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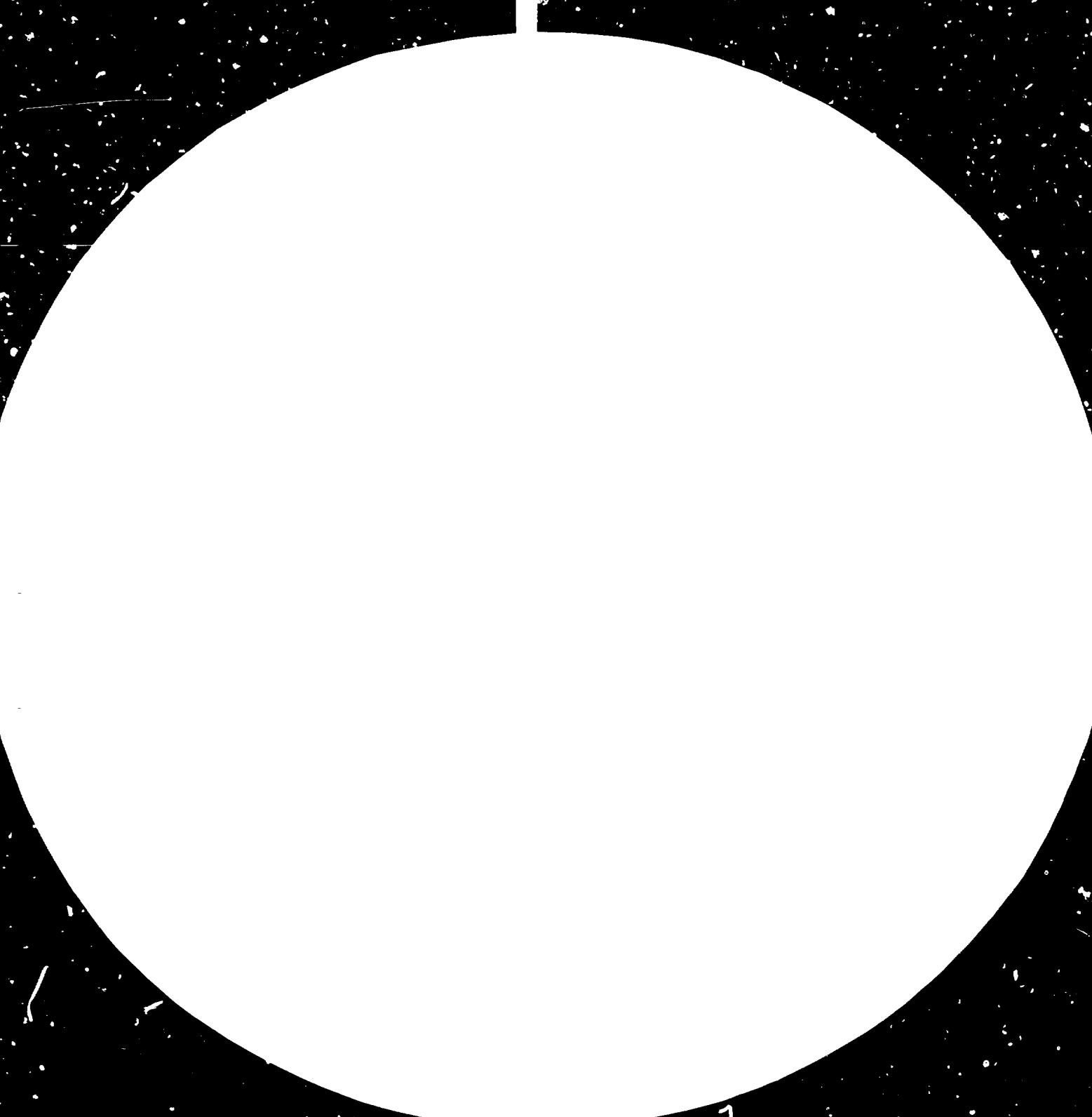
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Wavelength (micrometers)  $\lambda$  is related to resolution (cycles per millimeter)  $R$  by the equation  $R = \frac{1}{\lambda}$ .

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UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

81

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

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

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

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

## PREFACE

This compilation of industrial training opportunities for personnel from developing countries is the revised ninth 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 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 previous ones but contains considerably more information. Its more than 400 entries cover about 2,000 training courses. It should be emphasized that while these are but a fraction of the facilities existing world-wide for industrial training, they are possibilities which governments and organizations believe are of particular interest for 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 help 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 three sections: (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. 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.

Section (1) follows chronological order, while the entries in sections (2) and (3) are listed by country in English alphabetical order. To help users of the Guide - including participants in the Global Consultation on Industrial Manpower Training planned to be organized by UNIDO in September 1981 - the present publication includes a list of fields of training by host country.

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 direct, 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, 1981.

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 International Labour Organization (ILO), Geneva, the International Centre for Advanced Technical and Vocational Training in Turin, Italy, the United Nations Educational, Scientific and Cultural Organization (UNESCO), Paris and other international organizations.

It is hoped that this publication will continue to benefit all those in developing countries who are in need of industrial training. The tenth edition of the Guide is scheduled to appear in late 1981 and will cover courses to be offered in 1982 and, to the extent possible, 1983.

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## PREFACE

Le présent répertoire des possibilités de formation industrielle offertes aux cadres de pays en développement est la neuvième édition, mise à jour, 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 neuvième 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 plus de 400 rubriques concernant 2 000 stages de formation environ. 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 gouvernements et les organisations 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 en ce domaine.

Le présent répertoire comprend trois parties : 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. 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.

Pour la section 1, on a adopté l'ordre chronologique, tandis que dans les sections 2 et 3, les possibilités de formation énumérées sont classées dans l'ordre alphabétique anglais des pays hôtes. Pour aider les utilisateurs du présent "Aperçu" - notamment les participants à la réunion mondiale de consultation sur la formation de la main-d'oeuvre industrielle qui doit être organisée par l'ONUDI en septembre 1981, - on a inclus une liste des domaines de formation par pays d'accueil.

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 des Nations Unies. A condition de réunir les qualifications 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 des Nations Unies doivent être désignés par leurs gouvernements et leurs dossiers doivent être soumis à l'ONUDI 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 s'adresser au Programme de formation industrielle (1981) de l'ONUDI.

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 l'Organisation internationale du Travail (OIT), à Genève, du Centre international de perfectionnement professionnel et technique de Turin (Italie), de l'Organisation des Nations Unies pour l'éducation, la science et la culture (UNESCO), à Paris, et d'autres organisations internationales.

L'ONUUDI espère que la présente publication sera aussi utile que les précédentes à tous ceux qui, dans les pays en développement, ont besoin d'une formation industrielle. La dixième édition du répertoire, qu'il est prévu de publier à la fin de 1981, incitera les possibilités de formation offertes pour l'année 1982 et, dans la mesure du possible, pour l'année 1983.

#### PREFACIO

La presente compilación de oportunidades de capacitación industrial para personal de países en desarrollo constituye la novena edición revisada de una publicación de la ONUUDI que apareció por vez primera en 1972. Está basada en las respuestas a un cuestionario enviado a gobiernos, organizaciones 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 más de 400 entradas y facilita información sobre unos 2.000 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 ONUUDI.

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 radicados 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 tres secciones: 1) oportunidades de capacitación organizada y ofrecida por la ONUUDI; 2) oportunidades de capacitación ofrecidas por instituciones distintas de la ONUUDI 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. 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.

En la sección 1) se sigue el orden cronológico, mientras que en las secciones 2) y 3), las entradas se presentan en el orden alfabético inglés de los países en que se ofrece la capacitación. Para mayor comodidad de los usuarios del presente Repertorio - así como de los participantes en la Reunión de consulta global sobre capacitación de la mano de obra industrial que la ONUUDI prevé organizar en septiembre de 1981 - se incluye en esta edición una lista, ordenada por países u organizaciones huéspedes, de las esferas en que se ofrece capacitación.

A la ONUUDI 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 ONUUDI. Cualquier persona calificada de un país en desarrollo que no haya solicitado u obtenido una beca de la ONUUDI 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 ONUUDI 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 ONUUDI, para 1981, se ofrece más información sobre las actividades de capacitación de la ONUUDI.

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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 Organización Internacional del Trabajo (OIT), el Centro Internacional de Perfeccionamiento Profesional y Técnico, de Turín (Italia), la Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura (UNESCO), París, y otras organizaciones internacionales.

Se espera que esta publicación siga beneficiando a todas aquellas personas de los países en desarrollo que requieran capacitación en la esfera industrial. La publicación de la décima edición de este Repertorio está prevista para finales de 1981; comprenderá los cursos que se ofrecerán en 1982 y, en la medida de lo posible, en 1983.



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#### TRAINING OPPORTUNITIES OFFERED BY UNIDO

UNIDO organizes group training programmes for technical and managerial personnel in industry and industrial institutions in developing countries, in co-operation with Governments, firms and organizations having specialized knowledge and experience in a particular field. Two kinds of training are offered: in-plant group training programmes, which last from two to five months, and seminars and other group training programmes, lasting from five to six weeks.

The objectives of the in-plant group training programmes are to furnish the participants with intensive practical experience in a relatively short time and to upgrade their theoretical knowledge. The programmes are monitored by experts and usually include four elements: a theoretical introduction, studies, actual in-plant training, and study tours. At the end of each programme, an evaluation session is held, during which the participants assess the value of what they have learned in the light of conditions in their home countries. The seminars and other group training have the same objectives; they offer theoretical instruction and, to the extent feasible, practical studies.

A number of the UNIDO group training programmes are listed below. Some are conducted annually, others on an ad hoc basis. They are all organized subject to the availability of funds and suitable host facilities. Most of the programmes are interregional in interest and participation, but some are limited to certain geographical areas.

Formal applications for participation should be submitted to UNIDO through appropriate government channels and UNDP resident representatives only after the official invitation requesting nomination of candidates has been received. Apart from that, however, Governments are asked to notify UNIDO as early as possible of their interest in participating.

The general requirements for admission are an academic degree or equivalent and several years of practical experience in the particular field.

Further information may be obtained from: Training Branch, LIO  
United Nations Industrial Development Organization  
P.O. Box 300, A-1400 Vienna, Austria

Field of study	General description	Venue	Duration	Commencing	Language
Quality improvement of industrial products	Modern developments of quality improvement of industrial products, standardization at international, national and plant level, quality control and assurance, product design and improvement, packaging. In-plant training in selected mechanical, electrical and metalworking plants and study tours.	Association for Overseas Technical Scholarship Tokyo, Japan	8 weeks	January	English

Field of study	General description
Industrial facilities planning	The training programme will cover the following subjects: planning of industrial facilities (how to develop a functional industrial site), systematic layout planning (an effective procedure for planning the layout of offices, warehouses and production areas), materials management and logistics (analysing the flow of materials in order to arrange) and project management.
Iron and steel industry	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.
Production management of mechanical industry	Modern trends of production management; machinery, iron and steel and equipment manufacturing. Case studies on production planning and control, quality control, process innovation, introduction of new equipment etc. Practical training in mechanical, electrical engineering and metal-working plants.
Training of industrial trainers	Training activities in industrial enterprises, diagnosis of industrial training needs, training methodology, organization of industrial training, evaluation methodology.
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.
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.

Venue	Duration	Commencing	Language
National Institute of Management, Colombo Sri Lanka	2 weeks	January	English
o arrive at the most economical production and distribution			
Zaporoz-Steel	1 month	February	English
Zaporozhye	3 months	September	English
Ukrainian Soviet Socialist Republic			
Associations for Overseas Technical Scholarship Tokyo, Japan	2 1/2 months	February	English
Laboratorio Nacional de Engenharia e Tecnologia Industrial (LNETI) Lisbon, Portugal	5 weeks	March	Portuguese
VINITI All Union Institute for Scientific and Technical Information Moscow Union of Soviet Socialist Republics	2 months	March	French
Lumumba University Moscow Union of Soviet Socialist Republics	4 months	March	English

Field of study	General description	Venue	Duration	Commencing	Language
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	4 months 4 months	March September	English English
Petrochemical industry	Sources of raw material, technological processes, industrial equipment and unit operations, process control, maintenance and development prospects of petrochemical industry. In-plant training in the fields of plastics, fibres, or nitrogen.	Joint UNIDO/Romania Centre Bucharest Romania	2 months	March	English
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.	TES-Institute Prague Czechoslovakia	3 months	March	English
Industrial planning	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	10 weeks	March	English
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 German Democratic Republic	1 month	April	English
Organization and management of maintenance systems	Maintenance organization; techniques and methods including objectives, planning, methods, control systems, spare parts and material control used in maintenance systems; project planning and control, reliability engineering, training of maintenance personnel. In-plant training in maintenance organization, preventive maintenance planning or maintenance management control in mechanical, metallurgical and chemical industry.	Svenska Arbetsgivareföreningen SAF, ALI-RATI Lidingö, Sweden	3 months	April	English

Field of study	General description
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; mechanisation and automation of foundry processes; quality control and repair of and other safety and pollution problems.
Grain milling and storage	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.
Organization and production management in industrial co-operatives	Organization and management systems, rules and regulations governing industrial co-operatives. Financing and selection of appropriate technology, production and marketing. The programme will cover the industrial sectors of furniture, leather and clothing and will consist of theoretical and in-plant training as well as study visits.
Management and training in public enterprises	Role of public sector in the economic and social development of developing countries. The management and organization of Public Enterprises: planning and investment, production and marketing, financial management and information systems, management of the transfer of technology, training in Public Enterprises etc. Research work and visits to training centres in different enterprises and institutions.
Fertilizer industry	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.



<u>Venue</u>	<u>Duration</u>	<u>Commencing</u>	<u>Language</u>
Foundry Research Institute Krakow Poland	2 months	April	English

castings; environmental protection including noise control

Institute for Advanced Training of Managers and Specialists of the Ministry of State Purchases, Moscow Union of Soviet Socialist Republics	3 months	April	English
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Central Union of Work Co-operatives, Warsaw Poland	6 weeks	April	English
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International Centre for Public Enterprises in Developing Countries Ljubljana, Yugoslavia	3 weeks	April September	English French
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Ministry of Chemical Industry Moscow Union of Soviet Socialist Republics	3 months	April	English
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Field of study	General description	Venue	Duration	Commencing	Language
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. 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 Yugoslavia	2 months	May	English
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 compositions, packaging, quality control, distribution. Study tours to major pesticide industries.	Karl Marx University Leipzig German Democratic Republic	2 months	May	English
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, Belgium	6 weeks	August	French
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 Turkey	2 months	September	English
Sugar (beet) production	The programme will be carried out both in sugar plants and a sugar research institute and consists of theoretical and specialised actual practical in-plant training as well as study visits and an evaluation seminar. It will concentrate on both economical and technical aspects and include subjects on feasibility studies, raw material surveys, maintenance, production technologies and quality control in the realm of beet sugar production.	Sugar Research Institute Ankara, Turkey	2 months	September	English

Field of study	General description	Venue	Duration	Commencing	Language
Rice processing	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 huled-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 Slavynsk-na-Kubani and Krasnoarmeiskaya) Union of Soviet Socialist Republics	3 months	September	English
Maintenance of bio-medical electronic equipment	Technical and managerial questions related to the general and specific techniques for systematic fault diagnosis of bio-medical electronic equipment; i.e. fundamentals of electronics, trouble shooting in electronic equipment, maintenance testing, calibration and safety of bio-medical electronic equipment and its application, and maintenance management. In-plant training in related fields.	Hungarian Instrument Manufacturers Budapest, Hungary	2 1/4 months	September	English
Industrial training management	In the light of the industrial training infrastructure of the host country the curriculum covers topics such as: industrial training and the socio-cultural environment; the in-company training concept; the in-plant training concept; the training centre concept; the group training concept; training and career development; training and motivation; training demand analysis; training methods and techniques; trainer profiles; management training; training as an investment; training, professional guidance and employer; training equipment and teaching aids; legislation, organization and administration of training; training abroad; interest and role of governments, employers and trade unions in training.	The Austrian Institute for Assistance and Technical Cooperation with Developing Countries Vienna, Austria	5 weeks	September	English
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	3 weeks	September	English

Field of study	General description
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 metallurgy testing and/or workshops.
Cement industry	The programme concentrates on both economical and technical aspects of cement industry and includes subjects like feasibility studies, raw material surveys, management, maintenance, production technologies, quality control, energy conservation and pollution control.
Training for small-scale industrial advisers	Introduction to the assistance activities of an industrial adviser, production techniques, diagnosis of an industrial enterprise, study of the reasons why an enterprise is in difficulty, proposals and means to assist an enterprise facing difficulties, case studies.
Maintenance of railroad equipment	The programme will mainly consist of studying the problems related to the purchase and stocking of equipment, the workshop activities, the monitoring of the works, the utilization of computers, the practical training of personnel as well as the basic economic principles of maintaining and repairing rolling stock. The programme railway equipment.
Production and application of synthetic fibres	Synthetic fibre technology and laboratory and in-plant studies in production equipment and techniques. Processing technology including fibre engineering, testing and identification and the application of synthetic fibres for various purposes.
Mould design and mould making in plastics industry	Mould design and mould making, use and selection of new raw materials and equipment, introduction of modern processing and production methods and techno-economic aspects of mould design and mould making.

<u>Venue</u>	<u>Duration</u>	<u>Commencing</u>	<u>Language</u>
Engineering and Industrial Design Development Centre Cairo, Egypt	3 months	September	English

General Directorate for Cement Industry Ankara Turkey	2 months	September	English
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Laboratorio Nacional de Engenharia e Tecnologia Industrial (LNETI) Lisbon, Portugal	4-6 weeks	September	Portuguese
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Société Nationale des Chemins de Fer Belges (SNCB) Brussels, Belgium	7 weeks	October	French
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will also include study visits to specialized firms in manufacturing

The Höhere Bundeslehr- und Versuchsanstalt für Textilindustrie Vienna, Austria	5 weeks	October	English
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Heinrich Schmidberger Österreichische Kunststoffwerke G.m.b.H Vienna, Austria	1 1/2 months	October	English
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Field of study	General description	Venue	Duration	Commencing	Language
Plastic technology	Techno-economic aspects of plastic production, plastic fabrication technology, utilization of plastics equipment and tool design.	Laboratorium für Kunststofftechnik Vienna, Austria	2 months	October	English
Preventive maintenance	Production and maintenance (general) maintenance philosophies, production and maintenance planning; maintenance techniques, failure theories, condition monitoring; practical maintenance applications, preventive maintenance, instructions and control, corrective maintenance, work order system, spare parts and inventory control, control of technical documentation; follow-up of maintenance and production.	Addis Ababa Ethiopia	2 weeks	November	English
Maintenance management	The seminar for former participants of the In-Plant Group Training Programme in Organization and Management of Maintenance Systems in Sweden will cover the following subjects: the effectiveness of the training carried out in Sweden, the impact of the training on the professional performance of the former participants and proposals for further training and consultancy activities in the field of organization and management of maintenance systems.	Addis Ababa Ethiopia	2 weeks	November	English
Maintenance of buses and trucks	The programme will mainly consist in the study of the principle technical problems concerning different types of maintenance related to trucks, buses and tractors utilized for road transport. In addition maintenance will also be examined at the level of administrative and financial management. The programme will also include study visits to specialized firms in public works, transport, civil engineering equipment and to technical training institutes.	Société Nationale des Chemins de Fer Belges (SNCF) Brussels, Belgium	9 weeks	November	French
Packaging techniques and conditioning for rural industries and export promotion industries	Raw materials, corrugated cardboard boxes, wood packing, drums, cans, jerry cans, tins, pails and holbocks, plastic film and composites, industrial bags, transport stresses, test methods, equipment and standards, quality control, packaging accessories, packaging machinery, European packaging legislations, packaging costs and value analysis.	Institut Belge de l'Emballage Brussels, Belgium	7 weeks	November	French or English
Management techniques in manufacturing industry	Production management techniques including standardization, planning quality control, with special emphasis on problems related to the manufacturing of products for the export market. Individual in-plant training assignments in industry.	University of Cameroon Douala, United Republic of Cameroon	7 weeks	to be arranged	French

Field of study	General description	Venue	Duration	Commencing	Language
Management and training in public enterprises	Role of public sector in the economic and social development of developing countries. The management and organization of public enterprises: planning and investment, production and marketing, financial management and information systems, management of the transfer of technology, training in public enterprises, etc. Research work and visits to training centres in different enterprises and institutions.	1. Latin American Centre for Development Administration Nicaragua	3 weeks	to be arranged	Spanish
		2. Institute of Management, Pakistan	3 weeks	to be arranged	English
Textile industries	Raw materials, mechanical and chemical processing of textiles, production economics and organization, maintenance of textile machinery and environmental aspects related to textile industry. The programme will include laboratory and in-plant training in spinning, weaving, finishing or knitting.	Instytut Fizyki Włókna i Chemicznej Obróbki Włókna Lodz, Poland		to be arranged	English
Industrial development banking	Three-week lecture-cum-discussion seminar with emphasis on case studies; two-attachments with industrial development banks in Bombay, Delhi and Madras; one-week concluding seminar. Major subjects covered: 1. The objectives, activities, organizational structure, capitalization, the environmental frame of an industrial development bank and its interrelationship with the government and other institutions agencies. 2. Project identification and development. 3. Project evaluation-objectives techniques, procedures and practice-assessment of the market and marketing, the technical, financial, economic, managerial and legal aspects. 4. The follow-up functions - the rationale, the techniques and tools, the pre-requisites for diagnostic, anticipatory and problem-solving monitoring system. 5. Nurturing of problem projects and rehabilitation of "sick" projects. 6. Problems and pre-requisites for promoting and assisting small industrial projects and those to be located in under-developed regions.	Development Banking Centre of the Indian Management Development Institute Bangalore, India	6 weeks	to be arranged	English
Training for small-scale industrial advisers	Introduction to small-scale and medium enterprises, management methods of small- and medium-scale industrial enterprises, activities of an industrial adviser, training, diagnosis of enterprise, advisory services.	Agence de Coopération Culturelle et Technique Ecole Internationale de Bordeaux (in African country not yet determined)	4 weeks	to be arranged	French
Creation of industrial enterprises in rural areas	Global approach of rural enterprise, role of small- and medium-scale enterprises on rural areas, creation phases of an enterprise, main decisions to be taken in the creation of an industrial rural enterprise, contacts with offices promoting industrial small-scale enterprises.	Agence de Coopération Culturelle et Technique Ecole Internationale de Bordeaux (in an African country not yet determined)	4 weeks	to be arranged	French

Field of study	General description
Standardization and quality control	Methodology, quantitative control, qualitative control, non-destructive testing, statistical tools of quality, means to improve quality, quality management, practical training in industrial enterprises or institutions.
Small-scale industry financing	Financial difficulties of small- and medium-scale industrial enterprises, procedures and methods to provide loans to industrial small- and medium-scale enterprises, guarantee funds and state participation to facilitate loans to small enterprises, role of the departments in development banks working for small institutes, monitoring loans.
Standardization and quality control of industrial products	General information concerning standardization, national and regional institutions dealing with standardization and quality control, quality and standardization at enterprise level, promotion of quality by specialized assisting institutions.



Venue	Duration	Commencing	Language
Agence pour la Coopération Technique Industrielle et Economique (AFNOR) Association Inter- professionnelle de France, Paris-Lille	8 weeks	to be arranged	French
Union Africaine et Mauricienne de Banque pour le Développement/ Mauritius Development Bank Port Louis	4 weeks	to be arranged	French
Agence de Coopération Culturelle et Technique Ecole Internationale de Bordeaux, France	3-4 weeks	to be arranged	French

POSSIBILITES DE FORMATION OFFERTES PAR L'ONUDI

L'ONUDI organise, en coopération avec les gouvernements des pays hôtes et avec le concours d'entreprises industrielles et d'instituts spécialisés dans les domaines considérés, des stages de formation en groupe à l'intention du personnel technique et des cadres de gestion des entreprises et instituts industriels des pays en développement. L'Organisation propose deux types de formation : stages de formation collective en entreprise, qui durent de deux à cinq mois, et séminaires ou autres stages de formation collective qui durent de cinq à six semaines.

Les stages de formation collective en entreprise ont pour objectifs de permettre aux participants d'acquérir, dans un laps de temps relativement court, une solide expérience pratique et de parfaire leurs connaissances théoriques. Ils sont dirigés par des experts et comprennent en général quatre parties, à savoir une introduction théorique, des études, une formation pratique dans des entreprises et des visites d'établissements. Tous les stages se terminent par une session d'évaluation au cours de laquelle les participants évaluent les connaissances qu'ils ont acquises, eu égard aux conditions existant dans leur pays d'origine. Les séminaires et les autres stages de formation collective répondent aux mêmes objectifs et comportent une formation théorique et, dans la mesure du possible, des études pratiques.

On trouvera, ci-après, une liste de stages de formation collective organisés par l'ONUDI. Certains ont une périodicité annuelle, les autres sont organisés selon les besoins. Tous sont organisés sous réserve de disposer de fonds nécessaires et de trouver, dans le pays d'accueil, des moyens de formation adéquats. La plupart des stages ont un caractère interrégional ; quelques-uns ne sont ouverts qu'aux participants venant de certaines zones géographiques.

Les candidatures ne doivent être présentées à l'ONUDI par l'intermédiaire des services officiels compétents et du Représentant résident du PNUD qu'après réception de l'invitation officielle demandant l'envoi de candidatures ; les gouvernements sont en outre priés de faire savoir le plus rapidement possible à l'ONUDI s'ils envisagent de présenter des candidats à tel ou tel stage.

Les conditions générales d'admission sont les suivantes : être titulaire d'un diplôme universitaire (ou d'un diplôme équivalent) et justifier de plusieurs années d'expérience dans le domaine sur lequel porte la formation.

De plus amples renseignements sur les stages peuvent être obtenus à l'adresse suivante :

Service de la formation  
Division des opérations industrielles  
Organisation des Nations Unies pour le développement industriel  
Boîte postale 300, A-1400 Vienne (Autriche)

Sujet d'étude	Description générale	Lieu	Durée	Date d'ouverture	Langue
Amélioration de la qualité des produits industriels	Evolution de l'amélioration de la qualité des produits industriels, normalisation sur le plan international, national et individuel, contrôle et garantie de la qualité. Mise au point et amélioration des produits et conditionnement. Formation pratique dans certaines entreprises des industries mécaniques, électromécaniques et métallurgiques et visite d'usines.	Association for Overseas Technical Scholarship Tokyo (Japon)	8 semaines	Janvier	Anglais
Planification des installations industrielles	Le programme de formation portera sur les questions suivantes : planification des installations industrielles (comment mettre sur pied des installations fonctionnelles), aménagement systématique (méthode efficace pour planifier la disposition des bureaux, des entrepôts et des zones de production), gestion des matériaux et logistique (analyse du flux des matériaux pour rentabiliser au maximum la production et la distribution) et gestion des projets.	National Institute of Management, Colombo (Sri Lanka)	2 semaines	Janvier	Anglais
Industrie sidérurgique	Formation théorique : technologie, équipements, planification économique, gestion, entretien. Formation pratique : hauts fourneaux, installations d'agglomération, fours Martin, laminage, entretien des réfractaires.	Usine sidérurgique de Zaporozjé, Zaporozjé (RSS d'Ukraine)	1 mois 3 mois	Février Septembre	Anglais Anglais
Gestion de la production dans les industries mécaniques	Tendances modernes de la gestion de la production dans les industries mécaniques, la sidérurgie et la production de biens d'équipement. Etudes de cas portant notamment sur la planification et le contrôle de la production, le contrôle de la qualité, les procédés nouveaux et l'introduction de nouveaux équipements, etc. Formation pratique dans des entreprises des industries mécaniques, électromécaniques et métallurgiques.	Association des bourses d'études techniques pour étrangers, Tokyo (Japon)	2 mois et demi	Février	Anglais
Formation de spécialistes de la formation industrielle	Activités de formation dans des entreprises industrielles, définition des besoins en matière de formation industrielle, méthodes de formation, organisation de la formation industrielle, méthodes d'évaluation.	Laboratorio nacional de Engenharia e Technologia Industrial (LNETI), Lisbonne (Portugal)	5 semaines	Mars	Portugais

Sujet d'étude	Description générale	Lieu	Durée	Date d'ouverture	Langue
Information et documentation industrielles	Rôle de l'information dans le développement industriel, méthodes de recherche et d'extraction des données et leurs applications pratiques, méthodes de classification, systèmes d'information pour l'industrie. Formation pratique dans les domaines de l'information et de la documentation industrielles et visites d'instituts spécialisés chargés de fournir des renseignements à l'industrie.	VINITI Institut d'information scientifique et technique de l'URSS, Moscou (URSS)	2 mois	Mars	Français
Transformation des métaux	Planification, exécution et supervision des opérations de fabrication de pièces de machines ; conception des gabarits et des montages ; conception et utilisation des outils de coupe ; fonctionnement et entretien ; contrôle de la qualité et aspects économiques des opérations de transformation des métaux, etc. Formation pratique dans des laboratoires et dans des usines de transformation des métaux.	Université Lumumba Moscou (URSS)	4 mois	Mars	Anglais
Soudure électrique	Technologie et outillage utilisés pour la soudure électrique par fusion et pour la soudure par résistance ; procédés de soudage ; sources d'énergie produisant l'arc électrique dans les méthodes modernes de soudure ; matériel de soudure et pièces soudées ; conception technique de pièces en acier soudé, etc. Formation pratique dans des entreprises d'outillage de soudure électrique, dans des usines de transformation des métaux et dans des laboratoires.	Institut E.O. Paton de soudure électrique Kiev (RSS d'Ukraine)	4 mois 4 mois	Mars Septembre	Anglais Anglais
Industrie pétrochimique	Sources de matières premières, techniques de fabrication, équipement et fonctionnement des unités de production, contrôle des processus de fabrication, entretien, perspectives de développement de l'industrie pétrochimique. Formation pratique dans des usines de matières plastiques, de fibres synthétiques ou d'engrais azotés.	Centre commun CNUDI/ Roumanie Bucarest (Roumanie)	2 mois	Mars	Anglais
Moteurs Diesel	Aspects techniques, économiques et administratifs de l'utilisation, du fonctionnement et de l'entretien des moteurs Diesel ; conception et fabrication de ces moteurs et des pièces détachées. Formation pratique, dans des entreprises sur la fabrication des moteurs Diesel et des pièces détachées, ou sur l'entretien de ces moteurs.	Services techniques et économiques (TES), Prague (République socialiste tchécoslovaque)	3 mois	Mars	Anglais

Sujet d'étude	Description générale	Lieu	Durée	Date d'ouverture	Langue
Planification industrielle	Programme axé sur la macro-planification et les stratégies. Problèmes liés à l'industrialisation à long terme, stratégies et planification industrielle, mesures d'encouragement à l'industrie, questions relatives au transfert des techniques et à l'emploi, questions touchant le financement du développement industriel, élaboration et évaluation des projets, mission sur le terrain et séminaire.	Centre international pour le développement Tokyo (Japon)	10 semaines	Mars	Anglais
Planification industrielle	Aspects techniques de la planification industrielle à différents niveaux. Système uniforme de planification industrielle aux niveaux du pays, du secteur et de l'entreprise (prévisions à long terme, plans à long terme, à moyen terme et annuels). Organismes chargés de coordonner les plans nationaux de développement industriel à l'échelon international.	Institut de l'économie des pays en développement Berlin (République démocratique allemande)	1 mois	Avril	Anglais
Organisation et gestion des services d'entretien	Organisation de l'entretien ; techniques et méthodes utilisées dans les services d'entretien, définition des objectifs, planification, systèmes de contrôle, approvisionnement en pièces détachées et en fournitures ; planification et contrôle des projets, fiabilité, formation du personnel d'entretien. Formation pratique portant sur l'organisation et l'entretien, la planification de l'entretien préventif et le contrôle de la gestion de l'entretien dans les industries mécaniques, métallurgiques et chimiques.	Svenska Arbetsgivareföreningen SAF, ALI-RATI Lidingsö (Suède)	3 mois	Avril	Anglais
Techniques modernes de fonderie	Le programme du stage portera sur les sujets suivants : conception des procédés de fonderie modernes compte tenu des aspects techniques et économiques, matériaux de fonderie ; techniques de fusion et de coulée ; pratiques de modelage ; matériaux et techniques de moulage ; mécanisation et automation des procédés de fonderie ; contrôle de la qualité et réparation des pièces coulées ; protection du milieu, y compris mesures de prévention contre le bruit, et autres problèmes relatifs à la sécurité et à la pollution.	Institut de recherches en fonderie Cracovie (Pologne)	2 mois	Avril	Anglais

Sujet d'étude	Description générale	Lieu	Durée	Date d'ouverture	Langue
Meunerie et stockage des céréales	Techniques et équipement pour élévateurs, transformation des céréales, production de fourrage en vrac et sous forme de pellets, contrôle de la qualité des céréales, farine, mélanges fourragers, etc. Démonstration en laboratoires et formation pratique dans certaines entreprises.	Institut de formation avancée des cadres et des spécialistes Ministère des achats Moscou (URSS)	3 mois	Avril	Anglais
Organisation et gestion de la production dans les coopératives industrielles	Systèmes d'organisation et de gestion, règles et règlements applicables aux coopératives industrielles. Financement et choix de techniques appropriées, production et commercialisation. Le programme portera sur les industries du meuble, du cuir et de la confection. Il comprendra une formation théorique et une formation pratique ainsi que des visites d'étude.	Union centrale des coopératives de travail, Varsovie (Pologne)	6 semaines	Avril	Anglais
Gestion et formation dans les entreprises publiques	Rôle du secteur public dans le progrès économique et social des pays en développement. Gestion et organisation des entreprises publiques : planification et investissement, production et commercialisation, gestion financière et systèmes d'information, gestion du transfert des techniques, formation dans les entreprises publiques, etc. Travaux de recherche et visites de centres de formation rattachés à des entreprises ou à des organismes.	Centre international des entreprises publiques dans les pays en développement Ljubljana (Yougoslavie)	3 semaines	Avril Septembre	Anglais Français
Industrie des engrais	Technique et planification de la production des engrais minéraux. Matières premières, perspectives de développement de la production mondiale d'engrais minéraux. Techniques de base et leur évaluation du point de vue économique. Travaux de recherche sur la fabrication des engrais et formation pratique dans des usines d'engrais azotés ou phosphatés.	Ministère de l'industrie chimique, Moscou (URSS)	3 mois	Avril	Anglais
Organisation et gestion des entreprises agro-industrielles	Formation théorique à divers aspects des entreprises agro-industrielles (organisation, planification, gestion, politique de financement et d'investissement, infrastructure économique). Formation pratique en matière d'organisation de complexes agro-industriels et de diverses entreprises agro-industrielles et agro-alimentaires, visites d'entreprises agro-industrielles.	Centre fédéral de formation de cadres agricoles et industriels Novi Sad (Yougoslavie)	2 mois	Mai	Anglais

Sujet d'étude	Description générale	Lieu	Durée	Date d'ouverture	Langue
Méthodes et techniques pour la formulation et la production de pesticides	Mise au point des produits chimiques nécessaires à la fabrication des pesticides, plan des installations de l'usine, incidence sur le milieu, équipement utilisé pour la formulation des pesticides, essais des produits, formulation de granulés et de poudres mouillables, poudres fines, aérosols, appâts, compositions émulsifiables, conditionnement, contrôle de la qualité, distribution. Visite des principales usines de pesticides.	Université Karl Marx Leipzig (République démocratique allemande)	2 mois	Mai	Anglais
Protection de l'environnement dans les industries chimiques et pharmaceutiques	Mesure de la pollution de l'air, de l'eau et du sol et analyse des déchets industriels. Formation théorique, travaux pratiques en laboratoire et visite d'installations d'épuration et de protection de l'environnement.	Université d'Etat de Gand (Belgique)	6 semaines	Août	Français
Exploitation de petites fonderies	Le programme portera sur les questions suivantes : solidification des pièces coulées, conception des systèmes d'alimentation, des masselottes et des évents ; construction de modèles et matériaux utilisés pour construire des modèles ; moulage et matériaux de moulage ; la fonte de fer, sa fusion et sa coulée ; l'acier, sa fusion et sa coulée ; les alliages de cuivre, leur fusion et leur coulée ; les alliages d'aluminium, leur fusion et leur coulée ; techniques spéciales de moulage et de coulée (microfusion, moulage en coquille ; coulée en plâtre) ; défauts de fonderie ; contrôle de la qualité dans les fonderies ; fusion et coulée sous vide).	Marmara Scientific and Industrial Research Institute Istanbul (Turquie)	2 mois	Septembre	Anglais
Production de sucre (de betterave)	Le stage se tiendra dans des usines à sucre et dans un institut de recherches sur le sucre ; il comprendra une formation théorique et pratique spécialisée sur le tas, des visites d'étude et un séminaire d'évaluation. Axé sur les questions économiques et techniques, il portera en particulier sur les sujets suivants : études de faisabilité, enquêtes sur les matières premières, entretien, techniques de production, contrôle de la qualité en matière de production de sucre de betterave.	Institut de recherche sucrière Ankara (Turquie)	2 mois	Septembre	Anglais

Sujet d'étude	Description générale	Lieu	Durée	Date d'ouverture	Langue
Usinage du riz	Le stage portera sur les questions suivantes : grandes lignes de l'évolution du stockage des céréales et de l'usinage du riz ; gamme des produits de rizerie et leurs caractéristiques ; techniques modernes de fabrication d'amidon de riz (à partir de riz en grain et de riz décortiqué) ; types modernes d'entrepôts de riz ; matériel moderne de rizerie ; schémas fondamentaux de l'usinage du riz ; entretien préventif du matériel de rizerie ; contrôle de la qualité.	Institut de formation avancée des cadres et des spécialistes, Ministère des achats, Moscou (avec visites à Kiev, Leningrad, Krasnodar, Slavynask-na-Kubani et Krasnoarmeiskaya) (URSS)	3 mois	Septembre	Anglais
Entretien de l'équipement électronique biomédical	Techniques générales et particulières employées pour la recherche systématique des causes de mauvais fonctionnement de l'équipement électronique et problèmes d'organisation ; notions essentielles d'électronique ; dépannage des équipements électroniques ; entretien, essais, étalonnage et sécurité de l'équipement biomédical ; utilisation de cet équipement ; organisation des services d'entretien. Formation pratique dans ces domaines.	Fabrique nationale d'instruments de mesure Budapest (Hongrie)	2 mois et une semaine	Septembre	Anglais
Gestion de la formation industrielle	Etabli en fonction des moyens de formation industrielle du pays hôte, le programme de stage porte notamment sur les sujets suivants : formation industrielle et environnement socio-culturel ; concept de la formation en entreprise ; concept de la formation sur le tas ; concept de la formation en établissement ; concept de la formation en groupes ; formation et organisation des carrières ; formation et motivation ; analyse de la demande de formation ; méthodes et techniques de formation ; profil des formateurs ; formation à la gestion ; formation en tant qu'investissement ; formation, orientation professionnelle et emploi ; moyens et matériels de formation ; législation, organisation et administration de la formation ; formation à l'étranger ; intérêts et rôle des pouvoirs publics, des employeurs et des syndicats en matière de formation.	Institut autrichien d'assistance et de coopération technique avec les pays en développement Vienne (Autriche)	5 semaines	Septembre	Anglais
Imprimerie	Production de journaux, revues, livres (y compris les manuels) et autres documents imprimés ; plans et aménagement des ateliers d'imprimerie ; tâches et problèmes relatifs à la formation des spécialistes de l'industrie des arts graphiques ; normalisation et contrôle de la qualité dans l'industrie des arts graphiques. La formation théorique sera complétée par des visites d'études et une formation pratique dans des usines de construction de matériel d'imprimerie et des ateliers d'imprimerie.	VEB Polygraph Leipzig (République démocratique allemande)	3 semaines	Septembre	Anglais



Sujet d'étude	Description générale
Construction mécanique et conception industrielle	Introduction théorique sur la conception de produits, la conception d'outils, les techniques de production et la fabrication de prototypes de produits et d'outils. Stages de formation pratique dans des bureaux d'études et des laboratoires d'essais métallurgiques et/ou des ateliers.
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 anti-pollution.
Formation de conseillers industriels pour les petites entreprises	Introduction au rôle des conseillers industriels, techniques de production, diagnostic d'une entreprise industrielle, examen des causes des difficultés rencontrées par les entreprises moyens d'aider les entreprises à surmonter leurs difficultés, études de cas.
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'ordinateurs, 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.
Production et applications des fibres synthétiques	Technologie des fibres synthétiques. Etude, dans des laboratoires et entreprises, du matériel et des techniques de production. Techniques de traitement, notamment étude, essai et identification des fibres, et applications diverses des fibres synthétiques.

Lieu	Durée	Date d'ouverture	Langue
Engineering and Industrial Design Development Centre Le Caire (Egypte)	3 mois	Septembre	Anglais
Direction générale de l'industrie du ciment, Ankara (Turquie)	2 mois	Septembre	Anglais
Laboratorio Nacional de Engenharia e Tecnologia Industrial (LNETI), Lisbonne (Portugal)	4 à 6 semaines	Septembre	Portugais
Société nationale des Chemins de Fer Belges (SNCB) Bruxelles (Belgique)	7 semaines	Octobre	Français
Höhere Bundeslehr- und Versuchsanstalt für Textilindustrie Vienne (Autriche)	5 semaines	Octobre	Anglais

Sujet d'étude	Description générale	Lieu	Durée	Date d'ouverture	Langue
Conception et fabrication de moules dans l'industrie des matières plastiques	Conception et fabrication de moules, emploi et sélection de nouvelles matières premières et de nouveaux équipements, adoption de méthodes modernes perfectionnées de traitement et de production, aspects technico-économiques de la conception et de la fabrication des moules.	Heinrich Schmidberger Österreichische Kunststoffwerke G.m.b.H. Vienne (Autriche)	1 mois et demi	Octobre	Anglais
Technologie des matières plastiques	Aspects technico-économiques de la production, du travail et de l'utilisation des matières plastiques, étude du matériel et de l'outillage.	Laboratorium für Kunststofftechnik Vienne (Autriche)	2 mois	Octobre	Anglais
Entretien préventif	Principes généraux de l'entretien et de la production, planification de la production et de l'entretien ; méthodes d'entretien, théories des pannes, contrôle de l'état des équipements ; entretien pratique, entretien préventif, instructions et contrôle, entretien correctif, maintien en état de marche, contrôle des pièces détachées et des stocks, contrôle de la documentation technique ; suivi de l'entretien et de la production.	Addis Abeba (Ethiopie)	2 semaines	Novembre	Anglais
Gestion de l'entretien	Le séminaire, destiné aux participants du stage de formation en groupe dans l'entreprise à l'intention d'ingénieurs chargés de l'organisation et de la gestion des systèmes d'entretien, qui s'est déroulé en Suède, portera sur les questions suivantes : efficacité de la formation donnée en Suède, incidences de cette formation sur l'efficacité des participants et propositions concernant des activités ultérieures de formation et de consultation dans le domaine de l'organisation et de la gestion de systèmes d'entretien.	Addis Abeba (Ethiopie)	2 semaines	Novembre	Anglais
Entretien des autobus et des camions	Le stage portera surtout sur les principaux problèmes techniques que posent les différents types d'entretien des camions, autobus et tracteurs utilisés pour les transports routiers. En outre, on étudiera la gestion administrative et financière de l'entretien. Il est également prévu d'organiser des visites d'entreprises spécialisées dans les travaux publics, les transports et la fabrication de matériel de génie civil ainsi que des visites d'instituts de formation technique.	Société Nationale des Chemins de Fer Belges (SNCF), Bruxelles (Belgique)	9 semaines	Novembre	Français

Sujet d'étude	Description générale
Méthodes d'emballage et de conditionnement pour les industries rurales et les industries exportatrices	Matières premières, boîtes en carton ondulé, emballages en bois, tonneaux, bidons, jerricanes, boîtes en fer blanc, seaux, tonnelets ; pellicules et matériaux composites en plastique, sacs à usage industriel ; effort lors du transport, méthodes d'essai, équipement et normes, contrôle de la qualité, accessoires pour l'emballage, machines à emballer ; lois européennes sur l'emballage ; coûts et analyse de la valeur des emballages.
Techniques de gestion dans l'industrie manufacturière	Techniques de gestion de la production, notamment normalisation, contrôle de la qualité, se référant en particulier à la fabrication de produits pour l'exportation. Stages individuels de formation pratique dans l'industrie.
Gestion et formation dans les entreprises publiques	Rôle du secteur public dans le progrès économique et social des pays en développement. Gestion et organisation des entreprises publiques : planification et investissement, production et commercialisation, gestion financière et systèmes d'information, gestion du transfert des techniques, formation dans les entreprises publiques, etc. Travaux de recherche et visites de centres de formation rattachés à des entreprises ou à des organismes.
Industries textiles	Matières premières de l'industrie textile, traitement mécanique et chimique des textiles, économie et organisation de la production, entretien du matériel et protection de l'environnement. Le stage comportera une formation pratique en laboratoire et en usine dans les domaines suivants : filature, tissage, finissage, tricotage.

Lieu	Durée	Date d'ouverture	Langue
Institut belge de l'emballage Bruxelles (Belgique)	7 semaines	Novembre	Français et Anglais
Université du Cameroun Douala (République-Unie du Cameroun)	7 semaines	A convenir	Français
1. Centre latino- américain pour l'adminis- tration du développement (Nicaragua)	3 semaines	A convenir	Espagnol
2. Institut de gestion (Pakistan)	3 semaines	A convenir	Anglais
Instytut Fizyk: Wlokna i Chemicznej Obrobki Wlokna Lodz (Pologne)		A convenir	Anglais

Sujet d'étude	Description générale	Lieu	Durée	Date d'ouverture	Langue
Financement bancaire du développement industriel	Séminaire de trois semaines consistant en exposés avec débat et axé sur les études de cas. Deux semaines de stages dans des banques de développement industriel à Bombay, Delhi et Madras. Séminaire terminal d'une semaine. Principales questions à étudier : 1) objectifs, activités, organisation, capital et environnement des banques de développement industriel et liens entre ces banques et les organismes publics ou d'autres institutions; 2) identification et mise au point des projets ; 3) évaluation des projets (objectifs, techniques, méthodes et pratique), études relatives aux marchés et à la commercialisation, aspects techniques, financiers, économiques, administratifs et juridiques ; 4) fonctions de contrôle : principes de base, techniques et instruments ; conditions préalables à la mise en place d'un système de diagnostic, de prévision et de solution des problèmes ; 5) assistance aux projets critiques et assainissement des projets "malades" ; 6) problèmes à résoudre et conditions préalables à remplir pour promouvoir et appuyer les petits projets ainsi que les projets intéressants des régions attardées.	Centre de financement bancaire du développement, l'Institut indien de perfectionnement des cadres Bangalore (Inde)	6 semaines	A convenir	Anglais
Formation de conseillers industriels pour les petites entreprises	Introduction aux petites et moyennes entreprises, méthodes de gestion des petites et moyennes entreprises industrielles, activités des conseillers industriels, formation, diagnostic d'une entreprise, services consultatifs.	Agence de coopération culturelle et technique, Ecole internationale de Bordeaux (dans un pays africain qui n'a pas encore été choisi)	4 semaines	A convenir	Français
Création d'entreprises industrielles dans les zones rurales	Examen général des entreprises rurales, rôle des petites et moyennes entreprises dans les zones rurales, étapes de la création d'une entreprise, principales décisions à prendre pour créer une entreprise industrielle rurale, contacts avec les organismes chargés de promouvoir de petites entreprises industrielles.	Agence de coopération culturelle et technique, Ecole internationale de Bordeaux (dans un pays africain qui n'a pas encore été choisi)	4 semaines	A convenir	Français
Normalisation et contrôle de la qualité	Méthodes, contrôle quantitatif, contrôle qualitatif, essais non destructifs, outils statistiques concernant la qualité, moyens d'améliorer la qualité, contrôle de la qualité, formation pratique dans des entreprises ou des institutions industrielles	Agence pour la coopération technique, industrielle et économique (AFNOR) Association interprofessionnelle de France, Paris-Lille	8 semaines	A convenir	Français

Sujet d'étude	Description générale
Financement des petites industries	Difficultés financières des petites et moyennes entreprises industrielles, procédures permettant aux petites et moyennes entreprises d'obtenir des prêts de garantie et participation et l'Etat visant à faciliter l'octroi de prêts aux petites entreprises, rôle des départements dans les banques de développement travaillant pour de petits instituts, contrôle des prêts.
Normalisation et contrôle de la qualité des produits industriels	Renseignements généraux sur la normalisation, organismes nationaux et régionaux s'occupant de la normalisation et du contrôle de la qualité, qualité et normalisation dans les entreprises, promotion de la qualité par des organismes spécialisés.

Lieu	Durée	Date d'ouverture	Langue
Union africaine et mauricienne de banque pour le développement/ Banque mauricienne de développement Port Louis	4 semaines	A convenir	Français
Agence de coopération culturelle et technique Ecole internationale de Bordeaux (France)	3 à 4 semaines	A convenir	Français



#### OPORTUNIDADES DE CAPACITACION OFRECIDAS POR LA ONUDI

La ONUDI, con la colaboración de diversos gobiernos, así como empresas y organizaciones poseedoras de experiencia y conocimientos especializados, organiza programas de capacitación colectiva destinados a personal administrativo y técnico de categoría superior de la industria y las instituciones industriales de países en desarrollo. Se ofrecen dos tipos de capacitación: programas de capacitación colectiva en el trabajo, que duran de dos a cinco meses, y seminarios y otros programas de capacitación colectiva, de cinco a seis semanas de duración.

Los objetivos de los programas de capacitación colectiva en el trabajo consisten en dar a los participantes, en un espacio de tiempo relativamente corto, la posibilidad de adquirir experiencia práctica en régimen de trabajo intensivo y de ampliar sus conocimientos teóricos. Los programas son supervisados por expertos y, en general, constan de cuatro elementos: una introducción teórica; los estudios; la capacitación misma en el trabajo; y viajes de estudio. Cada programa termina con una sesión de evaluación, en la cual los participantes examinan la utilidad de lo que han aprendido, a la luz de las circunstancias existentes en sus respectivos países. Los seminarios y demás programas de capacitación colectiva tienen los mismos objetivos; ofrecen enseñanza teórica y, en la medida de lo posible, estudios prácticos.

En el cuadro que figura más adelante se da una lista de programas de capacitación colectiva organizados por la ONUDI. Algunos se realizan anualmente; otros, según convenga. La organización de estos programas está sujeta en cada caso a la disponibilidad de los recursos financieros necesarios, así como de locales y servicios ofrecidos por el gobierno del país huésped. La mayoría de los programas se organizan con carácter interregional, tanto con respecto a su esfera de interés como a los participantes en ellos, si bien algunos están limitados a determinadas zonas geográficas.

Las solicitudes oficiales de participación deben presentarse a la ONUDI a través de los conductos gubernamentales apropiados y por medio del Representante Residente del Programa de las Naciones Unidas para el Desarrollo, pero sólo después de recibida la invitación oficial en la que se pide la designación de candidatos. No obstante, se ruega a los Gobiernos que notifiquen a la ONUDI, lo antes posible, su interés por participar en estos programas.

Los requisitos generales de admisión son un título universitario (o su equivalente) y varios años de experiencia práctica en la esfera respectiva.

Puede obtenerse mayor información sobre estos programas escribiendo a:

Subdivisión de Capacitación, DOI  
Organización de las Naciones Unidas para el Desarrollo Industrial  
P.O. Box 300, A-1400 Viena (Austria)

Materia de estudio	Descripción general
Mejoramiento de la calidad de productos industriales	Novedades en la esfera del mejoramiento de la calidad de productos industriales, normalización a niveles internacional, nacional y de planta, control y garantía de calidad, diseño y mejoramiento de productos, envasado. Capacitación en el trabajo en determinadas plantas mecánicas, eléctricas y metalúrgicas, y viajes de estudio.
Planificación de instalaciones industriales	Este programa de capacitación versará sobre los temas siguientes: planificación de instalaciones industriales (trazado de un emplazamiento industrial funcional), planificación sistemática de espacios (planificación racionalizada de las oficinas, almacenes y zonas de producción), gestión y logística de materiales (análisis de la circulación de materiales para conseguir sistemas más económicos de producción y distribución), y gestión proyectos.
Industria siderúrgica	Estudios teóricos en elaboración tecnológica de equipo, planificación económica, gestión, mantenimiento. Capacitación en el trabajo en materia de fundición, altos hornos, plantas de aglomeración, hornos de solera abierta, trenes de laminación, mantenimiento de materiales refractarios.
Gestión de la producción en industrias mecánicas	Tendencias modernas de la gestión de la producción; fabricación de maquinaria, hierro y acero y equipo. Estudios de casos concretos sobre planificación y control de la producción, control de calidad, innovación de procesos, introducción de nuevo equipo, etc. Capacitación práctica en plantas de industrias mecánicas, de ingeniería eléctrica y de
Formación de instructores industriales	Actividades de capacitación en empresas industriales, diagnóstico de las necesidades de capacitación industrial, métodos de capacitación, organización de la capacitación industrial, métodos de evaluación.

Lugar	Duración	A comenzar	Idioma
Association for Overseas Technical Scholarship Tokio, Japón	8 semanas	Enero	Inglés
National Institute of Management, Colombo, Sri Lanka	2 semanas	Enero	Inglés
Zaporoz-Steel Zaporozhye RSS de Ucrania	1 mes 3 meses	Febrero Septiembre	Inglés Inglés
Association for Overseas Technical Scholarship Tokio, Japón	2 1/2 meses	Febrero	Inglés
transformación de metales.  Laboratorio Nacional de Engenharia e Tecnologia Industrial (LNETI) Lisboa Portugal	5 semanas	Marzo	Portugués

Materia de estudio	Descripción general	Lugar	Duración	A comenzar	Idioma
Documentación e información industrial	Función que corresponde a la información industrial en la industrialización, sistemas de recuperación de datos y su aplicación práctica, sistemas de clasificación, sistemas de información para la industria. Capacitación práctica en información industrial y documentación y visitas de estudio a institutos que se especializan en proporcionar servicios de información a la industria.	VINITI, Instituto Soviético de Información Científica y Técnica Moscú, URSS	2 meses	Marzo	Francés
Industria de transformación de metales	Planificación, ejecución y supervisión de procesos para fabricar partes de máquinas; diseño de matrices y plantillas, diseño y utilización de herramientas de corte; funcionamiento y mantenimiento, control de calidad y aspectos económicos de las operaciones de transformación de metales, etc. Estudios prácticos en laboratorios y capacitación en el trabajo en industrias de transformación de metales.	Universidad Lumumba Moscú, URSS	4 meses	Marzo	Inglés
Soldadura eléctrica	Tecnología y equipo de soldadura eléctrica, resistencia, procesos de soldadura, soldadura moderna, fuentes de energía para soldadura por arco, materiales y estructuras para soldar, diseño tecnológico racional de estructuras de metal soldado, etc. Capacitación en el trabajo en fábricas de equipo para soldadura eléctrica, en plantas de transformación de metales y en laboratorios.	Instituto de Soldadura Eléctrica E.O. Paton Kiev, RSS de Ucrania	4 meses 4 meses	Marzo Septiembre	Inglés Inglés
Industria petroquímica	Fuentes de materias primas, procesos tecnológicos, equipo industrial y funcionamiento, control de procesos, mantenimiento y perspectivas de desarrollo de la industria petroquímica. Capacitación en el trabajo en la esfera de los plásticos, las fibras o los fertilizantes nitrogenados.	Centro Conjunto ONUDI/Rumania, Bucarest, Rumania	2 meses	Marzo	Inglés
Motores diesel	Conocimientos prácticos y experiencia en los aspectos técnicos, económicos y de gestión de la utilización, el funcionamiento, el mantenimiento, el diseño y la producción de motores diesel y piezas de recambio. Capacitación en el trabajo en fabricación de motores diesel y piezas de recambio o en operaciones de mantenimiento.	Instituto TES Praga, Checoslovaquia	3 meses	Marzo	Inglés

Materia de estudio	Descripción general	Lugar	Duración	A comenzar	Idioma
Planificación industrial	Curso de estrategia y planificación a nivel macroeconómico. Problemas a largo plazo de la industrialización, estrategias industriales y planificación, incentivos industriales y políticas de promoción, problemas de la transferencia de tecnología y del empleo de la mano de obra, problemas de financiación del desarrollo industrial, preparación de proyectos, evaluación de proyectos, visitas sobre el terreno y curso práctico.	Centro de Desarrollo Internacional, Tokio Japón	10 semanas	Marzo	Inglés
Planificación industrial	Aspectos técnicos de la planificación industrial a distintos niveles. Sistema uniforme de planificación industrial a niveles nacional, sectorial y de fábrica (previsiones a largo plazo, planes a largo plazo, a mediano plazo y anuales). Organismos de coordinación de la planificación de los planes nacionales de desarrollo industrial a nivel internacional.	Instituto de Economía de Países en Desarrollo Berlín, República Democrática Alemana	1 mes	Abril	Inglés
Organización y gestión de sistemas de mantenimiento	Organización de sistemas de mantenimiento, técnicas y métodos incluso objetivos, planificación, métodos, sistemas de control, piezas de recambio y control de los materiales utilizados en los servicios de mantenimiento; planificación y supervisión de proyectos, mecánica de confiabilidad, capacitación de personal de mantenimiento. Capacitación en el trabajo en materia de organización de sistemas de mantenimiento, o en planificación del mantenimiento preventivo o en control de la gestión del mantenimiento en las industrias mecánicas, metalúrgicas y de productos químicos.	Svenska Arbetsgivareföreningen SAF, ALI-RATI Lidingö, Suecia	3 meses	Abril	Inglés
Tecnología moderna de fundición	El programa de capacitación abarcará los temas siguientes: el diseño de procesos de fundición modernos (incluidos los aspectos económicos y técnicos); materiales de fundición; tecnologías de fusión y fundición; práctica de construcción de modelos; materiales y tecnología de moldeado; mecanización y automatización de los procesos de fundición; control de calidad y reparación de piezas fundidas; protección del medio, incluido el control del ruido y otros problemas de seguridad y contaminación.	Instituto de Investigaciones de la Fundición Cracovia, Polonia	2 meses	Abril	Inglés

Materia de estudio	Descripción general
Molienda y almacenamiento de cereales	Tecnología y equipo de silos para elaboración de cereales, producción de forrajes mixtos a granel o granulados, control de la calidad de cereales, harina y forrajes mixtos, etc. Estudios prácticos en laboratorios y capacitación en el trabajo en empresas seleccionadas.
Organización y gestión de la producción en cooperativas industriales	Sistemas de organización y de gestión, normas y reglamentos sobre cooperativas industriales. Financiación y selección de tecnologías, producción y comercialización apropiadas. Este programa, que abarca los sectores del mueble, del cuero y de la vestimenta, consta de enseñanza teórica y capacitación en instalaciones industriales, así como visitas de estudio.
Gestión y capacitación en empresas públicas	Función del sector público en el desarrollo económico y social de los países en desarrollo. Gestión y organización de empresas públicas: planificación e inversión, producción y comercialización, gestión financiera y sistemas de información, gestión de la transferencia de tecnología, capacitación en materia de empresas públicas, etc. Labor de investigación y visitas a centros de capacitación existentes en distintas empresas e instituciones.
Industria de los fertilizantes	Tecnología y planificación de la producción de fertilizantes minerales. Materias primas, perspectivas de desarrollo de la producción mundial de fertilizantes minerales. Procesos y operaciones principales y su evaluación económica. Trabajos de investigación científica en materia de producción de fertilizantes, y capacitación en el fosfatados.
Organización y gestión de empresas agroindustriales	Capacitación teórica sobre distintos aspectos de las empresas agroindustriales. Planificación, gestión, financiación y política de inversiones de la empresa; infraestructura económica. Capacitación práctica sobre aspectos organizativos de las empresas agroindustriales y de las plantas de elaboración de alimentos, visitas de estudio a empresas agroindustriales.

Lugar	Duración	A comenzar	Idioma
Instituto de Altos Estudios para Gerentes y Especialistas del Ministerio de Compras del Estado Moscú, URSS	3 meses	Abril	Inglés
Unión Central de Cooperativas de Trabajo Varsovia, Polonia	6 semanas	Abril	Inglés
Centro Internacional para Empresas Públicas de Países en Desarrollo Ljubljana, Yugoslavia	3 semanas	Abril Septiembre	Francés Inglés
Ministerio de la Industria Química, Moscú, URSS	3 meses	Abril	Inglés

trabajo en plantas de fertilizantes nitrogenados o de fertilizantes

Centro Federal de Capacitación de Personal de Gestión Agrícola e Industrial, Novi-Sad Yugoslavia	2 meses	Mayo	Inglés
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Materia de estudio	Descripción general
Métodos y técnicas de producción y formulación de plaguicidas	Desarrollo de plaguicidas químicos, diseño de plantas, consideraciones relativas al medio ambiente, equipo utilizado en la formulación de plaguicidas, ensayo de productos, formulación de polvos granulados, humectables y espolvoreables, aerosoles, cebos y concentrados emulsionables, envasado, control de calidad, distribución. Visitas
Protección del medio ambiente en las industrias química y farmacéutica	Análisis de la contaminación del aire, del agua y del suelo, y de desechos industriales. Enseñanza teórica y ejercicios prácticos en laboratorios; visitas de estudio a plantas depuradoras y a instalaciones de protección del medio ambiente.
Operaciones de fundición en pequeña escala	El plan de estudios comprenderá las siguientes materias: solidificación en la fundición; diseño de alimentadores, respiraderos y bebederos; fabricación de modelos y materiales para modelos; moldeo y materiales de moldeo; hierro forjado y su fundición y forja; acero y su fundición y forja; aleaciones de cobre y su fundición y forja; aleaciones de aluminio y su fundición y forja; técnicas especiales de moldeo y forja tales como fusión a la cera perdida, moldeo en vaina, y fundición en molde de yeso; defectos de fundición; control de calidad en fundiciones; fusión y fundición al vacío.
Producción de azúcar de remolacha	Este programa se desarrollará en fábricas de azúcar y en un instituto de investigaciones del azúcar y consistirá en capacitación teórica y capacitación práctica especializada en el trabajo, así como en visitas de estudio y un seminario de evaluación. Se concentrará en los aspectos económicos y técnicos y comprenderá temas tales como estudios de viabilidad, estudios sobre materias primas, mantenimiento, tecnologías de producción y control de calidad en la esfera de la producción de azúcar de remolacha.





Lugar	Duración	A comenzar	Idioma
Universidad Karl Marx Leipzig, República Democrática Alemana	2 meses	Mayo	Inglés

de estudio a grandes fábricas de plaguicidas.

Universidad Estatal de Gante, Bélgica	6 semanas	Agosto	Francés
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Instituto Mármara de Investigaciones Científicas e Industriales Estambul, Turquía	2 meses	Septiembre	Inglés
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Instituto de Investigaciones del Azúcar Ankara, Turquía	2 meses	Septiembre	Inglés
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Materia de estudio	Descripción general	Lugar	Duración	A comenzar	Idioma
Elaboración del arroz	El plan de estudios comprenderá los siguientes temas: principales tendencias en el desarrollo de elevadores de granos y en la industria de elaboración del arroz; características y gama de los productos de los molinos de arroz; tecnología moderna de fabricación de almidón a partir de granos de arroz y de arroz descascarado; tipos modernos de graneros de arroz; equipo tecnológico moderno para empresas de elaboración del arroz; diagramas básicos para la elaboración del arroz; mantenimiento preventivo del equipo en empresas de elaboración del arroz; control de calidad.	Instituto de Capacitación Superior para Directivos y Especialistas Ministerio de Adquisiciones, Moscú (con visitas a Kiev, Leningrado, Krasnodar, Slavynask-na-Kubani y Krasnoarmeiskaya) URSS	3 meses	Septiembre	Inglés
Mantenimiento de equipo electrónico biomédico	Aspectos técnicos y de gestión relacionados con los procedimientos generales y específicos para la diagnosis sistemática de fallas en el equipo electrónico biomédico; por ejemplo, principios fundamentales de electrónica, reparaciones de emergencia en el equipo electrónico, comprobación de la eficacia del mantenimiento, calibración y seguridad del equipo electrónico biomédico y de su utilización, gestión del mantenimiento. Capacitación en el trabajo en esferas pertinentes.	Fabricantes de Instrumentos de Hungría Budapest, Hungría	2 1/4 meses	Septiembre	Inglés
Gestión de la capacitación industrial	En virtud de la infraestructura de capacitación industrial del país huésped, el plan de estudios comprende temas tales como: capacitación industrial y el medio socio-cultural; el concepto de la capacitación en la empresa; el concepto de la capacitación en el trabajo; el concepto del centro de capacitación; el concepto de la capacitación en grupo; capacitación y oportunidades de carrera; capacitación y motivación; análisis de la demanda de capacitación; métodos y técnicas de capacitación; perfiles de capacitadores; capacitación en materia de gestión; la capacitación como inversión; capacitación, asesoramiento profesional y empleo; equipo de capacitación y ayudas de instrucción; legislación, organización y administración de la capacitación; la capacitación en el extranjero; interés y función de gobiernos, empleadores y sindicatos en la capacitación.	Instituto Austriaco de Asistencia y Cooperación Técnica con Países en Desarrollo Viena, Austria	5 semanas	Septiembre	Inglés

<u>Materia de estudio</u>	<u>Descripción general</u>
Industrias tipográficas	Producción de periódicos, revistas y libros (incluidos libros de texto y demás material impreso); planificación y diseño de imprentas; tareas y problemas de la capacitación de especialistas para la industria de artes gráficas; normalización y control de calidad en la industria de artes gráficas. Además de la capacitación teórica, se organizarán visitas de estudio a plantas de fabricación de maquinaria para imprentas y a imprentas, y capacitación práctica en dichas empresas.
Diseño en la ingeniería y en la industria	Introducción teórica sobre diseño de productos, diseño de herramientas, ingeniería de producción y fabricación de prototipos de productos y herramientas. Estudios prácticos en oficinas de diseño, en laboratorios de ensayos metalúrgicos y/o en talleres.
Industria del cemento	El programa se concentra tanto en los aspectos económicos como técnicos de la industria del cemento y comprende temas tales como estudios de viabilidad, estudios sobre materias primas, gestión, mantenimiento, tecnologías de producción, control de calidad, conservación de energía y lucha contra la contaminación.
Capacitación de asesores para la pequeña industria	Introducción a las actividades de asistencia de un asesor industrial. Técnicas de producción, diagnóstico de una empresa industrial. estudio sobre el origen de las dificultades de las empresas, sugerencias y procedimientos para resolver esas dificultades, estudios de casos concretos.
Mantenimiento de equipo ferroviario	Programa primordialmente orientado al estudio de los problemas relacionados con la compra y el almacenamiento de equipo, actividades de taller, control de obras, utilización de computadoras, capacitación práctica del personal, y principios económicos básicos del mantenimiento y la reparación del material rodante. El programa incluye asimismo visitas de estudio a empresas especializadas en la fabricación de equipo ferroviario.

Lugar	Duración	A comenzar	Idioma
VEB Polygraph Leipzig, RDA República Democrática Alemana	3 semanas	Septiembre	Inglés
Centro de Desarrollo de la Proyección en la Ingeniería y en la Industria, El Cairo Egipto	3 meses	Septiembre	Inglés
Dirección General de la Industria del Cemento Ankara, Turquía	2 meses	Septiembre	Inglés
Laboratorio Nacional de Engenharia e Tecnologia Industrial (LNETI) Lisboa Portugal	4 - 6 semanas	Septiembre	Portugués
Société Nationale des Chemins de Fer Belges (SNCB) Bruselas, Bélgica	7 semanas	Octubre	Francoés

Materia de estudio	Descripción general	Lugar	Duración	A comenzar	Idioma
Producción y aplicación de fibras sintéticas	Tecnología de fibras sintéticas y estudios en laboratorio y en el trabajo sobre equipo y técnicas de producción. Tecnología de elaboración, inclusive preparación, ensayo e identificación de fibras y la aplicación de las fibras sintéticas a diversos fines.	Höhere Bundeslehr- und Versuchsanstalt für Textilindustrie Viena, Austria	5 semanas	Octubre	Inglés
Diseño y fabricación de moldes en la industria de los materiales plásticos	Diseño y fabricación de moldes, utilización y selección de nuevas materias primas y equipo, introducción de procesos y métodos de producción modernos, y aspectos técnico-económicos del diseño y la fabricación de moldes.	Heinrich Schmidberger Österreichische Kunststoffwerke G .H Viena, Austria	1 1/2 meses	Octubre	Inglés
Tecnología de los plásticos	Aspectos técnico-económicos de la producción de plásticos, tecnología de fabricación de plásticos, utilización de plásticos, proyección técnica de equipo y herramientas.	Laboratorium für Kunststofftechnik Viena, Austria	2 meses	Octubre	Inglés
Mantenimiento preventivo	Producción y mantenimiento general; filosofías del mantenimiento; producción y planificación del mantenimiento; técnicas de mantenimiento; previsión de averías y sistemas de inspección; medidas prácticas de mantenimiento; mantenimiento preventivo; instrucciones y medidas de control; mantenimiento correctivo; calendario de trabajos; control de piezas de repuesto y existencias; control de la documentación técnica; seguimiento del mantenimiento y de la producción.	Addis Abeba Etiopía	2 semanas	Noviembre	Inglés
Gestión del mantenimiento	Este seminario - para personas que hayan participado ya en el programa de capacitación colectiva en el trabajo en materia de organización y gestión de sistemas de mantenimiento, organizado en Suecia - se ocupará de los siguientes temas: eficacia de la capacitación impartida en Suecia; impacto de esa capacitación en las actividades profesionales de los participantes; y sugerencias sobre actividades adicionales de capacitación y consultoría en materia de organización y gestión de sistemas de mantenimiento.	Addis Abeba Etiopía	2 semanas	Noviembre	Inglés

Materia de estudio	Descripción general	Lugar	Duración	A comenzar	Idioma
Mantenimiento de autobuses y camiones	Esta programa abordará primordialmente el estudio de los principales problemas técnicos de los diversos sistemas de mantenimiento de camiones, autobuses y tractores utilizados para el transporte por carretera. Se estudiará también la gestión administrativa y financiera del mantenimiento. El programa incluirá visitas de estudio a empresas especializadas en equipo de ingeniería civil, transporte y obras públicas, así como a institutos de capacitación técnica.	Société Nationale des Chemins de Fer Belges (SNCL) Bruselas, Bélgica	9 semanas	Noviembre	Francés
Técnicas de embalaje y acondicionamiento para industrias rurales e industrias de promoción de las exportaciones	Materias primas, cajas de cartón ondulado, embalajes de madera, tambores, botes y latas de conservas, latas de gasolina, bidones cilíndricos, etc; películas de plástico y otros compuestos, bolsas industriales, métodos de ensayo de la resistencia del material de transporte, bienes de equipo y normas, control de calidad, accesorios de envasado, maquinaria de envasado, normas europeas del envasado, costos del envasado y análisis de valor.	Institut Belge de l'Emballage Bruselas, Bélgica	7 semanas	Noviembre	Francés o Inglés
Técnicas de gestión en la industria manufacturera	Técnicas de gestión de la producción: normalización; planificación del control de calidad, con particular referencia a los problemas relacionados con la fabricación de productos para los mercados de exportación. Capacitación individual en plantas industriales.	Universidad del Camerún, Douala, República Unida del Camerún	7 semanas	A determinar	Francés
Gestión y capacitación en empresas públicas	Función del sector público en el desarrollo económico y social de los países en desarrollo. Gestión y organización de empresas públicas: planificación e inversiones producción y comercialización, gestión financiera y sistemas de información, gestión de la transferencia de tecnología, capacitación en materia de empresas públicas, etc. Labor de investigación y visitas a centros de capacitación de diversas empresas e instituciones.	1. Centro Latino-americano de Administración para el Desarrollo Nicaragua  2. Institute of Management, Pakistán	3 semanas  3 semanas	A determinar  A determinar	Español  Inglés

Materia de estudio	Descripción general	Lugar	Duración	A comenzar	Idioma
Industria textil	Materias primas, elaboración mecánica y química de textiles, economía y organización de la producción, mantenimiento de la maquinaria textil, el medio ambiente en relación con la industria textil. El programa incluirá capacitación, en laboratorios y en fábricas, en materia de hilado, tejido, acabado y tejido de punto.	Instytut Fizyki Włokna i Chemiczne, Obrobki Włokna Lodz, Polonia		A determinar	Inglés
Bancos de desarrollo industrial	Seminario de tres semanas con clases y discusiones, haciendo hincapié en estudios de casos concretos; dos semanas de trabajo en bancos de desarrollo industrial de Bombay, Nueva Delhi y Madrás; seminario de recapitulación final, de una semana. Principales temas abarcados: 1. Objetivos, actividades, estructura organizativa, capitalización y marco ambiental de un banco de desarrollo industrial, y sus interrelaciones con el sector público y organismos e instituciones. 2. Identificación y desarrollo de proyectos. 3. Evaluación de proyectos -objetivos, técnicas, procedimientos y práctica- evaluación del mercado y comercialización; aspectos técnicos, financieros, económicos, jurídicos y relativos a la gestión. 4. Funciones del seguimiento -razón de ser, técnicas e instrumentos, requisitos previos para un diagnóstico, sistema de vigilancia preventiva y con miras a la solución de problemas. 5. Asistencia a proyectos problema y rehabilitación de proyectos "enfermos". 6. Problemas y requisitos previos para promover y prestar asistencia a pequeños proyectos industriales y a los que se ubicarán en regiones subdesarrolladas.	Centro Bancario de Desarrollo del Instituto Indio de Desarrollo de la Gestión Bangalore, India	6 semanas	A determinar	Inglés
Formación de asesores para la pequeña industria	Introducción a la pequeña y mediana empresa, métodos de gestión de las empresas industriales, pequeñas y medianas, actividades de un asesor industrial: capacitación, diagnóstico de empresas, servicios de asesoramiento.	Agence de Coopération Culturelle et Technique, Ecole Internationale de Bordeaux (en un país africano a determinar)	4 semanas	A determinar	Francés
Creación de empresas industriales en zonas rurales	Enfoque global a la empresa rural, función de la pequeña y mediana empresa en las zonas rurales, fases de la creación de una empresa, principales decisiones que han de adoptarse en la creación de empresas industriales rurales contactos con oficinas de promoción de la pequeña empresa industrial.	Agence de Coopération Culturelle et Technique, Ecole Internationale de Bordeaux (en un país africano a determinar)	4 semanas	A determinar	Francés

<u>Materia de estudio</u>	<u>Descripción general</u>
Normalización y control de calidad	Metodología, control cuantitativo y cualitativo, ensayos no destructivos, instrumentos estadísticos de calidad, medios de mejorar la calidad, gestión de la calidad, capacitación práctica en empresas o instituciones industriales.
Financiación de la pequeña industria	Dificultades financieras de las empresas industriales, pequeñas y medianas, procedimientos y métodos para conceder préstamos a empresas industriales, pequeñas y medianas, fondos de garantía y participación pública para facilitar la concesión de préstamos a la pequeña empresa, labor de las dependencias de crédito a la pequeña empresa de los bancos de desarrollo, vigilancia de los préstamos.
Normalización y control de calidad de productos industriales	Información general sobre normalización, instituciones nacionales y regionales encargadas de la normalización y del control de la calidad, control de calidad y normalización a nivel de empresas, promoción de la calidad por instituciones de asistencia.



Lugar	Duración	A comenzar	Idioma
Agence pour la Coopération Technique Industrielle et Economique (AFNOR) Association Inter- professionnelle de France, Paris-Lille	8 semanas	A determinar	Francés
Union Africaine et Mauricienne de Banque pour le Développement Port Louis	4 semanas	A determinar	Francés
Agence de Coopération Culturelle et Technique, Ecole Internationale de Bordeaux, Francia	3-4 semanas	A determinar	Francés

TRAINING OPPORTUNITIES OFFERED BY INSTITUTIONS OTHER THAN UNIDO  
 POSSIBILITES DE FORMATION OFFERTES PAR DES INSTITUTIONS AUTRES QUE L'ONU  
 OPORTUNIDADES DE CAPACITACION OFRECIDAS POR INSTITUCIONES DISTINTAS DE LA ONU

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	Fee
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. Le 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	-	\$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, néerlandais	-	A arranger
Industrial exploitation of non-metallic raw materials	Training workshop on the beneficiation and industrial utilization of non-metallic minerals (ceramics, building materials, refractories, insulating materials, fillers, filtrating agents, coating materials, etc.).	UNIDO - Czechoslovakia Joint Programme Zborovská 1 301 34 Pilsen Czechoslovakia	5 April 1982 5 weeks	Professional qualification. English	-	To be arranged

BUILDING MATERIALS INDUSTRIES (Cont'd)

Course or Seminar    General description

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Construction engineering and interior design    Practical further training could be considered in any one of the following areas: general contracting (all fields of civil engineering); ancillary trades.

Cement making    The Institute organizes throughout the year short course in its technological talent development programme on various aspects of cement making.

Ceramic production    Product classification, raw materials and relevant analyses, paste preparation, moulding, finishing, decoration. Equipment. On-the-job training.

Construction management    Post-graduate training in construction management at three levels.

Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Carl Duisberg-Gesellschaft and the 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 12-18 months including language training	Professional qualification and practical experience. German	-	To be arranged
Cement Research Institute of India M-10 South Extension 11 Ring Road New Delhi 110049 India	Throughout year 4-10 days	Professional qualification. English	-	\$US 80-200
SIOI, Segretariato Permanente per la Cooperazione Tecnica Internazionale Via del Tritone n. 46 00187 Rome, Italy	February 1981 6 months	Professional qualification. English, French, Spanish	January 1981	To be arranged
Centre for Housing Planning and Building National Housing Secretariate 5 Chittampalam Gardiner, Colombo 2 Sri Lanka, in co-ordination with Bouwcentrum International Education (BIE) P.O. Box 299 Rotterdam, Netherlands	Several times a year 6, 8 or 12 weeks	Diploma in the building discipline, relevant working experience. English	-	To be arranged

BUILDING MATERIALS INDUSTRIES (Cont'd)

<u>Course or Seminar</u>	<u>General description</u>
38th international course on housing planning and building	Planning and policy area: the course work in this field is intended to provide an understanding of the main options and design of government policies for low-income housing in urban areas. Design and technology area: the workshops will focus on issues related to building materials production and evolutionary infrastructure in the development of low-income settlements programmes. Complementary to these objectives an attempt will be made to identify the corresponding and specific state support to enhance local production of building materials and infrastructural service development.
Cement industry	Theoretical and practical training covering all aspects of cement industry; last six months provide on-the-job training.
Technology and testing of construction materials (Part I)	The properties of materials and methods of testing; technical visits. Emphasis on concrete and constituent concrete materials, soils and asphalt technology, but mastics and sealants, plasters, timber, paints, adhesives and solvents, bricks and blocks and ceramic tiles also covered. Course designed for students from developing countries.
Technology and testing of construction materials (Part II)	Course is complementary to Part I, providing more advanced, broader based training in technology and testing with opportunity for individual work programmes of special interest.

Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Bouwcentrum International Education (BIE) P.O. Box 299 Weena 700 3000 AG Rotterdam Netherlands	August 1981 4 1/2 months	University degree. English	1 April 1981	To be arranged
State Cement Corporation of Pakistan Ltd. Lahore, Pakistan (Mianwali and Hyderabad)	First week of May 1981 1 year	Engineering degree in mechanical, electrical, civil, electronics, chemical or mining disciplines. English	-	-
John Laing Research and Development Ltd. Manor Way, Borehamwood Hertfordshire WD6 1LN United Kingdom	September 1981 13 weeks	Professional qualification. English	31 July 1981	£4,500 + VAT
John Laing Research and Development Ltd. Manor Way, Borehamwood Hertfordshire WD6 1LN United Kingdom	January 1982 13 weeks	Professional qualification. English	31 July 1981	£4,750 + VAT

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Road construction materials	Practical laboratory testing of soils for road construction, road design, concrete testing; analysis of different types of soils.	Overseas Unit Transport and Road Research Laboratory Crowthorne, Berkshire United Kingdom	April 1981 and 1982 6 months	Professional qualification. English	January 1981 and 1982	-
<b>CHEMICAL INDUSTRIES</b> <b>INDUSTRIE CHIMIQUE</b> <b>INDUSTRIAS QUIMICAS</b>						
Plastic technology	Techno-economic aspects of plastic production, plastic fabrication technology, utilization of plastics equipment and tool design, polymer engineering, polymer chemistry, polymer physics, control engineering, testing maintenance, trouble shooting, plant visits.	LKT-TGM Laboratorium für Kunststofftechnik Wexstrasse 19-23 A-1200 Vienna Austria	- 6 weeks	- English	-	To be arranged
Plastics technology and polymer engineering	Applied R & D. 100 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.So., PhD. in science and 2 years in research experience. English, German, French	-	To be arranged

CHEMICAL INDUSTRIES (Cont'd)

Course or Seminar    General description

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Transfer of  
chemical  
technology to  
developing  
countries

Preparation and necessary measures  
to be taken by the developing country  
based on its infrastructure, natural  
resources, industrial and economic  
development. Case studies.

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.

Pharmaceutical  
technology

Preparation of ampoules and perfusion  
solutions, ointments, solutions for  
ophtaline use. Study of granulation,  
manufacturing of capsules, tableting.  
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.

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.



Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Technical University of Vienna, Institut f. Verfahrenstechnik u. Technologie d. Brennstoffe Getreidemarkt 9 1060 Vienna, Austria	March 1981 1 week	University level. German	-	-
C.R.I.F. Rue du Chéra, 200 B-4000 Liège Belgique	Arranger 5 mois	Qualifications professionnelles. Français, anglais	-	\$US 5,000
Department of Toxicology State University of Ghent Hospitaalstraat 13 B-9000 Ghent Belgium	August 6 weeks	Professional qualification. English or French	-	About Bf.40,000
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

CHEMICAL INDUSTRIES (Cont'd)

Course or Seminar    General description

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Paint and varnish technology    Theoretical and practical instruction in manufacture and testing of paints, varnishes, enamels etc. followed by 6 months in-plant training.

Petrochemicals    Course on petrochemical industries designed specially for Middle East countries.

Petroleum refining and mechanical maintenance    In-plant training.

Petroleum technology    Course for young chemical engineers and chemists, mainly from developing countries, wishing to acquire up-to-date specialization in petroleum refining and petrochemical fields, specially in teaching, research, design, processing and management.

Chemical engineering    The ACS organizes more than 50 short audio courses throughout the year on a wide range of subjects related to chemical engineering.

Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Industrial Research Laboratory Directorate of Industries Government of West Bengal Caval South Rd. Calcutta 15, India	6 June each year 24 months	Professional qualification. English	-	Rs 15 per month
Association of Petrochemical Industry in collaboration with Japan International Cooperation Agency (JICA), P.O. Box 216 Mitsui Building 2-1 Nishi Shinjuku Shinjuku-ku, Tokyo 160 Japan	26 Feb. 1981 6 weeks	Professional qualification. English	-	To be arranged
National Refinery Ltd. P.O. Box No. 3964 Korangi, Karachi Pakistan	Winter 1981 Duration to be arranged	- English	September 1981	\$US 100 approx.
Institut du Pétrole Gaz et Géologie Bulevardul Bucuresti ur.1, Ploiesti Romania, in co-operation with UNESCO	1 December 1981 11 months	Applicants should be university graduates in chemical engineering or chemistry. English	-	-
American Chemical Society, Department of Educational Activities 1155 16th St. N.W. Washington, D.C. 20036 United States of America	-	Professional qualification. English	-	\$95-750

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

<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>
Génie hautes fréquences et micro-ondes	Conception, fabrication d'appareillage, utilisation et maintenance des équipements existants ou à venir dans les domaines industriels et de génie biomédical. Applications industrielles et biomédicales des hautes fréquences et des micro-ondes.	Institut National des Sciences Appliquées de Lyon 69621 Villeurbanne Cédex, France	Octobre 3 à 5 mois	Ingénieurs de fabrication, cadres techniques. Français	Juin	A arranger
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 and 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
Electronics	Short to long duration courses on: operation and maintenance of electro-medical equipment power electronics; computer programming; micro processor; maintenance and repair of measuring test instruments; digital electronics; digital electronics instrumentation; industrial electronics; digital linear I.C.'s; thermal power plant instrumentation; process control instrumentation; process instrumentation and control; Hi-Fi equipment; operation and maintenance of CCTV equipment; domestic electronics; TV maintenance and servicing; operation and maintenance of cardiac equipment.	Advanced Training Institute for Electronics and Process Instrumentation Ramantapur, Hyderabad India	Throughout year 2-48 weeks	Professional qualification. English	-	To be arranged

Course or Seminar	General description	Organiser; Venue
Manufacture and testing of electronic equipment	Training programmes may cover the following manufacturing sections: radar equipments of various types; mini-computers for general purposes; EDP systems for management and control purposes; digital systems for data display; electronic infrastructure systems.	Istituto per la Ricostruzione Industriale (IRI) Ufficio Cooperazione Tecnica Internazionale Via Torino 98 Rome, Italy (Rome and other towns in Italy)
Industrial electronics	General electronics; logic; industrial electronics; main industrial and technical applications of modern electronics.	SIOI, Segretariato Permanente per la Cooperazione Tecnica Internazionale, Via del Tritone n. 46 00187 Rome, Italy
Electronics technology	Circuits designs (basic, industrial) repair maintenance of industrial and test equipments; also covered are workshop practice, mathematics, applied science, digital computers.	Pak Swiss Training Centre, Campus PCSIR Laboratories Karachi-39 Pakistan

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

Gestion  
internationale  
agro-alimentaire

-

I.G.I.A., B.P. 105  
95021 Cergy Pontoise  
Cédex, France

Commencing date; Duration	Qualifications: Language requirements	Latest date for receipt of applications	Fee
19 January 1981 5 months	Advanced technical education or university degree and 5 years experience. Italian, French, English, Spanish	-	To be arranged
February 1981 3 months	Professional qualification. English, French, Spanish	January 1981	To be arranged
October 1981 12 months	Technical degree. English	-	To be arranged
Septembre, octobre et janvier 1 année	Ingénieur. Français	-	F 24,000 (approx.)

FOOD PROCESSING INDUSTRIES (Cont'd)

Course or Seminar    General description

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Additifs alimentaires	Ce stage vise à donner une formation spécialisée, à vocation appliquée, dans le domaine des additifs alimentaires, pour les établissements à vocation scientifique, industrielle ou de recherche, concernés par la technologie, la biochimie, la pharmacodynamie des additifs alimentaires.
Standardization for products of agriculture and food-industry	Modern measuring methods to determine quality of industrially processed agricultural produces, organization and structure of standardization bodies in this field. In-plant demonstrations and practice in handling measuring equipment.
Food processing technologies	Under the financial support of bilateral donors an International Food Technology Training Centre has been established in 1964 at CFTRI, Mysore India. The Centre gives 6/8 weeks courses on specific food processing technologies to professionals of all Asian countries.
Food technology including fish processing	A higher level course to train senior operatives and managers for food processing plants, research establishments, etc.
Fish technology	Training in fish handling and processing, as well as quality control and fish inspection for countries in the Asian and Pacific region. Lectures and practical experiments and demonstrations.

Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Institut National des Sciences Appliquées de Lyon 69621 Villeurbanne Cédex, France	Octobre 16 semaines dont 4 en entreprise	Ingénieurs, cadres techniques. Français	Juin	A arranger
TESCO - Bureau for Hungarian Standardization Nagy Lajos kir, utja 202 1149 Budapest, Hungary	September 1981 4 weeks	University degree. French	30 January 1981	To be arranged
Central Food Technological Research Institute Mysore, India	To be arranged 6-8 weeks	Professional qualification. English	-	-
Central Food Technological Research Institute Mysore, India, in collaboration with FAO	June every year To be arranged	Graduates in sciences or equivalent. English	-	To be arranged
FAO, Rome, Italy (most likely venue will be Philippines)	Second half of 1981 6 weeks	Asia and Pacific region; nomination by Government. English	-	-



FOOD PROCESSING INDUSTRIES (Cont'd)

Course or Seminar	General description
Foodstuff industry	<p>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.</p> <p>B. Production and marketing: training in agricultural production and foodstuff plants and farms, in the problem of linking agriculture and produce processing; agricultural products, and specific aspects</p>
Minotier céréalier	<p>Cours préparatoire : italien, dessin, technologie générale, visites techniques ; cours de base professionnelle : mécanique, minoterie, technologie spéciale, travaux pratiques ; cours supérieur : organisation de l'entreprise, bilan, planification, marchandise, transport, automation.</p>
Technology of sugar and alcohol production	<p>Cultivation of sugar beet; process and quality control; beet sugar technology; sugar plant engineering.</p>
Alta especialización en tecnología de alimentos	<p>Fundamentos químicos y bioquímicos de la tecnología de alimentos; ingeniería de los procesos de conservación de alimentos; control analítico y de calidad en las industrias de alimentos; control microbiológico e higiene en las industrias de alimentos; tecnología específica de las conservas, de los zumos de frutas y de los alimentos deshidratados.</p>

Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Istituto per la Ricostruzione Industriale (IRI) Ufficio Cooperazione Tecnica Internazionale Via Liguria 40 00187 Rome, Italy (Rome and other towns in Italy)	19 January 1981 5 months	Advanced technical education or university degree and 5 years experience. Italian, French, English, Spanish	-	To be arranged

and production, marketing and distribution problems relating to industrial of production and marketing technologies.

IMC - Italian Management Center for International Development, Corso Magenta 46, Milan Italia	A arranger 6 mois	Jeunes techniciens. Français, italien, anglais	-	A arranger
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
Instituto de Agro-química y Tecnología de Alimentos Jaime Roig 11 Valencia, España	Septiembre 10 meses	Título superior expedido por una Universidad o escuela técnica superior. Español	Julio	A fijar

Course or Seminar	General description	Organizer; Venue
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
Food processing and technology	Details to be announced.	National Food Research Institute in collaboration with Japan International Co-operation Agency (JICA) P.O. Box 216 Mitsui Building 2-1 Nishi Shinjuku Shinjuku-ku Tokyo 160, Japan
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
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

Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Noviembre 1981 15 semanas	Poseer la formación básica que supone haber cursado estudios de escuelas técnicas de grado medio. Español	Octubre 1981	20,000 Ptas
8 January 1981 6 months	Professional qualification. English	-	To be arranged
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 5,000 per month
1st Monday in September each year 10 months	Professional qualification. German or English alternatively	1 year in advance	SwF 1,200

Course or Seminar	General description	Organizer; Venue
Meat canning	An introduction to meat canning for those involved in meat processing and meat quality control, and others who need a general knowledge of the principles of meat canning. The course covers the bacteriological and technological factors affecting meat canning and participants get practical experience of canning meat and various types of meat product.	Tropical Products Institute 127 Clerkenwell Road London EC1R 5DB United Kingdom
Post-harvest technology of fruits, vegetables and root crops	A basic four-week course of lectures and demonstrations on post-harvest physiology of fruits, vegetables and root crops, quality requirements, quality control, handling, storage, transportation and packaging. This is followed by 8-12 weeks in-depth training on specialised aspects which are important to the individual participant.	Tropical Products Institute 127 Clerkenwell Road London EC1R 5DB United Kingdom
Storage of durable agricultural products in the tropics	A basic four-week course of lectures and practicals covering all aspects of the storage of cereals and other durable agricultural products, including storage conditions, storage pests and their control, moulds, warehouse design, storage practice, packaging etc. This is followed by up to 5 months in-depth training on specialised aspects which are important to the individual participant.	Tropical Products Institute 127 Clerkenwell Road London EC1R 5DB United Kingdom
Nuevas técnicas para el control de calidad en la industria de alimentos	Introducción al control de calidad; métodos estadísticos de control; evaluación sensorial de alimentos; aspectos microbiológicos en control de calidad; análisis químico y físico; control de calidad de agua; cuerpos extraños en productos alimenticios; saneamiento de la planta.	INVESTI Km. 8 Carretera Panamericana Apdo. 1597 Carmelitas. 1010A Caracas, Venezuela

Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
July 1981 3 weeks	Knowledge of food technology preferably at least diploma level with relevant practical experience. English	According to vacancies. Earliest application advised	£100 per week
May 1981 May 1982 1-4 months	Degree or equivalent in biological sciences, horticulture, or agriculture and/or some years' relevant experience.	According to vacancies. Earliest application advised	£100 per week
2 March and 1 September 1981 March and September 1982 1-6 months	Degree or equivalent in biology, agriculture or engineering and/or some years' relevant experience. English	According to vacancies. Earliest application advised	£100 per week
Febrero 1981 Abril 1981	Graduado universitario Español	-	Bs. 2,500 (\$585) Asistencia

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

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
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.Fo.P., 1b avenue Général Michel B-6000 Charleroi Belgique	A arranger 1-6 mois	- Français, anglais	-	A arranger
Glass technology	Lectures and practical training in: fundamental properties of glass; sheet glass; container glass; machinery and materials; observation tours.	Government Industrial Research Institute, Osaka in collaboration with Japan International Co-operation Agency (JICA) P.O. Box 216 Mitsui Building 2-1 Nishi Shinjuku Shinjuku-ku, Tokyo 160 Japan	8 January 1981 2 1/2 months	Professional qualification. English	-	To be arranged
Optical technology	Repair, maintenance and calibration of optical instruments including microscopes, telescopes, sextants, theodolites, profile projector, etc. Major emphasis on workshop practice, laboratories and repair work.	Pakistan-Swiss Training Centre Campus PCSIR Laboratories Karachi-39, Pakistan	October 12 months	Technical degree. English	-	To be arranged

LEATHER AND LEATHER PRODUCTS INDUSTRIES  
INDUSTRIE DU CUIR ET DES ARTICLES EN CUIR  
INDUSTRIAS DEL CUERO Y DE LOS PRODUCTOS DE CUERO

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications; Language requirements	Last date for receipt of applications	Fee
Tecnología del cuero	Curso teórico-práctico: piel animal; operaciones y procesos de precurtición; curtición; operaciones y procesos de post curtición; terminación; efluentes de curtiembre; propiedades del cuero; normas y métodos de ensayo.	Centro de Investigación de Tecnología del Cuero (CITEC) Av. 52 (121 y 122) 1900 La Plata Argentina	1 Octubre 1981 1 mes	Ingeniero o licenciado en química, egresado de escuelas técnicas de curtiduría. Español	30 Junio 1981	A convenir
Tecnología del cuero	Períodos de adiestramiento sobre: procesos de fabricación, control de calidad, efluentes de curtiembre.	Centro de Investigación de Tecnología del Cuero (CITEC) Av. 52 (121 y 122) 1900 La Plata Argentina	1 Abril 1981 6-8 meses	Ingeniero o licenciado en química, egresado de escuelas técnicas de curtiduría. Español	1 Febrero 1981	A convenir
Fabrication du cuir	Chimie générale, organique et analytique ; laboratoire d'analyses chimiques et d'essais physiques ; chimie appliquée à la tannerie ; biochimie et microbiologie appliquées à la tannerie ; technologie de la fabrication du cuir et des machines de tannerie ; atelier de fabrication des cuirs.	Ecole de Tannerie et de Chimie de Liège 6 quai Gloesener 4020 Liège Belgique	15 septembre 1981 8 1/2 mois	Qualifications professionnelles. Français	15 juin 1981	Bf. 550,000
Initiation à la tannerie	Chimie (inorganique, organique, analytique) ; laboratoire d'analyses chimiques et d'essais physiques ; chimie appliquée à la tannerie ; biochimie et microbiologie appliquées à la tannerie ; technologie de la tannerie ; atelier et fabrication.	Ecole de Tannerie et de Chimie de Liège 6 quai Gloesener 4020 Liège Belgique	15 septembre 1981 8 1/2 mois	Qualifications professionnelles. Français	15 juin 1981	Bf. 450,000
Tannerie	Cours et travaux pratiques à la carte suivant désirs des stagiaires et but poursuivi.	Ecole de Tannerie et de Chimie de Liège 6 quai Gloesener 4020 Liège Belgique	A fixer	Qualifications professionnelles. Français	-	A fixer



LEATHER AND LEATHER PRODUCTS INDUSTRIES (Cont'd)

Course or Seminar    General description

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Contrôleur de qualité en tannerie-mégisserie	Chimie tannerie ; fabrication des cuirs et peausseries ; étude de la peau ; utilisation du cuir ; travaux pratiques.
Leathergoods 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.
Leather technology	Training in manufacture of different leathers; training in maintenance of tanning machinery; refresher courses on leather and allied subjects; seminars on problems relating to leather and allied industries.
Wool and leather technology	Training in the methodology of converting sheep skins into different grades of shearlings and fur suedes. Training in the technology of dressing, dyeing and finishing different fur skins.
Leather handicraft	Technical practical training in design and manufacture of leather articles (style study, model creation, leather cutting, use of equipment and materials).

Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Ecole Français de Tannerie 181/203 avenue Jean-Jaurès 69353 Lyon, Cédex 2 France	1 février 1981 4 1/2 mois	Qualifications professionnelles. Français	-	F 4,800
Central Leather Research Institute (CLRI), Adyar, Madras 600 020, India	March 1981 & 1982 48 weeks	University entrance. English	-	Rs 1,200 per month
Central Leather Research Institute (CLRI), Adyar Madras 600 020 India	To be arranged 3-12 months	Professional qualification. English	-	Rs 1,200 per month
Fur and Wool Technology Division Regional Research Laboratory (CSIR) Canal Road Jammu-Tawi, India	September and December 1981 6 weeks	Degree in science or technology. English	-	Rs 9,000 (tuition and materials)
SIOI, Segretariato Permanente per la Cooperazione Tecnica Internazionale Via del Tritone n. 46 00187 Rome, Italy	February 1981 3 months	Professional qualification. English, French, Spanish	January 1981	To be arranged

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Shoe design and production	Shoe technology, hides and relevant properties, tanning process and materials, shoe fitting and finishing.	SIOT, Segretariato Permanente per la Cooperazione Tecnica Internazionale Via del Tritone n. 46 00187 Rome, Italy	February 1981 6 months	Professional qualification. Italian	January 1981	To be arranged
Especialización en curtidos	Tecnología de curtidos; química técnica curtición; procesos industriales curtidos; maquinaria de curtidos; oficina técnica.	Escuela Nacional de Tonería, Plaza José Antonio s/n, Igualada (Barcelona) España	1 Octubre 9 meses	Títulos universitarios en ciencias químicas. Español	20 Septiembre	22,000 Ptas
Leather manufacture	Short courses on selected subjects.	Nene College Moulton Park Northampton NN2 7AL United Kingdom	To be arranged 1 October 1981	Professional qualification. English	-	Minimum £100 per week

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

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.	Spoorwegmateriel en Metaalconstructies, BN Vaartdijkstraat 5 B-8200 Brugge Belgique	A arranger 10-18 semaines	Qualifications professionnelles. Français, anglais ou néerlandais	-	A arranger
Mécanique générale	Large éventail de sujets dans le domaine de la mécanique générale.	Spoorwegmateriel en Metaalconstructies, BN Vaartdijkstraat 5 B-8200 Brugge Belgique	A arranger 10-18 semaines	Qualifications professionnelles. Français, anglais ou néerlandais	-	A arranger

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 A convenir	Diplôme de l'enseignement universitaire ou technique supérieur. Français, anglais	-	A arranger
Responsable de production pour unités à fabrication automatisée	Acquisition, par des cadres de l'industrie, des compétences nécessaires pour organiser, gérer et coordonner des services faisant appel à des méthodes et des moyens automatisés de fabrication, notamment des machines outils à commande numérique.	Institut National des Sciences Appliquées de Lyon 69621 Villeurbanne Cédex, France	Octobre 5 mois	Ingénieur ou assimilé. Français	Juin	A arranger
Industries mécaniques, transformatrices des métaux et connexes	MECAFORM organise à la demande des cours de formation professionnelle et technique et de perfectionnement, complétés par des stages en entreprises industrielles. Formation au siège, dans des écoles spécialisées, possibilité de stages pratiques. Spécialités enseignées: mécanique automatisée, dessin bureau d'études, fabrication mécanique, fabrication mécano-soudée, etc.	MECAFORM S.A. 98, bd Victor Hugo 92115 Clichy France	Toute l'année Durée à déterminer	Technicien supérieur, ingénieur, instructeur, moniteur, professeur. Français	-	A arranger
Welding	Welding processes; welding metallurgy; NDT and quality control; manufacturing codes; weld design economy and productivity; applications; safety; practical training in welding; project work. The Institute also organizes 13 one-month courses on different specializations. The Institute also organizes 20 courses varying in duration from 4 days to 13 weeks covering the major specializations of welding.	Welding Research Institute Tiruchirapalli 620014 India	January 1981 8 weeks	Graduate engineers. English	-	\$700
Corrosion science and technology	Thermodynamics and kinetics of corrosion processes; materials science; electro-chemistry; 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	lire 60,000

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Automobile engineering	Overhauling and testing of motor vehicles, sub-assembly and assembly of motor vehicles, manufacturing of body and mechanical units; engine assembly lines; parts and accessories (instruments and upholstery etc.).	Istituto per la Ricostruzione Industriale (IRI) Ufficio Cooperazione Tecnica Internazionale Via Torino 98, Rome Italy (Rome and other towns in Italy)	19 January 1981 5 months	Advanced technical education or university degree and 5 years experience. Italian, French, English, Spanish	-	To be arranged
Mechanical engineering	General mechanical engineering: Engineering design and research departments; work organization, organization and method study, work simplification, materials handling, material control and standardization, advanced methods of production control. Design and construction of machine tools, steel and pig-iron foundries, refrigeration equipment; production, materials study, metal casting and machining processes of moulds and models, destructive and non-destructive tests, intermediate and final testing; aeronautical production.	Istituto per la Ricostruzione Industriale (IRI) Ufficio Cooperazione Tecnica Internazionale Via Torino 98, Rome Italy (Rome and other towns in Italy)	19 January 1981 5 months	Advanced technical education or university degree and 5 years experience. Italian, French, English, Spanish	-	To be arranged
Shipbuilding	A. Specialization in the design and complete construction of the hull; in the fitting out of the ship; and in the construction and installation of the engines. B. Specialization in the field of ship repairs and the dry-dock overhauling of the hull, engines and auxiliary installations on board.	Istituto per la Ricostruzione Industriale (IRI) Ufficio Cooperazione Tecnica Internazionale Via Torino 98, Rome, Italy (Rome and other towns in Italy)	19 January 1981 5 months	Advanced technical education or university degree and 5 years experience. Italian, French, English, Spanish	-	To be arranged
Tool engineering	Die-casting die design; press tool design, forging die design; plastic mould design (injection and compression moulding); cutting tool design; jigs and fixtures design; metrology.	Asian Productivity Organization 4-14, Akasaka 8-chome Minato-ku, Tokyo 107 Japan (India)	October/November 1981 4 weeks (tentative)	Consultants, trainers and engineers concerned with design and manufacture of production tools. <u>of APO member countries.</u> English	-	\$US 100

MECHANICAL AND METALWORKING INDUSTRIES (Cont'd)

Course or Seminar    General description

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Mécanique  
automobile  
à moteur  
diesel

Pas encore annoncée.

Heat treatment

Technology of heat treatment.

Shipbuilding

Lectures and practical training in:  
applied ship dynamics and ship  
calculation; basic design, hull design  
and outfitting design; drawing and  
moulding plan; hull construction,  
welding and outfitting processes; marine  
engine and marine electricity; production  
management; shipyard practices;  
shipbuilding processes; test and sea-  
trial; observation tours.

Welding  
engineering

Materials and welding metallurgy; welding  
technology and fabrication; quality  
assurance in welding construction; design  
of welded constructions.

Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Hino Motors, Ltd. en collaboration avec JIDA, P.O. Box 216 Mitsui Building 2-1 Nishi Shinjuku Shinjuku-ku, Tokyo 160 Japon	14 Janvier 1981 2-5 mois	Qualifications professionnelles. Français	-	A arranger
Nagoya Municipal Industrial Research Institute in collaboration with Japan International Co-operation Agency (JICA), P.O. Box 216 Mitsui Building 2-1 Nishi Shinjuku Shinjuku-ku, Tokyo 160 Japan	15 January 1981 6 months	Professional qualification. English	-	To be arranged
Ship Bureau, Ministry of Transport in collaboration with Japan International Co-operation Agency (JICA), P.O. Box 216 Mitsui Building 2-1 Nishi Shinjuku Shinjuku-ku, Tokyo 160 Japan	8 January 1981 12 months	Professional qualification. English	-	To be arranged
Instituto de Soldadura Departamento de Investigação e Desenvolvimento Rua Tomás de Figueiredo 16A 1500 Lisboa, Portugal	1 October 1981 and 1982 6 months	Degree in mechanical engineering. Portuguese	May	Portuguese escudos 72,000

MECHANICAL AND METALWORKING INDUSTRIES (Cont'd)

Course or Seminar    General description

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Corrosion  
monitoring

Detection and measurement of corrosion  
in high capital cost process plant.

Boatbuilding

Practical aspects of building and  
maintaining boats up to 30 metres in  
length in timber, glass reinforced  
plastics, steel or concrete. The course  
includes design aspects and the ancillary  
skills required in boatbuilding.

Ultrasonic  
testing

To cover the practice and theory of  
ultrasonic non-destructive testing as  
applied to welded fabrications, with  
consideration of castings, forgings  
and materials.

Welding  
technology  
and inspection

Design, metallurgical processes, and  
inspection aspects of welds. Practical  
case study work.



Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Corrosion Monitoring Consultancy - CMC St. Pirans Denchworth Road Wantage Oxon, OX12 9AU United Kingdom	To be arranged	Professional qualification. English	-	To be arranged
International Boat-building Training Centre, Harbour Road Oulton Broad Lowestoft, Suffolk United Kingdom	Throughout year 1 year	Professional qualification. English	-	To be arranged
Scottish School of Non-Destructive Testing, Paisley College, High Street Paisley PA1 2BE United Kingdom	5 January and 13 April 1981 To be arranged	Professional qualification. English	-	£520
Scottish School of Non-Destructive Testing, Paisley College, High Street Paisley PA1 2BE United Kingdom	June 1981 To be arranged	Professional qualification and experience of the welding industry. English	-	£140

**METALLURGICAL INDUSTRIES  
INDUSTRIE METALLURGIQUE  
INDUSTRIAS METALURGICAS**

<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>
Acería	Tiene por finalidad suministrar los conocimientos teóricos fundamentales relacionados con los diferentes procesos de aceración. Para ello se desarrollará un módulo de "Fundamentos teóricos" y otro de "Tecnología de la elaboración del acero", en el que se analizarán con un criterio científico-técnico la operativa de los mismos.	Instituto Argentino de Siderurgia Carlos María Della Paolera 226 1104 Buenos Aires Argentina	Julio 1981 10 meses	Título universitario. Español	-	\$US 2,500
Siderurgia	Destinado a los profesionales que deseen capacitarse en siderurgia, para luego desempeñarse en esa industria. Comprende teoría y práctica, a desarrollar en cinco módulos: Ciencia básica, Reducción, Aceración, Laminación, Conocimientos generales. La práctica será realizada en distintas plantas siderúrgicas al término del módulo de teoría.	Instituto Argentino de Siderurgia Pje. Carlos María Della Paolera 226 1104 Buenos Aires Argentina	Mar. J 1981 10 meses	Título universitario. Español	-	\$US 10,000
Minéralogie	Méthodes de séparation et d'identification des minéraux ; traitement des minerais ; techniques d'investigations utilisées dans les études de traitement des minerais ; examens minéralogiques ; essais minéralogiques et métallurgiques ; analyses chimiques.	Laboratoire de Traitement des Minerais de l'Université Catholique de Louvain Bâtiment Reaumur Place Ste Barbe 2 1348 Louvain La Neuve Belgique	15 septembre chaque année 3 1/2 mois	Ingénieur des mines et métallurgie. Français, anglais	-	Bf. 30,000 par mois
Fonderie	Moulage ; noyautage ; masselottage ; fusion ; coulée.	S.A. Picart et Beer Avenue Louise 534 Boîte No. 4 1050 Bruxelles Belgique	Octobre 6 mois	Ingénieur civil. Français	-	Bf. 20,000 par mois

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
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) Ufficio Cooperazione Tecnica Internazionale Via Torino 98, Rome Italy (Rome and other towns in Italy)	19 January 1981 5 months	Advanced technical education or university degree and 5 years experience. Italian, French, English, Spanish	-	To be arranged
Electrical steel making	Lectures and practical training in: introduction of current situation of electrical steel making in Japan; management of electrical furnace, dissolution method, material control; observation tours.	Government Industrial Research Institute Nagoya and Daido Special Steel Corporation in collaboration with Japan International Co-operation Agency (JICA), P.O. Box 216 , Mitsui Building, 2-1 Nishi Shinjuku, Shinjuku-ku, Tokyo 160, Japan	15 January 1981 4 months	Professional qualification. English	-	To be arranged
Sidérurgie	Lux-Development organise des cours sur : entretien en usine sidérurgique ; techniques de la maintenance en sidérurgie ; atelier d'entretien général ; les fonctions du chef de service ; atelier de constructions métalliques ; contrôle de la qualité des produits sidérurgiques ; gestion des énergies dans une usine sidérurgique intégrée ; gestion commerciale de la production dans une entreprise sidérurgique ; expéditions ; préparation des matières premières en sidérurgie et en cimenterie ; utilisation d'équipements spéciaux de haut fourneau ; ingénierie et modernisation d'installations de hauts fourneaux ; coulée continue moderne ; travaux analytiques exécutés dans un laboratoire sidérurgique.	Lux-Development 7, rue Alcide de Gasperi, Luxembourg	Janvier - décembre 2-8 semaines	Qualifications professionnelles. Français, anglais ou allemand	-	Bf.25,000-100,000

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

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Cours général d'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, e.a. ; les films en matière plastique et les complexes ; les sacs industriels ; les sollicitations lors du transport essais sur emballages ; méthodes d'essai : 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. L'Institut organise aussi des cours de spécialisation de 2 jours à 1 mois.	Institut Belge de l'Emballage rue Picard 15 1020 Bruxelles Belgique	15 août 1981 2 mois	Degré universitaire. Français ou anglais	-	A convenir
Packaging	Short courses on various aspects of packaging design and technology.	Hong Kong Packaging Council and Hong Kong Polytechnic 21A Ma tau Wei Road 12/F Hunghom, Kowloon Hong Kong	To be arranged	In-service factory staff, shipping, packaging and production control, personnel, packaging designers and manufacturers. Chinese and English	-	To be arranged
Packaging engineering	Course limited to packaging for transport (transport packaging) for industrial and agricultural goods rather than consumer packaging, and will broadly cover such topics as marketing and distribution; packaging planning and design; packaging for transport; unit-load system; packaging materials, methods and machinery; materials handling, package testing and quality control; standardization in packaging, etc. Course consists of lectures, discussions and visits.	Asian Productivity Organization 4-14, Akasaka 8-chome Minato-ku, Tokyo 107 Japan (Hong Kong, Stage I) (Japan, Stage II)	To be decided 4 weeks (tentative)	Managers of packaging industries, members of industrial research and packaging institutions and consultants at National Productivity Organizations or similar institutions, <u>of APO member countries.</u> English	-	\$US 100
Packaging engineering	Details to be announced	Industrial Products Research Institute in collaboration with Japan International Cooperation Agency (JICA), P.O. Box 216, Mitsui Building, 2-1 Nishi, Shinjuku, Shinjuku-ku, Tokyo 160, Japan	8 January 1981 10 weeks	Professional qualification. English	-	To be arranged

**PRINTING INDUSTRIES  
INDUSTRIES GRAPHIQUES  
INDUSTRIAS GRAFICAS**

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Offset printing	Training courses specially designed for developing countries.	Printpromotion GMBH P.O. Box 71 01 09 6000 Frankfurt/M 71 Federal Republic of Germany (Biberach, FRG)	September 11 months	Basic knowledge of printing. English	August	DM 12,400
Photo composing	Training courses specially designed for developing countries.	Printpromotion GMBH P.O. Box 71 01 09 6000 Frankfurt/M 71 Federal Republic of Germany (Biberach, FRG)	Spring 5 months	Basic knowledge of composing. English	December	DM 7,900
Reproduction	Training courses specially organised for developing countries.	Printpromotion GMBH P.O. Box 71 01 09 6000 Frankfurt/M 71 Federal Republic of Germany (Biberach, FRG)	September 11 months	Basic knowledge of photography. English	May	DM 12,400

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

Pulp and paper	Practical and theoretical training on pulp and paper technology. Syllabus includes fibrous materials for papermaking; chemistry of cellulose; hemicellulose and lignin; principles and processing of pulp and paper.	Forest Research Institute P.O. New Forest Dehra Dun (U.P.) India	15 July 1981 6 months	Degree in science or engineering. English	15 April 1981	To be arranged
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PULP AND PAPER INDUSTRIES (Cont'd)

Course or Seminar    General description

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Pulp and paper technology	(1) Certificate course of six months. (2) Diploma course of one year.
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Paper and fibre boards including hard and insulation boards	Processing paper board using agro-industrial residues. Processing hard boards from different materials. Evaluation of process and product.
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Pulp and paper technology	Theoretical and practical aspects of pulp and paper production; problem solving exercises in wood chemistry, pulp technology and paper technology. Laboratory exercises.
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Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Forest Research Institute P.O. New Forest Dehra Dun (U.P.) India	15 July (6 months) 1 August (1 year)	Degree in science or engineering. English Degree in chemical engineering. English	(1) 15 May (2) 1 June	(1) Rs 200 caution money Rs 150 (2) Rs 200 caution money Rs 150 fee Rs 50 Exam. fees
Cellulose Pulp and Board Division Regional Research Laboratory, Jammu-Tawi, India	April and November 1981 4-6 weeks	Science or engineering degree. English	-	Rs 5,000 (tuition only)
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 1981 and 1982 10 months	B.Sc. or equivalent; some practical experience in pulp and paper industries. English	-	-

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Pulp and paper technology	Paper and pulp testing; pulping technology; paper making technology; organisation of research; wastepaper recycling; microbiological aspects of paper making; water and effluent treatment; energy conservation; technical service; automation and computer control.	Paper and Board Division of Pira Randalls Road Leatherhead Surrey KT22 7RU United Kingdom	To be arranged	Professional qualification. English	-	To be arranged
<b>TEXTILE INDUSTRIES INDUSTRIE TEXTILE INDUSTRIAS TEXTILES</b>						
Quality control in textiles	Short courses covering modern testing methods in: cotton spinning; weaving; knitting; dyeing and finishing.	Textile Consolidation Fund, Quality Control Centre, Gamila Buhreid Street, El Siouf Alexandria, Egypt	Variable 2 weeks	Professional textile experience. Arabic (courses can also be arranged in English)	-	To be arranged
Textiles	Technical training and courses on: physical testing (fibres, yarns, fabrics); chemical testing (dye-stuffs, chemicals, auxiliaries, etc.); interpretation of physical tests (including statistical methods); spinning technology; weaving technology; chemical finishing and management controls in textile mills for product-mix planning and marketing (raw material quality and price, productivity and quality in manufacture, fuel or power economy, personnel, financial structure and working capital).	Ahmedabad Textile Industry's Research Association Polytechnic P.O. Ahmedabad 380 015 India	July to August 15-30 days	Professional qualification. English	-	To be arranged



TEXTILE INDUSTRIES (Cont'd)

Course or Seminar    General description

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Textile industry	Weaving technology and laboratory; spinning and laboratory; printing, finishing and laboratory; textile chemistry, dyeing and laboratory; hosiery technology, textile technology laboratory.
Technical machinery industries	Lectures: general introduction on textile machinery industry in Japan; weaving machinery; spinning machinery; dyeing machinery; preparatory machinery; observation: weaving machinery maker; spinning machinery maker; dyeing machinery maker; preparatory machinery maker; field trip.
Textile industry	Spinning, weaving including preparation yarn and piece dyeing, finishing, printing, testing.
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.

Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
SIOI, Segretariato Permanente per la Cooperazione Tecnica Internazionale, Via del Tritone n. 46 00187 Rome, Italy	February 1981 5 months	Professional qualification. English, French Spanish	January 1981	To be arranged
Japan Textile Machinery Manufactures Association in collaboration with Japan International Co-operation Agency (JICA), P.O. Box 216 Mitsui Building 2-1 Nishi Shinjuku Shirajuku-ku, Tokyo 160 Japan	8 January 1981 3 months	Professional qualification. English	-	To be arranged
International Consulting Division of Royal Textile Mills Nijverdal-ten Cate P.O. Box 58 Almelo, Netherlands	Throughout year (except July) 4-12 weeks	Graduate of technical school. English/German	-	To be arranged
Royal Ten Cate Group in collaboration with the Textile Engineering College, P.O. Box 1075 7500 BB Enschede Netherlands	October 5-6 months	Production managers and technical staff; minimum secondary level schooling, 2 years experience in textile industry. English	August	To be arranged

TEXTILE INDUSTRIES (Cont'd)

Course or Seminar    General description

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Textiles	Short courses on: textile production, planning and control; basic work study in textile industry; printing and dyeing of polyester and polyester cellulose blends; training of weaving shed supervisors; training of weaving and weaving fitter's instructors; training of spinning instructors; quality control (spinning); quality control and testing in wet processing; designing and product development in textiles.
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.
Cotton knitting - technology and quality control	Basic statistics; general fibre technology, fibre structure, fibre properties in relation to end-use, fibre identification; testing and preparation of cotton yarns for knitting; range of knitted fabrics; knitting technology; testing of fabric knitted from cotton; evaluation of end product; fabric finishing; manufacture of garments knitted from cotton products; garment testing; fabric and garment faults.
Sizing of spun yarns	Theory and practice of yarn preparation for weaving (warping, beaming, size constituents, size application, control systems, mechanical problems, evaluation and fault analysis at subsequent stages of processing).

Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
T.I.R.D.C., Karachi Pakistan	Throughout year 6-24 days	Professional qualification in textile field. English	-	To be arranged
International Institute for Cotton Kingston Road Didsbury Manchester M20 8RD United Kingdom (Bolton Institute of Technology)	April 1981 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	January 1981	£400 - £475
International Institute for Cotton Kingston Road Didsbury Manchester M20 8RD United Kingdom (School of Textile and Knitwear Technology of the Leicester Polytechnic)	June 1981 6 weeks	Professional education, combined with several years practical experience in textile industry. English	March 1981	£475-550
The International Institute for Cotton Kingston Road Didsbury, Manchester M20 8RD, United Kingdom (Bolton Institute of Technology)	April 1981 8 weeks	Technical qualifications in textile technology. English	January 1981	£450 - £525

## 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
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.	The International Institute for Cotton Kingston Road Didsbury Manchester M20 8RD United Kingdom	May 1981 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 1981	£650-750
Textiles/textile technology	Cotton and synthetic fibres, yarns and fabrics - their production, structure, properties and end-uses; textile processing and machinery for spinning, yarn texturing, weaving, warp knitting, nonwovens production, dyeing, printing, finishing, and making-up; quality control; physical and chemical testing; design of textile products for end-use; industrial textiles; energy conservation and auditing; working environment hazards; water and effluent treatment; technical management; investment appraisal; marketing of textile products.	Shirley Institute Didsbury, Manchester M20 8RX, United Kingdom	Throughout year 1 day to 6 months	Vary according to course. English	-	£50 - £150 per day depending on course

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

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
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## WOOD PROCESSING AND WOOD PRODUCTS INDUSTRIES

### Course or Seminar    General description

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Small-scale forest industries	The seminar will provide detailed information on the FAO portfolio of small-scale forest industries and on recent developments in the field of mechanical forest industries. It will also acquaint the participants with the methodology of all phases of industrial investment studies; prepare them to negotiate on industrial projects with consultants, banks and equipment suppliers.
Wood-based panel technology	Wood as raw-material; wood machining; maintenance; quality control; wood-based panel technology and equipment; industrial economics; marketing and utilization.
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).

Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
National Board of Vocational Education Forestry Training Programme for Developing Countries Hakaniemenkatu 2 00530 Helsinki 53 Finland (Kotka College of Forestry and Forest Industry)	22 May 1981 3 weeks	Professional qualification. Participants from Africa and Near East. English	-	-
National Board of Vocational Education Forestry Training Programme for Developing Countries Hakaniemenkatu 2 00530 Helsinki 53 Finland (Kotka College of Forestry and forest Industry)	17 August 1981 4 months	Technical education in forestry or wood-working and practical experience in field. English	-	-
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	Executives with completed training and practical experience. German	-	To be arranged

WOOD PROCESSING AND WOOD PRODUCTS INDUSTRIES

Course or Seminar    General description

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Seasoning and preservation of timber	Moisture content determination, wood-water relationship; storage and stacking of timber; design and operation of seasoning kilns; seasoning of bamboo; behaviour of seasoned timber in use; natural durability of timber; agencies responsible for destruction of timber; preservatives and preservation processes; preparation of timber for treatment; specification and operation of preservation plants.
Wood working and saw-milling	Elements of timber technology; wood machining; wood processing principles; production planning; work-study; quality control; plan lay-out; timber yard management.
Timber studies	Wood and timber technology including an advanced study of one area of specialisation including sawmill management and timber preservation.
Timber structures and technology	Basic properties of timber; utilization of timber; structural analysis of components; the building process with timber; protection by design; biodeterioration and preservation of timber.



Organiser; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Forest Research Institute, P.O. New Forest, Dehra Dun (U.P.), India	1 April 1981 6 months	Post-graduate degree in physics, chemistry or degree in engineering. English	1 January 1981	To be arranged
Forest Research Institute and Colleges, P.O. New Forest, Dehra Dun (U.P.), India	15 October 1981 16 weeks	Degree in science or engineering. English	15 July 1981	To be arranged
Buckinghamshire College of Higher Education, School of Furniture and Timber Queen Alexandra Road High Wycombe, Bucks. United Kingdom	September 1981 and 1982 1 year	University entrance. English	-	About £2,500
Department of Civil Engineering Imperial College University of London London SW7, United Kingdom	October 1981 12 months	University degree, or suitable equivalent experience, in civil engineering, building, architecture, timber technology or forestry. English	1 May 1981	£3,000

TRAINING OPPORTUNITIES OFFERED BY INSTITUTIONS OTHER THAN UNIDO  
 POSSIBILITES DE FORMATION OFFERTES PAR DES INSTITUTIONS AUTRES QUE L'ONUDI  
 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
Micro-informatique	Conception et réalisation de systèmes basés sur les microprocesseurs 8 et 16 bits ; conception et réalisation de périphériques pour micro-ordinateurs ; interface entre le monde extérieur et les micro-systèmes ; programmation en langage machine et langages évolués (Basic, Fortran, Pascal) de micro-ordinateurs et micro-systèmes.	C.R.I.F. Rue du Chéra, 200 B-4000 Liège Belgique	A arranger 5 mois	Qualification d'ingénieur ou gradué avec des connaissances en informatique ou électronique. Français, anglais	-	\$US 5,000
Analyste d'informatique de gestion	Ce cours couvre l'ensemble des domaines de connaissances nécessaires à l'utilisation de l'informatique dans l'entreprise et dans l'administration.	CEPIA, Domaine de Voluceau B.P. 105, Rocquencourt 78150 Le Chesnay, France	Septembre 3 mois	Qualifications professionnelles. Français	Fin juin	A arranger
L'informatique des organisations de gestion	Le programme des cours, travaux pratiques, travaux dirigés et autres activités est orienté vers la formation de formateurs, couvre l'ensemble des domaines de l'informatique des organisations.	CEPIA, Domaine de Voluceau B.P. 105, Rocquencourt 78150 Le Chesnay France	Mi-janvier 6 mois	Qualifications professionnelles. Français	-	A arranger
Mise en place, développement et contrôle des systèmes de gestion informatisés	Analyse ; perfectionnements techniques, tendances actuelles en matériel et en logiciel micro-informatique, réseaux, bases de données ; introduction aux systèmes d'information, étude de réalisations pilotes ; conférences de synthèse ; introduction à l'informatique en milieu industriel.	CEPIA, Domaine de Voluceau B.P. 105, Rocquencourt 78150 Le Chesnay France	Septembre 3 mois	Qualifications professionnelles. Français	Fin juin	A arranger

AUTOMATION AND DATA PROCESSING (Cont'd)

Course or Seminar    General description

Programmeur analyste de gestion	Initiation à l'informatique et à la logique de programmation ; langages : COBOL - GAP II ; analyse fonctionnelle ; analyse organique ; gestion comptable ; économie d'entreprise ; anglais informatique ; mathématiques appliquées.
Programmeur COBOL ANS	Initiation à l'informatique et à la logique de programmation ; principes de base du COBOL ; description des données ; divisions d'un programme COBOL ; étude des ordres COBOL ; sous-programmes externes ; exploitation des tables ; modules COPY ; bibliothèques ; programmation avec fichiers SAM - ISAM.
Informatique et gestion	Formation de concepteurs de systèmes de gestion (informatique, gestion et organisation).
Automation, informatique et régulation dans les unités industrielles	L'Institut organise dix-neuf cours de courte durée.
Basic systems analysis	Methods of processing data for accounting, statistical and managerial purposes; systems analysis and design. (Training package on basic systems analysis developed by the British National Computing Centre (NCC).)

Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
E.P.S.I. 43 rue de Trévis 75009 Paris France	Septembre 9 mois	Qualifications professionnelles. Français	-	A arranger
E.P.S.I. 43 rue de Trévis 75009 Paris France	Janvier, mars, mai, septembre, novembre 14 semaines	Qualifications professionnelles. Français	-	A arranger
INIG 37, quai de Grenelle 75015 Paris France	Octobre 10 mois	Diplômés du 2e cycle universitaire ou Grandes Ecoles, cadres. Français	Septembre	F 11,000
Institut de Régulation et Automation Guy Berthier, chemin des Moines, 13644 Arles France	Toute l'année	Qualifications professionnelles. Français	-	A arranger
The Hong Kong Productivity Centre Sincere Building 173 Des Voeux Road Central, Hong Kong	April and October 1981 4 weeks	A knowledge of typical business procedures and management. English	-	\$HK 4,000

Course or Seminar	General description	Organizer; Venue	Commencing date, Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Computer in management and industry	The International Computer Education and Information Centre (SZAMOK) organizes 15 short courses on: management systems; effective data base design; data modelling; structured programme design by Warnier's method; structured programme design by Jackson's method; advanced programming management methods; efficient structured programming in COBOL; networks for distributed processing; hardware and software architectures for distributed processing; structured systems design; management of computer information system development; advanced macro-assembler programming; concurrent programming; software development for microcomputers; and distributed data processing.	SZAMOK, Szakasits Arpád u. 68 Budapest XI Hungary	March to November 1981 5 days	Professional qualification. 12 courses require good knowledge of English and 3 Russian.	-	\$US 800 per course
Low cost automation applied to pneumatics, oil hydraulics and mechanisation	Pneumatics; oil hydraulics; mechanisation.	Central Institute of Tool Design Balanagar, Hyderabad 500 037 (A.P.) India	12 November 1981 and 7 January 1982 4 weeks	Diploma in engineering and work experience. English	-	\$US 500
Management information systems	Systems approach and cybernetics; management and organization; organizational objectives and strategies; role of information in decision making for planning and control; role of managers in MIS; role of computers; computer hardware and software; data base concepts; MIS feasibility study; functional analysis; MIS master plan; MIS design and developments; MIS implementation; MIS project management.	National Institute for Training in Industrial Engineering (NITIE), P.O., Vikar Lake, Bombay 400 087, India	7 December 1981 2 weeks	Senior staff concerned with management information systems. English	1 October 1981	\$US 500
Industrial technology	Courses on: resource management using computers; Fortran programming for data processing; Fortran programming for scientific applications; instrumentation for technicians; integrated circuits and applications.	Perarignar Anna University of Technology Madras 600 025 India	Variable 2-9 weeks	Professional degree. English	-	To be arranged

Course or Seminar	General description	Organizer; Venue
Information storage and retrieval systems (ISRS)	Fundamentals; tools and techniques for information handling; organization of retrieval files and information transfer; modern information systems; information and communication; study visits; practical work.	Small Industry Extension Training (SIET) Institute Yousufguda Hyderabad 500045 India
Systems analysis for automatic data processing	A.D.P. applications in various industrial areas in Israel will be presented in order to demonstrate their efficient implementation under conditions prevailing in a developing country. Background lectures will also be given and discussions will take place on systems analysis; information systems; use of techniques of scientific management; application of A.D.P.	Israel Institute of Productivity 4 Henrietta Szold St. Tel Aviv Israel
Computer technology	Advanced study of computer software and techniques and practice in programming, comprising advanced COBOL programming, advanced FORTRAN programming, applications and practice.	The Asia Electronics Union, Uchisaiwai Bldg, 1-4-2 Uchisaiwai-cho Chiyoda-ku Tokyo 100, Japan
Computer applications	Introduction; country paper presentations; systems concepts; applications of computers in: manufacturing, banks, finance, business communications, airlines, service sectors, public utilities, education.	Asian Productivity Organization, 4-14 Akasaka 8-chome Minato-ku, Tokyo 107 Japan (Thailand)
Low cost automation training course	Introduction to low cost automation LCA systems; management and social aspects of LCA; components of LCA; standard symbols and notation; design of LCA circuits; applications of LCA; developing and implementing LCA training courses for engineers; development of LCA in Japan and international comparisons; practical applications of LCA; how to introduce LCA, and its effects; setting up LCA centres in member countries.	Asian Productivity Organization, 4-14 Akasaka 8-chome Minato-ku, Tokyo 107 Japan  Philippines (Stage I) Japan (Stage II)

Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
October 1981 10 weeks	University degree and library experience. English	-	\$US 1,600 approx.
November 12 weeks	Professional qualification. English	1 October	To be arranged
18 Sept. 3 months	Professional education. English	August	-
Date in 1982 to be decided 2 weeks (tentative)	Senior consultants of National Productivity Organizations or similar institutions and senior managers of organizations using computers, of <u>APO member countries</u> . English	-	\$US 50
Date in 1982 to be decided 5 weeks (tentative)	Consultants and trainers at National Productivity Organizations or similar institutions who will be in a position to develop and implement training in LCA, of <u>APO member countries</u> . English	3 months before commencement	\$US 200

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Low cost automation	Application of low cost automation as a tool for upgrading production techniques; demonstration projects in the low cost automation laboratory and actual inplant assignments in various industries; how and where low cost factory automation can help; how automation can be achieved without computerizing or adapting "highcharge" electronic device; how to install suitable "low cost" automation equipment and inexpensive standard electro-pneumatic and other mechanical devices; production management subjects with emphasis on quantitative approaches to solving production management problems and on the economic aspects of adaptive technology like low cost automation for improving production of factory operation.	Institute for Small Scale Industries Virata Hall E. Jacinto St. UP Campus, Diliman Quezon City Philippines	August 1981 16 weeks	Holders of Bachelors Degree in mechanical, electrical, chemical and industrial engineering or their equivalent. English	3 months before starting date	\$US 1,400
Informatics and applied mathematics for research	The course is designed largely for developing countries to train participants to acquire the knowledge and techniques they need in practicing a skilled activity in scientific and practical applications in the following branches: informatics, operations research, mathematics for scientific research, mathematics for social and economic sciences.	University of Bucharest, Computing Centre, (under the sponsorship of UNESCO) Academy Str. 14-70109 Bucharest, sector I Romania	1 October 1981 12 months	University degree. English	-	\$US 2,000
Gestión de la informática	El entorno de la informática y la responsabilidad del usuario; el desarrollo técnico de la informática; el control y la dirección de la informática.	Escuela de Organización Industrial Gregorio del Amo 6 Madrid-3, España	Octubre 9 meses	Título universitario. Español	-	A convenir
Computers in management 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 May 1981 6 weeks	University degree. English	1 March 1981	\$US 3,600



Course or Seminar    General description

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Energy  
conservation

Training workshop on energy conservation in silicate industry (ceramics, building materials, glass).

Energy  
management

Lectures, discussions, case studies, plant observations and in-plant studies covering: total energy concept; energy sources - present situation and future prospects; energy feasibility studies; energy management policy; fuels and combustion; heat utilization and heat loss; feed water and steam generation; operational measures for fuel efficiency; thermal insulation; refractories; heat conductivity; maintenance of equipment; waste heat recovery; instrumentation including automatic controls and calibration; economy-analysis for decision making; research for new energy sources; energy and the environment.

Energy  
development

Short courses on wide range of subjects connected with off-shore oil drilling and production technology.

Energy  
production

Wide range of courses on oil and gas production technology.

ENERGY  
ENERGIE  
ENERGIA

Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
UNIDO-Czechoslovakia Joint Programme Zborovská 1 301 34 Pilsen Czechoslovakia	6 April 1981 1 week	Professional qualification. English	-	To be arranged
Asian Productivity Organization, 4-14 Akasaka 8-chome Minato-ku, Tokyo 107 Japan (Japan (Stage I) Republic of Korea (Stage II) 1982 courses tentatively in India and Japan)	To be decided 1981 and 1982 6 weeks (tentative)	Technical consultants at National Productivity Organizations, and plant engineers or fuel technologists concerned with energy management, <u>of APO member countries.</u> English	-	\$US 200
ISOT A/S and CO, International School of Technology, Prof. Kohtav. 108 1320 Stabekk, Norway	To be arranged	Professional qualification. English or Norwegian	-	To be arranged
Petroleum and Gas Institute P.O. Box 10 39, Bucuresti Street Ploiesti, Romania	To be arranged 3 weeks- 11 months	Professional qualifications. English or French	-	To be arranged

ENERGY (Cont'd)

Course or Seminar    General description

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Energy  
production

All branches of oil and gas production industry.

Energy  
development

Short courses covering wide range of subjects relating to off-shore oil drilling and related technology.

Energy  
production

Offshore engineering; offshore materials and corrosion engineering; oil drilling technology; offshore survival.

Engineering  
industries

Lectures, demonstrations, research, and visits to national energy facilities, attendance at energy conferences and personal directed investigations in production of energy from non-conventional sources photovoltaics, biomass geothermal, wind, biomass and direct solar.

Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Staff Training Centre of the Mining, Oil and Geology Ministry Strada Justitiei 55 Bucharest 70661 Romania	To be arranged	Engineering degree and industrial experience. English	-	To be arranged
PITB-Offshore Training Centre Forties Road Montrose Angus DD10 9ET United Kingdom	To be arranged 1-20 days	Professional qualification. English	-	£60-800
School of Mechanical and Offshore Engineering, Robert Gordon's Institute of Technology Schoolhill, Aberdeen AB9 1FR, United Kingdom	To be arranged 1 week - 9 months	Professional qualification. English	-	£20-3,000
Office of International Programs Engineering Experiment Station, Georgia Institute of Technology, Atlanta Georgia, 30332 United States of America	15 January and 1 June 1981 14 January and 1 June 1982 To be arranged	Professional qualification. English	-	\$US 4,000-5,500

Course or Seminar    General description

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Hidrogeología general y aplicada	Hidraulica subterránea; metodología de los estudios hidrogeológicos regionales; trazadores aplicados a hidrogeología; geofísica aplicada a hidrogeología; hidraulica de pozos; la polución de los acuíferos y los desechos industriales; problemas hidrogeológicos relacionados a selección de sitios industriales; hidrogeoquímica de las aguas subterráneas.
Protection of the environment	Short courses on wide range of environmental subjects, including: preventive maintenance of water district systems; air quality monitoring; solid waste management; unit processes in waste water treatment; analytical instrumentation in environmental engineering.
Environmental engineering	Environmental problems in member countries; experience of Japan in pollution control; plant level techniques for pollution control; industrial sector-wise pollution problems and prevention; raw material conservation and waste re-cycling; legislative measures for environmental pollution control; proposals for adapting pollution control techniques in member countries.
Environmental science and technology	Theoretical and practical training in laboratories covering environmental problems encountered in engineering planning and design and environmental control activities.

ENVIRONMENT  
 ENVIRONNEMENT  
MEDIO AMBIENTE

Organizer; V nue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Instituto de Pesquisas Tecnológicas do Estado de São Paulo São Paulo-Capital Brasil	12 enero 1981 12 semanas	- Español	-	\$US 1,000
National Environmental Engineering Research Institute, Nagpur 440 020, India	Throughout year. Duration to be arranged	Engineering or chemistry degree. English	-	To be arranged
Asian Productivity Organization, 4-14 Akasaka 8-chome Minato-ku, Tokyo 107 Japan	To be decided 4 weeks (tentative)	Technical consultants at National Productivity Organizations or similar institutions, plant managers and engineers who are concerned with diagnosis and guidance in the field of environmental protection, <u>of APO member countries.</u> English	-	\$US 100
International Institute for Hydraulic and Environmental Engineering (I.H.E.) Gude delft 95 P.O. Box 3015 Delft Netherlands	Mid-October each year. 11 months	Engineers and scientists. English	-	To be arranged

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Bases scientifiques de la protection de l'air	Bases mathématiques et physiques ; météorologie et climatologie de la pollution atmosphérique ; chimie de la pollution atmosphérique ; sources de pollution ; effets de la pollution atmosphérique ; principes de lutte, aspects économiques et sociaux ; environnement atmosphérique et autres aspects de la pollution du milieu.	Ecole Polytechnique Fédérale de Lausanne Suisse, avec le concours de l'OMM et de l'OMS	2 mars 1981 7 mois	Qualifications professionnelles. Français	-	-
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	September 1981 and 1982 3-6 months	Degree or equivalent in science, preferably biology or chemistry. English	-	To be arranged
Water quality control and management	Technical and economic aspects of pollution together with a methodology relevant to present day practice.	Middlesex Polytechnic Queensway, Enfield Middlesex EN3 4SF United Kingdom	January 1981 12 weeks	Professional qualification. English	-	To be arranged
Water problems and industrial development	Special courses designed to meet the identified training needs of organizations in following fields: supervisor and technician development; water law, finance and administration; water sanitation management; water quality management; water distribution operation management; water sector - manpower development; training officer training and development.	National Water Council Overseas Development Group, James House 27 London Road Newbury, Berkshire RG13 1JL, United Kingdom	To be arranged 6-12 weeks	Professional qualification. English	-	To be arranged

Course or Seminar	General description	Organizer; Venue
Water and waste engineering for developing countries	The technology and management of works for the provision of water supplies and the improvement of sanitation for urban and rural areas of developing countries, including health, engineering, sociological and organizational factors. Particular emphasis on operation and maintenance.	WEDC Group Civil Engineering Department University of Technology, Loughborough Leics, LE11 3TU United Kingdom
Water and waste engineering for developing countries	Water resources management; water supply engineering; waste and environmental control; wastewater treatment and disposal; finance and administration.	WEDC Group Civil Engineering Department University of Technology, Loughborough Leics, LE11 3TU United Kingdom
<b>INDUSTRIAL DESIGN DESIGN INDUSTRIES <u>DESIGN INDUSTRIAL</u></b>		
Design of die-casting dies	Theory and design exercises on die-casting dies; terminology, machines, types, design details, die casting alloys, case studies: elimination of casting defects, die steels for die casting dies, etc.	Central Institute of Tool Design Balaganar Hyderabad 500 037 (A.P.) India
Design of gauges	Theory and design of various types of gauges, viz. plain, taper and thread ring gauges.	Central Institute of Tool Design, Balaganar Hyderabad 500 037 (A.P.) India



Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
19 April 1981 and 18 April 1982 3 months	Graduate or equivalent with considerable practical experience in a senior professional appointment in a developing country. English	-	£1,500 (1981) £1,600 (1982)
1 October 1981 1 year	Good honours degree and at least 2 years practical experience. English	-	£4,500 (approx.)
August 1981 10 weeks )	Degree in mechanical engineering. English	June	Rs 6,000
4 June 1981 4 weeks	Degree in mechanical engineering with one year experience. English	-	Rs 2,400

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
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	October 1981 11 weeks	Degree in mechanical engineering with one year's experience. English	August	Rs 6,600
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	January 1981 11 weeks	Degree in mechanical engineering. English	November 1980	Rs 6,600
Tool design	Course for design draughtsmen covers; design practice, metrology, material specification, testing and heat treatment, process planning, design of press tools, moulds for plastics and die casting dies, jigs and fixtures, cutting tools and gauges, specialization in press tools or moulds for plastics and die casting dies, or tooling for machining process (including special cutting tools or gauges and advanced jigs and fixtures).	Central Institute of Tool Design Balanagar Hyderabad 500 037 (A.P.) India	August 1981 1 year	Diploma in mechanical engineering. English	May	Rs 12,000
Plant engineering	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 plant 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. 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. 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.	Istituto per la Ricostruzione Industriale (IRI), Ufficio Cooperazione Tecnica Internazionale Via Liguria 40 00187 Rome, Italy (Rome and other towns in Italy)	19 January 1981 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; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Product design	Industrial design case studies from member countries; role of product design technology in industry; design management; design technology transfer; design projects by participants in groups.	Asian Productivity Organization, 4-14 Akasaka 8-chome Minato-ku, Tokyo 107 Japan (Hong Kong)	To be decided 2 weeks (tentative)	Product designers and consultants concerned with product design at National Productivity Organizations or similar institutions, of APO member countries. English	-	\$US 50
Die making and machine tools	Details of course not yet available.	Kyoto Skill Development Centre of Employment Promotion Project Corporation Kyoto, Japan	January 12 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	This Austria-WIPO training course will focus on the following main subjects: introduction to industrial property; 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 and the World Intellectual Property Organization A-1014 Vienna Kohlmarkt 8-10 Austria CH-1211 Geneva 20 34, chemin des Colombettes, Switzerland (Diplomatic Academy, Vienna)	Probably June 1981 4 weeks	The training programme has been designed to meet the needs of experts from developing countries who are: patent office officials with a technical background; other officials concerned with technological decisions; documentalists and information specialists not familiar with patent documentation; technical research workers. English	February 1981	No tuition fee
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INDUSTRIAL INFORMATION AND DOCUMENTATION (Cont'd)

Course or Seminar    General description

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Industrial  
property

Seminar.

Industrial  
property

Practical training in patent  
offices or similar institutions.

Industrial  
property

Study tours which include visits to  
and discussions at industrial property  
offices or institutions.

Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Industrial Property Institute, Patent Office, in collaboration with Japan International Co-operation Agency (JICA) P.O. Box 216, Mitsui Building, 2-1 Nishi, Shinjuku, Shinjuku-ku, Tokyo 160, Japan	5 March 1981 4 weeks	Professional qualification. English	-	To be arranged
WIPO in cooperation with a number of patent offices or institutions dealing with industrial property matters (Bulgaria, Canada, Czechoslovakia, Egypt, France, German Democratic Republic, Germany, Federal Republic of, Hungary, India, Israel, Netherlands, Poland, Spain, Sweden, Switzerland, United Kingdom, United States of America, USSR, European Patent Office (UPO), African Intellectual Property Organization (OAPI) United Republic of Cameroon).	Beginning September 2 weeks to 2 months	Officials working in patents and trademarks nominated by their governments. English, French, Russian	Generally end of January	Nil
WIPO in cooperation with a number of patent offices or institutions dealing with industrial property matters. Patent offices or similar institutions of host countries (Algeria, Belgium, Brazil, France, Guinea-Bissau, Luxembourg, Portugal, Switzerland, African Intellectual Property Organization (OAPI) United Republic of Cameroon))	During the whole year duration of about 1 month	Officials working in patents and trademarks nominated by their governments. English, French, Portuguese, Spanish	Generally end of January	Nil

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Industrial property	Courses of a general or specialized nature on industrial property or related subjects i.e., general introductory courses; patent administration; patent documentation, patent information and examination, trademarks; specialized tasks of patent offices.	WIPO in co-operation with a number of governments or institutions (Australia, Austria, France, Germany, Federal Republic of, Spain, European Patent Office, Andean Group Secretariat, Central American Institute of Public Administration (ICAP), UNDP and the Government of the Soviet Union )	Beginning June 2-4 weeks	Officials working in patents and trademarks nominated by their governments. English, French, Spanish	Generally end of January	Nil

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

Projets industriels	Séminaire comprenant un ensemble d'exposés et d'études de cas sans les différents domaines en relation avec la génération, la sélection et la décision de réalisation de projets industriels : les marchés en amont et en aval, l'intégration des projets dans les plans de développement, les conditions de faisabilité, le financement des projets et les formes d'intervention des pouvoirs publics, les techniques d'organisation et de gestion assurant la viabilité des entreprises. En plus des exposés présentés et des discussions conduites par des ingénieurs et économistes expérimentés du Bureau Gombert, le séminaire comprend des séjours dans des organismes publics et privés belges. Les participants au séminaire sont également assistés dans la constitution d'une documentation personnelle. Le programme précis du séminaire est fixé d'après la formation initiale et l'expérience des participants ainsi que d'après les fonctions qu'ils occupent ou sont appelés à occuper.	Bureau d'Ingénieurs-Conseils GOMBERT chaussée de Charleroi 123a, B-1060 Bruxelles Belgique	A fixer	Niveau universitaire. Français	3 mois avant le début du séminaire	A arranger
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Course or Seminar	General description	Organizer; Venue
<p>Planificación con menciones en:</p> <p>a) planificación y política económica, y</p> <p>b) planificación regional</p>	<p>El curso se divide en tres secciones con los siguientes temas de estudio:</p> <p>a) sección común: contabilidad social, matemáticas, estadística, economía. Análisis y desarrollo, planificación. Política económica, aspectos sociales del desarrollo, proyectos y programas integrados; b) sección planificación y política económica: técnicas y modelos de planificación. Instrumentos de política económica; c) sección planificación regional: organización espacial; planificación regional. Técnicas de análisis; d) ambas menciones industrial.</p>	<p>ILPES con la colaboración de CEPAL. Edificio Naciones Unidas</p> <p>Av. Dag. Hammarskjöld</p> <p>Vitacura, altura 3030</p> <p>Santiago, Chile</p>
<p>Corporate planning and decision making</p>	<p>Problems of implementation and running of short term planning systems. Advanced case study dealing with budgeting problems.</p>	<p>Copenhagen Institute of Technology</p> <p>Gregersensvej</p> <p>DK-2630 Taastrup</p> <p>Denmark</p>
<p>Identification and promotion of industrial projects</p>	<p>Principal sources of ideas for industrial investment opportunities; development and evaluation of these ideas; and planning and implementing a programme of industrial promotion.</p>	<p>Industrial Development Authority</p> <p>Lansdowne House</p> <p>Dublin 4</p> <p>Ireland</p>
<p>Introduction to project appraisal</p>	<p>The course is designed to equip participants with the basic tools of analysis in the fields of finance, marketing, production planning and control and general management which will enable them to tackle the evaluation of industrial projects.</p>	<p>Industrial Development Authority</p> <p>Lansdowne House</p> <p>Dublin 4</p> <p>Ireland</p>
<p>Project implementation-operations</p>	<p>The course is designed to develop the participants in the total planning process within organizations and to identify the areas where controls should exist.</p>	<p>Industrial Development Authority</p> <p>Lansdowne House</p> <p>Dublin 4</p> <p>Ireland</p>

Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
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Abril 1981 A convenir	Funcionarios con formación universitaria, jerarquía superior o intermedia con desempeño en organismos vinculados a la planificación. Español	Enero 1981	-
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ial, crecimiento regional, teoría y método de ofrecen subespecialidades: rural-agrícola-urbano-

To be arranged	Senior executives. English	-	To be arranged
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3rd quarter 1981 8 weeks	Experienced public officials with university degree. English	-	To be arranged
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9 February 1981 8 weeks	Public officials with university degree. English	-	To be arranged
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12 October 1981 8 weeks	Middle or senior level executives with university degree. English	-	To be arranged
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Course or Seminar	General description	Organizer; Venue
Applied systems analysis	An individual course of study and skill development for each participant is focused on a selected development problem from his own country and the subjects best suited to his work are identified.	Systems Development Programme, Trinity College, Dublin 2 Ireland
Development projects: design and appraisal	Techniques and practices for a selective appraisal of economic development projects, including implementation and evaluation of results. Numerous contacts with development project specialists from United Nations organizations, World Bank and the European Economic Community will be provided during the programme. Study tour.	ILO International Centre for Advanced Technical and Vocational Training 201 Via Ventimiglia 10127 Turin, Italy
Projets de développement : élaboration et évaluation	Techniques et pratiques nécessaires à l'analyse sélective de projets de développement économique, étude de leur mise en oeuvre et évaluation des résultats. Au cours du voyage d'étude, les participants auront l'occasion de rencontrer de nombreux spécialistes de projets de développement des organisations des Nations Unies, de la Banque mondiale et de la Communauté économique européenne.	Centre international de perfectionnement professionnel et technique 201 Via Ventimiglia 10127 Turin Italie
Project feasibility	<p><u>Stage I</u> Group dynamics; developing economics; project management; project identification; the project feasibility report; market study; technical study; organization and management study; financial study; socio-economic study; feasibility report; profile of small business in Japan; group discussion/report writing; case presentation; course evaluation.</p> <p><u>Stage II</u> Project case study sessions, in 4 groups, and report presentation.</p>	Asian Productivity Organization 4-14, Akasaka 8-chome, Minato-ku Tokyo 107, Japan (in association with the Asian Development Bank) Philippines (Stage I) Japan (Stage II)

Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
October 1981 1 year	University degree. English	August	IR£2,500
February 1981 6 weeks	Professional qualification. English	-	\$US 2,350
Avril 1981 6 semaines	Qualifications professionnelles. Français	-	\$US 2,350
January 1981 and 1982 7 weeks (tentative)	Personnel from government agencies, development banks, financing institutions, industrial advisory or extension institutions, industrial promotion agencies, National Productivity Organizations and other similar bodies, <u>of APO member countries.</u> English	-	\$US 200

Course or Seminar	General description	Organizer; Venue
Technology development and transfer	To be decided.	Asian Productivity Organization, 4-14 Akasaka 8-chome Minato-ku, Tokyo 107 Japan
Regional development planning	Meaning of development: problems and issues; concepts and theories; social and economic analysis; planning for key strategic sectors and intersectoral co-ordination; project planning and management; institution and administrative capability building; planning synthesis.	United Nations Centre for Regional Development, Marunouchi 2-4-7 Naka-ku, Nagoya 460 Japan
Industrialization	The programme for this course will consist of a number of lectures related to the theory and practice of industrial development with special emphasis on the agro-based industry development.	NUFFIC, P.O. Box 90734 2509 LS The Hague Netherlands, in collaboration with Royal Tropical Institute, Amsterdam, and in consultation with the FAO, Rome
Agro-based industries	Lectures related to the theory and practice of industrial development with special emphasis on the agro-based industry.	NUFFIC (Netherlands Universities Foundation for International Cooperation) P.O. Box 90734 Badhuisweg, The Hague Netherlands

Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Date in 1982 to be decided 2 weeks (tentative)	Senior technical personnel from government and senior consultants of National Productivity Organizations or similar institutions, <u>of APO member countries</u> . English	-	\$US 50
3 March 1981 13 weeks	University degree (age 30-45 years). English	-	Applicants selected receive UN fellowships
18 May 1981 6 weeks	University degree and some years of experience in agro-based industry development.	1 April 1981	f. 3,000 (including tuition fee, full board, fieldtrip expenses and lodging)
May/June 1981 and 1982 6 weeks	University degree and some years of practical experience. English	1 April 1981 and 1982	f. 3,500 (including tuition and full board and lodging)

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Regional industrial development for executives (RIDE)	Dissemination of knowledge and skills pertaining to stimulation and execution of regional industrial development. Introduction to socio-economic development, regional concepts, agricultural development, industrial development; surveying techniques; economic and social aspects of regional development; location of industry; industrial promotion; industrial development; marketing; project evaluation; social evaluation of projects; fieldwork.	Research Institute for Management Science (RVB) Mijnbouwplein 11 P.O. Box 143, Delft Netherlands	January and July 22 weeks	Bachelor's degree or equivalent and 5 years practical experience. English	3 months before start of course	f. 9,700 (tuition only)
Project study preparation	Techniques for identifying venture opportunities and preparation of project feasibility studies.	UP Institute for Small-Scale Industries (UP ISSI) Quezon City Philippines	March 1981 12 weeks	Professional qualification. English	-	\$US 900
Town and regional planning for developing countries	Ecologically and economically oriented integrated physical planning on local and regional scales course, covers all aspects of the process of urbanization and of industrialization. Special emphasis given to correlations between research, practice and implementation. Lectures, seminars and extensive practical work including field visits.	Technical University of Szczecin Al. Piastow 50 Szczecin, Poland	Early January each year 6 months	Professional qualification. English	-	To be arranged
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	12 January 1981 12 weeks	University degree and several years experience of development planning and/or project work. English	-	£1,900 (includes tuition and accommodation)

Course or Seminar	General description	Organizer; Venue
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
Industrial development: planning, projects and technology	Industrialization; development planning and project appraisal; the choice, adaptation and design of industrial technology; project appraisal; policy issues related to industrial development.	David Livingstone Institute of Overseas Development Studies, University of Strathclyde 16 Richmond Street Glasgow G1 1XQ United Kingdom
Project appraisal, planning and control	Economic development and development strategy, an overview; essential concepts of appraisal, planning and control; appraisal techniques; financing; planning; implementation; project control.	Department of Accountancy and Finance University of Strathclyde, Livingstone Tower, 26 Richmond Street, Glasgow G1 1YH, United Kingdom
Technological change and the Third World	To examine the relationships between policies for the import of technology and the development of local technological skills and their implications for future planning.	The Institute of Development Studies at the University of Sussex, Falmer Brighton United Kingdom

Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
21 September 1981 12 weeks	University degree and several years experience of development and/or project work. English	-	£2,250 (estimate includes tuition and accommodation)
6 January 1981 12 weeks	Professional qualification. English	-	£2,800
8 January 1981 12 weeks	Professional qualification. English	-	£2,700 (provisional)
5 January 1981 6 weeks	Professional qualification. English	-	£525 (tuition) + £280 (accommodation, breakfast)

INDUSTRIAL PLANNING AND PROGRAMMING (Cont'd)

<u>Course or Seminar</u>	<u>General description</u>
Selected aspects on transfer and development of technology	On-the-job training programme.
Selected aspects on transfer and development of technology	Training programme on technology, planning and policies.
Selected aspects on transfer and development of technology	Training programme on trade and technology policies in the pharmaceutical sector.
Selected aspects of transfer and development of technology	In-house training programme.



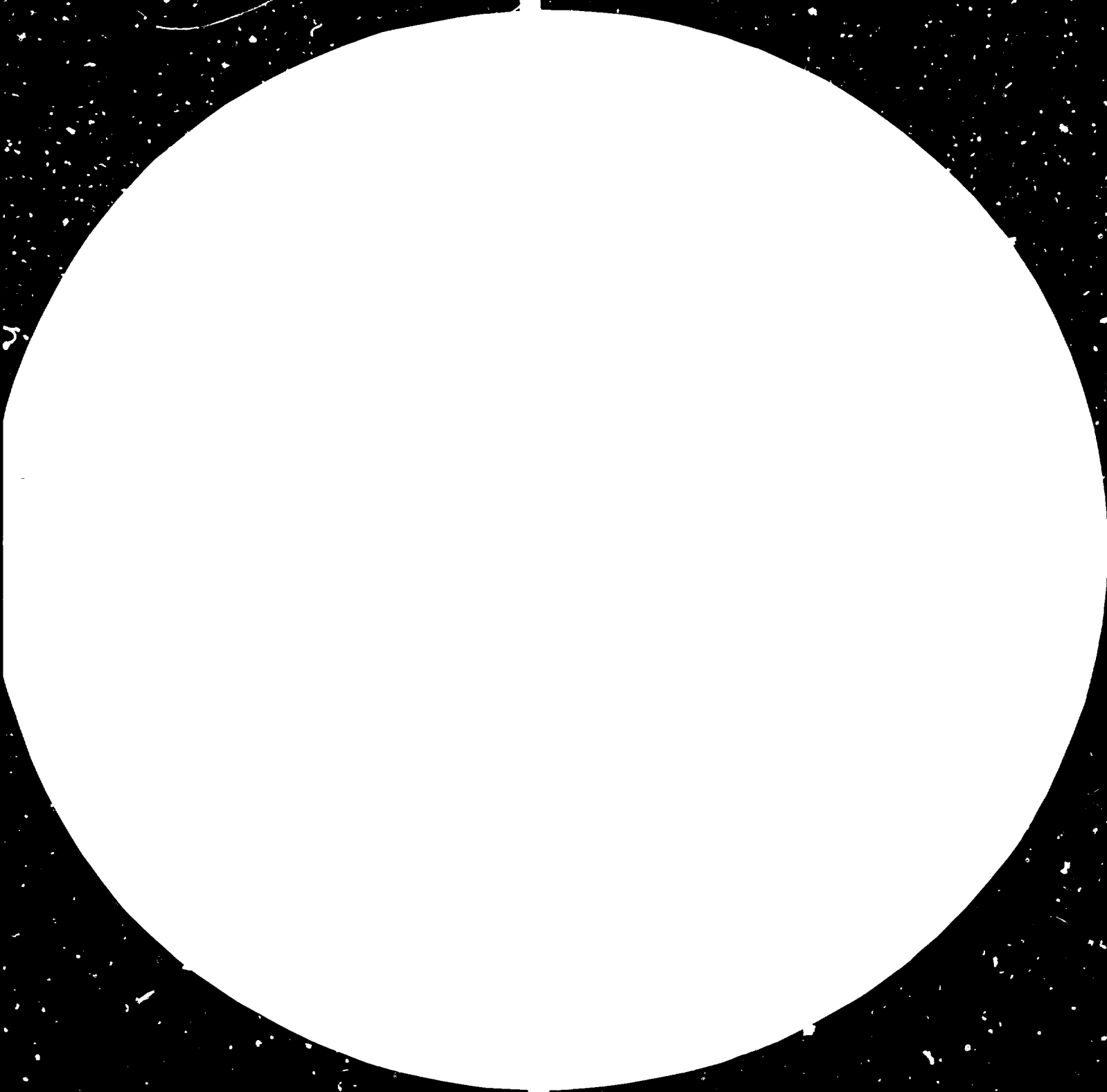
Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
UNCTAD Advisory Service on Transfer of Technology Palais des Nations CH-1211 Geneva Switzerland (course may be carried out in diverse locations in India)	January and March 1981 4 weeks	Programme for government officials from developing countries. English	-	-
UNCTAD Advisory Service on Transfer of Technology Palais des Nations CH-1211 Geneva Switzerland (course may be carried out in Asia)	June 1981 2 weeks	Programme for government officials from developing countries. English	-	-
UNCTAD Advisory Service on Transfer of Technology Palais des Nations CH-1211 Geneva Switzerland (course for African countries using French as a working language)	September-October 1981 to be arranged	Programme for government officials from developing countries. French	-	-
UNCTAD Advisory Service on Transfer of Technology Palais des Nations CH-1211 Geneva Switzerland (course being carried out at UNCTAD's Headquarters)	On-going programme (usually 3 weeks)	Programme for government officials from developing countries. English, French or Spanish	-	-

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

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
International promotion and foreign investment	Market research; market penetration; international trade promotion; exportation means and techniques; international distribution; export finance and pricing; foreign investment.	International Trade-Invest Institute World Trade Center 162 bd Emile Jacquain Box 57, 1000 Brussels, Belgium	To be arranged about 4 months	University degree. English or French	-	To be arranged
Corporate finance	To provide participants with a very thorough and comprehensive knowledge of corporate finance and to develop their confidence in the application of that knowledge.	Irish Management Institute Sandyford Road Dublin 14 Ireland	To be arranged 1981	Senior managers in industrial companies, either privately or state owned. English	-	To be arranged
Fomento industrial	Con la colaboración de bancos de desarrollo y otras organizaciones de Norte y Sud America y Europa, ALIDE organiza 76 cursos en los siguientes temas: financiación de exportaciones; preparación y perfeccionamiento de administradores de programas internos de capacitación en aspectos tales como: teoría y técnica de la organización, administración de recursos humanos, política de desarrollo de personal, metodología y técnicas de enseñanza; financiamiento y políticas de inversión; asesoramiento, preparación y administración de inversiones; financiamiento de proyectos internacionales; transacciones comerciales en el exterior; aceptación y ubicación de colocaciones a la vista y al futuro, operaciones de cambio, apertura de créditos y cobranzas en el exterior; cofinanciamiento industrial; leasing; crédito hipotecario; evaluación de proyectos industriales; préstamos consorciados; operaciones de cambio, apertura de créditos y cobranzas en el exterior; desarrollo de la capacidad de negociación para la captación de recursos y tecnología; transacciones financieras internacionales, prácticas operacionales; operaciones de crédito interno; crédito industrial; estudios económicos; administración financiera; evaluación de proyectos; programas de asistencia no financiera para pequeña y mediana empresa; análisis de crédito industrial; crédito industrial a la pequeña y mediana industria; pre-inversión; promoción de proyectos de inversión; financiamiento de proyectos específicos (en los sectores: industrial, agrícola, minero y turístico); dirección de empresas; crédito industrial y artesanal; promoción de proyectos industriales; crédito y asistencia a la pequeña y mediana empresa; crédito y asistencia a la construcción de viviendas; financiamiento de la construcción y equipamiento de astilleros; financiación oficial; financiación de las inversiones en industrias agrarias; financiación de las inversiones en la industria; evaluación de las actividades de un banco de desarrollo; procedimientos legales; asistencia técnica; evaluación y seguimiento de proyectos; infraestructura; organización de empresas; estudio de sistemas operativos de financiamiento; formulación de planes y políticas crediticias y financieras en banca e instituciones financieras; evaluación de grandes proyectos industriales urbanos y de desarrollo regional; financiamiento del desarrollo; financiamiento y promoción industrial; crédito de exportación; crédito pesquero; programación financiera; control interno.	ALIDE Apartado 3988 Lima, Perú	Varios durante el año (1-8 meses)	Título universitario. Ser funcionario de una institución miembro de ALIDE. Español, inglés, francés, portugués, alemán.	-	-

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

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Maintenance	Les technologies pluridisciplinaires avancées concernant la maintenance ; l'organisation du travail ; la gestion d'un service de maintenance, par un stage en entreprise avec des apports théoriques et pratiques intégrés.	Institut National des Sciences Appliquées de Lyon 69621 Villeurbanne Cédex, France	October 3-5 mois	Ingénieurs ou formation équivalente. Français	Juin	A arranger
Maintenance in fertilizer industry	Preventive maintenance; maintenance of equipment and machinery including boilers, compressors and turbines; materials of construction; welding technology; material handling; refractory and insulation; corrosion and prevention; lubrication; instruments to detect flaws; failure analysis; hazards and safety; inventory control; maintenance effectiveness.	The Fertilizer Association of India Near Jawaharlal Nehru University New Delhi 110067 India	June 1981 and 1982 2 weeks	Qualified mechanical engineer with 4-5 years experience in fertilizer industry. English	-	Rs 3,000
Systematic plant maintenance	Characteristics and objectives of maintenance; organization for maintenance; systems approach for maintenance; planning and scheduling maintenance; mechanics of planned maintenance system; preventive maintenance; maintenance planning and co-ordination by PERT/CPM; supporting staff and technical services for maintenance; breakdown analysis; downtime analysis; indicators for maintenance control; maintenance cost control; maintenance information systems; design and implementation of integrated maintenance system; maintenance management.	National Institute for Training in Industrial Engineering NITIE P.O., Vihar Lake Bombay-400 087, India	9 November 1981 2 weeks	Senior and middle level executives in maintenance and production function. English	-	\$US 500
Productive maintenance	Management-worker relationship; productive maintenance management; reliability and maintainability; process capability; economic analysis; measurement and evaluation of maintenance performance; promotion of maintenance activity.	Asian Productivity Organization 4-14 Akasaka 8-chome Minato-ku, Tokyo 107 Japan	Date in 1982 to be decided 6 weeks (tentative)	Managers and engineers engaged in maintenance activities in the process industry, and consultants, of APO member countries. English	-	\$US 200





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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	Diagnostic techniques; inspection; maintenance schedules; lubrication; types of maintenance; procurement; stock control; spares scalings; safety; accounting and costing; budgeting; introduction to terotechnology; workshop layout; tool requirements; management of maintenance staff.	Crown Agents Training Services, 4 Millbank London SW1 United Kingdom	13 April, 6 July and 28 September 1981 10 weeks	Professional qualification, managerial role concerned with maintenance of assets/resources. English	4 weeks before commencement date	£2,700
Science laboratory equipment	Course designed for technical staff in developing countries who are directly involved in the use, maintenance and repair of science laboratory equipment.	Department of Science Bristol Polytechnic Coldharbour Lane Bristol BS16 1QY United Kingdom	September 1981 and 1982 12 months	Scientific or technical education with 4-5 years experience. English	-	To be arranged

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

Gestion	INPED organise des stages sur : direction de l'entreprise ; direction de projects ; conseil en organisation ; direction du personnel ; direction des finances.	Institut National de la Productivité et du Développement Industriel (INPED) Boumerdès, Alger Algérie	Toute l'année 16 mois	Qualifications professionnelles. Arabe, français	-	A arranger
Management	Short courses (more than 300) covering virtually all significant fields of management.	Australian Management Training College Australian Institute of Management 135 Walker Street North Sydney, NSW 2060 Australia	Throughout year 1-28 days	Professional qualification. English	-	\$A 95-1,800

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Management development	Functions of administration and management; organizations; human dynamics; managerial skills; management techniques; seminars on current management/administrative issues and will also include field study visits and attachments.	International Training Institute Middle Head, Sydney Australia	27 May 1981 12 weeks	Professional qualification and senior management position. English	-	To be arranged
Middle management	Public administration and its environment; the managerial role and functions; field studies and practical attachments; management projects; the manager and the law; communications.	International Training Institute Middle Head, Sydney Australia	11 February 1981 12 weeks	Professional qualification and middle level management position. English	-	To be arranged
Management	Short courses on: small business management; management in action; in-plant training.	Barbados Institute of Management and Productivity Willey, St. Michael Barbados	January, April, September each year. Variable duration	Professional qualification and business experience. English	-	To be arranged
Gestion des entreprises	Séminaire comprenant des exposés donnés par des ingénieurs du Bureau Gombert particulièrement expérimentés en organisation et gestion des entreprises suivis de discussions et d'études de cas concernant les différents aspects de la gestion des entreprises : gestion générale : structure, comptabilité, recherche opérationnelle, informatique ; gestion du personnel ; qualification du travail, systèmes de rémunération, formation dans l'entreprise ; gestion des approvisionnements : gestion des stocks, procédures d'approvisionnement et de distribution ; gestion de la production : étude du travail, planning, contrôle de la qualité, prix de revient ; gestion des équipements : choix des investissements, introduction de nouveaux équipements, développement de l'entretien préventif ; gestion des ventes : rôle de la fonction commerciale, distribution de la production. Le programme du séminaire est réglé dans ses détails (sujets, cas traités) d'après les domaines d'intérêt des participants et leurs problèmes.	Bureau d'ingénieurs-conseils Gombert Chaussée de Charleroi 123A, B-1060 Bruxelles Belgique	A fixer 4-8 semaines	Humanités complètes suivies d'une formation spécialisée. Expérience professionnelle minimum de 2 ans. Occupation actuelle ou à venir d'une fonction de gestion de contrôle ou de conseil dans une entreprise ou un organisme public d'assistance et de promotion des entreprises.	3 mois avant le début du séminaire	A arranger

Course or Seminar	General description	Organizer; Venue
Organisation et gestion des entreprises	Stage individuel en organisation et gestion des entreprises comprenant : des exposés et discussions sur des sujets généraux choisis parmi ceux que le stagiaire souhaite approfondir et suivis de lectures dirigées d'ouvrages généraux et de rapports d'études de cas ; la participation à des études et travaux entrepris par les ingénieurs-conseils du bureau Gombert ; des séjours guidés dans des entreprises et organismes publics belges ; la constitution d'une documentation et la rédaction du rapport de stage. Le stage permet de connaître et d'approfondir les méthodes et techniques de gestion propres aux grandes fonctions de l'entreprise : direction générale, direction du personnel, production, approvisionnement, gestion des équipements, ventes.	Bureau d'ingénieurs-conseils, G.Gombert Chaussée de Charleroi 123A, B-1060 Bruxelles Belgique
Management	MCE organizes short courses on: financial management; general management; insurance management; manufacturing management; marketing management; administrative management and EDP; personnel management and training; international management; purchasing management; management programmes for presidents; top management; compensation surveys.	Management Centre Europe, avenue des Arts 4, 1040 Brussels Belgium (Brussels, London, Geneva and other European cities)
Advanced practice in engineering	Monitored experience in all aspects of engineering in Canadian industry and consulting engineers, plus seminars in engineering management.	Canadian College of Advanced Engineering Practice, No. 600 2050 Mansfield Montreal H3A 1Z2 Quebec, Canada



Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
A fixer suivant la formation demandée	Humanités complètes suivies d'une formation spécialisée. Occupation d'une fonction participant à l'organisation ou à la gestion d'une entreprise, d'une administration ou d'un service public. Connaissance du français parlé et écrit.	3 mois avant la date souhaitée pour le début du stage	A fixer
Throughout year 2-14 days	Professional qualification. English	-	Bf.24,000- Bf.62,000
Any time 6-12 months	Graduate engineers or teachers of engineering requiring practical experience and knowledge of engineering management. English or French	-	\$C 3,500 12 month course \$C 2,500 6 month course

## MANAGEMENT AND INDUSTRIAL ADMINISTRATION (Cont'd)

<u>Course or Seminar</u>	<u>General description</u>
Management	The syllabus covers all functional areas of management as well as interdisciplinary subjects necessary as background for effective management.
Stock and production management	Staff management; method control; quality control; production management; organization; stock management; corporate planning; use of computers as a management tool. Practical visits.
Administración de empresas	Cursos sobre: planeamiento y control de la producción; administración y gerencia moderna; marketing y comunicación publicitaria; cash-flow; administración financiera; planeación y manejo de las finanzas en la pequeña y mediana industria, investigación de mercados; control gerencial; simulación práctica de toma de decisiones; de las utilidades; auditoría interna.
Import management	Intensive course for the management of state trading corporations, and senior officials from ministries, central banks and customs.
Management and contracting of project imports for industrial purposes	Course for senior business executives and government officials with responsibilities for the management and contracting of project imports for industrial, infrastructural and public purposes.
Directeur financier	Comptabilité générale et analytique ; budget et contrôle gestion ; audit et contrôle interne ; organisation des systèmes comptables ; direction proprement dite.

Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
The Mediterranean Institute of Management (M.I.M.) P.O. Box 4019, Nicosia Cyprus	September 10 months	University degree. English	-	£C 120
The Technological Institute Gregersensvej DK-2630 Taastrup Denmark	To be arranged	Professional qualification. English	-	To be arranged
CEFE - Centro de Formación Empresarial Casilla postal no. 3476 Quito, Ecuador	Enero-noviembre Variable	Título universitario. Español	-	\$US 300-1,200
costos en la administración de empresas; planificación y control				
PRODEC, The Helsinki School of Economics Runeberginkatu 22-24 SF-00100 Helsinki Finland (Bangkok)	23 March 1981 3 weeks and in 1982	Professional qualification. English	-	-
PRODEC, The Helsinki School of Economics Runeberginkatu 22-24 SF-00100 Helsinki Finland	31 August 1981 4 weeks and in 1982	Professional qualification. English	-	-
IDET-CEGOS S.A. 33 quai Galliéni B.P. 50 92152 Curesnes France	Dates à fixer 6 semaines	- Français	-	F 15,000

Course or Seminar	General description	Organizer; Venue
Contrôle de gestion	Méthodes de direction et de gestion prévisionnelle ; organisation, stratégie, planification.	IFG, 37, quai de Grenelle, 75015 Paris France (Paris, Lyon et Toulouse)
Techniques de gestion	Comptabilité, finances, budgets, administration, mathématiques appliquées à la gestion.	IFG, 37, quai de Grenelle, 75015 Paris France
Advanced management (Stanford-INSEAD programme)	To equip senior managers with the necessary background and skills for handling the general responsibilities of management in an international setting.	INSEAD Bld. de Constance 77305 Fontainebleau France
General management for middle managers	The programme is an intensive seven-week course entirely in English, designed for men or women with between seven and fifteen years' experience who have achieved a position of responsibility in their functional area. The programme covers fundamental areas of management: finance, marketing, management science, the computer, human relations, and operations management.	INSEAD, Bld. de Constance, 77300 Fontainebleau, France
Gestion générale	Préparer les cadres supérieurs qui ont essentiellement exercé des responsabilités fonctionnelles à des postes de plus haute responsabilité au niveau de département, de division ou de direction générale.	INSEAD Bld. de Constance 77305 Fontainebleau France

Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Février et octobre 1981 4 mois et 6 semaines de stage	Chefs d'entreprises, cadres supérieurs, conseils d'entreprise. Français	Janvier et septembre	F 15,000
Mars 1981 3 mois	Agents de maîtrise, cadres et chefs PME. Français	Février 1981	F 10,800
28 June 1981 4 weeks	Senior executives with a minimum of 15 years business experience. English	June 1979	F 25,800
22 March 1981 7 weeks	Candidates under 32 years of age are unlikely to have enough experience to benefit fully from the programme, while those much over 45 may not have the potential required. Excellent knowledge of English	-	F 35,500
18 octobre 1981 7 semaines	Pour des cadres supérieurs à haut potentiel, de 30 à 45 ans, possédant au moins 7 ans d'expérience. Français	-	F 31,000

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Techniques et gestion de la production	Permettre à des cadres, possédant une expérience en fabrication, d'acquérir une formation complémentaire en organisation et en gestion de la production.	Institut National des Sciences Appliquées de Lyon 69621 Villeurbanne Cédex, France	Octobre 5 mois minimum	Ingénieurs de fabrication, ou niveau équivalent. Français	Juin	A arranger
Production management	Introduction to production management; structural and flow organization; network technique; production control; work study; production engineering; quality control; investment and profitability calculation; plant data recording; cost accounting; value analysis; personnel management; preventive maintenance; preparation and execution of a complete plant for a certain product of an enterprise; comprehensive business game; (there is a follow-up seminar about 9 months after participants return to home countries).	Carl Duisberg-Gesellschaft e.V. Hohenstaufenring 30-32 D-5000 Köln 1 Federal Republic of Germany	May and October about 9 weeks	Engineering degree and at least 5 years practical experience in responsible position in production management. English	-	To be arranged
Management of maintenance of industrial equipment	Principles of management; principles of maintenance; management of maintenance; cost effectiveness of maintenance; economy of maintenance; maintenance systems in industrialized countries; maintenance systems in less industrialized countries; examples of maintenance; case studies; recording, statistics and research of wear and heavy wear; field work; inspection of a factory.	Carl Duisberg-Gesellschaft e.V. Hohenstaufenring 30-32 D-5000 Köln 1 Federal Republic of Germany (Cairo, Egypt)	To be arranged 2 weeks	Engineering degree and at least 3 years industrial experience at executive or managerial level. English	-	To be arranged
Works management at the executive level	Specialized practical, individual further training in business administration at the management level.	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

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Industrial Management	Short courses covering broad range of management: business administration; management accounting; supervisory management; production management; marketing management.	The Hong Kong Productivity Centre Sincere Building 173 Des Voeux Road Central Hong Kong	To be arranged	Position in management. English, Chinese	-	To be arranged
Industrial engineering	Management techniques, productivity, financial accounting, cost and budgetary control, managerial economics, econometrics, marketing and manufacturing; work study, organization and methods, incentives, production planning and control, plant layout, and materials handling, inventory control, PERT, data processing and wage administration; quality control, preventive maintenance, fuel efficiency, operations research and tool engineering; general management, personnel management, industrial hazards and safety, teaching techniques and communication, methodology of consultancy and reporting; plant engineering, fuel efficiency, production engineering, operations research, materials management, marketing research and industrial relations and personnel management.	National Productivity Council 5-6 Institutional Area Lodhi Road New Delhi-110003 Madras, India	1st week of December every year	Engineering degree. English	October	\$US 700
Industrial training	The Institute organizes short courses in: production planning and control; organization and techniques of training; PERT/CPM; materials management; human relations; production management; project management; quality control; managerial effectiveness; organization and management; systematic plant maintenance; management information systems.	National Institute for Training in Industrial Engineering Vihar Lake Bombay-400 087 India	February to December 2-3 weeks	Professional qualification. English	-	\$US 500-750
Managerial effectiveness	Managerial process; functions of management; decision making; management by objectives; transactional analysis for self-awareness; communication and human relations; leadership styles; motivating subordinates; conflict management and building; problem-solving and creativity; discussion on managerial problems faced by participants; management of change; management information system for managerial effectiveness; management of managerial time; subordinate development.	National Institute for Training in Industrial Engineering NITIE, P.O. Vihar Lake Bombay-400 087 India	31 August 1981 2 weeks	Senior managers. English	30 June 1981	\$US 500

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Materials management	Role, scope and objectives, cost parameters, forecasting, make/buy decisions, materials planning; budgets and budgetary controls; purchasing; economic and professional aspects; value analysis and rationalization; stores management and stock control; inventory models and use of operations research, computerized systems; management reporting.	National Institute for Training in Industrial Engineering NITIE P.O., Vihar Lake Bombay-400 087, India	2 March 1981 3 weeks	Executive responsibility. English	-	\$US 750
Organization and methods	The systems concept; organization analysis, work distribution and linear responsibility charts; method study in the office; procedure charting; form design and control; motion economy and workplace layout; office layout; work measurement for office work; office work planning; management of change.	National Institute for Training in Industrial Engineering NITIE P.O., Vihar Lake Bombay-400 087, India	14 September 1981 3 weeks	Senior executives and middle level managers with at least 3 years experience in responsible position. English	-	\$US 750
Production management	Organization objectives and systems approach to objectives; production, marketing co-ordination and aggregate planning; productivity techniques, maintenance consideration and value analysis; planning and control, capacity utilization, budgetary control, quality control and inventory control; production scheduling; shop relations, training incentives, industrial relations; communication and motivation, developing juniors; management information systems, computer assistance, utilization of operations research.	National Institute for Training in Industrial Engineering NITIE P.O., Vihar Lake Bombay-400 087, India	13 July 1981 2 weeks	Production executives. English	-	\$US 500
Production planning and control	Role, scope, and objectives, cost parameters; market forecasts and aggregate planning; make/buy decisions, capacity utilization; work standards, planning and scheduling techniques; inventory control; use of networks; budgetary control; quality control; value analysis and rationalization; computerized systems and use of operations research; management reporting.	National Institute for Training in Industrial Engineering NITIE P.O., Vihar Lake Bombay-400 087, India	23 March 1981 2 weeks	Executive responsibility. English	-	\$US 500



Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Project management	Need identification; project formulation and design; organizational design; cost engineering; economic analysis; social cost benefit analysis, project appraisal; project financing, cost of capital, feasibility reports; project planning and scheduling; network techniques and application of linear programming; resource limitations; time-cost trade offs; project budget, network based approach and its integration with conventional approach; project execution, materials planning, contract planning and control; project monitoring and control, reporting systems, project rescheduling, use of computers, project audit and documentation.	National Institute for Training in Industrial Engineering NITIE P.O., Vihar Lake Bombay-400 087, India	10 August 1981 3 weeks	Executive responsibility. English	-	\$US 750
The chief executive programme	To provide an opportunity to chief executives to study the management of a similar business in Ireland, attend a formal programme in advanced management techniques, establish linkage for appropriate technology transfer and develop business plans.	Irish Management Institute, Sandyford Road, Dublin 14 Ireland	March 10 weeks	Professional qualification and senior position. English	-	£4,600
Management development programme	To give managers a comprehensive understanding of the management functions and their relationships and to develop their skills to manage a business.	Irish Management Institute, Sandyford Road, Dublin 14 Ireland	September 8 weeks	Professional qualification. English	-	To be arranged
Management of energy sources and energy saving	Basic principles and considerations, energy conservation without or with minimal capital investment, policy making and cost-benefit analysis, organizational considerations are dealt with in the first part of the programme. Three week study tour.	ILO International Centre for Advanced Technical and Vocational Training 201 Via Ventimiglia 10127 Turin Italy	May 1981 12 weeks	Professional qualification. English	-	\$US 3,695

Course or Seminar	General description	Organizer; Venue
Business administration (corporate organization and management refresher course)	Topics cover the whole question of corporate organization that can be followed up in detail during the in-house courses, such as: production planning and control; economic and financial management; investment planning; personnel management: selection, recruitment, staff planning and training, remuneration, etc.; industrial relations; commercial management; organizational change and development; analysis of corporate data systems; EDP; ergonomics; special management techniques: stock control, maintenance management, quality control, supplies, operational research, the managerial grid, etc.	Istituto per la Ricostruzione Industriale (IRI), Ufficio Cooperazione Tecnica Internazionale Via Liguria 40 00187 Rome Italy (Rome and other towns in Italy)
Business administration (integrated corporate management methods)	Course on integrated corporate management methods and systems, with suitable teaching methods and closely linked to practical in-house courses, in which management methods will be examined in terms of individual management functions and duties, their integration, the interplay between the firm and the socio-economic environment, the problems of development and know-how transfer; group in-house courses to put single-interest groups of participants in immediate contact with the most important management experiences in and less developed areas of Italy; individual courses, or visits to students (1-2 weeks in all).	Istituto per la Ricostruzione Industriale (IRI), Ufficio Cooperazione Tecnica Internazionale, Via Liguria 40, 00187 Rome, Italy (Rome and other towns in Italy)
Industrial and systems engineering	Retraining course covering: participants' individual reports and cases on the application of the principles of industrial and systems engineering; problems faced in the above applications; some of the latest techniques in the field of industrial and systems engineering; in-depth discussions on advanced practices; adaptation of the latest techniques to one's own country.	Asian Productivity Organization, 4-14 Akasaka 8-chome Minato-ku Tokyo 107 Japan

Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
19 January 1981 5 months	Advanced technical education or university degree and 5 years experience. Italian, French, English, Spanish	-	To be arranged

19 January 1981 5 months	Advanced technical education or university degree and 5 years experience. Italian, French, English, Spanish	-	To be arranged
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In one or more companies in highly industrialized to companies to make brief contact for individual

June/July 1981 6 weeks (tentative)	Ex-participants selected from the past ISE courses, who showed outstanding performance during the courses and after the courses as well, <u>of APO member countries</u> <u>English</u>	-	\$US 200
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MANAGEMENT AND INDUSTRIAL ADMINISTRATION (Cont'd)

Course or Seminar    General description

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Management  
consultancy

Present status and development of management consultancy in Asia; management consultancy practice in Japan; preliminary survey in business diagnosis; communication/problem solving; integrated business diagnosis; recent developments in management techniques.

Management by  
objectives

Overview on MBO; practice of MBO in Japan; prerequisites for introducing MBO; situation regarding MBO in member countries; how to adapt principles in own countries.

Production  
management

Work measurement; production planning and control; materials management; productive maintenance; quality control and quality assurance; plant layout and materials handling; work design; group technology; industrial safety; factory budget and cost management; worker motivation; economic analysis for management decisions; computerization; new product planning.

Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Asian Productivity Organization, 4-14 Akasaka 8-chome Minato-ku, Tokyo 107 Japan	Mid-1981 10 weeks (tentative)	Management consultants from National Productivity Organizations or similar institutions, of <u>APO member countries</u> . English	-	\$US 200
Asian Productivity Organization 4-14 Akasaka 8-chome Minato-ku, Tokyo 107 Japan	To be decided 3 weeks (tentative)	Managers of industrial enterprises and consultants of National Productivity Organizations and similar institutions, of <u>APO member countries</u> . English	-	\$US 100
Asian Productivity Organization 4-14 Akasaka 8-chome Minato-ku, Tokyo 107 Japan (Korea (Stage I) Japan (Stage II))	August/September 1982 12 weeks (tentative)	Senior managers of industrial plants or consultants at National Productivity Organizations or similar institutions, of <u>APO member countries</u> . English	-	\$US 200

Course or Seminar	General description	Organizer; Venue
Productivity measurement and analysis	To be decided later.	Asian Productivity Organization, 4-14 Akasaka 8-chome Minato-ku, Tokyo 107 Japan (India)
Project management	Development planning and the role of rural and small industries development; case experiences from member countries; the overall project cycle; project identification and definition; project formulation and preparation; project design; project appraisal, selection, negotiation and approval; project activation and organization; project implementation, operation and control; project completion, output diffusion and handing over; project evaluation and follow-up, integrat: case study.	Asian Productivity Organization, 4-14 Akasaka 8-chome Minato-ku, Tokyo 107 Japan (India)
Supervisory development	Problems and constraints to supervisory training and development; methods and techniques of identifying supervisory training needs and designing training programmes; modular approach to supervisory training; training methods and techniques; promotion of supervisory training, establishing institutional mechanisms and facilities.	Asian Productivity Organization, 4-14 Akasaka 8-chome Minato-ku, Tokyo 107 Japan (Singapore)

Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Date in 1982 to be decided 2 weeks (tentative)	Senior consultants of National Productivity Organizations or similar institutions and government officials concerned with productivity measurement, <u>of APO member countries.</u> English	-	\$US 50
October/November 1982 4 weeks (tentative)	Trainers, consultants and practitioners in the field of project management, <u>of APO member countries.</u> English	-	\$US 100
Date in 1982 to be decided 4 weeks (tentative)	Consultants of National Productivity Organizations or similar institutions and middle managers responsible for organization development, <u>of APO member countries</u> English	-	\$US 100

Course or Seminar	General description	Organizer; Venue
Systematic problem solving	QC circles and other small group activities; production planning and control; accounting and economic analysis; management of improvement; in-plant studies in selected manufacturing industries.	Asian Productivity Organization, 4-14 Akasaka 8-chome Minato-ku, Tokyo 107 Japan
Tools for managerial decision-making	Review of engineering economy and theories; principles of economic analysis; value of economic analysis in generating alternatives; accounting systems and economic analysis; latest techniques in economic analysis; cases of economic analysis; analysis of uncertainty and risk; accuracy and precision of financial data; economic analysis and data base; economic decision-making practice in Japan.	Asian Productivity Organization, 4-14 Akasaka 8-chome Minato-ku, Tokyo 107 Japan
Cross cultural management	Designed for local managers involved with trans-national business activities. 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, 2-12-13, Honkomagome Bunkyo-ku, Tokyo Japan



Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Date in 1982 to be decided 6 weeks (tentative)	Consultants of National Productivity Organizations or similar institutions and managers from industry, of <u>APO member countries</u> . English	-	\$US 200
August 1981 and 1982 6 weeks (tentative)	Persons engaged in decision-making analysis, from <u>APO member countries</u> . English	-	\$US 200
February, May and October 1981. 3 weeks	About 10 years of practical experience in middle management level. English	-	Y 255,000 (\$US 1,050)

Course or Seminar	General description	Organizer; Venue
Production management	Designed for local engineers and managerial staff in charge of production control or factory 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 2-12-13 Honkomagome Bunkyo-ku Tokyo, Japan (Nagoya, Japan)
Agro-based industrial development	Survey of components, linkages and total environment in which agro-based industrial development (ABID) will have to operate in developing countries; essential technical and managerial tools for integrated ABID; practical experience through the application of the acquired tools in a selected field of ABID.	National Institute of Public Administration (INTAN) Kuala Lumpur Malaysia
Management and industrial development	Principles of operational management in industry. The training programme provides for a series of personalized introductions on the development of the product programme and market potentials, production management, technology development, investment planning and costing, operations research, licencing and international industrial collaboration. The programme will further include self-study of selected literature and field-observations. An experienced CBO-associate will provide guidance as tutor and programme co-ordinator.	CBO - Centre for Management and Industrial Development Exchange Building Coolsingel/Meent Postbox 30042 3001 DA Rotterdam Netherlands

Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
February 1981 and 1982 6 weeks	Engineers and managerial staff who are in charge of production control or factory management in industries of developing countries. English	-	Y 413,000 (\$US 1,700)
August 1981 and 1982 12 weeks	Professional qualification; involvement in agro-industrial development from ESCAP region. English	-	\$US 1,000
Commencement to be arranged. 8-12 weeks	University graduates in engineering, economics or business administration, preferably with experience in industry. English	-	To be arranged

Course or Seminar	General description	Organizer; Venue
Management and industrial development	Management and industrial administration; marketing and export trade development; plant design; product design; quality assurance; maintenance and repair; light industries: industrial planning and programming. 10-seminars of approx. 3 weeks duration are conducted twice a year. Individual study programmes are also arranged, varying from a minimum of 2 to 3 months up to 6 to 8 months. As appropriate, participation in the above seminars can be included as part of individual study programmes.	CBO-Centre for Management and Industrial Development P.O. Box 30042 Exchange Building Coolsingel 58 Rotterdam Netherlands
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 (RVB) P.O. Box 143 2600 AC Delft Netherlands
General management	To develop executives with general management capabilities for small and medium sized enterprises in developing countries; to develop specialists in corporate 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
Management	RVB organizes a series of programmes in the following fields: general management; marketing management; production management; financial management; industrial extension officers training; advanced training in industrial management consultancy; regional industrial development executives.	Research Institute for Management Science (RVB) P.O. Box 143 2600 AC Delft Netherlands

Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
February and September 1981 2-8 months	University graduates in engineering, economics or business administration preferably with several years of experience in industry. English, French, German, Indonesian, or Dutch	-	To be arranged
15 July 1981 22 weeks	Professional qualification and 5 years business experience. English	3 months before start of course	f. 9,700
7 January 1981 22 weeks	Professional qualification and business experience. English	3 months before start of course	f. 9,700
Throughout year	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
Management consultancy (advanced training course)	Investment analysis and project evaluation; transfer of technology; group technology; interview techniques; presentation of results and recommendations; problem isolation and solving; motivation; M.I.S. and other recording systems; communication; the principles and practice of management consultancy in the Netherlands; study of industrial structure reports in the Netherlands, followed by in-plant study of a number of Dutch industrial branches; discussions on selected individual papers of participants; business simulation game played with the assistance of a computer; evaluation of training course by participants (oral and written).	Jointly by Asian Productivity Organization and Research Institute for Management Science (RVB) Delft Venue: Netherlands	August/September 1982 13 weeks (tentative)	Management consultants or training National Productivity Organizations or equivalent institutes, of APO members countries. English	-	-
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	7 January 1981 22 weeks	Professional qualification and 5 years business experience. English	3 months before start of course	f. 9,700
Management consultancy	Specific courses to be arranged in management consultancy, project financing, marketing and engineering studies.	Investment Advisory Centre of Pakistan P.O. Box No. 7534 Karachi, Pakistan	To be arranged	Experience in management consultancy, industry, finance. English	-	To be arranged
Management and development administration	NIPA organizes regular, formal courses in: planning and development; financial administration; advanced administration and development; advanced management.	National Institute of Public Administration University Road Karachi-47 Pakistan	Most courses are given twice during 1981 and will be repeated in 1982 2-12 weeks	Professional qualification and experience as senior administrator. English	-	Rs 1,000 Rs 6,000
General management	Principles of management; business promotion.	National Management Development Centre Karachi Pakistan	Throughout year 3 weeks	Middle level managers. English	-	-

Course or Seminar	General description	Organizer; Venue
Management	A wide range of courses including: public enterprises; the computer as an aid to management; comparative study of some aspects of administration and development in China and Pakistan; investment analysis; decision-making and implementation; advanced management and development; comparative administration and development in certain countries; O & M.	Pakistan Administrative Staff College Lahore Pakistan
Advanced management	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 (Murree)
Management	Management process; personnel management; financial analysis; production management; marketing management.	Pakistan Institute of Management Shahrah Iran Clifton Karachi 6 Pakistan
Industrial engineering	Courses on wide range of subjects including: basic process instrumentation; preventive maintenance; general mechanics; applied instrumentation and control; fuels and lubricants analysis; management by objectives; process of management; supervisor development; manager development; process operations; instrument mechanics.	PETROMAN Mussarat Building Sultan Ahmed Shah Road Off Shaheed-e-Millat Road Karachi Pakistan

Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Throughout year 1 1/2 - 13 weeks	Professional qualification and managerial experience. English	-	\$US 90 - 1,600
To be arranged 3 weeks	Senior executives from business and industry. English	-	PRs 2,500
To be arranged 5 weeks	Junior and middle managers from business and industry.	-	PRs 2,500
Throughout year 1-4 months	Professional qualification as engineer. English	-	PRs 1,500 PRs 5,000



MANAGEMENT AND INDUSTRIAL ADMINISTRATION (Cont'd)

<u>Course or Seminar</u>	<u>General description</u>
Administración general y producción	Comprende: principios y objetivos de la organización. Administración de personal. Gestión de materiales y control de inventarios. Planificación y control de la producción. Seguridad industrial. Métodos de trabajo y estudio de tiempos. Procedimientos administrativos. 160 horas. Incluye práctica en forma de asesorías a empresas nacionales participantes.
Contabilidad, costos y finanzas: formación económico-financiera básica	Conocimientos macroeconómicos para Empresarios; conceptos básicos de economía de las empresas; interpretación de estados financieros; proceso gerencial 1: planificación financiera; proceso gerencial 2: control de gestión; técnicas presupuestarias; registros de control interno; costeo 1: elaboración; costeo 2: puntos de equilibrio; planeamiento y control de efectivo.
Management	Programme provides managers with a broad view of the functions of industrial management (production, marketing, finance, personnel) as well as the tools of industrial administration.
Management consultancy	Training of participants from the government and private sectors to provide extension services, technical assistance and management consultancy to small and medium industries.
Regional industrial development	The RIDE course is aimed at producing trained manpower capable of designing, programming and monitoring the industrial promotion component of a regional economic development programme.

Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Servicio Nacional de Promoción Profesional, SNPP Av. Molas Lopez e/5 y 6 Villa Victoria Asunción Paraguay	1 Abril 1981 2 meses	Profesional trabajando en esas materias en institución de desarrollo. Español	Diciembre 1980	\$US 3,000
Servicio Nacional de Promoción Profesional, SNPP Av. Molas Lopez e/5 y 6 Villa Victoria Asunción Paraguay	Agosto 1980	Profesional trabajando en esas materias en institución de desarrollo. Español	Mayo 1981	\$US 3,000
UP - Institute for Small-Scale Industries (UP ISSI) Quezon City Philippines	February and August 1981 12 weeks	Managers with professional qualification. English	-	\$US 900
UP - Institute for Small-Scale Industries (UP ISSI) Quezon City Philippines	June 1981 6 months	Professional qualification. English	-	\$US 1,400
UP - Institute for Small-scale Industries (UP ISSI) Quezon City Philippines	June 1982 6 months	Professional qualification. English	-	\$US 1,400

Course or Seminar	General description	Organizer; Venue
Industrial management	General management, research and development, economics of development, marketing and sales, forecasting techniques, personnel administration, accounting, statistics, production and inventory.	Somali Institute of Development Administration and Management (SIDAM) P.O. Box 964 Mogadiscio Somalia
Dirección general de la empresa	La empresa como sistema; introducción al management; análisis económico-financiero; técnicas de previsión; entorno jurídico y económico de la empresa; política financiera; gestión de recursos humanos y política de personal; otras políticas de la empresa: productos-mercados, aprovisionamientos, I+D, etc.; organización y estructura de la empresa; planificación estratégica; diseño del sistema de gestión; plan anual y control de gestión; juego de empresas.	Escuela de Organización Industrial Gregorio del Amo 6 Madrid-3, España
Gestión	Cursos sobre: gestión fiscal; auditoria; dirección financiera de la empresa; comercio exterior; producción y distribución; dirección comercial.	Escuela de Organización Industrial Gregorio del Amo 6 Madrid-3 España
Métodos cuantitativos de gestión	Informática básica; análisis de sistemas; estadística aplicada; estrategia y planificación de la empresa; gestión de sistemas productivos; gestión de operaciones financieras; gestión de operaciones comerciales; comportamiento en las organizaciones; teoría de la decisión; simulación; teoría de Grafos; programación dinámica; teoría de Colas; programación matemática; juego de empresas cuantitativo.	Escuela de Organización Industrial Gregorio del Amo 6 Madrid-3, España

Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Mid-July 1981 1 year	University degrees in engineering or economics and some practical experience. English	Mid-April 1981	To be arranged
Octubre 9 meses	Título superior en alguna facultad universitaria o escuela técnica superior. Experiencia de 5 años en puestos de responsabilidad en la empresa o administración pública. Español	Septiembre	A convenir
Enero a diciembre 3-6 meses	Título universitario. Español	-	A convenir
Octubre 9 meses	Título superior en alguna facultad universitaria o escuela técnica superior. Certificación académica y calificaciones. No se requiere experiencia. Español	Septiembre	A convenir

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Organización y gestión de la investigación	Organización y dirección de I.D.; la actividad de I.D.; planificación y proyectos; el factor humano en la I.D.; gestión económica de la I.D.; gestión de la tecnología; análisis, diagnósticos y síntesis.	Escuela de Organización Industrial Gregorio del Amo 6 Madrid-3 España	Enero (4 días, de lunes a jueves cada tres semanas) 6 meses	Título universitario. Español	-	A convenir
International advanced management programme	To provide a firm foundation in a broad range of functional areas and understanding of their inter-relationships and their contribution to strategy design and implementation in an international setting.	Centre for Education in International Management 4 chemin de Conches CH-1231 Geneva Switzerland	4 May 1981 4 weeks	Senior executives. English	-	Swf 13,000
International executive programme	To make managers more aware of future changes in political, social and economic patterns, and more effective in coping with these changes.	Centre for Education in International Management 4 chemin de Conches CH-1231 Geneva Switzerland	2 March and 5 October 1981 4 weeks	Senior executives dealing with international operations. English	-	Swf 9,000
Gestion	L'Institut organise des cours dans les domaines suivants : Comptabilité ; organisation d'entreprise ; étude du marché ; innovation de produits ; gestion du personnel ; système de travail ; formation ; système de planification de gestion et d'information ; planification du traitement d'information par EDP ; organisation et gestion industrielles ; planification dans le secteur public ; planification de techniques et technologies d'exploitation ; planification d'implantation et de construction d'entreprises ; logistique et distribution ; gestion et organisation par système.	Institut d'Organisation Industrielle de l'Ecole Polytechnique Fédérale Zurichbergstrasse 18 8028 Zurich Suisse	A arranger	Qualifications professionnelles. Allemand	-	A arranger
Finance management	The Institute organizes regular, advanced, and post-graduate level courses in finance management including accountancy, banking, insurance, and tax administration.	Institute of Finance Management P.O. Box 3918 Dar-es-Salaam United Republic of Tanzania	Throughout year variable	Professional qualification. English	-	To be arranged

Course or Seminar	General description	Organizer; Venue
Management	The Association organizes throughout the year 150 courses in the following five fields of management: production; finance; marketing; personnel; general management.	Thailand Management Association Manabhand Building 308 Silom Road Bangkok 5 Thailand
Supply and materials management	Procurement and purchasing; stock control; stores organization and layout; storage methods; packing and preservation; quality control and reliability; inspection; materials handling; shipping and insurance; inland distribution; stores accounting; financial control; management of supplies staff.	Crown Agents Training Services 4 Millbank London SW1 United Kingdom
Work study	The syllabus for these courses cover the following subjects: method study; motion study; work measurement; activity sampling; labour cost control; human implication of work study; report writing; simple monograph construction; simple wage payment; incentive systems. These courses are suitable for personnel recruited for existing departments in which supervision is available for their projects. Sessions are backed with exercises to illustrate theory and practice.	Fielden House Productivity Centre Limited Mersey Road West Didsbury Manchester M20 8QA United Kingdom
Management and production control	The Institute of Production Control organizes throughout the year courses on: computers and systems analysis for production; cost control and financial accounting for production; materials management; production control; principles of factory management; production management; production and materials management using computers; production planning and documentation; statistics and operational research for production; principles of office management; production planning and stock control.	Institute of Production Control 23 Wood Street Stratford-on-Avon Warwicks United Kingdom (courses held in Stratford-on-Avon, Edinburgh, Malta, Hong Kong, Kuala Lumpur, Singapore, Trinidad, Brazil, Stockholm and Brussels)

Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
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To be arranged	Professional qualification. English or Thai	-	To be arranged
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19 January, 13 April, 6 July and 28 September 1981 12 weeks	Professional qualification and managerial position in the supply field. English	4 weeks before commencement date	£3,000
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Throughout the year from 4 weeks to 10 weeks	Prospective work study practitioners, management trainees. English	-	From £320 to £450
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and to give practice in its application.

Throughout year 2-28 days	Works directors, production managers, production controllers, stock controllers, factory managers, shop supervisors, and management trainees, departmental and office managers in industry and commerce. English	-	From £120 to £1,500
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Course or Seminar	General description	Organizer; Venue
General management	The responsibilities of management and the role of the manager; the management of finance; production management; resource scheduling and allocation; work study and measurement of work; marketing management; research; sales promotion; advertising; management of human resources; leadership; industrial relations; training and development of subordinates; organizational communication.	International Department, Industrial Society P.O. Box 1BQ 48 Bryanston Square London W1A 1BQ United Kingdom
Management	The P-E Consulting Group through its principal operating companies organizes training courses in: consultancy practice; introduction to management consultancy; appreciation of organization and development; advanced course in training methods; application of production and inventory control; planning and control of production; production management; marketing management; effective speaking leadership in management; self-management; finance and accounts general management; art of management.	The P-E Consulting Group Park House Egham Surrey TW20 OHW United Kingdom
Management	RIPA organizes nine training programmes in: training techniques for managers; organization methods and job evaluation; middle management in the public sector; management services; middle management cadres; personnel management; the management of training; administration for development; financial management.	Royal Institute of Public Administration Hamilton House Mabledon Place London WC1H 9BD United Kingdom
Management and information and control systems	The programme includes an outline of general management and management function; statistics and the basic of MIS; building, introducing and measuring performance; manual MIS; techniques; technology; computer aided systems together with study visits and projects.	Royal Institute of Public Administration Hamilton House Mabledon Place London WC1H 9BD United Kingdom



Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
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9 February, 18 May and 21 September 1981 12 weeks	Professional qualification and experience in general management. English	-	£1,725
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Throughout year 3 days - 6 weeks	Professional degree and managerial experience. English	-	£200 - £1,960 + VAT
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and writing; problem analysis and decision making;  
for non-financial managers; project management;

Throughout year 12 - 16 weeks	Professional qualification. English	-	To be arranged
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September 1981 To be arranged	Middle and senior managers. English	-	To be arranged
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Course or Seminar	General description	Organizer; Venue
Project management	The programme includes an introduction to modern concepts of management and project management, numerate skills, appraisal, control and implementation, resource planning, visits and case studies.	Royal Institute of Public Administration Hamilton House Mabledon Place London WC1H 9BD United Kingdom
Business adviser development	Course organized for business advisers aiding small firms. Subjects covered: finance, costing and accounts; marketing management; production management; personnel aspects; micro computers in small business; general management principles.	Small Business Centre of the University of Aston in Birmingham United Kingdom
Executive development	Practical problems relevant to running a small business. Subjects covered: finance, costing and accounts; marketing management; production management; personnel aspects; micro computers in small business; general management principles. Two-week practical project.	Small Business Centre of the University of Aston in Birmingham United Kingdom
Management	Short courses on: finance, costing and accounts; middle management; financial management; project planning and rural development; decision making and policy formulation; problem definition and solution; marketing in a small industrial business.	Small Business Centre of the University of Aston in Birmingham United Kingdom
General management	Application of general management principles; development of management skills; marketing, financial, manufacturing and personnel management; economic factors or international trade.	Urwick Management Centre Stoke Poges Lane Slough, Berks SL1 3PF United Kingdom

Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
September 1981 To be arranged	Middle and senior managers. English	-	To be arranged
To be arranged 8 weeks	Professional qualification and business experience. English	-	£1,000 (not including accommodation)
To be arranged 10 weeks	Professional qualification and business experience. English	-	£1,200 (not including accommodation)
To be arranged 2 weeks	Professional qualification. English	-	£150-300
February, June and October 6 weeks	Middle and senior managers. English	-	£1,500 + VAT

MANAGEMENT AND INDUSTRIAL ADMINISTRATION (Cont'd)

Course or Seminar    General description

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Management	Short courses are organized during the year in: marketing management; finance for the non-financial executive; production management; computer systems analysis; production management in construction.
Management for the young executive	Application of general management principles; development of management skills; marketing, financial, manufacturing and personnel management; economic factors of international trade.
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.
Project management for local development	An intensive programme for government administrators and planners in developing nations who are responsible for the preparation, analysis, evaluation, and management of projects, for local development.
Public management development	The programme is made up of three main elements: management core course work; specialization course work in one of seven management areas; field trips; field attachment; application paper.

Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Urwick Management Centre Stoke Poges Lane Slough Berks SL1 3PF United Kingdom	Throughout year 1-3 weeks	Professional qualification. English	-	£300-750 + VAT
Urwick Management Centre Stoke Poges Lane Slough, Berks SL1 3PF United Kingdom	January, April, September, November 4 weeks	Young managers with some management experience, typically aged between 25 and 35. English	-	£1,000 + VAT
Urwick Management Centre Stoke Poges Lane Slough Berks SL1 3PF United Kingdom	May and November 3 weeks	Middle and senior managers about to move into general management. English	-	£750 + VAT
Institute of Public Service University of Connecticut 1380 Asylum Avenue Hartford, Ct. 06105 United States of America	22 May 1981 12 weeks	University degree. English	20 March 1981	\$US 3,600
Institute of Public Service University of Connecticut 1380 Asylum Avenue Hartford, Ct. 06105 United States of America	Approx. 20 September 1981 6 1/2 months	University degree or equivalent experience. English	1 May 1981	\$US 4,900

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Desarrollo gerencial	Estudio del marco técnico general y de la administración funcional y del management.	Centro de Estudios de la Dirección de Empresa, de la Asociación Cristiana de Dirigentes de Empresa (ACDE) Avenida Uruguay 1829 Montevideo Uruguay	Marzo A discutir	Título superior. Español	-	\$US 100
Dirección y gestión empresarial	Cursos sobre: el gerente y su desarrollo; principios fundamentales de la venta profesional; supervisión industrial; técnicas de administración moderna; planificación y control de la producción.	CNTPI Sarandí 690 D 2º E., Montevideo Uruguay	Varias A discutir	Graduado universitario. Español	-	\$US 100 - 200

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

Trade promotion and export marketing research	Course for senior and middle level business executives and senior export promotion officials seeking to establish stronger trading and marketing links with major European markets from Angola, Botswana, Egypt, Ethiopia, Ghana, Guinea, Ivory Coast, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mauritius, Morocco, Mozambique, Nigeria, Sierra Leone, Somalia, Sudan, Swaziland, United Republic of Cameroon, United Republic of Tanzania, Uganda, Zambia, Zimbabwe.	PRODEC The Helsinki School of Economics Runeberginkatu 22-24 SF-00100 Helsinki Finland (Addis Ababa, Ethiopia, Nairobi, Kenya and Helsinki with supply study in home country and demand study in selected European markets)	5 January 1981 12 weeks and in 1982	Professional qualification. English	-	-
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Course or Seminar	General description	Organizer; Venue
Marketing	Techniques modernes de commercialisation et marketing ; actions de vente ; plan d'action commerciale.	ADETEM 30 rue d'Astorg 75008 Paris France
Marketing, politique et stratégie d'entreprise	Centre des hautes études de marketing et stratégie.	ADETEM 30 rue d'Astorg 75008 Paris France
Organisation de l'entreprise, structures et fonctions, marketing et commercialisation	Organisation de l'entreprise pour l'action sur l'environnement et les marchés.	ADETEM 30 rue d'Astorg 75008 Paris France
European marketing programme	INSEAD organizes short courses on (a) european marketing and (b) general management for young executives.	INSEAD Bd de Constance 77300 Fontainebleau France
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 D-5000 Köln 1 Federal Republic of Germany

Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Février et septembre 1981 17 semaines	Qualifications professionnelles. Français	-	F 12,906
Mai et novembre 1981 15 semaines	Qualifications professionnelles. Français	-	F 11,466
Février et septembre 1981 15 semaines	Qualifications professionnelles. Français	-	F 10,930
(a) 1 March and 16 August 1981 (b) 12 February and 20 September 1981 (a) and (b) are 3-week courses	Professional qualification. English	-	(a) F 18,500 (b) F 16,500
April and October 5 weeks	Practical experience in a responsible managerial position in export-oriented industry or commerce. English	-	To be arranged



Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Export promotion	Role of government in export promotion; export marketing management; export marketing research; export promotion techniques; lectures; discussions; case studies; workshop; business games; field visits; market survey in Italy.	SIOI Segretariato Permanente per la Cooperazione Tecnica Internazionale Via del Tritone n. 46 00187 Rome Italy	February 1981 3 months	Professional qualification. English	January 1981	To be arranged
Export marketing (selected industrial commodity groups)	Lectures/discussions and case studies covering: introduction to export marketing; current status of world economy and future prospects; general economic development policies and industrialization strategies; government's support and promotion in export industries; advertising and sales promotion; export strategy and features of selected industrial commodity groups in member countries; costing and pricing; consumer behaviour and new product development; systematic approach to export marketing for selected industrial commodity groups; distribution channels, transportation and warehousing; trade promotion organizations and trade fairs; international sub-contracting; quality control for exports; export financing and credit; development and practices of integrated trading companies.	Asian Productivity Organization 4-14 Akasaka 8-chome Minato-ku Tokyo, 107 Japan (Republic of Korea)	August/ September (tentative) 3 weeks	Marketing consultants of National Productivity Organizations, or similar institutions, and persons concerned with export promotion of industrial goods, or other persons concerned with the selected commodity groups, of APO member countries. English	-	\$US '00
Salons internationales	Problèmes d'organisation, gestion administrative et commerciale.	Lux-Development 7, rue Alcide de Gasperi B.P. 1503 Luxembourg	A arranger	- français anglais allemand	-	A convenir
Marketing and export trade development	Development of the marketing function, with special emphasis on export trade development. The training provides for a series of personalized introductions on market analysis, international trade relations, product-programme, quality assurance, marketing, pricing and costing. The programme will further include self-study of selected literature and market documentation and observations. An experienced CEO-associate will provide guidance as tutor and programme co-ordinator.	CBO - Centre for Management and Industrial Development Exchange Building Coolsingel/Meent P.O. Box 30042 3001 DA Rotterdam Netherlands	Commence- ment to be arranged. 8-12 weeks	University graduates in engineering, economics or business administration, preferably with experience in industry. English	-	To be arranged

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Marketing management	Managerial training in marketing policy and practice; exposure to marketing conditions and action through marketing workshops; marketing tools and techniques applicable to marketing decision-making in developing countries.	Research Institute for Management Science (RVB) P.O. Box 143 2600 AC Delft Netherlands	7 January 1981 22 weeks	Professional qualification and three years business experience in small or medium sized enterprises. English	3 months before start of course	f. 9,700
MerCADEO moderno: concepto, análisis y aplicaciones dinámicas	Comprende: ambiente del mercadeo; desarrollo del producto; fijación de precios; publicidad y promoción de ventas; canales de distribución, mercado comercial y estrategias competitivas; investigación de mercado.	SNPP Servicio Nacional de Promoción Profesional; Av. Molas Lopez e/5 y 6 Villa Victoria Asunción Paraguay	1 Junio 1981 2 meses	Profesional trabajando en esas materias en institución de desarrollo. Español	15 Febrero 1981	\$US 3,000
Trade promotion	ITC organizes training events adapted to the local needs of developing countries, in which they take place, in: export marketing techniques; export marketing research; export marketing management; trade information; official trade representation; export financing; import procurement.	International Trade Centre UNCTAD/GATT P.O. Box 30 1211 Geneva 21 Switzerland	To be arranged	Professional qualification. Language requirements according to location of each training activity.	-	-
Organisation de la vente dans une entreprise industrielle	Analyse du produit ; analyse du marché ; activités de vente ; design du profil des agents de la vente, leur recrutement, leur formation.	Centre national de Promotion des Petites et Moyennes Entreprises B.P. 1086 Lomé, Togo	Juin 1981 2 mois	Etre, de près ou de loin, intéressé par les activités de vente, dans une entreprise industrielle. Français	-	F.CFA. 20,000

MARKETING AND EXPORT PROMOTION (Cont'd)

Course or Seminar    General description

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Marketing  
management

Classes and workshops on marketing planning, strategy and tactics tailored to each participant's policies and problems.

Industrial  
promotion for  
export  
processing zones,  
industrial parks,  
and other  
industrial  
agencies

Production sharing in the manufacture of goods between advanced and developing nations; factors influencing plant location decisions; the U.S. economy and marketing methods; how strategies and plans for promotion are devised and implemented; operating within budgets; the use of computers in promotion; incentives used to attract investment; and the functions and responsibilities of industrial promotion officers. Visits to factories.

Export  
marketing  
for small  
industries

Course for managers and marketing officials of small industries on export marketing, (joint export marketing groups), product adaptation, costing and pricing and packaging for export.

Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
International Marketing Institute 16 Garden Street Cambridge, Mass. 02138 United States of America	22 June 1981 and 21 June 1982 6 weeks (academic segment) and 4 weeks (optional survey tour)	Business executives, government officials, consultants.	31 May 1981	\$US 1,975 + room and board
International Parks, Inc. (with the co-operation of Northern Arizona University Management Development Programme) P.O. Box 986 Flagstaff Arizona 86002 United States of America	June 1981 and 1982 10 weeks	Degree in business or engineering. English	-	\$US 5,000 (includes all living and travel expenses during programme)
PRODEC The Helsinki School of Economics Runeberginkatu 22-24 SF-00100 Helsinki Finland	19 October 1981 2 weeks and in 1982	Professional qualification. English	-	-

QUALITY CONTROL AND STANDARDIZATION  
 CONTRÔLE 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
Normalisation	Cours sur la normalisation et l'entreprise ; les nomenclatures et codifications ; l'analyse de la valeur et autres techniques d'analyse ; la gestion qualité dans l'entreprise ; la fonction qualité dans les petites et moyennes industries ; le contrôle de réception et les relations clients fournisseurs ; la qualité et la conception des produits.	AFNOR Association Française de Normalisation Tour Europe Cedex 7 92080 Paris La Défense France	Toute l'année 1-5 semaines	Ingénieurs et techniciens. Français	-	A arranger
Metrology I	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 PTB.	Carl Duisberg-Gesellschaft and the Zentralstelle für Arbeitsvermittlung der Bundesanstalt für Arbeit in co-operation with the 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
Metrology II	Mechanics, electricity, heat, optics and acoustic covers: introduction to the techniques of precision measurement at laboratories of the PTB; participation in precision measurements of the PTB; possibly, licensing tests of measuring equipment at manufacturers' premises; informational visits to bureaus of standards, testing offices, etc.; topic-oriented visits of plants as prescribed by the PTB.	Carl Duisberg-Gesellschaft and the Zentralstelle für Arbeitsvermittlung der Bundesanstalt für Arbeit in co-operation with the 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	Technicians with experience in metrology. German	-	To be arranged

QUALITY CONTROL AND STANDARDIZATION (Cont'd)

<u>Course or Seminar</u>	<u>General description</u>
Standardization for developing countries	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.
Quality control	Principles and practice of quality control.
Quality control	Certification and inspection system.
Quality control in foundry and die casting	Introduction to quality control; quality control in Japan; foundry and die casting industry in Japan; statistical quality control; standardization; foundry and die casting processes; in-plant observation and study of foundry and die casting industry.
Quality control	Designed for local engineers and managerial staff who supervise quality control, production control or factory management. Participants will study various fundamental QC techniques through lectures, class room discussions and in-plant practices and learn how to implement QC techniques in an actual production site.

Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
India: Standards Institution 9 Bahadur Shah Zafar Marg New Delhi 110 002 India	Second week of November each year 12 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-August	-
National Institute for Training in Industrial Engineering Vihar Lake Bombay-400087 India	20 April 1981 2 weeks	Professional qualification and experience in quality control. English	February 1981	\$US 500
Agency of Industrial Science and Technology, Japanese Standards Association in collaboration with Japan International Corporation Agency (JICA), P.O. Box 216, Mitsui Building, 2-1 Nishi Shinjuku Shinjuku-ku, Tokyo 160, Japan	8 January 1981 8 weeks	Professional qualification... English	-	To be arranged
Asian Productivity Organization, 4-14 Akasaka 8-chome Minato-ku, Tokyo 107 Japan	Date in 1982 to be decided 6 weeks (tentative)	Technical consultants of National Productivity Organizations or similar institutes and engineers in the foundry and die casting industry, of APO member countries. English	-	\$US 200
The Association for Overseas Technical Scholarship 2-12-13 Honkomagome Bunkyo-ku, Tokyo Japan (Osaka, Japan)	July 1981 6 weeks	Professional qualification and experience in quality and production control. English	-	Y 413,000 (\$US 1,700)

QUALITY CONTROL AND STANDARDIZATION (Cont'd)

<u>Course or Seminar</u>	<u>General description</u>
Certification and inspection system (including export inspection)	Essentials of certification and examination systems, operations of Japanese certification system and JIS licensed factories, self-certification marking system, examinations of JIS system, third party certification system, present certification systems in foreign countries, international certification system, export inspection law, compulsory certification systems etc., including orientation, technical visits, observation tour and evaluation.
Industrial standardization and quality control	Essentials of standardization, fundamentals in industrial standardization, administration of national standardization, standardization at international level, technical standards in regulation, JIS marking system, presentation of product standards, company standardization, value engineering and standardization, standardization in distribution of goods, standardization in information processing, permeation and implementation of standards, quality control, reliability and quality assurance system, sampling methods, and sampling inspection, etc. (Tentative subjects) including: orientation, technical visits, observation tour, and evaluation.
Industrial metrology	Practical training in the calibration of industrial measuring instruments covering the physical, electrical and temperature parameters. Laboratory work and field visits.



Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
<p>Japan International Cooperation Agency (JICA) Agency of Industrial Science and Technology, and Japanese Standards Association P.O. Box 216, Shinjuku Mitsui Building, No. 1-2 chome, Nishi Shinjuku, Shinjuku-ku, Tokyo 160 Japan</p>	<p>January 1981 and 1982 Approx. 2 months</p>	<p>University graduates. English</p>	-	<p>To be arranged</p>
<p>Japan International Cooperation Agency (JICA) Agency of Industrial Science and Technology (AIST) Japanese Standards Association P.O. Box 216 Shinjuku Mitsui Building No. 1-2 chome Nishi Shinjuku Shinjuku-ku Tokyo 150 Japan</p>	<p>Summer 1981 summer or winter 1982 Approx. 3 months</p>	<p>University graduates at present engaged in standards engineering works at National Standards Bodies (NSB). English</p>	-	<p>To be arranged</p>
<p>Singapore Institute of Standards and Industrial Research (SISIR), 179 River Valley Road Singapore 0617</p>	<p>To be arranged 8 weeks</p>	<p>Professional qualification. English</p>	-	<p>To be arranged</p>

QUALITY CONTROL AND STANDARDIZATION (Cont'd)

Course or Seminar    General description

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Non-destructive testing    Non-destructive testing courses, covering topics such as industrial radiography, welding inspection and industrial applications of NDT; on-the-job practical training.

Quality control and certification    Quality control, statistical sampling plan, control charts and other quality control techniques; practical attachments.

Gestión y control de calidad    Ciclo de cinco seminarios: planificación moderna de la gestión en la empresa; técnicas estadísticas aplicadas al control de calidad; fiabilidad; control de calidad de proveedores y fabricación; control de calidad en el desarrollo de nuevos productos.

Quality control    Principle of sanitation, canning, emphasizing retort operation; packaging; management, and food law relating to food additives.

Organization of standards work    Programme extends the experience and develops the competence of personnel from the newer standards organizations. It places the whole process of standardization in its context within the constitution and industrial establishment of a country. The course does not offer specialized training in any particular subject like quality assurance, metrology, food or textiles, although all these subjects are covered.

Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Singapore Institute of Standards and Industrial Research (SISIR), 179 River Valley Road Singapore 0617	April 1981 4 weeks	University degree. English	-	To be arranged
Singapore Institute of Standards and Industrial Research (SISIR), 179 River Valley Road Singapore 0617	July 1981 8 weeks	Technical diploma and experience in quality control. English	-	To be arranged
Instituto Nacional de Racionalización y Normalización Zurbano 46, Madrid España (en colaboración con la Asociación Española para el Control de la Calidad)	A discutir	Titulado superior. Español	-	Ptas 12,000
Institute of Food Research and Product Development, Kasetsart University P.O. Box 4-170 Bangkok 4, Thailand	August 1981 2 weeks	Professional qualification. Thai or English	17 July 1981	To be arranged
British Standards Institution (BSI) 80 Park Lane London W1A 2BS United Kingdom	4 July 1981 5 1/2 weeks	University graduates working at a national standards organization. English	Application is advised before 30 April 1981	£600

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Metrology, quality assurance and standardization	Course designed for those working in this field and is particularly relevant to those countries who wish to establish or extend their national metrological and standardization services.	Cranfield Institute of Technology Cranfield, Bedford United Kingdom	23 February 1981 13 weeks	Professional qualification. English	-	£3,000
Metrology, quality assurance and standardization	Training in metrology; metrology theory and industrial metrology practice; legal metrology practice; quality assurance; equipment manufacturing and calibration; legal metrology enforcement.	Department of Trade, Metrology, Quality Assurance and Standards Division Legal Metrology Branch 26 Chapter Street London SW1P 4NS, United Kingdom, in association with the British Standards Institution and the Cranfield Institute of Technology	23 February 1981 13 weeks	Professional qualification. English	-	£3,000
Quality assurance	This short course is designed to provide engineers, technologists and management with an up-to-date appraisal of quality assurance.	Scottish School of Non-Destructive Testing, Paisley College, High Street Paisley PA1 2BE United Kingdom	June 1981 To be arranged	Professional qualification and industrial experience. English	-	£85
Non-destructive testing	Theoretical and practical training in the four basic N.D.T. methods, radiography, ultrasonics, magnetic particle and penetrant inspection.	The Unit Inspection Company, Sketty Hall Swansea SA2 8QE United Kingdom	April and October 1981 26 weeks	University degree. English	1 February and 1 August 1981	To be arranged
Nuevas técnicas para el control de calidad en la industria de alimentos	Introducción al control de calidad; métodos estadísticos de control; evaluación sensorial de alimentos; aspectos microbiológicos en control de calidad; análisis químico y físico; control de calidad de agua; cuerpos extraños en productos alimenticios; saneamiento de la planta (v. industrias alimentarios).	INVESTI Km. 8 Carretera Panamericana Apdo. 1697 Carmelitas 1010A Caracas, Venezuela	Febrero 1981 Abril 1981	Graduado universitario. Español	-	Bs. 2,500 (\$585) Asistencia

SMALL-SCALE INDUSTRIES  
PETITES INDUSTRIES  
PEQUENAS INDUSTRIAS

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Small industry and entrepreneur development	The course is designed to equip participants with the ability to plan and implement a development programme for a country's small industries.	Industrial Development Authority Lansdowne House Dublin 4 Ireland	29 June 1981 8 weeks	Experienced public officials with university degree. English	..	To be arranged
Small industries development	Government measures for promotion of small industries; techniques and methodology for stimulating small-scale labour intensive industries and development of entrepreneurship; infrastructure facilities including industrial estates, etc.; technical problems of small-scale industries; extension services for promotion; financial assistance for small-scale industries.	Asian Productivity Organization, 4-14 Akasaka 8-chome Minato-ku, Tokyo 107 Japan (Stage I: Republic of Korea; stage II: another member country)	Date in 1982 to be decided 3 weeks (tentative)	Consultants of National Productivity Organizations or similar institutions and senior government officials concerned with promotion of small industries development, <u>of APO member countries.</u> English	-	\$US 100
Small industry	Lectures and practical training in: general perspectives of Japan's smaller enterprises; its development and management methods in connection with government policies, taxation systems, financing and banking provisions, etc.; observation tours.	Osaka Prefectural Government, Osaka Prefectural Institute for Industrial Management in collaboration with Japan International Cooperation Agency (JICA), P.O. Box 216, Mitsui Building 2-1 Nishi Shinjuku, Shinjuku-ku, Tokyo 160, Japan	8 January 1981 10 weeks	Professional qualification. English	-	To be arranged
Industrial estates and complexes	Management and planning aspects of industrial estate and complex development. The training programme provides for a series of personalized introductions on development planning of industry and infrastructure, physical planning, location aspects, environmental planning, investment and costs, lay-out development, optimization. The programme will include further self-study of selected literature and field-observations. An experienced CBO-associate will provide guidance as tutor and programme-coordinator.	CBO - Centre for Management and Industrial Development Exchange Building Coolsingel/Meent Postbox 30042 3001 DA Rotterdam Netherlands	Commencement to be arranged 8-12 weeks	University graduates in engineering, economics or business administration, preferably with experience in industry. English	-	To be arranged

## SMALL-SCALE 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
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.	Research Institute for Management Science (RVB) P.O. Box 143 2600 AC Delft Netherlands	15 July 1981 22 weeks	Professional qualification and business experience. English	3 months before start of course	f. 9,700
Entrepreneurship development	Promotion of small enterprises in the countryside and generation of self-employment schemes for potential entrepreneurship. Course includes: achievement motivation training; management skills training; preparation of feasibility study; project preparation; entrepreneurship.	Institute for Small-Scale Industries University of the Philippines (UP-ISSI) and other Philippine bodies Virata Hall Quezon City Philippines	June, August and October 1981 18 weeks	Persons with strong desire to organize and manage their own enterprises and having equity capital. English	-	\$US 900
Entrepreneurship development	The objective of the course is to develop the capability of trainers in designing, implementing and evaluating an entrepreneurship development programme.	Institute for Small-Scale Industries University of the Philippines (UP-ISSI) Quezon City, Philippines	August 1981 6 weeks	Professional qualification. English	-	\$US 900
Management consultancy	Small-scale industries; introduction to business management principles; marketing and export development; production management; management accounting; financial management to personnel management; business policy; management games; project development; introduction to new management techniques; appreciation lectures; industry survey; visits to modern small factories; practical in-plant exercises; fieldwork.	Institute for Small-Scale Industries University of the Philippines (UP-ISSI) Quezon City Philippines	July 1981 7 months	The course is open to holders of Bachelor's or Master's degrees.	3 months before course starts	\$US 1,400
Manager's course	Introduction to business management; marketing management; production management; accounting and financial management; personnel management and general management; business policy; enterprises planning and development; evaluation of a manager; business game; integrated plant survey reports.	Institute for Small-Scale Industries University of the Philippines (UP-ISSI) and other Philippine bodies Quezon City Philippines	March August 1981	Professionally qualified managers or potential managers preferably of small and medium scale manufacturing enterprises. English	-	\$US 1,400

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Small industry information management	Planning and analysis of information services; acquisition and processing of various information materials from the different libraries, documentation and information centers for information storage and retrieval; identification of various sources of information and user's information needs.	Institute for Small-Scale Industries University of the Philippines (UP-ISSI) Quezon City Philippines	June 1981 14 weeks	Professional qualification. English	-	\$US 1,400
Promotion of small-scale enterprises in developing countries	The programme aims to enable participants to develop and apply an integrated programme of assistance for small-scale enterprises which is suitable for the circumstances of the particular country or region in which they are employed. The programme covers credit, training, extension, technology, marketing and government policy, and the organization of an integrated national approach.	The Cranfield School of Management Cranfield Bedford MK43 OAL United Kingdom	31 August 1981 10 weeks	Professional qualification. English	-	£3,000 (including all accommodation)

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

Trainer development	Short courses and group training programmes on: instruction orientation; interpersonal relations; improvement of working methods; accident prevention; group instruction; office task analysis; training trainers.	National Training Council, Department of Employment and Youth Affairs Canberra A.C.T. Australia	Throughout year 5-35 days	Professional qualification. English	-	\$A 90-400
Directeur de la formation	Formation dans la nation et l'entreprise ; l'étude des besoins ; la réponse à ces besoins ; la préparation des projets ; les moyens de la formation ; les moyens de l'action : pédagogie et animation ; les moyens du contrôle.	IDET-CEGOS S.A. 33 quai Galliéni B.P. 50 92152 Suresnes France	Dates à fixer 4 semaines	- Français	-	F 10,000

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
Trainer development	The Institute organizes 16 different courses covering the principal aspects of trainer development.	Central Staff Training and Research Institute, Dasnagar Howrah-711105 Calcutta, India	To be arranged 1-4 weeks	Professional qualification. English	-	Nominal fee of Rs 20 per course
Organization and techniques of training	Training for results; role and functions of training department; identification of training needs; programme structuring; evaluation of training; psychology of learning; techniques of training; lecture; audio-visual aids; case study; incidence process; role play; inbasket exercise; business game; programme instruction; self-awareness programmes.	National Institute for Training in Industrial Engineering (NITIE) Vihar Lake Bombay 400087 India	9 February 1981 2 weeks	Training officers, management development personnel and other technical personnel involved in the process of management developing and training. English	9 December 1980	\$113 500
Industrial development - the role of manpower planning and industrial training	The course is designed to equip participants to plan their future manpower requirements and implement a systematic industrial training programme both at national and company levels.	Industrial Development Authority Lansdowne House Dublin 4 Ireland	4 August 1981 8 weeks	Experienced public officials with university degree. English	-	To be arranged
Industrial development - the training of rural labour	The central issue will be the training and organization of people in rural areas to ensure the successful transfer of skills that will bring them into productive and socially acceptable employment in industry.	Industrial Development Authority Lansdowne House Dublin 4 Ireland	12 October 1981 8 weeks	Middle to senior level officials with university degree. English	-	To be arranged
Advanced trainers' workshop	To equip suitably qualified people with the training skills to successfully conduct management training programmes in their own country.	Irish Management Institute Sandyford Road Dublin 14 Ireland	May 8 weeks	Professional qualification and management training experience in developing countries. English	-	To be arranged



## TRAINER DEVELOPMENT (Cont'd)

### Course or Seminar    General description

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Audio-visual  
aids  
technology

The theory of communication; a systems approach to audio-visual communication; applied educational technology; preparation of visual software; media production techniques; teaching with audio-visual aids; the use of audio-visual hardware. Study tour.

Direction des  
établissements  
de formation  
professionnelle

Ce cours s'adresse à des directeurs d'établissements de formation professionnelle et technique, d'écoles techniques et de services de formation d'entreprises, et a pour objet de perfectionner leurs connaissances en matière de gestion financière, de direction du personnel et d'élaboration de programmes de formation.

Formation sur  
le tas:  
organisation et  
méthodes  
d'enseignement

Ce cours est destiné à des formateurs d'instructeurs qui enseigneront sur le lieu de travail et à des responsables de services publiques de formation professionnelle et technique. Le cours comprend un voyage d'étude, et a pour objet de préparer les participants à organiser des activités de formation, en dehors du système scolaire, qui répondent aux besoins des secteurs tertiaire, industriel et agricole.

Training  
methodology

Modern learning theories; development of learning programmes; validating training programmes and systems; training methods and techniques; training and learning media. Study visits.

Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
ILO International Centre for Advanced Technical and Vocational Training 201 Via Ventimiglia 10127 Turin Italy	2 March, 1 June and 2 November 1981 9 days	Professional qualification. English, French or Spanish	-	\$US 1,800
Centre international de perfectionnement professionnel et technique 201 Via Ventimiglia 10127 Turin Italie	Septembre 1981 10 semaines	Qualifications professionnelles. Français	-	\$US 3,050
Centre international de perfectionnement professionnel et technique 201 Via Ventimiglia 10127 Turin Italie	Septembre 1981 10 semaines	Qualifications professionnelles. Français	-	\$US 3,060
ILO International Centre for Advanced Technical and Vocational Training 201 Via Ventimiglia 10127 Turin Italy	2 February, 4 May and 5 October 1981 25 days	Professional qualification. English, French or Spanish	-	\$US 1,200

TRAINER DEVELOPMENT (Cont'd)

Course or Seminar    General description

Training systems	The systems approach to training: structuring of the training system; use of a system model for instruction; design, control and validation of a learning programme; planning, implementation, follow-up and evaluation of an instructional system.
Training techniques	The need for management training; principles of learning; training methodologies: case method, programmed instruction; business games, role playing, in-plant practice, sensitivity training; use of audio-visual aids; planning and implementing training programmes: assessment of training needs, design of programme, administration of programme, evaluation. (Stage I lasts one week and consists of lectures and discussions. Stage II covers observational visits.)
Trainer development	Short courses in management training methods and learning theory for trainers and training organizers.
Trainer development	Identifying training needs; training technology; preparation of training materials; individual assignments.

Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
ILO International Centre for Advance Technical and Vocational Training 201 Via Ventimiglia 10127 Turin Italy	19 January, 20 April and 21 September 1981 12 days	Professional qualification. English, French or Spanish	-	\$US 600
Asian Productivity Organization, 4-14 Akasaka 8-chome Minato-ku Tokyo 107 Japan (Philippines (Stage I) Japan Stage II)	To be decided 3 weeks (tentative)	Trainers of National Productivity Organizations or similar institutions, <u>of APO member countries.</u> English	-	\$US 100
Centre for Management Development P.O. Box 7648 Lagos, Nigeria	June and July 1981 3-5 weeks	Professional qualification. English	-	To be arranged
The British Association for Commercial and Industrial Education (BACIE) 16 Park Crescent, London W1N 4AP, United Kingdom, (London and Oxford)	2 August 1981 12 weeks	Professional qualification. English	-	£2,600 (to be confirmed)

TRAINER DEVELOPMENT (Cont'd)

Course or Seminar    General description

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Skills and techniques of training

The programme will cover: the principles of adult training; the defining of training needs and the formulation of training objectives; the designing of training programmes, with particular reference to method and content; the communication skills involved in training; and organizational aspects of implementing staff training.

Trainer development

A thirteen week basic training officer course including job-related project work and help with post-course secondment if required. Course is organized for senior overseas training offices and government officers responsible for training development.

Training officers

Identification and analysis of organizational and individual training needs using job analysis and performance appraisal; design of training programmes; costing and budgeting for training; training methods and the assessment of training's effectiveness. Practical visits.

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. The course is run on workshop lines with project work, teaching practices, and exercises in course design.

Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Crown Agents Training Services 4 Millobank London SW1 United Kingdom	16 February, 11 May and 3 August 1981 8 weeks	Professional qualification and training experience. English	4 weeks before commencement date	£2,500
Industrial Training Service 43 Market Place Wetherby West Yorkshire LS22 9LN United Kingdom	March 1981 Approx. 13 weeks	Professional qualification. English	December 1980	£2,350 + £3,000 (for accommodation)
International Department Industrial Society P.O. Box 1BQ 48 Bryanston Square London W1A 1BQ United Kingdom	9 March and 7 September 1981 and 5 March and 6 September 1982 9 weeks	Professional qualification and training officers experience. English	-	£1,725
School of Management Studies Polytechnic of Central London 35 Marylebone Road London NW1 5LS United Kingdom	September 12 weeks	Degree and/or professional qualification. English	-	£1,150

Course or Seminar	General description	Organizer; Venue
Trainer development	The College organizes a series of courses designed specifically for overseas trainers, as follows: development programme for overseas trainers; programme for experienced overseas trainers; instructional techniques for overseas trainers; individually managed programmes for overseas trainers.	The Training Technology Division, Faculty of Management Slough College of Higher Education Wellington Street Slough SL1 1YG United Kingdom
Training and education for 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 Avenue Hartford, CT. 06105 United States of America

Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
January, April and June 1981 6-12 weeks	Professional qualification. English	-	£1,120 - £1,920 (non-residential) Individual programmes about £185 per week
22 May 1981 12 weeks	University degree. English	20 March 1981	*US 3,600



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

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Mantenimiento predictivo	Las características de las instalaciones y equipos de la industria siderúrgica, hace necesario tener un conocimiento profundo de la tecnología del mantenimiento, como así también de los desarrollos tecnológicos e investigaciones que se realizan en la materia. Es por lo tanto el objetivo del cursillo, analizar y profundizar las técnicas del mantenimiento predictivo, que posibiliten diagnosticar el "estado de salud" de la maquinaria y equipo afectado a la industria siderúrgica.	Instituto Argentino de Siderurgia Carlos María Della Paolera 226 1104 Buenos Aires Argentina	Septiembre 1981 1 semana	Título universitario. Español	-	\$US 500
Programación de la producción	La diversificación de productos, medidas y calidades de la producción siderúrgica, implica un análisis detallado y armónico del empleo de las instalaciones y equipos afectados a la producción, con la finalidad de maximizar su utilización, evitando tiempos muertos e incidencias negativas en los costos. Para lograr lo anteriormente expresado es menester poseer un profundo dominio de las técnicas de programación, las que serán analizadas en detalle durante la realización del cursillo.	Instituto Argentino de Siderurgia Carlos María Della Paolera 226 1104 Buenos Aires Argentina	Abril 1981 1 semana	Título universitario. Español	-	\$US 500
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
Marketing management strategy	Management international; marketing strategy.	IFG, 37, quai de Grenelle, 75015 Paris France (Thury sous Clermont, Oise)	June 1 week (residential)	Heads of enterprises and high level European officials. English	June	F 6,000 + Stipend

<u>Course or Seminar</u>	<u>General description</u>	<u>Organizer; Venue</u>
Séminaire pour directeurs de foires	Thèmes techniques se rapportant à des problèmes de foires.	Union des Foires Internationales 35 L's, rue Jouffroy 75017 Paris, France (Vienne, Autriche)
Basic means of company standardization	Principles and organization of standardization; international standardization; standardization science; standardization techniques; company standardization; organization, tasks and function; standardization and electronic data processing; microfilm of technical documents; organizing systems.	DIN Deutsches Institut für Normung e.V. Purgrafenstr. 4-10 D-1000 Berlin (West) 30
Management knowledge in company standardization	Co-operation and management in the modern society; how to run a department; conference and discussion techniques; managerial hierarchy within a company; industrial economics and administration; company management; standardization and labour legislation.	DIN Deutsches Institut für Normung e.V. Burggrafenstr. 4-10 D-1000 Berlin (West) 30
Standardization	Standardization aspects; tendencies of national and international standardization; legal aspects in relation to standardization; law on technical equipment; maintenance network planning; economy in company standardization; value analysis; applied methodology for standardization; computer aided design; computer aided manufacturing.	DIN Deutsches Institut für Normung e.V. Burggrafenstr. 4-10 D-1000 Berlin (West) 30

Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Avril/mai 1981 A arranger	- Français, anglais, espagnol, allemand	-	-
February, March, September and October 5 days	- German	-	DM 1,045
March and October 4 days	Professional experience of some years of standardization or attendance of former DIN courses I and II. German		DM 1,625
February, March, September and October 5 days	Basic knowledge of standardization. German	-	DM 1,045

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Standardization and maintenance	Organization of standardization and maintenance; maintenance working documents; planning and control of maintenance; co-ordination; design aspects of standardization and maintenance; budgeting and insurance; legal aspects concerning standardization and maintenance; planning and control of spare parts.	DIN Deutsches Institut für Normung e.V. Burggrafenstr. 4-10 D-1000 Berlin (West) 30	March and September 3 days	Some experience in maintenance. German	-	DM 910
Management	Short courses organized throughout the year on general management; EDP, finance; marketing; personnel; production; small business; insurance; supply management; management and organization development; supervisory Hong Kong industrial management.	The Hong Kong Management Association Management House 26 Canal Road West Hong Kong	3-4 times a year 1-5 days	Manager, executive, superior. English, Chinese	-	To be arranged
Industrial technology	Short courses on: low-cost automation; introduction to the use of small computers; heat treatment of steels; service treatment; textile and garment production; waste treatment.	The Hong Kong Productivity Centre Sincere Building 173 Des Voeux Road Central Hong Kong	To be arranged	Technical personnel. English, Chinese	-	To be arranged
Textiles	Short courses on: analysis and improvement of productivity in spinning and weaving; process control in spinning; process control in weaving; quality control in wet processing of cotton textiles; engineering services (fuel economy, air-conditioning, materials handling); and critical dimensions of textile management.	Ahmedabad Textile Industry's Research Association Polytechnic P.O. Ahmedabad 380 015 India	August to November 3-10 days	Professional qualification. English	-	To be arranged

Course or Seminar      General description

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Cement production and technology      The Institute organizes 12 short courses on wide range of basic subjects in cement manufacture and technology.

Production and recovery of marine chemicals      Theoretical lectures on production of salt from sea water and recovery of valuable marine chemicals. Practical training in analysis of salt and other marine chemicals.

Fertilizer production      Flow; temperature; pressure and level measurements; automatic control; control valves; electronic instruments; annunciators; thyristors; computer for process control; vibration measurement and other predictive maintenance instruments; gas sampling and analysis; weighing systems; design of control panels; system reliability.

PERT/CPM      Principles of network development; critical path analysis; probability aspects in PERT; resources allocation and levelling; multi-project scheduling; concept of crashing; project cost control; introduction to computers and PERT packages; precedence networks; line of balance; decision trees.

Advancement of management and productivity      Discussion and study in depth of modern concepts, techniques and problems of productivity.

Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Cement Research Institute of India M-10 South Extension 11 Ring Road New Delhi 110049 India	Throughout year 4-10 days	Professional qualification. English	-	Rs 400 - 1,000
Central Salt and Marine Chemical Research Institute Bhavnagar, India	March or April 1981 10-15 days	Science degree. English	-	\$US 300-400
The Fertilizer Association of India Near Jawaharlal Nehru University New Delhi 110067 India	October 1981 and 1982 6 days	Qualified instrument/electronics engineers in fertilizer industry. English	-	Rs 2,000
National Institute for Training in Industrial Engineering (NITIE) Vihar Lake Bombay-400087, India	16 February 1981 2 weeks	Project management executives. English	16 December 1980	\$US 500
National Productivity Council 5-6 Institutional Area Lodhi Road New Delhi-110003, India (Srinagar)	September-October 15 days	Senior management personnel. English	-	\$US 350 incl. board and lodging

**Course or Seminar    General description**

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**Transfer of  
technology**

The training workshop covers: selection of technologies for R&D; evaluation of technologies; preparation of feasibility reports; mechanisms of development and transfer of technology; fixation of price for technology; entrepreneur development and technology absorption. It also covers mechanisms for the development and transfer of technology suitable for small scale and cottage industries; patent law; drafting of patent specifications; negotiating procedures for the acquisition of technologies, etc.

**Structural  
engineering**

Courses on: analysis and design of structures for dynamic loads; computer applications to analysis and design of structures; methods and techniques used in construction of off-shore and marine structures; modern trends in building; precast concrete for residential and industrial buildings; modern methods of design and construction.

**Management**

Short courses covering broad range of management; general, financial, production, marketing and personnel management; and supervisory training.

**Management**

The Foundation organizes short courses in supervisory development, project development and management, and production engineering.

<b>Organizer; Venue</b>	<b>Commencing date; Duration</b>	<b>Qualifications: Language requirements</b>	<b>Last date for receipt of applications</b>	<b>Fee</b>
National Research Development Corporation 61 Ring Road Lajpat Nagar-III New Delhi-110024 India	First quarter of 1981 15 days	Professional qualification and post at decision- making level. English	-	\$US 500
Structural Engineering Research Centre Madras 600 020 India	To be arranged 1-4 weeks	Engineering degree. English	-	\$US 200 - 500
Pakistan Institute of Management Shahrah Iran Clifton Karachi 6 Pakistan (Karachi and Lahore)	To be arranged 1-2 weeks	Senior and middle level executives from business and industry. English	-	PRs 800-2,000
Economic Development Foundation, Inc. JMT Building, Ayala Avenue, Makati, Metro Manila, Philippines	To be arranged 8 days	Professional qualification. English	-	\$US 87



<u>Course or Seminar</u>	<u>General description</u>	<u>Organizer; Venue</u>
Welding	Short courses on: design of welded constructions; quality control in welded constructions; welding metallurgy; welding technology.	Instituto de Soldadura Departamento de Formação e Documentação rua Tomás de Figueiredo 16A 1500 Lisboa Portugal
Análisis técnico de carbones	Desmuestra, preparación de muestras; análisis inmediato; análisis elemental: C,H,N y S en sus diferentes formas potencia calorífica; análisis de cenizas.	Instituto de Carboquímica (C.S.I.C.) Apartado-589 Plaza Paraíso 1 Zaragoza-5, España
Cromatografía y pirocromatografía aplicada a la identificación de microorganismos	Preparación de muestras; cromatografía derivados volátiles; pirocromatografía; interpretación de cromatogramas y pirogramas; trazado de patrones.	Instituto de Carboquímica (C.S.I.C.) Apartado-589 Plaza Paraíso 1 Zaragoza-5 España
International programme for senior executives	To help senior executives respond to challenges facing multinational business, examine crucial factors influencing corporate strategy and structure, suggest options for innovative strategic and structural responses on an international level.	Centre for Education in International Management, 4 chemin de Conches CH-1231 Geneva Switzerland
Gestion générale	Organisation administrative ; gestion du personnel ; application informatique à la gestion du personnel ; évaluation et étude de postes ; plan de carrière ; techniques de quantification du travail administratif.	Société Nationale Tunisienne de Cellulose, 6 avenue Habib Bourghiba Tunis, Tunisie

Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
October, November, December 1981 January 1982 5 days	Degree in mechanical engineering. Portuguese	-	Portuguese escudos 8,500- 9,000
A convenir 15 días	Titulado superior o medio. Español	-	A convenir
A convenir 15 días	Titulado superior. Español	-	A convenir
12 January and 1 June 1981 1 week	Company presidents and senior executives. English	-	SwF 6,000
Mai, juin et juillet 1981 1 semaine	Qualifications professionnelles. Français	-	A arranger

Course or Seminar    General description

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Papier et pâte	Problèmes de production; problèmes d'entretien; découvertes dans le domaine du papier; nouveau matériel; problèmes technico-commerciaux du papier; différentes qualités de pâte; problèmes d'entretien et de production; inventions; marché international de pâte et sa conjoncture.
Ceramic technology	General aspects of ceramics industry; recent developments; factory project preparation; feasibility studies; visits to one or two plants.
Tribology	The practical aspects of friction, lubrication and wear.
Materials handling and distribution management	Short courses on: modern warehouse design; reduction of fork truck costs; physical distribution management; order picking systems; cost reduction in warehouses; organization and control of transport operations; warehouse management and industrial relations; warehouse layouts and methods; distribution strategies and concepts; storage handling for production; the role of computer in distribution planning; effective layout planning.

Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Société Nationale Tunisienne de Cellulose, 6 avenue Habib Bourghiba Tunis, Tunisie	Mai et juin 1981 1 semaine	Qualifications professionnelles. Français	-	A arranger
Sümerbank General Directorate, lecture rooms of Textile and Training and Research Center, Bursa, Turkey	October 1-2 weeks	Professional qualification. English	-	To be arranged
Department of Mechanical Engineering University College of Swansea United Kingdom	21 September 1981 5 days	- English	1 May 1981	£200 including accommo- dation
The National Materials Handling Centre Cranfield Institute of Technology, Cranfield Bedford MK43 OAL United Kingdom	Throughout year 2-3 days	Professional qualification. English	-	£105-370

<u>Course or Seminar</u>	<u>General description</u>	<u>Organizer; Venue</u>
Printing	PIRA, the research association for the paper and board, printing and packaging industries, organizes short courses and technical tutorials throughout most of the year on such subjects as: database online systems; electronic composition for technical directors, works managers, supervisors and others engaged in production and publishing; graphic reproduction and colour; paper and film assembly; lithographic printing; newspaper printing; quality control; bar coding systems; flexographic printing.	PIRA, Randalls Road Leatherhead Surrey KT22 7RU United Kingdom
Measurement system dynamics	The dynamics of measuring systems, especially for the electrical measurement of mechanical and thermal quantities.	Stein Engineering Services, Inc. 5602 East Monte Rosa Phoenix Arizona 85018 United States of America
Measurement system engineering	The engineering of measuring systems for the measurement by electrical means, of mechanical and thermal quantities.	Stein Engineering Services, Inc. 5602 East Monte Rosa Phoenix Arizona 85018 United States of America
Practical aspects of pressing and drying	Course directed to paper machine operating personnel, engineers, mill managers, production managers, and papermill supt. Practical aspects of pressing and drying in addition to design and operation of press and dryer sections.	Technical Association of the Pulp and Paper Industry (TAPPI) Ore Dunwoody Park Atlanta, GA 30338 United States of America

Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
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Throughout 1981 2-5 days	Experience in printing industry. English	-	£180-'50 + VAT
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March 5 days	Professional qualification. English	-	\$US 625
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March 5 days	Professional qualification. English	-	\$US 625
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15 March 1981 6 days	Professional qualification. English	-	\$US 395
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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 and fields of training in which training opportunities are offered by institutions other than UNIDO.

- ALGERIA            Training opportunities offered by institutions other than UNIDO:  
                  - Management and industrial administration
- ARGENTINA         Training opportunities offered by institutions other than UNIDO:  
                  - Leather and leather products industries  
                  - Metallurgical industries
- AUSTRALIA         Training opportunities offered by institutions other than UNIDO:  
                  - Management and industrial administration  
                  - Trainer development
- AUSTRIA           Training opportunities offered by UNIDO:  
                  - Industrial training management  
                  - Production and application of synthetic fibres  
                  - Mould design and mould making in plastics industry  
                  - Plastics technology
- Training opportunities offered by institutions other than UNIDO:  
                  - Chemical industries  
                  - Industrial information and documentation
- BARBADOS         Training opportunities offered by institutions other than UNIDO:  
                  - Management and industrial administration
- BELGIUM           Training opportunities offered by UNIDO:  
                  - Environmental control in chemical and pharmaceutical industries
- Training opportunities offered by institutions other than UNIDO:  
                  - Building materials industries  
                  - Chemical industries  
                  - Glass and optical industries  
                  - Leather and leather products industries  
                  - Mechanical and metalworking industries  
                  - Metallurgical industries

BELGIUM Training opportunities offered by institutions other than UNIDO:  
- Packaging industries  
- Wood processing and wood products industries  
- Automation and data processing  
- Industrial planning and programming  
- Investment promotion and industrial financing  
- Management and industrial administration

CANADA Training opportunities offered by institutions other than UNIDO:  
- Management and industrial administration

CHILE Training opportunities offered by institutions other than UNIDO:  
- Management and industrial administration

CYPRUS Training opportunities offered by institutions other than UNIDO:  
- Management and industrial administration

CZECHOSLOVAKIA Training opportunities offered by UNIDO:  
- Diesel engines

Training opportunities offered by institutions other than UNIDO:  
- Mechanical and metalworking industries

DENMARK Training opportunities offered by institutions other than UNIDO:  
- Industrial planning and programming  
- Management and industrial administration

ECUADOR Training opportunities offered by institutions other than UNIDO:  
- Management and industrial administration

EGYPT Training opportunities offered by UNIDO:  
- Engineering and industrial design

Training opportunities offered by institutions other than UNIDO:  
- Textile industries

FINLAND Training opportunities offered by institutions other than UNIDO:  
- Wood processing and wood products industries  
- Marketing and export promotion



(Cont'd)

- FRANCE Training opportunities offered by institutions other than UNIDO:
- Electrical and electronic industries
  - Food processing industries
  - Leather and leather products industries
  - Mechanical and metalworking industries
  - Automation and data processing
  - Maintenance and repair
  - Management and industrial administration
  - Marketing and export promotion
  - Quality control and standardization
  - Trainer development
- GERMAN DEMOCRATIC REPUBLIC Training opportunities offered by UNIDO:
- Industrial planning
  - Methods and techniques of pesticide production and formulation
  - Printing industry
- GERMANY, FEDERAL REPUBLIC OF Training opportunities offered by institutions other than UNIDO:
- Building materials industries
  - Chemical industries
- HONG KONG Training opportunities offered by institutions other than UNIDO:
- Packaging industries
  - Industrial planning and programming
  - Management and industrial administration
- HUNGARY Training opportunities offered by UNIDO
- Maintenance of bio-medical electronic equipment
- Training opportunities offered by institutions other than UNIDO:
- Food processing industries
  - Automation and data processing
- INDIA Training opportunities offered by UNIDO:
- Industrial development banking
- Training opportunities offered by institutions other than UNIDO:
- Building materials industries
  - Electrical and electronic industries
  - Industrial design
  - Leather and leather products industries

INDIA Training opportunities offered by institutions other than UNIDO: (Cont'd)

- Mechanical and metalworking industries
- Pulp and paper industries
- Textile industries
- Wood processing and wood products industries
- Automation and data processing
- Industrial planning and programming
- Maintenance and repair
- Management and industrial administration
- Quality control and standardization
- Trainer development

IRELAND Training opportunities offered by institutions other than UNIDO:

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

ISRAEL Training opportunities offered by institutions other than UNIDO:

- Automation and data processing

ITALY Training opportunities offered by institutions other than UNIDO:

- Building materials industries
- Electrical and electronic industries
- Food processing industries
- Industrial design
- Industrial planning and programming
- Leather and leather products industries
- Mechanical and metalworking industries
- Metallurgical industries
- Textile industries
- Management and industrial administration
- Marketing and export promotion

JAPAN Training opportunities offered by UNIDO:

- Quality improvement of industrial products
- Production management of mechanical industry
- Industrial planning

- JAPAN Training opportunities offered by institutions other than UNIDO: (Cont'd)
- Chemical industries
  - Food processing industries
  - Glass and optical industries
  - Industrial design
  - Industrial information and documentation
  - Mechanical and metalworking industries
  - Metallurgical industries
  - Packaging industries
  - Textile industries
  - Automation and data processing
  - Industrial planning and programming
  - Maintenance and repair
  - Management and industrial administration
  - Marketing and export promotion
  - Quality control and standardization
  - Small-scale industries and entrepreneurship
  - Trainer development
- LUXEMBOURG Training opportunities offered by institutions other than UNIDO:
- Metallurgical industries
  - Marketing and export promotion
- MALAYSIA Training opportunities offered by institutions other than UNIDO:
- Management and industrial administration
- NETHERLANDS Training opportunities offered by institutions other than UNIDO:
- Building materials industries
  - Textile industries
  - Industrial planning and programming
  - Management and industrial administration
  - Marketing and export promotion
  - Trainer development
- NICARAGUA Training opportunities offered by UNIDO:
- Management and training in public enterprises
- NIGERIA Training opportunities offered by institutions other than UNIDO:
- Trainer development





- TOGO                    Training opportunities offered by institutions other than UNIDO:  
                         - Marketing and export promotion
- TURKEY                   Training opportunities offered by UNIDO:  
                         - Small-scale foundry operations  
                         - Sugar (beet) production  
                         - Cement industry
- UNION OF SOVIET  
SOCIALIST  
REPUBLICS                Training opportunities offered by UNIDO:  
                         - Iron and steel industry  
                         - Documentation and industrial information  
                         - Metalworking industries  
                         - Electric welding  
                         - Grain milling and storage  
                         - Fertilizer industries  
                         - Rice processing
- UNITED KINGDOM        Training opportunities offered by institutions other than UNIDO:  
                         - Building materials industries  
                         - Food processing industries  
                         - Leather and leather products industries  
                         - Mechanical and metalworking industries  
                         - Pulp and paper industries  
                         - Textile industries  
                         - Wood processing and wood products industries  
                         - Industrial planning and programming  
                         - Maintenance and repair  
                         - Management and industrial administration  
                         - Quality control and standardization  
                         - Small-scale industries and entrepreneurship  
                         - Trainer development
- UNITED REPUBLIC  
OF CAMEROON            Training opportunities offered by UNIDO:  
                         - Management techniques in manufacturing industry
- UNITED REPUBLIC  
OF TANZANIA            Training opportunities offered by institutions other than UNIDO:  
                         - Management and industrial administration

- UNITED STATES OF AMERICA      Training opportunities offered by institutions other than UNIDO:
- Chemical industries
  - Automation and data processing
  - Management and industrial administration
  - Marketing and export promotion
  - Trainer development
- URUGUAY                      Training opportunities offered by institutions other than UNIDO:
- Management and industrial administration
- YUGOSLAVIA                  Training opportunities offered by institutions other than UNIDO:
- Management and training in public enterprises
  - Organization and management of agro industrial enterprises

UNITED NATIONS AND RELATED ORGANIZATIONS

- ECONOMIC COMMISSION FOR LATIN AMERICA - ECLA
- Management and industrial administration
- INTERNATIONAL TRADE CENTRE - ITC/UNCTAD/GATT
- Marketing and export promotion
- UNITED NATIONS CENTRE FOR REGIONAL DEVELOPMENT - UNCRD
- Industrial planning and programming
- FOOD AND AGRICULTURE ORGANIZATION - FAO
- Food processing industries
- INTERNATIONAL LABOUR ORGANIZATION - ILO
- Industrial planning and programming
  - Management and industrial administration
  - Trainer development
- WORLD INTELLECTUAL PROPERTY ORGANIZATION - WIPO
- Industrial information and documentation



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 ou par d'autres institutions.

- ALGERIE Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Gestion et administration des entreprises
- ALLEMAGNE (REPUBLIQUE FEDERALE D') Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Industrie des matériaux de construction
  - Industrie chimique (y compris les industries pétrochimique et pharmaceutique)
- ARGENTINE Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Industrie du cuir et des articles en cuir
  - Industrie métallurgique
- AUSTRALIE Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Gestion et administration des entreprises
  - Formation de formateurs
- AUTRICHE Possibilités de formation offertes par l'ONUDI :
- Gestion de la formation industrielle
  - Production et utilisation des fibres synthétiques
  - Conception et fabrication de moules dans l'industrie des matières plastiques
  - Technologie des matières plastiques
- Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Industries chimiques (y compris les industries pétrochimiques et pharmaceutiques)
  - Information et documentation industrielles
- BARBADES Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Gestion et administration des entreprises
- BELGIQUE Possibilités de formation offertes par l'ONUDI :
- Lutte contre la pollution dans les industries chimiques et pharmaceutiques

- BELGIQUE Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Industrie des matériaux de construction
  - Industrie chimique (y compris les industries pétrochimique et pharmaceutique)
  - Verrerie et optique
  - Industrie du cuir et des articles en cuir
  - Constructions mécaniques et industrie de transformation des métaux
  - Métallurgie
  - Industrie de l'emballage et du conditionnement
  - Industrie du bois et des produits en bois
  - Automatisation et traitement des données
  - Planification et programmation industrielles
  - Promotion des investissements et financement
  - Gestion et administration des entreprises
- CANADA Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Gestion et administration des entreprises
- CHILE Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Gestion et administration des entreprises
- CHYPRE Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Gestion et administration des entreprises
- DANEMARK Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Planification et programmation industrielles
  - Gestion et administration des entreprises
- EQUATEUR Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Gestion et administration des entreprises
- EGYPTE Possibilités de formation offertes par l'ONUDI :
- Constructions mécaniques, esthétique industrielle et conception de produits
- Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Industries textiles
- ESPAGNE Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Industrie alimentaire
  - Industrie du cuir et des articles en cuir
  - Automatisation et traitement des données
  - Gestion et administration des entreprises
  - Contrôle de la qualité et normalisation

- ETATS UNIS  
D'AMERIQUE
- Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Industrie chimique (y compris les industries pétrochimique et pharmaceutique)
  - Automatisation et traitement des données
  - Gestion et administration des entreprises
  - Commercialisation et promotion des exportations
  - Formation de formateurs
- FINLANDE
- Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Industrie du bois et des produits en bois
  - Commercialisation et promotion des exportations
- FRANCE
- Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Industries électrique et électronique
  - Industrie alimentaire
  - Industrie du cuir et des articles en cuir
  - Constructions mécaniques et industries de transformation des métaux
  - Automatisation et traitement des données
  - Entretien et réparation
  - Gestion et administration des entreprises
  - Commercialisation et promotion des exportations
  - Contrôle de la qualité et normalisation
  - Formation de formateurs
- HONG KONG
- Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Industrie de l'emballage
  - Planification et programmation industrielles
  - Gestion et administration des entreprises
- HONGRIE
- Possibilités de formation offertes par l'ONUDI :
- Entretien de l'équipement électronique biomédical
- Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Industrie alimentaire
  - Automatisation et traitement des données
- INDE
- Possibilités de formation offertes par l'ONUDI :
- Financement bancaire du développement industriel
- Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Industrie des matériaux de construction
  - Industries électrique et électronique
  - Industrie alimentaire
  - Esthétique industrielle et conception de produits

- INDE Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Industrie du cuir et des articles en cuir
  - Industrie mécanique et industries de transformation des métaux
  - Industrie du papier et de la pâte à papier
  - Industrie textile
  - Industrie du bois et des produits en bois
  - Automatisation et traitement des données
  - Planification et programmation industrielles
  - Entretien et réparation
  - Gestion et administration des entreprises
  - Contrôle de la qualité et normalisation
  - Formation de formateurs
- IRLANDE Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Planification et programmation industrielles
  - Promotion des investissements et financement industriel
  - Gestion et administration des entreprises
  - Direction des petites entreprises
  - Formation de formateurs
- ISRAEL Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Automatisation et traitement des données
- ITALIE Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Industrie des matériaux de construction
  - Industries électrique et électronique
  - Industrie alimentaire
  - Esthétique industrielle et conception de produits
  - Planification et programmation industrielles
  - Industrie du cuir et des articles en cuir
  - Industrie mécanique et industries de transformation des métaux
  - Industrie métallurgique
  - Industrie textile
  - Gestion et administration industrielles
  - Commercialisation et promotion des exportations
- JAPON Possibilités de formation offertes par l'ONUDI :
- Amélioration de la qualité des produits industriels
  - Gestion de la production dans les industries mécaniques
  - Planification industrielle

- JAPON Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Industrie chimique (y compris les industries pétrochimique et pharmaceutique)
  - Industrie alimentaire
  - Verrerie et optique
  - Esthétique industrielle et conception de produits
  - Information et documentation industrielles
  - Industrie mécanique et industrie de transformation des métaux
  - Industrie métallurgique
  - Industrie de l'emballage
  - Industrie textile
  - Automatisation et traitement des données
  - Planification et programmation industrielles
  - Entretien et réparation
  - Gestion et administration des entreprises
  - Commercialisation et promotion des exportations
  - Contrôle de la qualité et normalisation
  - Direction des petites entreprises
  - Formation de formateurs
- LUXEMBOURG Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Industrie métallurgique
  - Commercialisation et promotion des exportations
- MALAISIE Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Gestion et administration des entreprises
- NICARAGUA Possibilités de formation offertes par l'ONUDI :
- Gestion et formation dans les entreprises publiques
- NIGERIA Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Formation de formateurs
- NORVEGE Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Industries du papier et de la pâte à papier
- PAKISTAN Possibilités de formation offertes par l'ONUDI :
- Gestion et formation dans les entreprises publiques
- Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Industrie des matériaux de construction
  - Industrie chimique (y compris les industries pétrochimique et pharmaceutique)
  - Industries électrique et électronique
  - Verrerie et optique
  - Industrie textile
  - Gestion et administration des entreprises

- PARAGUAY Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Gestion et administration des entreprises
  - Commercialisation et promotion des exportations
- PAYS-BAS Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Industrie des matériaux de construction
  - Industrie textile
  - Planification et programmation industrielles
  - Gestion et administration des entreprises
  - Commercialisation et promotion des exportations
  - Formation de formateurs
- PEROU Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Promotion des investissements et financement industriel
- PHILIPPINES Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Automatisation et traitement des données
  - Planification et programmation industrielles
  - Gestion et administration des entreprises
  - Direction des petites entreprises
- POLOGNE Possibilités de formation offertes par l'ONUDI :
- Techniques modernes de fonderie
  - Organisation et gestion de la production dans le cadre de la coopération industrielle
  - Industrie textile
- Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Planification et programmation industrielles
- PORTUGAL Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Industrie mécanique et industrie de transformation des métaux
- REPUBLIQUE  
DEMOCRATIQUE  
ALLEMANDE Possibilités de formation offertes par l'ONUDI :
- Planification industrielle
  - Méthodes et techniques pour la formulation et la production de pesticides
  - Imprimerie
- REPUBLIQUE-UNIE  
DU CAMEROUN Possibilités de formation offertes par l'ONUDI :
- Techniques de gestion dans l'industrie manufacturière
- REPUBLIQUE-UNIE  
DE TANZANIE Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Gestion et administration des entreprises

- ROUMANIE Possibilités de formation offertes par l'ONUDI :
- Industrie pétrochimique
- Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Industrie chimique (y compris les industries pétrochimique et pharmaceutique)
  - Automatisation et traitement des données
- ROYAUME-UNI Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Industrie des matériaux de construction
  - Industrie alimentaire
  - Industrie du cuir et des articles en cuir
  - Industrie mécanique et industrie de transformation des métaux
  - Industrie du papier et de la pâte à papier
  - Industrie textile
  - Industrie du bois et des produits en bois
  - Planification et programmation industrielles
  - Entretien et réparation
  - Gestion et administration des entreprises
  - Contrôle de la qualité et normalisation
  - Direction des petites entreprises
  - Formation de formateurs
- SINGAPOUR Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Contrôle de la qualité et normalisation
- SOMALIE Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Gestion et administration des entreprises
- SRI LANKA Possibilités de formation offertes par l'ONUDI :
- Planification des installations industrielles
- SUEDE Possibilités de formation offertes par l'ONUDI :
- Organisation et gestion des services d'entretien
- Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Industrie alimentaire
- SUISSE Possibilités de formation offertes par des institutions autres que l'ONUDI :
- Industrie alimentaire
  - Industrie textile
  - Gestion et administration des entreprises

- TCHECOSLOVAQUIE Possibilités de formation offertes par l'ONUDI :  
- Moteurs Diesel
- Possibilités de formation offertes par des institutions autres que l'ONUDI :  
- Industrie mécanique et industrie de transformation des métaux
- THAÏLANDE Possibilités de formation offertes par des institutions autres que l'ONUDI :  
- Gestion et administration des entreprises  
- Contrôle de la qualité et normalisation
- TOGO Possibilités de formation offertes par des institutions autres que l'ONUDI :  
- Commercialisation et promotion des exportations
- TURQUIE Possibilités de formation offertes par l'ONUDI :  
- Exploitation de petites fonderies  
- Production de sucre (de betterave)  
- Industrie du ciment
- UNION DES  
REPUBLIQUES  
SOCIALISTES  
SOVIÉTIQUES Possibilités de formation offertes par l'ONUDI :  
- Industrie sidérurgique  
- Information et documentation industrielles  
- Industrie de transformation des métaux  
- Soudure électrique  
- Meunerie et stockage des céréales  
- Industrie des engrais  
- Usinage du riz
- URUGUAY Possibilités de formation offertes par des institutions autres que l'ONUDI :  
- Gestion et administration des entreprises
- YOUgoslavie Possibilités de formation offertes par des institutions autres que l'ONUDI :  
- Gestion et formation dans les entreprises publiques  
- Organisation et gestion des entreprises agro-industrielles

ORGANISATION DES NATIONS UNIES ET ORGANISMES APPARANTES

COMMISSION ECONOMIQUE POUR L'AMERIQUE LATINE (CEPAL)

- Gestion et administration des entreprises

CENTRE DU COMMERCE INTERNATIONAL CNUCED/GATT

- Commercialisation et promotion des exportations



CENTRE DES NATIONS UNIES POUR LE DEVELOPPEMENT REGIONAL

- Planification et programmation industrielles

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

- Industrie alimentaire

ORGANISATION INTERNATIONALE DU TRAVAIL (OIT)

- Planification et programmation industrielles
- Gestion et administration des entreprises
- Formation de formateurs

ORGANISATION MONDIALE DE LA PROPRIETE INDUSTRIELLE (OMPI)

- Information et documentation industrielles



LISTA DE LAS ESFERAS EN LAS QUE SE OFRECE CAPACITACION, POR PAISES U ORGANIZACIONES HUESPEDES

La siguiente es una lista de los países u organizaciones huéspedes incluidos en este Repertorio. Bajo el nombre de cada país u organización se enumeran las esferas de capacitación en el orden en que aparecen en el Repertorio (véase el índice). Se hace una distinción entre los programas de capacitación ofrecidos por la ONUDI y las esferas en las que otras instituciones distintas de la ONUDI ofrece oportunidades de capacitación.

- ALEMANIA,  
REPUBLICA  
FEDERAL DE
- Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Industrias de los materiales de construcción
  - Industrias químicas (incluidas las petroquímicas y farmacéuticas)
- ARGELIA
- Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Gestión y administración en la esfera industrial
- ARGENTINA
- Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Industrias del cuero y productos de cuero
  - Industrias metalúrgicas
- AUSTRALIA
- Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Gestión y administración en la esfera industrial
  - Formación de instructores
- AUSTRIA
- Oportunidades de capacitación ofrecidas por la ONUDI:
- Diseño y fabricación de moldes en la industria de los materiales plásticos
  - Gestión de la capacitación industrial
  - Producción y aplicación de fibras sintéticas
  - Tecnología de los plásticos
- Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Industrias químicas (incluidas las petroquímicas y farmacéuticas)
  - Información y documentación industriales
- BARBADOS
- Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Gestión y administración en la esfera industrial
- BELGICA
- Oportunidades de capacitación ofrecidas por la ONUDI:
- Protección del medio ambiente en las industrias químicas y farmacéuticas
- Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Industrias de los materiales de construcción
  - Industrias químicas (incluidas las petroquímicas y farmacéuticas)
  - Industrias del vidrio y ópticas

- BELGICA Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Industrias del cuero y productos de cuero
  - Industrias mecánicas y de transformación de metales
  - Industrias metalúrgicas
  - Industrias del embalaje
  - Industrias de elaboración de la madera y de productos de madera
  - Automatización y elaboración de datos
  - Planificación y programación industriales
  - Promoción de las inversiones y financiación industrial
  - Gestión y administración en la esfera industrial
- CANADA Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Gestión y administración en la esfera industrial
- CHECOSLOVAQUIA Oportunidades de capacitación ofrecidas por la ONUDI:
- Motores diesel
- Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Industrias mecánicas y de transformación de metales
- CHILE Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Gestión y administración en la esfera industrial
- CHIPRE Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Gestión y administración en la esfera industrial
- DINAMARCA Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Planificación y programación industriales
  - Gestión y administración en la esfera industrial
- ECUADOR Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Gestión y administración en la esfera industrial
- EGIPTO Oportunidades de capacitación ofrecidas por la ONUDI:
- Diseño en la ingeniería y en la industria
- Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Industrias textiles
- ESPAÑA Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Industrias alimentarias
  - Industrias del cuero y productos de cuero
  - Automatización y elaboración de datos
  - Gestión y administración en la esfera industrial
  - Control de calidad y normalización

- ESTADOS UNIDOS DE AMERICA Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Industrias químicas (incluidas las petroquímicas y farmacéuticas)
  - Automatización y elaboración de datos
  - Gestión y administración en la esfera industrial
  - Comercialización y promoción de las exportaciones
  - Formación de instructores
- FIIPINAS Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Automatización y elaboración de datos
  - Planificación y programación industriales
  - Gestión y administración en la esfera industrial
  - Pequeña industria y actividad empresarial
- FINLANDIA Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Industrias de elaboración de la madera y de productos de madera
  - Comercialización y promoción de las exportaciones
- FRANCIA Oportunidades de capacitación ofrecidas por otras instituciones distintas de la ONUDI:
- Industrias eléctricas y electrónicas
  - Industrias alimentarias
  - Industrias del cuero y productos de cuero
  - Industrias mecánicas y de transformación de metales
  - Automatización y elaboración de datos
  - Mantenimiento y reparación
  - Gestión y administración en la esfera industrial
  - Comercialización y promoción de las exportaciones
  - Control de calidad y normalización
  - Formación de instructores
- HONG KONG Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Industrias del embalaje
  - Planificación y programación industriales
  - Gestión y administración en la esfera industrial
- HUNGRIA Oportunidades de capacitación ofrecidas por la ONUDI:
- Mantenimiento de equipo electrónico biomédico
- Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Industrias alimentarias
  - Automatización y elaboración de datos

INDIA

Oportunidades de capacitación ofrecidas por la ONUDI:

- Bancos de desarrollo industrial

Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:

- Industrias de los materiales de construcción
- Industrias eléctricas y electrónicas
- Industrias alimentarias
- Industrias del cuero y productos de cuero
- Industrias mecánicas y de transformación de metales
- Industrias de la celulosa y el papel
- Industrias textiles
- Industrias de elaboración de la madera y de productos de madera
- Diseño industrial
- Automatización y elaboración de datos
- Planificación y programación industriales
- Mantenimiento y reparación
- Gestión y administración en la esfera industrial
- Control de calidad y normalización
- Formación de instructores

IRLANDA

Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:

- Planificación y programación industriales
- Promoción de las inversiones y financiación industrial
- Gestión y administración en la esfera industrial
- Pequeña industria y actividad empresarial
- Formación de instructores

ISRAEL

Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:

- Automatización y elaboración de datos

ITALIA

Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:

- Industrias de los materiales de construcción
- Industrias eléctricas y electrónicas
- Industrias alimentarias
- Industrias del cuero y productos de cuero
- Industrias mecánicas y de transformación de metales
- Industrias metalúrgicas
- Industrias textiles
- Diseño industrial
- Planificación y programación industriales
- Gestión y administración en la esfera industrial
- Comercialización y promoción de las exportaciones

JAPON

Oportunidades de capacitación ofrecidas por la ONUDI:

- Gestión de la producción en industrias mecánicas
- Mejoramiento de la calidad de productos industriales
- Planificación industrial

Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:

- Industrias químicas (incluidas las petroquímicas y farmacéuticas)
- Industrias alimentarias
- Industrias del vidrio y ópticas
- Industrias mecánicas y de transformación de metales
- Industrias metalúrgicas
- Industrias del embalaje
- Industrias textiles
- Diseño industrial
- Información y documentación industriales
- Automatización y elaboración de datos
- Planificación y programación industriales
- Mantenimiento y reparación
- Gestión y administración en la esfera industrial
- Comercialización y promoción de las exportaciones
- Control de calidad y normalización
- Pequeña industria y actividad empresarial
- Formación de instructores

LUXEMBURGO

Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:

- Industrias metalúrgicas
- Comercialización y promoción de las exportaciones

MALASIA

Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:

- Gestión y administración en la esfera industrial

NICARAGUA

Oportunidades de capacitación ofrecidas por la ONUDI:

- Gestión y capacitación en empresas públicas

NIGERIA

Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:

- Formación de instructores

NORUEGA

Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:

- Industrias de la celulosa y el papel

PAISES BAJOS

Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:

- Industrias de los materiales de construcción
- Industrias textiles
- Planificación y programación industriales

- PAISES BAJOS Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Gestión y administración en la esfera industrial
  - Comercialización y promoción de las exportaciones
  - Formación de instructores
- PAKISTAN Oportunidades de capacitación ofrecidas por la ONUDI:
- Gestión y capacitación en empresas públicas
- Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Industrias de los materiales de construcción
  - Industrias químicas (incluidas las petroquímicas y farmacéuticas)
  - Industrias eléctricas y electrónicas
  - Industrias del vidrio y ópticas
  - Industrias textiles
  - Gestión y administración en la esfera industrial
- PARAGUAY Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Gestión y administración en la esfera industrial
  - Comercialización y promoción de las exportaciones
- PERU Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Promoción de las inversiones y financiación industrial
- POLONIA Oportunidades de capacitación ofrecidas por la ONUDI:
- Industrias textiles
  - Organización y gestión de la producción en cooperativas industriales
  - Tecnología moderna de fundición
- Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Planificación y programación industriales
- PORTUGAL Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Industrias mecánicas y de transformación de metales
- REINO UNIDO Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Industrias de los materiales de construcción
  - Industrias alimentarias
  - Industrias del cuero y productos de cuero
  - Industrias mecánicas y de transformación de metales
  - Industrias de la celulosa y el papel
  - Industrias textiles
  - Industrias de elaboración de la madera y de productos de madera
  - Planificación y programación industriales



- REINO UNIDO Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Mantenimiento y reparación
  - Gestión y administración en la esfera industrial
  - Control de calidad y normalización
  - Pequeña industria y actividad empresarial
  - Formación de instructores
- REPUBLICA DEMOCRATICA ALEMANA Oportunidades de capacitación ofrecidas por la ONUDI:
- Industrias tipográficas
  - Métodos y técnicas de producción y formulación de plaguicidas
  - Planificación industrial
- REPUBLICA UNIDA DEL CAMERUN Oportunidades industriales ofrecidas por la ONUDI:
- Técnicas de gestión en la industria manufacturera
- REPUBLICA UNIDA DE TANZANIA Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Gestión y administración en la esfera industrial
- RUMANIA Oportunidades de capacitación ofrecidas por la ONUDI:
- Industrias petroquímicas
- Oportunidades de capacitación ofrecidas por otras instituciones distintas de la ONUDI:
- Industrias químicas (incluidas las petroquímicas y farmacéuticas)
  - Automatización y elaboración de datos
- SINGAPUR Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Control de calidad y normalización
- SOMALIA Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Gestión y administración en la esfera industrial
- SRI LANKA Oportunidades de capacitación ofrecidas por la ONUDI:
- Planificación de instalaciones industriales
- SUECIA Oportunidades de capacitación ofrecidas por la ONUDI:
- Organización y gestión de sistemas de mantenimiento
- Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Industria alimentaria

- SUIZA Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Industrias alimentarias
  - Industrias textiles
  - Gestión y administración en la esfera industrial
- TAILANDIA Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Gestión y administración en la esfera industrial
  - Control de calidad y normalización
- TOGO Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Comercialización y promoción de las exportaciones
- TURQUIA Oportunidades de capacitación ofrecidas por la ONUDI:
- Industria del cemento
  - Operaciones de fundición en pequeña escala
  - Producción de azúcar de remolacha
- UNION DE REPUBLICAS SOCIALISTAS SOVIETICAS Oportunidades de capacitación ofrecidas por la ONUDI:
- Industrias de los fertilizantes
  - Industria de transformación de metales
  - Industria siderúrgica
  - Documentación e información industriales
  - Elaboración del arroz
  - Molienda y almacenamiento de cereales
  - Soldadura eléctrica
- URUGUAY Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Gestión y administración en la esfera industrial
- YUGOSLAVIA Oportunidades de capacitación ofrecidas por instituciones distintas de la ONUDI:
- Gestión y capacitación en empresas públicas
  - Organización y gestión de empresas agroindustriales

ORGANOS Y ORGANIZACIONES DEL SISTEMA DE LAS NACIONES UNIDAS

CENTRO DE DESARROLLO REGIONAL DE LAS NACIONES UNIDAS - CDRNU

- Planificación y programación industriales

CENTRO DE COMERCIO INTERNACIONAL (CCI/UNCTAD/GATT)

- Comercialización y promoción de las exportaciones

COMISION ECONOMICA PARA AMERICA LATINA - CEPAL

- Gestión y administración en la esfera industrial

ORGANIZACION DE LAS NACIONES UNIDAS PARA LA AGRICULTURA Y LA ALIMENTACION -

- Industrias alimentarias

ORGANIZACION INTERNACIONAL DEL TRABAJO - OIT

- Planificación y programación industriales

- Gestión y administración en la esfera industrial

- Formación de instructores

ORGANIZACION MUNDIAL DE LA PROPIEDAD INTELECTUAL - OMP

Información y documentación industriales



FAO

