able to make practical use of the training on return. English	Mid-September	-
Standardization	This programme is aimed at training a group of engineers and scientists under home conditions and includes lectures, workshop sessions and group discussions.	Indian Standards Institution 9 Bahadur Shah Zafar Marg New Delhi 110 002 India	June, October 4-6 weeks	Professional qualification. English	February	To be arranged

## QUALITY CONTROL AND STANDARDIZATION (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Quality control	Participants will study various fundamental QC techniques through lectures, classroom discussions and in-plant exercises and learn how to apply QC techniques in an actual production site.	The Association for Overseas Technical Scholarship, Japan 30-1, Senju Azuma 1-chome, Adachi-ku, Tokyo, Japan	July 1984 and 1985 6 weeks	Engineers and managerial staff of developing countries who supervise quality control, production control or factory management. English	5 months before the commencement of the programme	Y 458,000
Quality management	The Japanese approach for company-wide quality control through lectures, plant visits, in-plant exercises and discussions to develop suitable measures for his/her own organization to promote quality and productivity improvement.	The Association for Overseas Technical Scholarship, Japan 30-1, Senju Azuma 1-chome, Adachi-ku, Tokyo, Japan	June 1984 and 1985 3 weeks	Senior managers of developing countries who are responsible for quality and productivity in his/her organization. English	5 months before the commencement of the programme	Y 272,000
Standardization	Basic training workshop in standardization, certification and metrology.	A.R.S.O. P.O. Box 57363 Nairobi, Kenya	Mid 1984 2 weeks	Standards officers. English	-	To be arranged
Quality control	Specialization in quality control. The Institute also organizes an 8 weeks course for quality control supervisors development.	Mexican Institute for Quality Control Thiers, 251-PH M-10040 Mexico DF Mexico	2 October- 16 December 1984 14 August- 7 October 1984 (supervisors development course)	Professional qualification. Spanish	-	To be arranged

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Advanced quality control techniques	The techniques are presented in a simple and pragmatic way with the accent being on application rather than theory and on how these techniques compare with the old and well established ones. Topics covered in the Seminar include: elements of "Qualimetrics" or the measurement of quality, economic design of control charts, modified control limits, multivariate charts, cumulative-sum techniques, evolutionary operations, pre-control, continuous sampling plans, production decisions, equipment decisions, operations research applications in quality control and computer influence on quality control.	International Centre for Quality and Management Sciences P.O. Box 2082 3000 CB Rotterdam The Netherlands	2 July 1984 and 8 July 1985 " weeks	Bachelor degree or equivalent and experience in quality control or a related discipline. English	3 months before commencing date	f. 3,500
Management of quality control	The course is divided into three parts: 1. theoretical; dealing with the basic concepts, quality specifications, organization, policy, planning and motivation, economics of quality, customer service, inspection and sampling, process capability, auditing, reliability and quality improvement. Statistical tools in quality control and standardization are given special attention. 2. practical; conducted in factories, offices or institutes concerned with quality control. 3. general; spent on transmission of knowledge, studying topics of special interest and visits to industrial plants.	International Centre for Quality and Management Sciences P.O. Box 2082 3000 CB Rotterdam Netherlands	2 January and 20 August 1984 and 7 January 1985 and 26 August 1985 4 months	Bachelor degree or equivalent and experience in quality control or a related discipline. English	-	f. 13,000
Quality systems installation, auditing and improvement	Various types of control systems are discussed including the organization schemes and cost-reporting methods that go with each type. For existing quality control systems, the Seminar shows systematic methods of auditing and improving the system to make it work more efficiently, hence economically. Topics dealt with include: quality control functions, types of quality control systems, organization for quality assurance, introducing a quality control system, setting-up for inspection, sampling plans and their use, analyzing a quality system, quality systems auditing, quality motivation & improvement programmes and quality requirements for export to industrial nations.	International Centre for Quality and Management Sciences P.O. Box 2082 3000 CB Rotterdam The Netherlands	2 January, 23 April, 20 August 1984 and 7 January, 29 April and 26 August 1985 4 weeks	Bachelor degree or equivalent and experience in quality control or a related discipline. English	3 months before commencing date	f. 3,500

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Statistical quality control, a computer-oriented approach	The emphasis is devoted to the development and applications of various statistical tools underlying the modern methods of controlling the quality of goods and services at an early stage of the production cycle. Topics covered in the course include: the nature and impact of the computer, flow diagrams for statistical analysis, probability and probability distributions, sampling theory and techniques, tests of significance, control charts, experimental design and regression and correlation analysis.	International Centre for Quality and Management Sciences P.O. Box 2082 3000 CB Rotterdam Netherlands	5 March 21 May and 22 October 1984 and 11 March 1985 27 May and 28 October 1985 6 weeks	Bachelor degree or equivalent and experience in quality control or a related discipline. English	3 months before commencing date	f. 5,000
Applied practical quality control, inspection and metrology for mechanical engineering	The course is designed for vocational or technical teachers as well as technical staff in industry who are planning to introduce or improve practical quality control programmes. The syllabus covers theoretical and practical areas at quality control, inspection and dimensional metrology.	Swedec International AB, Riddargatan 37 S-11457 Stockholm Sweden	September 15 weeks or less	Professional qualification. English	-	Approx. \$US 500 per week (accommodation and meals included)
Quality management	Total quality control with involvement of all management levels and all functions. 1. The quality concept: definitions of quality, quality assurance, quality control, inspection, quality and economy, quality trends in Japan and west; 2. quality activities in: pre-production, production, vendor relations and after sales; 3. statistical quality control; 4. organization, requirement systems; and 5. motivation.	Swedec International AB, Riddargatan 37 S-11457 Stockholm Sweden	Commencing date on request	Top management. English	-	To be arranged
Non-destructive testing	Penetrant flaw detection and magnetic particle inspection; ultrasonic inspection (practical and theory); comprehensive study of industrial radiography (practical and theory); familiarization and study of codes of practice relating to industry.	Anglian Welding School Ltd., New Road, Acle Norwich, Norfolk NR 13 3BD United Kingdom	To be arranged 16 weeks	- English	-	By arrangement

## QUALITY CONTROL AND STANDARDIZATION (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Metrology	A practical course in mass, length, volume and flow measurement for inspectors in legal metrology.	Dept. of Trade National Weights and Measures Laboratory 26 Chapter Street London SW1P 4NS United Kingdom	May 1984 and 1985 3 weeks	Professional qualification. English	February 1984	£600
Non-destructive testing methods	To provide comprehensive coverage of industrial radiography, surface inspection methods and ultrasonic testing. In addition, manufacturing and joining processes, such as casting, forgings and welding will be treated. It is intended that the radiography part of the course will give a coverage similar to that of the Kodak course.	Scottish School of Non-Destructive Testing Paisley College High Street Paisley PA1 2BE Scotland United Kingdom	Mid-September 1984 and 1985 12 weeks	Professional qualification. English	-	£825
Quality assurance	This short course is designed to provide engineers, technologists and management with an up-to-date appraisal of quality assurance and covers: economic, communication and planning elements of QA; statistical concepts, quality control charts, QA and the consumer. QA test procedures prior to, during and after manufacture; specification interpretation; training and certification of QA personnel; reliability case studies, the QA manual product liability.	Scottish School of Non-Destructive Testing Paisley College High Street, Paisley PA1 2BE, Scotland, United Kingdom	To be arranged	Professional qualification. English	-	To be arranged
Quality engineering	The primary purpose of this course is to equip the student for a career in quality engineering and considers the technical and management factors involved in prescribing realistic quality programmes, quality systems and quality levels and the assurance of product quality; the principles and practice of non-destructive testing methods; those aspects of electronics and instrumentation which are relevant to quality engineering with NDT.	Scottish School of Non-Destructive Testing Paisley College High Street Paisley PA1 2BE Scotland, United Kingdom	Late September 1984 and 1985 6 months	Degree science or engineering. English	-	£1,300

**SMALL-SCALE INDUSTRIES AND ENTREPRENEURSHIP**  
**PETITES INDUSTRIES ET ENTREPRENEURS**  
**PEQUEÑAS INDUSTRIAS Y LOS EMPRESARIOS**

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Small industry financing	Understand the policies and programmes in India for financing small industry; improve their skills in scrutinising and appraising applications for loans; and develop suitable systems for proper utilization of funds by the borrower and ensure prompt recovery.	Small Industry Extension Training (SIET) Institute Yousufguda Hyderabad 500 045 India	To be decided 8 weeks	Personnel engaged in promoting/ financing small industries. English	-	\$US 2,330
Small industry management consultancy	Refresh their knowledge in the function areas of industrial management; sharpen their skills of analytical techniques in providing integrated counselling services to identify the real problems and evaluate alternative solutions; acquire the skills to practice management consultancy for performing general business diagnosis and diagnosis of the problems in the functional areas in a small industry; contribute to the development of industrial management consultancy services in their countries.	Small Industry Extension Training (SIET) Institute Yousufguda Hyderabad 500 045 India	To be decided 12 weeks	University degree. English	-	\$US 3,250
Small industry promotion in developing economies	Develop the required analytical skill for identifying industrial opportunities and in making project analysis; share the Indian experience in the field of small industry development and promotion, and in other sub-areas of decentralized sector; and impart promotional techniques for the accelerated development of small industries.	Small Industry Extension Training (SIET) Institute Yousufguda Hyderabad 500 045 India	To be decided 12 weeks	Personnel engaged in promotion of industries. English	-	\$US 3,250
Small industry and entrepreneur development	The course will equip participants to plan and implement a development programme for a country's small industries.	Industrial Development Authority Lansdowne House Ballsbridge Dublin 4, Ireland	18 June 1984 8 weeks	Professional qualification. English	-	IR£4,500

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Promotion of income-generating projects for women in rural areas	Programme of studies include: community development; basics economics; working with groups; human relations; co-operation; organization of pre-co-operatives; production management; marketing and sales promotion; administration of small-scale industries and exercise in setting up a small enterprise; analysis of practical projects planned by the participants for implementation in their countries.	Mount Carmel International Training Centre for Community Development (MCTC) 12 David Pinsky 34351 Haifa, Israel	25 May 1984 (1985) 4 months	The course is open to professional women and men between the ages of 25-40. English	-	\$US 4,400 (covering studies, full board, lodging, and pocket money)
Small-scale industries	Woman in economic development; planning; working with groups; co-operation; training; production; marketing; administration and management.	Mount Carmel International Training Centre for Community Development (MCTC) 12 David Pinsky St. Haifa 31060, Israel	January 1984 3 months	Professional qualification. The course is open to women and men between the ages of 25-40. English	-	\$US 1,000
Industrial extension officers training	To expand the capability of industrial extension officers to assist small and medium sized industries in solving their internal and external problems. The programme provides tools for problem solving and familiarizes the participant with their use through field assignments. The interaction of the different managerial aspects and the inter-relation between enterprise and environment will also be demonstrated.	Research Institute for Management Science (RVB) Delft, Netherlands	18 July 1984 5 months	Professional qualification and business experience. English	-	f. 9,700 (tuition only)
Entrepreneur development	To develop entrepreneurial activities in the rural areas for economic growth. The main objectives are to promote the development of small enterprise; to generate self-employment scheme for potential entrepreneurs and provide employment for others; to develop entrepreneurial quality and attitudes.	Industrial Service Institute Soi Kluaynamthai Rama IV Rd, Phakanong Bangkok 10110 Thailand	To be arranged 1 month	Professional qualification. Thai		Baht 1,600

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Promotion of small-scale enterprises in developing countries	The objective of this programme is to enable participants to improve the ways in which they promote local small enterprises, through financing, extension, training, entrepreneurship development, consultancy and the design and implementation of general government policies.	The Enterprise Development Centre Cranfield School of Management Cranfield Bedford, MK43 0AL United Kingdom	3 September 1984 3 September 1985 8 weeks	Professional qualification. English	-	£3,500 (1984) £3,650 (1985)
Small enterprise development	The Cranfield programme on the promotion of small-scale enterprises in developing countries is aimed at staff of government departments, development and commercial banks, official and voluntary enterprise promotion agencies and academic institutions who are concerned with the promotion of local enterprise. Its objective is to enable them to perform more effectively through an exchange of ideas with colleagues from other countries and exposure to the wide variety of techniques that are now available for promoting the establishment of new businesses and assisting those which already exist.	Enterprise Development Centre Cranfield School of Management Cranfield, Bedford Beds MK43 0AL United Kingdom	11 September 1984 2 months	At least one year's practical experience in promoting small enterprise. English	-	£3,500 - 3,800
Executive development (small business)	This programme covers: organization; financial accounting; management accounting; marketing; management of the production or service function; personnel management; personal tutorial on specific project nominated by participant. (Optional 2 weeks extra.)	The Small Business Centre University of Aston 200 Aston Brook St. Birmingham B6 4SY United Kingdom	January and May 1984 10 weeks	Professional qualification. English	-	£1,500 (2 week option £500)
Small business management	Organization delegation, leadership and motivation; financial management, accountancy and management accountancy; marketing and organizing the selling effort; managing the production/service function; managing people; and conducting an organizational audit.	The Small Business Centre, University of Aston 200 Aston Brook St Birmingham United Kingdom	October 1984 February 1985 and May 1985 12 weeks	Professional qualification. English	To be arranged	

**TRAINER DEVELOPMENT**  
**PERFECTIONNEMENT DU PERSONNEL ENSEIGNANT**  
**DESARROLLO DE PROFESSIONALES DE CAPACITACION**

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Trainers	The Department organizes short courses for trainers: instruction techniques; operator course design; supervisor development; management of training; interpersonal relations; instruction communication; method improvement.	National Trainer Training Service Department of Employment and Industrial Relations, P.O. Box 399, Canberra City ACT 2601, Australia (venues throughout Australia)	Throughout year 4-45 days	Professional qualification. English	-	\$US 120 - 580
Training trainers	Specially designed for teachers of management in company training centers, business schools, universities. It focuses on training needs analysis, training objectives, training design evaluation and learning methods.	ISSEC (groupe ESSEC) 35, bd de Sébastopol 75001 Paris, France	21 May 1984 4 weeks	Professional qualification. English	-	F 44,000 (tuition and full residence)
Training methods and skills	To understand and gain insight into the dynamics of training/learning process; develop skills in the choice and use of training methods; develop competence in planning a curriculum; develop personal and role effectiveness as a trainer.	Small Industry Extension Training Institute Yousufguda Hyderabad 500 045 India	To be decided 8 weeks	Personnel engaged in training. English	-	\$US 2,330
Basic training officer course	The aim of the course is to provide training personnel with an opportunity of developing an understanding of the knowledge, attitudes, concepts and skills that are related to: diagnosing training needs; consulting effectively with the people; and implementing change.	ANCO - The Industrial Training Authority P.O. Box 456 27-33 Upper Baggot Street, Dublin 4 Ireland	To be arranged according to demand 6 weeks	Practising training personnel. English	-	To be arranged
Trainability test design	For managers, supervisors and instructors directly involved in the selection and training of operatives. Objectives: to provide participants with a basic understanding of the methods and techniques of trainability testing; participants will be qualified in designing trainability tests; participants will be able to implement, monitor and validate their tests.	ANCO - The Industrial Training Authority P.O. Box 456 27-33 Upper Baggot Street, Dublin 4 Ireland	To be arranged according to demand 1 week	Professional qualification. English	-	To be arranged

## TRAINER DEVELOPMENT (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Designing and developing training material	To enhance the understanding of trainers of training methodology and to strengthen capability to design and develop training needs through study of attitudes to change; factors affecting motivation; the preparation and use of training aids and a training package; action learning and project based training.	Institute of Public Administration 57-61 Lansdowne Road Ballsbridge Dublin 4, Ireland	September 1984 10 weeks	At least 2 years practical working experience of the training function. English	July 1984	To be arranged
Industrial training	Designing and developing your own training materials.	Institute of Public Administration 57-61 Lansdowne Road Ballsbridge Dublin 4, Ireland	4 September 1984 10 weeks	Professional qualification. English	-	IR£2,794
Training and instructional techniques	The need for a comprehensive staff development programme; the identification of training needs and the design of programmes to meet these needs; the learning process in adults; developing skills in using training and instructional techniques; evaluation of training.	Institute of Public Administration 57-61 Lansdowne Road Ballsbridge Dublin 4, Ireland	May 1984 10 weeks	Professional qualification. English	March 1984	To be arranged
Trainers' workshop	There are four major components of the workshop: theory and techniques of teaching adults; personal skills of the trainers; preparation of training materials; training within the organization.	Irish Management Institute, National Management Centre Sandyford Road Dublin 14, Ireland	14 May 1985 8 weeks	Trainers of managers and administrators. English	5 April 1985	To be arranged
Training: its design and management	To develop staff training; apply the principles of training to the training requirement in their organization; make skilled analysis of training needs; devise and implement training programmes; run training sessions; evaluate and assess staff training.	Crown Agents Training Services 4 Millbank London SW1P 3JD United Kingdom	9 April and 2 July 1984 9 weeks	Professional qualification. English	-	£3,850 (fully residential)

## TRAINER DEVELOPMENT (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Design of trainability assessment tests	Trainability testing is a valid method of measuring a person's training potential for a specific job. The course covers the introduction, design value and validation of trainability tests plus an in-company project.	Fielden House Productivity Centre Limited 856 Wilmslow Road Didsbury Manchester M20 8RY United Kingdom	Throughout year 1 week and project	Professional qualification. English	-	£345
Training of trainers	This course is for newly appointed training officers or those who require to up-date or develop their skills and knowledge in training. Its objective is to enable course members to carry out their company's training function for all operative, clerical, technical supervisory and management categories.	Fielden House Productivity Centre Limited The Shirley Campus 856 Wilmslow Road Didsbury Manchester M20 8RY United Kingdom	Throughout year 10 weeks	Professional qualification. English	-	£850
Training officers	For training managers and officers in public and private sectors who have specific responsibility for advising their organizations on training policies and organizing training. To equip delegates to identify and distinguish between the main techniques and methods available for training of people at all levels in the organization and demonstrate the ability to select the appropriate technique to achieve the training needs and ability to advise management on formulation of training policy and organize the implementation of training and development programmes to agreed standards.	International Department, The Industrial Society Robert Hyde House 48 Bryanston Square London W1H 7LN United Kingdom	16 January 30 April and 17 September 1984 12 weeks	Professional qualification. English	-	£2,295 (+ VAT)
Sharing British training expertise	To help participants to develop a detailed understanding of systematic training and its application in all fields of work activity, including the contribution which it can make to the development of human resources.	Industrial Training Service Limited 43 Market Place Wetherby West Yorkshire LS22 4LN United Kingdom	Mid-July 1984 and 1985 13 weeks	Professional qualification. English	- 1984: £3,500 1985: £3,750# (*estimate)	

## TRAINER DEVELOPMENT (Cont'd)

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<u>Course or Seminar</u>	<u>General description</u>	<u>Organizer; Venue</u>	<u>Commencing date;</u>	<u>Qualifications:</u>	<u>Last date for receipt of applications</u>	<u>Fee</u>
Training	Course are organized on: effective training techniques; training needs analysis; training design and validation; evaluation of training; management training techniques; presentation and instructional skills; overseas training.	International Training and Education Company (UK) Ltd. 105 Oxford Road Reading, Berkshire United Kingdom	Throughout year 3 days - 12 weeks	Professional qualification. English	-	£250 + VAT - £3,600 + VAT
Trainer development	The programme provides an opportunity to study the western scene in management education so that participants can convert to their own uses back home those features likely to be relevant.	School of Management Studies, Polytechnic of Central London 35 Marylebone Road London NW1 5LS United Kingdom	To be arranged 4-24 weeks	Professional qualification. English	-	Depending on length and tutorial input £500 - 2,400

CHAPTER 3: OTHER TRAINING OPPORTUNITIES AND SHORT COURSES  
 CHAPITRE 3 : AUTRES POSSIBILITES DE FORMATION ET SESSIONS D'ETUDE DE BREVE DUREE  
 CAPITULO 3: OTRAS OPORTUNIDADES DE CAPACITACION Y CURSOS CORTOS

<u>Course or Seminar</u>	<u>General description</u>	<u>Organizer; Venue</u>	<u>Commencing date; Duration</u>	<u>Qualifications: Language requirements</u>	<u>Last date for receipt of applications</u>	<u>Fee</u>
Gestión de la calidad en la industria del cuero.	Introducción a la organización y administración de empresas. La gestión de calidad. Control de procesos en curtiembre. Control de insumos químicos y materias primas. Calidad de conformidad (Análisis químico, ensayos físico-mecánicos observación microscópica).	Centro de Investigación de Tecnología del Cuero (CITEC) Camino Centenario e/ 505 y 508 (Casilla de Correo nº 6 1897 M.B. Gonnet Argentina	1 Octubre 1984 1 semana	Ingeniero o licenciado en química, egresado de escuelas técnicas de curtiduría. Español	30 junio 1984	A convenir
Management	Residential courses in wide range of management subjects.	Institute of Management, University of New South Wales Sydney, Australia	Throughout most of year 2-5 days	Professional education. English	-	\$A 180-550
Model analysis vibration	Fundamentals on vibration theory and fourier analysis; digitalization techniques; filters; data harvesting; curve fitting techniques; implementation on computer; principles of intensity measurements; workshop with instruments; structural design methods; coupling with F.E.M.; structural damping; applications in car industry; buildings; machines, etc.	Catholic University of Leuven Department of Mechanical Engineering Celestijnlaan 300B 3030 Heverlee Belgium	10 September 1984 1 week	Professional qualification. English	-	\$US 600
Formation de spécialistes en transfert de technologie	Définition des besoins et du domaine de prospection ; détection, évaluation et sélection de technologies ; recherche de partenaires industriels, commerciaux et financiers ; négociation des contrats de transfert de technologie ; mise en place du transfert technologique.	IBF dans les locaux de la Société Nationale d'Investissement (S.N.I.) 63, rue Montoyer 1040 Bruxelles Belgium	A arranger	Qualifications professionnelles. Français, anglais	-	A arranger

## OTHER TRAINING OPPORTUNITIES AND SHORT COURSES (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Industrial production	Alcohol as raw material for the chemical industry; vegetable oils and their main uses; starch hydrolysis and modification for industrial uses; U.V., visible and infrared spectrometry analysis; gas chromatography; basic fundamentals for formulation of paints; processing methods in rubber industry; nuclear magnetic resonance spectrometry; atomic absorption spectrophotometry; basic concrete technology.	Instituto Nacional de Tecnología Avenida Venezuela 82 20.081 Rio de Janeiro Brazil	To be arranged 3 days - 3 weeks	Professional qualification. Portuguese or Spanish	-	To be arranged
X-ray diffraction	X-ray diffraction including the analysis of structures like minerals, raw materials and industrial products.	Instituto Nacional de Tecnología Avenida Venezuela 82 20.081 Rio de Janeiro Brazil	To be arranged 3 months	Professional qualification. Portuguese or Spanish	-	To be arranged
Tecnologia industrial	Cursos sobre: La molienda autogena y sus aplicaciones al processamiento de minerales; aplicabilidad de los modelos matemáticos al dimensionamiento a optimización de circuitos de molienda-clasificación; pirometalurgica del cobre; muestro de materiales a granel.	Centro de Investigación Minera y Metalúrgica (CIMM) Av. Parque Insti- tucional No. 6500 Munquehue Santiago, Chile	19 de Marzo 1984, 26 de Marzo 1984, 9 de Abril 1984 1 semana	Calificación profesional. Español	-	\$US 300
Management	Cours sur : techniques documentaires ; entraînement à la lecture rapide ; bureautique ; commerce international ; action commerciale : formation de formateurs : entraînement à l'animation des groupes de progrès ; méthodologie pédagogique ; relations humaines ; efficacité.	CNOF 3, rue Cassette 75006 Paris France	A arranger 3-10 jours	Qualifications professionnelles. Français	-	A arranger

## OTHER TRAINING OPPORTUNITIES AND SHORT COURSES (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Transmissions numériques	Ce séminaire a pour but d'acquérir une formation de base en transmission numérique. L'orientation de ce stage se veut conceptuelle et fait appel à des connaissances de base en traitement du signal ; cours sur : transmission en bande de base, transmission sur onde porteuse, présentation des principales modulations, propriétés et performances des démodulateurs associés ; étude pratique en transmission numérique.	Ecole Nationale Supérieure des Télécommunications de Bretagne BP 856 29279 Brest Cedex France	4 juin 1984 17 septembre 1984 1 semaine	Ingénieurs. Français	2 mois avant le stage	F 3,000
Commutation temporelle numérique	Structure des autocommutateurs temporéels numériques ; principes de la commande d'un système en temps réel ; nombreux travaux pratiques sur une maquette pédagogique.	Ecole Nationale Supérieure des Télécommunications de Bretagne BP 856 29279 Brest Cedex France	14 mai 1984 17 septembre 1984 2 semaines	Ingénieurs ou techniciens connaissant un microprocesseur ou un langage informatique. Français	2 mois avant le début du stage	F 4,800
Techniques spécifiques du pétrole	Cours sur : technologie du matériel pétrolier pétrochimique et chimique ; mud logging and well side geology ; diaigraphies différencées ; études générales pétrolières.	E.N.S.P.M. - F.I. C.E.S.R.G.C. BP 311 92506 Rueil Malmaison Cedex France	A arranger 2-4 semaines	Qualifications professionnelles. Français, anglais	-	A arranger
Information engineering in developing countries	Practice-related and job-oriented seminars including experimental gaming.	Centre for Technological Cooperation Technical University Berlin Str. des 17. Juni 135 1000 Berlin (West) 12 Federal Republic of Germany	1 November 12 months	Professional qualification. German and English	31 August	-

## OTHER TRAINING OPPORTUNITIES AND SHORT COURSES (Cont'd)

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<u>Course or Seminar</u>	<u>General description</u>	<u>Organizer; Venue</u>	<u>Commencing date; Duration</u>	<u>Qualifications: Language requirements</u>	<u>Last date for receipt of applications</u>	<u>Fee</u>
Management	Short courses organized throughout the year on general management; EDP, finance; marketing; personnel; production; small business; insurance; supply management.	Hong Kong Management Development Centre The Hong Kong Management Association 26 Canal Road West Management House Hong Kong	3-4 times a year 1-5 days	Manager, executive supervisor. English, Chinese	-	To be arranged
Management	Supervisory management training, basic management skills, management development series for specialists, and management training skills.	Hong Kong Management Development Centre The Hong Kong Management Association 26 Canal Road West Management House Hong Kong	3-4 times a year 1-5 days	Manager, executive supervisor. English, Chinese	-	To be arranged
Management seminars (by experts from overseas)	These seminars provide an opportunity for top executives to keep abreast with the latest management techniques and thinking being developed elsewhere in the world.	Hong Kong Management Development Centre The Hong Kong Management Association 26 Canal Road West Management House Hong Kong	2-3 times a year 1-5 days	Top management. English	-	Approx. HK\$1,000 per day
Management studies	Completion of six basic modules and an additional six modules of a particular orientation at the choice of the participants, e.g. personnel, finance, production and marketing.	Hong Kong Management Development Centre The Hong Kong Management Association 26 Canal Road West Management House Hong Kong	February and September annually 1-5 days	Executives whose minimum age is 27, must be in employment. English, Chinese	-	HK\$500 per module (12 modules in total)

## OTHER TRAINING OPPORTUNITIES AND SHORT COURSES (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Industrial technology	Short courses on: low-cost automation; building and construction; introduction to the use of microcomputers; textiles and garments; product finishing; working of metals and heat treatment; plastics; environmental engineering and waste treatment; energy conservation.	Hong Kong Productivity Centre World Commerce Centre Harbour City 11 Canton Rd, Kowloon Hong Kong	To be arranged	Technical personnel. English, Chinese	-	To be arranged
Industrial training	Short courses are arranged on: production management; systematic plant maintenance; organization of techniques of training; production planning and control; project management; quality control; management information systems.	National Institute for Training in Industrial Engineering Vihar Lake Bombay 400 087 India	Throughout year 2 weeks	Professional qualification. English	-	\$US 500
Organization and performance improvement in transport enterprises	To improve the management and organizational capacity of senior officials from transport companies in developing countries.	DEVCO-State Agencies Development Cooperation Organisation Coras Iompair Eireann Kildress House Pembroke Row Dublin 2, Ireland	3 September 1984 6 weeks	Professional qualification. English	-	IR£5,000 (to be adjusted)
Power utility training	Management and supervisory skills for staff at all levels. Development training for newly qualified engineers and technicians including attachment to relevant departments for specific experience. Operation and maintenance of power station plant and instrumentation. Finance, accounting and computer systems. Commercial activities including marketing, load management and load shaping, metering.	Consultancy Manager Electricity Supply Board Lower Fitzwilliam st. Dublin 2, Ireland	By arrangement 8 weeks - 2 years	Professional qualification. English	-	To be arranged

## OTHER TRAINING OPPORTUNITIES AND SHORT COURSES (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Applied solar energy	Basic physical principles of solar radiation; technical concepts of solar energy applications; heat conversion system-active and passive; mechanical and electrical conversion systems; residence applications; industrial applications; economic analysis of systems; storage systems; thermodynamic utilization cycles.	CISM - International Centre for Mechanical Sciences Piazza Garibaldi 18 Udine, Italy	1984 (period not yet fixed) 1 week	Professional qualification. English	-	To be arranged
Industrial training	The Asian Productivity Organization organizes (or is prepared to organize) seminars and training courses in the following subjects: technology development and transfer mechanism; productive maintenance; systematic problem solving; corporate planning; supervisory development; quality control; agro-industry management; energy management; production management; tools for managerial decision-making; small industries development; project management; productivity measurement and analysis; institutional and expert management consultancy; computer applications in manufacture; project feasibility; environmental engineering; tool engineering; export marketing; training techniques; senior management consultancy; packaging engineering; product design; construction management. (Details of above seminars and training courses supplied by A.P.O.)	Asian Productivity Organization 4-14 Akasaka 8-chome Minato-ku Tokyo, Japan (in Japan and other countries of Asia)	To be arranged in 1984 1-12 weeks	Professional qualification; membership in productivity or similar organization of A.P.U member country. English	3 months before commencement	To be arranged
Industrial production	Lectures, on-the-job training observation in: Cement production and testing; high polymer synthesis; rubber; paint; pulp and paper production; ferrous and non-ferrous metal analysis; pottery production; refractory building and testing; textiles (textile testing, inspection, paintweaving, dyeing and finishing).	National Industrial Research Institute 2 Chungang-Dong Kwacheon-Myun Kyunggi-Do Republic of Korea	Throughout year 3 months	College graduate. English	-	To be arranged
Industrial production	The Institute organizes short courses on purchasing management; systematic handling analysis; systematic plant maintenance; basis of quality control; business policy and strategy; systematic layout planning; and maintenance.	Technology Transfer (TECTIN) 16B, Jin. Kemaja K.L. 22-01 Malaysia	February to October 2-3 days	Professional qualification. English	-	\$US 200 - 270

## OTHER TRAINING OPPORTUNITIES AND SHORT COURSES (Cont'd)

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Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Industrial production	Water cooling tower and system technology; practical boiler water treatment; ion exchange water softening and demineralization technology; international licensing and negotiation for the technology manager; land disposal of industrial wastes; hydrogeneration; process vacuum technology; applied cost engineering for capital projects - from planning through construction; loss prevention in the process and related industries; solvent extraction technology; applied cost engineering; effective project management; gas processing and contaminant removal technology; pulverized coal combustion; gas turbine technology; structural and geotechnical aspects of pipeline design and construction; pressure vessel design and analysis per American Society of Mechanical Engineers (ASME) code; applied combustion technology; applied pump technology; pneumatic conveying for bulk solids; piping design, analysis and fabrication per ANSI piping and ASME III boiler codes; practical combustion control and instrumentation; applied robotics for industry; shell and tube heat exchangers - mechanical aspects; stack sampling and ambient air monitoring; fired process heaters; welded fabrication per American Society of Mechanical Engineers (ASME) code; modern laboratory design and energy conservation; practical sulfonation and sulfation technology; metallurgy for the non-metallurgist; condition based maintenance and fault diagnostics in machinery; introduction to petroleum refinery processing; heavy oils processing for yield improvement; maintenance of offshore platforms; petroleum refinery planning and operations; process plant steam generation and control; applied planning and scheduling of North Sea offshore platforms, applied planning and scheduling for process plants; distillation; industrial corrosion; management and cost control of small offshore projects; minicomputers, microcomputers and programmable controllers; good laboratory practices; diesel engineering; biotechnology: procedures and applications; contemporary tablet coating; industrial sterilization and microbiological quality control; aseptic packaging for food and pharmaceuticals; food rheology and extrusion technology; microwave technology and applications for industry; applied surface and colloid chemistry; elastomers technology; electrically conductive polymers; blow molding technology; adhesion science and technology; industrial drying technology; immobilized enzymes and microbes; continuous reactor technology; industrial membrane technology; fermentation engineering; high purity process water for pharmaceutical, medical and electronic applications; computers in the pharmaceutical industry; emulsion suspension technology; pharmaceutical aerosols; drug product stability and shelf life; powders: their properties and processing; good manufacturing practice for the pharmaceutical and allied industries; pharmaceutical quality assurance and control; documenting procedures in the pharmaceutical and related industries; analysis of biomedical studies using modern statistical techniques; industrial and applied microbiology and acute toxicity; preparing clinical protocols and good clinical practices; introduction to thick film hybrid circuit technology; microprocessor based equipment fundamentals and trouble shooting; fibre optic communications; higher end microprocessors; electro magnetic compatibility engineering; solid state electronics for non-electrical engineers; ceramic-metal joining; refractories; melting of glass; ceramics processing: drying and firing; forming of glass.	Center for Professional Advancement Palestrinastraat 1 1071 LC Amsterdam Netherlands (courses are held in Amsterdam and other European cities)	Throughout year 2-5 days	Professional qualification. English	-	\$US 620 - 1,350

## OTHER TRAINING OPPORTUNITIES AND SHORT COURSES (Cont'd)

- 132 -

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Industrial engineering	Partex organizes some 24 courses on many aspects of industrial engineering.	Partex Companhia Portuguesa de Serviços Av. Berna 56 1093 Lisboa Codex Portugal	Throughout 1984 5 days	Professional qualification. English, French, Portuguese	-	To be arranged
Technology	Designed especially for technology practitioners - individuals working directly in technology. It will centre on two themes: the development endogenous technologies and the transfer of exogenous technologies. In particular it will be devoted to the following five subjects: up-grading of traditional technologies; development of new technologies from endogenous R and D; contract negotiation in technology purchases; adaptation of exogenous technologies to local conditions; and diffusion of technologies.	Training Division The African Regional Centre for Technology P.O. Box 2435 Dakar, Senegal (Northern Africa: precise site to be determined later)	November 1984 2 weeks	Professional qualification.	15 October 1984	All costs to be covered by the workshop
Technology development and transfer	The development of endogenous technologies and the transfer of exogenous technologies. In particular it will be devoted to the following five subjects: up-grading of traditional technologies; development of new technologies from endogenous R and D; contract negotiation in technology purchases; adaptation of exogenous technologies to local conditions; and diffusion of technologies.	Training Division The African Regional Centre for Technology P.O. Box 2435 Darkar, Senegal (Western Africa: precise site to be determined later)	April 1984 2 weeks	Professional qualification.	15 March 1984	All costs will be covered by the workshop
Marketing management	The modern concept and practice of marketing management and its place within the firm; to assist marketing managers in developing the skills required for meeting and handling business challenges in today's environment; to provide a forum in which local and Caribbean marketing managers can discuss developments relevant to their operations.	Trinidad & Tobago Management Develop- ment Centre 2nd Floor Salvatori Bldg. Port of Spain Trinidad, W.I. Trinidad & Tobago	24 June 1984 6 days	Professional qualification. English	-	\$US 600 plus accomoda- tion

## OTHER TRAINING OPPORTUNITIES AND SHORT COURSES (Cont'd)

- 133 -

<u>Course or Seminar</u>	<u>General description</u>	<u>Organizer; Venue</u>	<u>Commencing date; Duration</u>	<u>Qualifications: Language requirements</u>	<u>Last date for receipt of applications</u>	<u>Fee</u>
Normalisation	Signification et objectifs de la normalisation ; normalisation nationale et internationale, organismes de normalisation ; la normalisation dans l'entreprise ; méthodologie et technique de normalisation ; science et pratique du dessin ; numérotation, classification et traitement des données ; établissement des nomenclatures, principes de base, exemples d'application ; aperçu sur les normes nationales.	Association Suisse de Normalisation Secteur "Industrie des Machines, des Métaux et des Plastiques" Kirchenweg 4 CH-8032 Zurich Suisse	Automne 1984 3 jours	Formation technique ou technico-commerciale de degré moyen. Français	-	A convenir
Problem solving and decision-making	Creative and analytical problems; Systematic model; Brainstorming; Making priorities; Cause and effect analysis; Data collection; Analysis of data; Decision matrix.	Swedec International AB Riddargatan 37 114 57 Stockholm Sweden	On request 3 days	Top and middle management. English	3 months before start	To be arranged
Cost reduction in industrial enterprises	Concepts of cost reduction; costing analysis; techniques of cost reduction by work study; techniques of cost reduction by resources control; techniques of cost reduction in office; case study in cost reduction.	TMDPC, Department of Industrial Promotion Ministry of Industry Bangkok 10400 Thailand	To be arranged 5 days	Professional qualification. Thai	-	Baht 200
Industrial organization	Short programmes are organized in training management and export marketing.	TMDPC, Department of Industrial Promotion Ministry of Industry Bangkok 10400 Thailand	To be arranged 5 days	Professional qualification. Thai	-	Baht 200

## OTHER TRAINING OPPORTUNITIES AND SHORT COURSES (Cont'd)

- 134 -

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Statistical methods for experimental research	The experiment, the design and analysis; review of statistical inference, single-factor experiments with no restriction on randomization, latin squares split-plot design, confounding, fractional replication, PERT-CPM, etc.	University of Hacettepe Department of Statistics Ankara Turkey	March 1984 3 months	Professional qualification. English	-	-
Industrial production	Short courses are managed on: production planning; system design; industrial maintenance management; assessment of reliability characteristics and maintenance policies for machine components; scheduling and sequencing in jobbing/batch manufacture; design and location of plant and office facilities; engineering manufacturing techniques.	Department of Industrial Engineering Middle East Technical University Ankara, Turkey	May, June, July 1984 3 days	Professional qualification. English	-	\$US 450
Technology	Range of short courses involving introduction to microcomputers and practical work.	Blackwood Hodge Management Centre Nene College Moulton Park Northampton NN2 7AL United Kingdom	Continuous from 1 September 1984 4 days	Professional qualification. English	-	£95 per day
Management	The organization arranges courses in many aspects of training: overseas and senior training officers programmes; identification of training needs; job analysis; training design; training evaluation for cost effective performance; the trainer's role in management self-development.	British Association for Commercial and Industrial Education (BACIE) 16 Park Crescent London W1N 4AP United Kingdom	Throughout year 1 day - 12 weeks	Professional qualification. English	-	£109 + VAT - £3,000 + VAT

## OTHER TRAINING OPPORTUNITIES AND SHORT COURSES (Cont'd)

- 135 -

<u>Course or Seminar</u>	<u>General description</u>	<u>Organizer; Venue</u>	<u>Commencing date; Duration</u>	<u>Qualifications: Language requirements</u>	<u>Last date for receipt of applications</u>	<u>Fee</u>
Petroleum studies	Short courses on: end use for refinery products; modern refining technology; crude oil supply, purchase, exchanges and trading; exploration, geology, geophysics reservoir evaluation and development; petroleum industry management; developing petroleum gases business; fundamentals of plastics processing; lubricants and functional fluids business; tanker operations; management of inland distribution; petrochemical feedstocks; bunkering; international trade in crude and petroleum products; corporate planning and project financing; marketing strategies; fire fighting training; management development; oilfield safety; structure and development of international petroleum and petrochemical industry; exploration well logging; developments in enhanced oil recovery; introduction to refinery modelling and linear programming techniques.	The College of Petroleum Studies St. Georges Mansions George Street Oxford OX1 2AR United Kingdom	Throughout year 3-10 days	Professional qualification. English	-	£280 - 930
Sour gas - the challenge	The course will consist of a series of lectures from experts within the field.	Corrosion and Protection Centre UMIST Manchester M60 1QD United Kingdom	27 March 1984 3 days	Professional qualification. English	-	To be arranged
Furniture technology and production management	Short courses on: upholstery fabrics; foams; frame design; cabinet furniture adhesives; finishing; board materials; plastics; dimensional control; packaging; marketing and sales planning; safety and noise control; costing for profitability; general management problems; productivity improvement techniques.	Furniture Industry Research Association Maxwell Road Stevenage, Herts. United Kingdom	Through 1984/85 1-10 days	Senior managers and furniture management experience. English	-	£200 - 700
Hospital engineering	Courses on: automatic control; electrical engineering; electro-medical equipment; maintenance; foundation in electronics; lift maintenance; medical gas and vacuum equipment maintenance; microcomputers; refrigeration; steam conservation and utilization; sterilization; ventilation and air conditioning.	Hospital Estate Management and Engineering Centre Eastwood Park Falfield Wotton-under-Edge Gloucestershire GL12 8DA United Kingdom	To be arranged 2 weeks	Professional qualification. English	-	To be arranged

## OTHER TRAINING OPPORTUNITIES AND SHORT COURSES (Cont'd)

- 136 -

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Quality assurance and related subjects	Regular and comprehensive programme of short courses on all subjects relating to quality assurance. They include statistical quality control, metrology, quality costing, reliability engineering, quality in design, the quality of software, test and inspection, and overall quality management.	The Institute of Quality Assurance 54 Princes Gate Exhibition Road London SW7 2PG United Kingdom	February-June and September-November 1-5 days	Professional qualification. English	-	To be arranged
Materials handling	Short courses on: micro-electronics in materials handling; application of micro-electronic control to materials handling system design; redesigning your order picking system; techniques of physical distribution management; warehouse management and industrial relations; warehouse layout and methods; the control of physical distribution; first line supervision in physical distribution; modern warehouse design; unit load handling in manufacture; parts storage system design.	National Materials Handling Centre Cranfield Institute of Technology Cranfield Bedford MK43 OAL United Kingdom	Throughout year 2-4 1/2 days	Professional qualification. English	-	To be arranged
Industrial pneumatic system	The course has been developed for engineers, designers, training officers and users of pneumatic equipment. There will be a "down to earth" approach rather than a theoretical one.	Sheffield City Polytechnic Automation Advisory Service Pond Street Sheffield, South Yorkshire S1 1WB United Kingdom	5 November 1984 1 week	Professional qualification. English	-	To be arranged
Power hydraulic systems	This course has been developed for engineers, designers, and users of oil hydraulic systems. There will be a "down to earth" approach rather than a theoretical one.	Sheffield City Polytechnic Automation Advisory Service Pond Street Sheffield, South Yorkshire S1 1WB United Kingdom	21 May 1984 1 week	Professional qualification. English	-	To be arranged

## OTHER TRAINING OPPORTUNITIES AND SHORT COURSES (Cont'd)

- 137 -

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Project planning	A series of seminars to enable participants to design, deliver and evaluate courses in their own institutions which meet training needs with effectiveness and economy. Sessions cover: motivation of adult learners; writing and use of teaching objectives; principles of course design, the selection of content and participants, and course implementation; selection and use of teaching methods; selection of audio-visual aids; use and construction of case studies; and techniques of assessment and evaluation.	Project Planning Centre for Developing Countries University of Bradford Bradford West Yorkshire United Kingdom	Periodically throughout the year, 1 week	University degree. English	-	£250 for 1 week (including accommodation)
Industrial audiology	Short courses on: basics of hearing and noise; hearing conservation; audiometry, regulations and legislation; tutorials; assessment; vehicle noise and vibration; recent advances in structural dynamics.	ISVR, University of Southampton United Kingdom	April - September 1984 To be determined	Professional qualification. English	-	£300 approx.
Noise and vibration	(13th advanced course). Basic subjects of acoustics, random processes, vibration theory, subjective response and aero-dynamic noise. Industrial machinery noise, diesel engine noise, process plant noise, environmental noise and planning; laser techniques for non-contact measurement.	ISVR, University of Southampton United Kingdom	September 1984 To be determined	Professional qualification. English	-	£400 approx.
Development statistics	To strengthen the capacity of officials compiling statistics to improve their range, quality, presentation and possible uses, and to broaden the data base for decision-makers.	Institute of Development Studies University of Sussex Falmer, Brighton Sussex BN1 9RE United Kingdom	30 April 1984 12 weeks	Professional qualification. English	-	£90 per week

## OTHER TRAINING OPPORTUNITIES AND SHORT COURSES (Cont'd)

- 138 -

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
National external economic negotiation and management	The emphasis will be on: a) necessary and possible responses to existing patterns of "desired" (e.g. by IMF, IBRD, TNC banks) response and their limitations and how countries could negotiate in the financial field and b) problems of negotiating and managing relations with TNCs in respect to national resource development, international trade including transfer pricing and general "control"/"benefit maximization" frameworks to ensure that TNC operations do provide substantial, defined benefits to the national economy and its development.	Institute of Development Studies University of Sussex Falmer, Brighton Sussex BN1 9RE United Kingdom	30 July 1984 6 weeks	Professional qualification. English	-	£190 per week
Tribology	Practical aspects of friction lubrication and wear.	University College of Swansea Department of Mechanical Engineering Swansea SA2 8PP United Kingdom	September 1984 To be decided	Professional qualification. English	-	Approx. £250
Gum chemistry and technology in the food industry	Purpose is to provide an overview of the large and increasingly important role gums play in the development and manufacture of processed food products.	American Association of Cereal Chemists 3340 Pilot Knob Road St. Paul, Minn. United States of America	Autumn 1984	Professional qualification.	-	To be arranged
Introduction to cereal chemistry and technology	To provide an overview of the unique biological properties of cereal grains for those who have not had formal training in cereal chemistry.	American Association of Cereal Chemists 3340 Pilot Knob Road St. Paul, Minn. United States of America	May 1984 -	Professional qualification. English	-	To be arranged
Milling for cereal chemists	Designed to provide cereal chemists with an in-depth view of the milling process, the opportunity to work with milling equipment, and to teach them the fundamentals of the milling process.	American Association of Cereal Chemists 3340 Pilot Knob Road St. Paul, Minn. United States of America	January 1984 -	Professional qualification. English	-	To be arranged

## OTHER TRAINING OPPORTUNITIES AND SHORT COURSES (Cont'd)

- 139 -

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Chemistry and microbiology	Scientific meetings and workshops of interest to chemists and microbiologists.	Association of Official Analytical Chemists 1111 N. 19th Street Suite 210 Arlington, VA 22209 United States of America (various cities)	May and 28 October - 1 November 1984 3-5 days	Professional qualification. English	-	To be arranged
Energy conservation information resources	A general introduction to energy conservation information resources. Designed for technical personnel or information specialists working with technical personnel. Formal and informal energy conservation information resources, searching techniques, designing a search strategy and other tools for finding and using energy conservation information will be covered and demonstrated.	Denver Research Institute/IBM P.O. Box 10127 Denver, CO 80208 United States of America	8 October 1984 3 days	University degree. English	-	\$US 300
Industrial census	Field operations workshop.	International Statistical Programs Center, U.S. Bureau of the Census Washington, D.C. 20233, United States of America	To be arranged	Professional qualification. English	-	To be arranged
Systems analysis and management of industrial statistics programmes	Responsibilities of systems analysts, project leaders, managers of an ADP installation, and end-users of information systems; managerial understanding of the principles of manual, mechanical, and electronic information processing of industrial data. Principles and techniques of systems analysis, programme design, feasibility studies and their use, and the establishment of controls and standards for ensuring accuracy and timeliness in processing economic and industrial data.	International Statistical Programs Center, U.S. Bureau of the Census Washington, D.C. 20233 United States of America	January 1984 4 days	Professional qualification. English	-	\$US 2,900

## OTHER TRAINING OPPORTUNITIES AND SHORT COURSES (Cont'd)

- 140 -

<u>Course or Seminar</u>	<u>General description</u>	<u>Organizer; Venue</u>	<u>Commencing date; Duration</u>	<u>Qualifications: Language requirements</u>	<u>Last date for receipt of applications</u>	<u>Fee</u>
Management and communication	Change, organizational communication, problem solving, leadership styles, motivation, persuasion, time management, decision making, delegation, developing and maintaining effective working relationships.	Management-Communication Associates P.O. Box 366 East Lansing Michigan 48823 United States of America (various other cities)	Year-round 5 or 11 days	Professional qualification. English	-	\$US 380 or 725
Co-operatives	Co-operative education and management seminar, including such areas as co-operative development, structure and organization of co-operatives, financial structure of co-operatives, co-operative education, management of co-operatives, financial management and analysis, personnel management, public relations, marketing and merchandising through co-operatives, and operations of various types of co-operative societies.	University Center for Cooperatives University of Wisconsin-Extension Madison, Wisconsin 53706, United States of America	27 August 1984 16 weeks	Third World co-operative leaders and officials with at least a secondary school education and experience in co-operative work. English	1 July 1984	\$US 7,815
Electrical engineering	Short courses on: power system stability; analysis of load management; distribution planning; testing of power equipment; engineering economics; probability and insulation co-ordination; generation planning; interfacing industrial and customer-owned generation with utility systems.	Westinghouse Electric Corp. 777 Penn Centre Boulevard Pittsburgh, PA 15235 United States of America	Throughout year 3-4 days	Engineering degree. English	-	\$US 870 - 980

CHAPTER 4: FIELDS OF TRAINING BY HOST COUNTRIES

The following is a list of the host countries included in this Guide. Under each country's name the fields of training are listed in the order in which they appear in the Guide (see table of contents). Distinction is made between training programmes offered by UNIDO (A) and fields of training in which training opportunities are offered by institutions other than UNIDO (B).

ARGENTINA	B
	<ul style="list-style-type: none"><li>- Food processing industries</li><li>- Leather and leather products industries</li></ul>
AUSTRALIA	B
	<ul style="list-style-type: none"><li>- Management and industrial administration</li><li>- Trainer development</li></ul>
AUSTRIA	A
	<ul style="list-style-type: none"><li>- Chemical industries</li><li>- Trainer development</li></ul>
	B
	<ul style="list-style-type: none"><li>- Chemical industries</li><li>- Industrial information and documentation</li></ul>
BELGIUM	A
	<ul style="list-style-type: none"><li>- Environment</li><li>- Maintenance and repair</li><li>- Mechanical industries</li><li>- Textile industries</li></ul>
	B
	<ul style="list-style-type: none"><li>- Building materials industries</li><li>- Chemical industries</li><li>- Energy</li><li>- Environment</li><li>- Food processing industries</li><li>- Glass and optical industries</li><li>- Industrial planning and programming</li></ul>

BELGIUM

B

- Investment promotion and industrial financing
- Leather and leather products industries
- Maintenance and repair
- Management and industrial administration
- Mechanical and metalworking industries
- Metallurgical industries
- Packaging industries
- Textile industries
- Wood processing and wood products industries

BRAZIL

B

- Chemical industries
- Energy
- Maintenance and repair
- Management and industrial administration
- Quality control and standardization

BULGARIA

A

- Management and industrial administration

CHILE

B

- Environment
- Industrial planning and programming
- Management and industrial administration

CHINA

A

- Mechanical and metalworking industries

COSTA RICA

A

- Wood processing and wood products industries

CZECHOSLOVAKIA

A

- Mechanical and metalworking industries
- Metallurgical industries

DENMARK

B

- Building materials industries

EGYPT

A

- Industrial design

B

- Industrial design

FINLAND

B

- Management and industrial administration
- Wood processing and wood products industries

FRANCE

A

- Energy
- Maintenance and repair
- Quality control and standardization
- Trainer development

B

- Chemical industries
- Energy
- Food processing industries
- Industrial information and documentation
- Management and industrial administration
- Marketing and export promotion
- Packaging industries
- Quality control and standardization
- Trainer development

GERMAN DEMOCRATIC  
REPUBLIC

A

- Chemical industries
- Industrial planning and programming
- Printing industries

GERMANY, FEDERAL  
REPUBLIC OF,  
AND BERLIN  
(WEST)

B

- Automation and data processing
- Chemical industries
- Electrical and electronic industries
- Maintenance and repair

GERMANY, FEDERAL REPUBLIC OF, AND BERLIN (WEST)	B
	<ul style="list-style-type: none"><li>- Management and industrial administration</li><li>- Marketing and export promotion</li><li>- Printing industries</li><li>- Quality control and standardization</li><li>- Wood processing and wood products industries</li></ul>
HUNGARY	A
	<ul style="list-style-type: none"><li>- Maintenance and repair</li></ul>
	B
	<ul style="list-style-type: none"><li>- Automation and data processing</li><li>- Electrical and electronic industries</li><li>- Maintenance and repair</li></ul>
INDIA	B
	<ul style="list-style-type: none"><li>- Automation and data processing</li><li>- Building materials industries</li><li>- Food processing industries</li><li>- Industrial design</li><li>- Industrial planning and programming</li><li>- Leather and leather products industries</li><li>- Management and industrial administration</li><li>- Marketing and export promotion</li><li>- Mechanical and metalworking industries</li><li>- Packaging industries</li><li>- Quality control and standardization</li><li>- Small-scale industries and entrepreneurship</li><li>- Textile industries</li><li>- Trainer development</li></ul>
INDONESIA	B
	<ul style="list-style-type: none"><li>- Food processing industries</li></ul>
IRAQ	B
	<ul style="list-style-type: none"><li>- Management and industrial administration</li></ul>

IRELAND

B

- Industrial planning and programming
- Management and industrial administration
- Small-scale industries and entrepreneurship
- Trainer development

ISRAEL

B

- Small-scale industries and entrepreneurship

ITALY

A

- Energy
- Leather and leather products industries
- Management and industrial administration
- Wood processing and wood products industries

B

- Automation and data processing
- Energy
- Food processing industries
- Industrial design
- Industrial planning and programming
- Maintenance and repair
- Management and industrial administration
- Metallurgical industries

JAPAN

A

- Industrial planning and programming
- Management and industrial administration

B

- Industrial design
- Management and industrial administration
- Quality control and standarization

KENYA

B

- Quality control and standardization

MAURITIUS	A
	<ul style="list-style-type: none"><li>- Wood processing and wood products industries</li></ul>
MEXICO	B
	<ul style="list-style-type: none"><li>- Quality control and standardization</li></ul>
MOROCCO	B
	<ul style="list-style-type: none"><li>- Building materials industries</li></ul>
NETHERLANDS	B
	<ul style="list-style-type: none"><li>- Building materials industries</li><li>- Food processing industries</li><li>- Industrial planning and programming</li><li>- Leather and leather products industries</li><li>- Management and industrial administration</li><li>- Marketing and export promotion</li><li>- Metallurgical industries</li><li>- Quality control and standardization</li><li>- Small-scale industries and entrepreneurship</li><li>- Textile industries</li></ul>
NORWAY	B
	<ul style="list-style-type: none"><li>- Energy</li><li>- Pulp and paper industries</li></ul>
PAKISTAN	B
	<ul style="list-style-type: none"><li>- Building materials industries</li><li>- Maintenance and repair</li><li>- Management and industrial administration</li></ul>
PERU	B
	<ul style="list-style-type: none"><li>- Investment promotion and industrial financing</li></ul>
PHILIPPINES	A
	<ul style="list-style-type: none"><li>- Automation and data processing</li><li>- Energy</li><li>- Industrial planning and programming</li><li>- Small-scale industries and entrepreneurship</li></ul>

PHILIPPINES	B
	- Wood processing and wood products industries
POLAND	A
	- Industrial planning and programming
	- Metallurgical industries
	B
	- Industrial planning and programming
PORUGAL	B
	- Food processing industries
	- Maintenance and repair
	- Management and industrial administration
ROMANIA	A
	- Chemical industries
SENEGAL	A
	- Industrial planning and programming
	B
	- Management and industrial administration
SPAIN	B
	- Food processing industries
SWEDEN	B
	- Food processing industries
	- Management and industrial administration
	- Quality control and standardization
SWITZERLAND	A
	- Textile industries

SWITZERLAND	B
	<ul style="list-style-type: none"><li>- Food processing industries</li><li>- Management and industrial administration</li></ul>
THAILAND	B
	<ul style="list-style-type: none"><li>- Automation and data processing</li><li>- Chemical industries</li><li>- Management and industrial administration</li><li>- Metallurgical industries</li><li>- Pulp and paper industries</li><li>- Small-scale industries and entrepreneurship</li></ul>
TURKEY	A
	<ul style="list-style-type: none"><li>- Building materials industries</li><li>- Food processing industries</li><li>- Mechanical and metalworking industries</li><li>- Metallurgical industries</li></ul>
	B
	<ul style="list-style-type: none"><li>- Building materials industries</li><li>- Chemical industries</li><li>- Food processing industries</li></ul>
UKRAINIAN SOVIET SOCIALIST REPUBLIC	A
	<ul style="list-style-type: none"><li>- Mechanical and metalworking industries</li><li>- Metallurgical industries</li></ul>
UNION OF SOVIET SOCIALIST REPUBLICS	A
	<ul style="list-style-type: none"><li>- Chemical industries</li><li>- Food processing industries</li><li>- Industrial information and documentation</li><li>- Mechanical and metalworking industries</li><li>- Trainer development</li></ul>
UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	A
	<ul style="list-style-type: none"><li>- Maintenance and repair</li></ul>

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UNITED KINGDOM  
OF GREAT BRITAIN  
AND NORTHERN  
IRELAND

B

- Automation and data processing
- Building materials industries
- Chemical industries
- Electrical and electronic industries
- Energy
- Environment
- Food processing industries
- Industrial design
- Industrial planning and programming
- Investment promotion and industrial financing
- Leather and leather products industries
- Maintenance and repair
- Management and industrial administration
- Marketing and export promotion
- Mechanical and metalworking industries
- Packaging industries
- Printing industries
- Pulp and paper industries
- Quality control and standardization
- Small-scale industries and entrepreneurship
- Textile industries
- Trainer development
- Wood processing and wood products industries

UNITED REPUBLIC  
OF CAMEROON

A

- Quality control and standardization
- Maintenance and repair

B

- Management and industrial administration

UNITED REPUBLIC  
OF TANZANIA

A

- Small-scale industries and entrepreneurship

B

- Management and industrial administration

UNITED STATES  
OF AMERICA

B

- Automation and data processing
- Chemical industries
- Energy
- Food processing industries
- Industrial planning and programming
- Management and industrial administration
- Marketing and export promotion
- Metallurgical industries

URUGUAY

B

- Management and industrial administration

YUGOSLAVIA

A

- Food processing industries
- Trainer development
- Wood processing and wood products industries

B

- Management and industrial administration
- Trainer development

UNITED NATIONS AND RELATED ORGANIZATIONS

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT (UNCTAD)

- Industrial information and documentation

FOOD AND AGRICULTURE ORGANIZATION (FAO)

- Food processing industries
- Wood processing and wood products industries

WORLD INTELLECTUAL PROPERTY ORGANIZATION (WIPO)

- Industrial information and documentation

CHAPITRE 4 : DOMAINES DE FORMATION, PAR PAYS

On trouvera, ci-après, une liste des pays d'accueil figurant dans l'Aperçu. Pour chacun de ces pays on a indiqué, dans le même ordre que dans l'Aperçu (voir la table des matières), les domaines sur lesquels porte la formation, en distinguant selon que les possibilités de formation sont offertes par l'ONUDI (A) ou par d'autres institutions (B).

ALLEMAGNE, REPUBLIQUE FEDERALE D', ET BERLIN-OUEST	B
	<ul style="list-style-type: none"><li>- Automatisation et traitement des données</li><li>- Contrôle de la qualité et normalisation</li><li>- Entretien et réparation</li><li>- Gestion et administration industrielle</li><li>- Industrie du bois et des articles en bois</li><li>- Industrie chimique</li><li>- Industries électriques et électroniques</li><li>- Industries graphiques</li><li>- Marketing et promotion des exportations</li></ul>
ARGENTINE	B
	<ul style="list-style-type: none"><li>- Industrie alimentaire</li><li>- Industrie du cuir et des articles en cuir</li></ul>
AUSTRALIE	B
	<ul style="list-style-type: none"><li>- Gestion et administration industrielle</li><li>- Perfectionnement du personnel enseignant</li></ul>
AUTRICHE	A
	<ul style="list-style-type: none"><li>- Formation des formateurs</li><li>- Industrie chimique</li></ul>
	B
	<ul style="list-style-type: none"><li>- Industrie chimique</li><li>- Information et documentation industrielles</li></ul>
BELGIQUE	A
	<ul style="list-style-type: none"><li>- Entretien et réparation</li><li>- Environnement</li><li>- Industries mécaniques</li><li>- Industrie textile</li></ul>

BELGIQUE

B

- Energie
- Entretien et réparation
- Environnement
- Gestion et administration industrielle
- Industrie alimentaire
- Industrie du bois et des produits du bois
- Industrie chimique
- Industrie du cuir et des articles en cuir
- Industrie de l'emballage
- Industrie des matériaux de construction
- Industries mécaniques et transformation des métaux
- Industrie métallurgique
- Industrie textile
- Industrie de la verrerie et de l'optique
- Planification et programmation industrielles
- Promotion des investissements et financement industriel

BRESIL

B

- Contrôle de la qualité et normalisation
- Energie
- Gestion et administration industrielle
- Industrie chimique

BULGARIE

A

- Gestion et administration industrielle

B

- Gestion et administration industrielle

CHILI

B

- Environnement
- Gestion et administration industrielle
- Planification et programmation industrielles

CHINE

A

- Industries mécaniques et transformation des métaux

COSTA RICA	A
	- Industrie du bois et des articles en bois
EGYPTE	A
	- Désign industriel
	B
	- Désign industriel
ESPAGNE	B
	- Industrie alimentaire
ETATS-UNIS D'AMERIQUE	B
	- Automatisation et traitement des données
	- Energie
	- Gestion et administration industrielle
	- Industrie alimentaire
	- Industrie chimique
	- Industrie métallurgique
	- Marketing et promotion des exportations
	- Planification et programmation industrielles
FINLANDE	B
	- Gestion et administration industrielle
	- Industrie du bois et des produits du bois
FRANCE	A
	- Contrôle de la qualité et normalisation
	- Energie
	- Entretien et réparation
	- Perfectionnement du personnel enseignant
	B
	- Contrôle de la qualité et normalisation
	- Energie
	- Gestion et administration industrielle

FRANCE	B
	<ul style="list-style-type: none"><li>- Industrie alimentaire</li><li>- Industrie chimique</li><li>- Industrie de l'emballage</li><li>- Information et documentation industrielles</li><li>- Marketing et promotion des exportations</li><li>- Perfectionnement du personnel enseignant</li></ul>
HONGRIE	A
	<ul style="list-style-type: none"><li>- Entretien et réparation</li></ul>
	B
	<ul style="list-style-type: none"><li>- Automation et traitement des données</li><li>- Gestion et administration industrielle</li><li>- Industries électriques et électroniques</li></ul>
INDE	B
	<ul style="list-style-type: none"><li>- Automatisation et traitement des données</li><li>- Contrôle de la qualité et normalisation</li><li>- Design industriel</li><li>- Gestion et administration industrielle</li><li>- Industrie alimentaire</li><li>- Industrie du cuir et des articles en cuir</li><li>- Industrie de l'emballage</li><li>- Industrie des matériaux de construction</li><li>- Industries mécaniques et transformation des métaux</li><li>- Industrie textile</li><li>- Marketing et promotion des exportations</li><li>- Perfectionnement du personnel enseignant</li><li>- Petites industries et entrepreneurs</li><li>- Planification et programmation industrielles</li></ul>
INDONESIE	B
	<ul style="list-style-type: none"><li>- Industrie alimentaire</li></ul>
IRAQ	B
	<ul style="list-style-type: none"><li>- Gestion et administration industrielle</li></ul>

IRLANDE

B

- Gestion et administration industrielle
- Perfectionnement du personnel enseignant
- Petites industries et entrepreneurs
- Planification et programmation industrielles

ISRAEL

B

- Petites industries et entrepreneurs

ITALIE

A

- Energie
- Gestion et administration industrielle
- Industrie du cuir et des articles en cuir
- Industrie du bois et des articles en bois

B

- Automatisation et traitement des données
- Design industriel
- Energie
- Entretien et réparation
- Gestion et administration industrielle
- Industrie alimentaire
- Industrie métallurgique
- Planification et programmation industrielles

JAPON

A

- Gestion et administration industrielle
- Planification et programmation industrielles

B

- Contrôle de la qualité et normalisation
- Design industriel
- Gestion et administration industrielle
- Planification et programmation industrielles

KENYA

B

- Contrôle de la qualité et normalisation

MAROC	B
	<ul style="list-style-type: none"><li>- Industrie des matériaux de construction</li></ul>
MAURICE	A
	<ul style="list-style-type: none"><li>- Industrie du bois et des articles en bois</li></ul>
MEXIQUE	B
	<ul style="list-style-type: none"><li>- Contrôle de la qualité et normalisation</li></ul>
NORVEGE	B
	<ul style="list-style-type: none"><li>- Energie</li><li>- Industrie de la pâte à papier et du papier</li></ul>
PAKISTAN	B
	<ul style="list-style-type: none"><li>- Entretien et réparation</li><li>- Gestion et administration industrielle</li><li>- Industrie des matériaux de construction</li></ul>
PAYS-BAS	B
	<ul style="list-style-type: none"><li>- Contrôle de la qualité et normalisation</li><li>- Gestion et administration industrielle</li><li>- Industrie alimentaire</li><li>- Industrie du cuir et des articles en cuir</li><li>- Industrie des matériaux de construction</li><li>- Industrie métallurgique</li><li>- Industrie textile</li><li>- Marketing et promotion des exportations</li><li>- Petites industries et entrepreneurs</li><li>- Planification et programmation industrielles</li></ul>
PEROU	B
	<ul style="list-style-type: none"><li>- Promotion des investissements et financement industriel</li></ul>

- PHILIPPINES            A
- Automation et traitement des données
  - Energie
  - Petites industries et entrepreneurs
  - Planification et programmation industrielles
- B
- Industrie du bois et des produits du bois
- POLOGNE              A
- Industrie métallurgique
  - Planification et programmation industrielles
- B
- Planification et programmation industrielles
- PORUGAL              B
- Entretien et réparation
  - Gestion et administration industrielle
  - Industrie alimentaire
- REPUBLIQUE  
DEMOCRATIQUE  
ALLEMANDE            A
- Industrie chimique
  - Industries graphiques
  - Planification et programmation industrielles
- REPUBLIQUE  
SOCIALISTE  
SOVIETIQUE  
D'UKRAINE           A
- Industries mécaniques et transformation des métaux
  - Industrie métallurgique
- REPUBLIQUE-  
UNIE DE  
TANZANIE            A
- Petites industries et entrepreneurs
- B
- Gestion et administration industrielle

REPUBLIQUE-  
UNIE DU  
CAMEROUN

A

- Entretien et réparation
- Gestion et administration industrielle

B

- Gestion et administration industrielle

ROUMANIE

A

- Industrie chimique

ROYAUME-UNI  
DE GRANDE-  
BRETAGNE ET  
D'IRLANDE DU  
NORD

A

- Entretien et réparation

B

- Automatisation et traitement des données
- Contrôle de la qualité et normalisation
- Design industriel
- Energie
- Entretien et réparation
- Environnement
- Gestion et administration industrielle
- Industrie alimentaire
- Industrie du bois et des produits du bois
- Industrie chimique
- Industrie du cuir et des articles en cuir
- Industries électriques et électroniques
- Industrie de l'emballage
- Industries graphiques
- Industrie des matériaux de construction
- Industries mécaniques et transformation des métaux
- Industries de la pâte à papier et du papier
- Industrie textile
- Perfectionnement du personnel enseignant
- Petites industries et entrepreneurs
- Planification et programmation industrielles
- Promotion des investissements et financement industriel

SENEGAL

A

- Planification et programmation industrielles

SUEDE

B

- Contrôle de la qualité et normalisation
- Gestion et administration industrielle
- Industrie alimentaire

SUISSE

A

- Industrie chimique

B

- Gestion et administration industrielle
- Industrie alimentaire

TCHECOSLOVAQUIE

A

- Industries mécaniques et transformation des métaux
- Industrie métallurgique

THAILANDE

B

- Automation et traitement des données
- Gestion et administration industrielle
- Industrie chimique
- Industrie métallurgique
- Industrie de la pâte à papier et du papier
- Petites industries et entrepreneurs

TURQUIE

A

- Industrie alimentaire
- Industrie des matériaux de construction
- Industries mécaniques et transformation des métaux
- Industrie métallurgique

B

- Industrie alimentaire
- Industrie chimique
- Industrie des matériaux de construction

UNION DES  
REPUBLIQUES  
SOCIALISTES  
SOVIETIQUES      A  
- Industrie alimentaire  
- Industrie chimique  
- Industries mécaniques et transformation des matériaux aux  
- Information et documentation industrielles  
- Perfectionnement du personnel enseignant

URUGUAY      B  
- Gestion et administration industrielle

YUGOSLAVIE      A  
- Formation des formateurs  
- Industrie du bois et des produits du bois  
- Industrie alimentaire  
  
B  
- Gestion et administration industrielle  
- Perfectionnement du personnel enseignant

ORGANISATION DU SYSTEME DES NATIONS UNIES ET ORGANISATIONS APPARENTÉES

CONFERENCE DES NATIONS UNIES SUR LE COMMERCE ET LE DÉVELOPPEMENT (CNUCED)

- Information et documentation industrielles

ORGANISATION DES NATIONS UNIES POUR L'ALIMENTATION ET L'AGRICULTURE (FAO)

- Industrie alimentaire
- Industrie du bois et des produits du bois

ORGANISATION MONDIALE DE LA PROPRIÉTÉ INTELLECTUELLE (OMPI)

- Information et documentation industrielles

CAPITULO 4: ESFERAS DE CAPACITACION POR PAISES HUESPEDES

A continuación figura una lista de los países huéspedes incluidos en la presente Guía. Debajo del nombre de cada país figuran las esferas de capacitación en el orden en que aparecen en la Guía (véase el índice). Se hace una distinción entre los programas de capacitación que ofrece la ONUDI (A) y las esferas de capacitación en que instituciones diferentes de la ONUDI (B) ofrecen oportunidades de formación.

ALEMANIA, REPUBLICA FEDERAL DE, Y BERLIN (OESTE)	B
	<ul style="list-style-type: none"><li>- Automatización y procesamiento de datos</li><li>- Comercialización y promoción de la exportación</li><li>- Control de calidad y normalización</li><li>- Gestión y administración industrial</li><li>- Industrias eléctricas y electrónica</li><li>- Industrias gráficas</li><li>- Industrias de elaboración de la madera y de productos de madera</li><li>- Industrias químicas</li><li>- Mantenimiento y reparación</li></ul>
ARGENTINA	B
	<ul style="list-style-type: none"><li>- Industrias alimentarias</li><li>- Industrias del cuero y de los productos de cuero</li></ul>
AUSTRALIA	B
	<ul style="list-style-type: none"><li>- Desarrollo de profesionales de capacitación</li><li>- Gestión y administración industrial</li></ul>
AUSTRIA	A
	<ul style="list-style-type: none"><li>- Industrias químicas</li><li>- Desarrollo de profesionales de capacitación</li></ul>
	B
	<ul style="list-style-type: none"><li>- Industrias químicas</li><li>- Información y documentación industriales</li></ul>
BELGICA	A
	<ul style="list-style-type: none"><li>- Industrias mecánicas</li><li>- Industrias textiles</li><li>- Mantenimiento y reparación</li><li>- Medio ambiente</li></ul>

BELGICA

B

- Energía
- Gestión y administración industrial
- Industrias alimentarias
- Industrias del cuero y los productos de cuero
- Industrias relacionadas con el embalache
- Industrias de elaboración de la madera y de productos de madera
- Industrias de los materiales de construcción
- Industrias mecánicas y de transformación de metales
- Industrias metalúrgicas
- Industrias químicas
- Industrias textiles
- Industrias del vidrio y ópticas
- Mantenimiento y reparación
- Medio ambiente
- Planeamiento y programación industriales
- Promoción de inversiones y financiación industrial

BRASIL

B

- Control de calidad y normalización
- Energía
- Gestión y administración industrial
- Industrias químicas

BULGARIA

A

- Gestión y administración industrial

B

- Gestión y administración industrial

CHECOSLOVAQUIA

A

- Industrias mecánicas y de transformación de metales
- Industrias metalúrgicas

CHILE

B

- Gestión y administración industrial
- Medio ambiente
- Planeamiento y programación industriales

CHINA	A
	- Industrias mecánicas y de transformación de metales
COSTA RICA	A
	- Industrias de elaboración de la madera y de productos de madera
DINAMARCA	B
	- Industrias de los materiales de construcción
EGIPTO	A
	- Diseño industrial
	B
	- Diseño industrial
ESPAÑA	B
	- Industrias alimentarias
ESTADOS UNIDOS DE AMERICA	B
	- Automatización procesamiento de datos
	- Comercialización y promoción de la exportación
	- Energía
	- Gestión y administración industrial
	- Industrias alimentarias
	- Industrias metalúrgicas
	- Industrias químicas
	- Planeamiento y programación industriales
FILIPINAS	A
	- Automatización y procesamiento de datos
	- Energía
	- Pequeñas industrias y los empresarios
	- Planificación y programación industriales
	B
	- Industrias de elaboración de la madera y de productos de madera

FINLANDIA

B

- Gestión y administración industrial
- Industrias de elaboración de la madera y de productos de madera

FRANCIA

A

- Control de calidad y normalización
- Desarrollo de profesionales de capacitación
- Energía
- Mantenimiento y reparación

B

- Comercialización y promoción de las exportaciones
- Control de calidad y normalización
- Desarrollo de profesionales de capacitación
- Energía
- Gestión y administración industrial
- Industrias alimentarias
- Industrias relacionadas con el embalaje
- Industrias químicas
- Información y documentación industriales

HUNGRIA

A

- Mantenimiento y reparación

B

- Automatización y procesamiento de datos
- Gestión y administración industrial
- Industrias eléctricas y electrónicas

INDIA

B

- Automatización y procesamiento de datos
- Comercialización y promoción de las exportaciones
- Control de calidad y normalización
- Desarrollo de profesionales de capacitación
- Diseño industrial
- Gestión y administración industrial
- Industrias alimentarias
- Industrias del cuero y los productos de cuero

INDIA

B

- Industrias relacionadas con el embalaje de los materiales de construcción
- Industrias mecánicas y de transformación de metales
- Industrias textiles
- Pequeñas industrias y los empresarios
- Perfeccionamiento de capacitadores
- Planeamiento y programación industriales

INDONESIA

B

- Industrias alimentarias

IRAQ

B

- Gestión y administración industrial

IRLANDA

B

- Desarrollo de profesionales de capacitación
- Gestión y administración industrial
- Pequeñas industrias les empresarios
- Planificación y programación industriales

ISRAEL

B

- Pequeñas industrias y gestión empresarial

ITALIA

A

- Energía
- Gestión y administración industrial
- Industrias del cuero y los productos de cuero
- Industrias de elaboración de la madera y de productos de madera

B

- Automatización y procesamiento de los datos
- Diseño industrial
- Energía
- Gestión y administración industrial
- Industrias alimentarias
- Industrias metalúrgicas
- Mantenimiento y reparación
- Planeamiento y programación industriales

JAPON	A
	<ul style="list-style-type: none"><li>- Gestión y administración industrial</li><li>- Planeamiento y programación industriales</li></ul>
	B
	<ul style="list-style-type: none"><li>- Control de calidad y normalización</li><li>- Diseño industrial</li><li>- Gestión y administración industrial</li><li>- Planeamiento y programación industriales</li></ul>
KENYA	B
	<ul style="list-style-type: none"><li>- Control de calidad y normalización</li></ul>
MARRUECOS	B
	<ul style="list-style-type: none"><li>- Industrias de los materiales de construcción</li></ul>
MAURICIO	A
	<ul style="list-style-type: none"><li>- Industrias de elaboración de la madera y de productos de madera</li></ul>
MEXICO	B
	<ul style="list-style-type: none"><li>- Control de calidad y normalización</li></ul>
NORUEGA	B
	<ul style="list-style-type: none"><li>- Industrias de la celulosa y el papel</li></ul>
PAISES BAJOS	B
	<ul style="list-style-type: none"><li>- Comercialización y promoción de las exportaciones</li><li>- Control de calidad y normalización</li><li>- Gestión y administración industrial</li><li>- Industrias alimentarias</li><li>- Industrias del cuero y los productos de cuero</li><li>- Industrias de los materiales de construcción</li><li>- Industrias metalúrgicas</li><li>- Industrias textiles</li><li>- Pequeñas industrias y los empresarios</li><li>- Planeamiento y programación industriales</li></ul>

- |   |   |
|---|---|
| PAKISTAN  | B   |
|   | <ul style="list-style-type: none"><li>- Gestión y administración industrial</li><li>- Industrias de los materiales de construcción</li><li>- Mantenimiento y reparación</li></ul>   |
| PERU  | B   |
|   | <ul style="list-style-type: none"><li>- Promoción de inversiones y financiación industrial</li></ul>  |
| POLONIA   | A   |
|   | <ul style="list-style-type: none"><li>- Industrias metalúrgicas</li><li>- Planeamiento y programación industriales</li></ul>  |
|   | B   |
|   | <ul style="list-style-type: none"><li>- Planeamiento y programación industriales</li></ul>  |
| PORUGAL   | B   |
|   | <ul style="list-style-type: none"><li>- Gestión y administración industrial</li><li>- Industrias alimentarias</li><li>- Mantenimiento y reparación</li></ul>  |
| REINO UNIDO DE<br>GRAN BRETANA E<br>IRLANDA DEL NORTE | A   |
|   | <ul style="list-style-type: none"><li>- Mantenimiento y reparación</li></ul>  |
|   | B   |
|   | <ul style="list-style-type: none"><li>- Automatización y procesamiento de datos</li><li>- Control de calidad y normalización</li><li>- Desarrollo de profesionales de capacitación</li><li>- Energía</li><li>- Gestión y administración industrial</li><li>- Industrias alimentarias</li><li>- Industrias de la celulosa y el papel</li><li>- Industrias del cuero y de los productos de cuero</li><li>- Industrias relacionadas con el embalaje</li><li>- Industrias gráficas</li><li>- Industrias de los materiales de construcción</li></ul> |

- |  |   |
|--|---|
| REINO UNIDO DE<br>GRAN BRETAÑA E                   | B   |
| IRLANDA DEL NORTE                                  | <ul style="list-style-type: none"><li>- Industrias eléctricas y electrónicas</li><li>- Industrias de elaboración de la madera y de productos de madera</li><li>- Industrias de los materiales de construcción</li><li>- Industrias mecánicas y de transformación de metales</li><li>- Industrias químicas</li><li>- Industrias textiles</li><li>- Mantenimiento y reparación</li><li>- Medio ambiente</li><li>- Pequeñas industrias y los empresarios</li><li>- Planeamiento y programación industriales</li><li>- Promoción de inversiones y financiación industrial</li></ul> |
| REPUBLICA<br>DEMOCRATICA<br>ALEMANA                | A   |
|  | <ul style="list-style-type: none"><li>- Industrias de la imprenta</li><li>- Industrias químicas</li><li>- Planificación y programación industriales</li></ul>   |
| REPUBLICA<br>SOCIALISTA<br>SOVIETICA DE<br>UCRANIA | A   |
|  | <ul style="list-style-type: none"><li>- Industrias mecánicas y de transformación de metales</li><li>- Industrias metalúrgicas</li></ul>   |
| REPUBLICA UNIDA<br>DEL CAMERUN                     | A   |
|  | <ul style="list-style-type: none"><li>- Control de calidad y normalización</li><li>- Mantenimiento y reparación</li></ul>   |
|  | B   |
|  | <ul style="list-style-type: none"><li>- Gestión y administración industrial</li></ul>   |
| REPUBLICA UNIDA<br>DE TANZANIA                     | A   |
|  | <ul style="list-style-type: none"><li>- Pequeñas industrias y gestión empresarial</li></ul>   |
|  | B   |
|  | <ul style="list-style-type: none"><li>- Gestión y administración industrial</li></ul>   |
| RUMANIA  | A   |
|  | <ul style="list-style-type: none"><li>- Industrias químicas</li></ul>   |

SENEGAL

A

- Planeamiento y programación industrial

B

- Gestión y administración industrial

SUECIA

B

- Control de calidad y normalización
- Gestión y administración industrial
- Industrias alimentarias

SUIZA

A

- Industrias químicas

B

- Gestión y administración industrial
- Industrias alimentarias

TAILANDIA

B

- Automatización y procesamiento de datos
- Gestión y administración industrial
- Industrias de la celulosa y el papel
- Industrias metalúrgicas
- Industrias químicas
- Pequeñas industrias y los empresarios

TURQUIA

A

- Industrias alimentarias
- Industrias de los materiales de construcción
- Industrias mecánicas y de transformación de metales
- Industrias metalúrgicas

B

- Industrias alimentarias
- Industrias de los materiales de construcción
- Industrias químicas

UNION DE  
REPUBLICAS  
SOCIALISTAS  
SOVIETICAS

A

- Industrias de elaboración de alimentos
- Industrias mecánicas y de transformación de metales
- Industrias químicas
- Información y documentación industriales
- Desarrollo de profesionales de capacitación

URUGUAY

B

- Gestión y administración industrial

YUGOSLAVIA

A

- Industrias alimentarias
- Industrias del trabajo de la madera y los productos madereros
- Perfeccionamiento de capacitadores

B

- Desarrollo de profesionales de capacitación
- Gestión y administración industrial

#### NACIONES UNIDAS Y ORGANIZACIONES CONEXAS

CONFERENCIA DE LAS NACIONES UNIDAS SOBRE COMERCIO Y DESARROLLO (UNCTAD)

- Información y documentación industriales

ORGANIZACION DE LAS NACIONES UNIDAS PARA LA AGRICULTURA Y LA ALIMENTACION (FAO)

- Industrias alimentarias
- Industrias de elaboración de la madera y de productos de madera
- Medio ambiente

ORGANIZACION MUNDIAL DE LA PROPIEDAD INTELECTUAL (OMPI)

- Información y documentación industrial

