

**INTERNATIONAL SHORTCOURSES, WORKSHOPS  
AND CONFERENCES ON IRRIGATION  
MANAGEMENT AND RELATED TOPICS**

**1990**

This 1990 Compendium of International Shortcourses, Workshops and Conferences has been prepared by Louis Berger International, Inc. and Water and Power Consultancy Services (India) Ltd. on behalf of the Irrigation Research and Management Improvement Organization, Central Water Commission, Government of India, and the United States Agency for International Development under the Water Resources Management and Training Project No. 386-0484.

This third annual compendium is produced as an aid in selecting and arranging international training in irrigation management. Program listings are based on information received by January 1990, and LBII/WAPCOS takes no responsibility for program changes. Suggestions for improvement and data entries for the 1991 compendium should be sent to : Tom Kajer

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# 1990 - SCHEDULED PROGRAMS

## JANUARY

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Jan 02 - 19 Jan 1990	Leadership and Management Development	Dr. Judith Jenkins International Institute for Development Graduate School, USDA 600 Maryland Avenue, SW, Room 134, Washington, DC 20024 USA Tel:(202)447-7476 Tlx:756563 6S INTL WASH Fax:(202)3828403	Nature of the management process; basic supervisory skills; communication; decision-making; planning; delegation; leadership; time management; personnel administration; and evaluation;	Managers from public and private sector. \$ 1500
Jan 02 - 19 Jan 1990	Project Analysis with Micro- computer Applications	R.K. Saampath, Course Coordinator International Center of Agri. & Resource Development, B 303 Clark Building, Colorado State University, Ft. Collins, Colorado 80523	Includes Training in project analysis, role of analysis in development programs, identification and selection of relevant data, measures of project worth, appropriate applications of economic and financial analysis, 30 hours using Lotus 1-2-3 in applied practice, case studies, etc.	Mid-level Technicians and Adminis- trators of Agri. and other deve- lopment projects. \$ 1000
Jan 03 - 23 Mar 1990 (12 Weeks)	Irrigation & Water Resources	Ian Smout Water, Engineering & Dev. Centre (WEDC) Loughborough University of Technology Leicestershire LE11, 3TU, England 0509-222642/34319 UNITEC 6/0509 610231	Irrigation planning, management, operation and maintenance; crop water use; design of surface and sprinkler systems drainage; Surface water: data analysis; floods; droughts; reservoir and structures design; earth dams; river engineering Groundwater location, surveys, abstraction; recharge and geo- chemistry; test pumping; borehole logging; well design; borehole rehabilitation; resource evaluation.	Holders of professional appoint- ments concerned with irrigation in developing countries. £4950 including accommodation and all meals.
Jan 05 - 19 Jan 1990	Microcomputer Applications in Irrigation Data and Project Management	Dr. T.S. Sheng IICE, Civil Engineering Department Colorado State University Ft. Collins, Colorado 80523, USA Tel:303-491-7425 Tlx:9109309000 ENGR	The course is designed to develop microcomputer skills of irrigation professionals for application of software packages to irrigation data and project management. Through lectures and hands-on sessions, participants will learn how to apply database, spreadsheet, project management and word processing software to their daily irrigation operation and planning activities.	Irrigation management specialists with limited or no microcomputer experience. \$ 2175

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Jan 07 - 17 Feb 1990	Applied Microcomputer Use in Irrigation and Drainage	Admissions Committee, International Irrigation Center Utah State University Logan, Utah 84322 - 4150, USA Tel:801-750-2800 Fax:1248 Tlx:3789426 UTAH STATE LOGN	Course at Logan, Utah. (In English and Spanish)	\$ 3900 (2 week add-on = \$1200)
Jan 07 - 15 Dec 1990	Computer-Assisted Irrigation System Management	Admissions Committee International Irrigation Center Utah State University Address, telephone/fax/tlx:same as above	49 week course in English at Logan, Utah; Grand Junction and Alamosa, Colorado; Twin Falls, Idaho; Yuma, Arizona; and Imperial Valley of California.	Irrigation personnel responsible for installing/operating project microcomputer systems. \$ 29025
Jan 08 - 30 Mar 1990	Planning and Implementation of Water Supply and Sanitary Projects	Development and Project Planning Centre University of Bradford, Bradford, West Yorkshire, England BD7 1DP		
Jan 10 - 06 Mar 1990	Applied Microcomputer Course for Irrigation and Drainage Professionals	Training Program Organizer c/o Sheladia Associates, Inc. National Irrigation Training Institute Shore Protection Building Shoubra El-Mezalat-Cairo, Egypt	Held at NITI Training Center, Cairo. Areas covered include microcomputer operating system, commercial software, Basic language programming, computer applications in irrigation design and evaluation, computer applications in drainage and salinity, computer applications in open channel hydraulics, computer modelling and simulation, and specialized training in irrigation management.	Professionals planning, designing, implementing and management of irrigation projects. \$ 3000
Jan 15 - 09 Mar 1990	Computer Applications in Management	Dr. Prentiss deJesus International Institute for Development Graduate School, USDA 600 Maryland Avenue SW, Room 134, Washington, DC 20024, USA Tel:(202)447-7476 Tlx:756363 GS INTL WASH	DOS system software; beginning and advanced word processing; spreadsheet accounting with LOTUS 1-2-3; database management with dBase III; communications software; and project management software.	Government officers, managers of businesses; and directors of development projects. \$ 5300
Jan 15 - 15 Jul 1990	International Post-Graduate Course on Hydrology	Dr. Gabor Kienitz, Course Director VITUKI, Water Resources Research Centre Budapest, IX. Kvassay J. ut 1. VITUKI-H-1453, Budapest, Pf.27 Tel:361-1143-043 Tlx:61-224959 vituk h Fax:361-1341-514	Course includes Mathematical methods and computer application, General fluid mechanics, Geosciences, Hydrological processes, Hydrological observations and primary data processing, Hydrological analysis and modelling, Environmental aspects, Application of hydrology in water management.	Civil engineers, hydrologists, hydrogeologists, agronomists. \$ 8500

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Jan 23 - 25 Jan 1990	3 day course on RIBAMAN River Basin Management, Intro RBM-DOGGS	Jacqueline Watts Overseas Development Unit Hydraulics Research Wallingford, Oxfordshire, OX10 8 BA, UK Tel:+44-491-3538 Tlx:048532 HRSWAL 6 Fax:0491-32233 6, 6x	RBM-DOGGS is a distributed catchment model for calculating unsteady discharges in a stream network for prescribed rainfall event. On-line and off-line storage ponds can be included in series or in parallel.	
Jan 24 - 26 Jan 1990	International Symposium on Planning, Management and Research of Water Resources	Ing. Miguel Villasuso L'ino Facultad de Ingenieria Universidad Autonoma de Yucatan Calle 14x41, Ex-Fenix Merida, Yucatan, Mexico Tel:99-27-45-23	Held in Merida, Yucatan, Mexico	
January 25 (1 day)	Environmental Site Assessment	NWMA Education Department National Water Well Association 6375 Riverside Drive, Dublin, OH 43017, USA Tel:614-761-1711 Fax:614-761-3446	This course focuses on scientific investigations performed in conjunction with property transactions. The course looks at subsurface investigations performed as a prerequisite to commercial and industrial property transfers.	Ground water scientists and engineers. Call NWMA for further information.
Jan 29 - 02 Feb 1990	Basic Groundwater Hydrology	Julie Gay Duke University - School of Forestry and Environmental Studies 212 Biological Sciences Building Duke University, Durham, NC 27706, USA Tel:919-684-2135	Basic principles, concepts and methods of groundwater hydrology. When appropriate the role of forests in groundwater hydrology and the environmental consequences of groundwater are emphasized.	\$ 600
Jan 29 - 23 Feb 1990	Planning and Management of Rural Water Supply and Sanitation	N.C. Thanh International Training Centre for Water Resources Management (CEFIGRE) Sophia Antipolis - B.P. 113 06561 Valbonne Cedex, France Tel:93654900 Tlx:461 311F Fax:93654402	Held in Bangkok, Thailand in English. Includes prefeasibility and feasibility studies, sector development and planning, economics and financial feasibilities, institutional arrangement, community participation in planning, construction and maintenance, of the system, project monitoring and evaluation, M.I.S. project implementation, etc.	Senior government officers, and engineers planning and managing RWSS programs.
Jan 29 - 20 Apr 1990	Management Analyst Certificate Program	Jane Burke International Institute for Development Graduate School, USDA 600 Maryland Avenue SW, Room 134, Washington, DC 20024 Tel:(202)447-7476 Tlx:756563 6S INTL WASH	Systems analysis; report writing; conducting meetings; position description development; records management; forms design and analysis; making presentations; task analysis; conducting interviews; introducing organizational change; motivation; feedback; and communication.	Mid-level managers from public and private sectors. \$ 7500

## FEBRUARY

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Feb - Nov 1990	Irrigation and Drainage Course	Training Division Tsukuba International Agricultural Training Centre (TIATC) JICA No. 3-7 Koyadai, Tsukuba-Shi Ibaraki-ken, 305 Japan Tel:02975(6) 1771-6 Tlx:J22271	Introduces systematically to engineers engaged in land improvement works, the scientific knowledge and technology of small scale irrigation and drainage schemes, mainly for rice cultivation.	Civil engineers/irrigation engineers
Feb 02 - 04 Feb 1990	Watershed Development and Management	Dr. S.K. Tripathi, Organizing Secretary Water Resources Development Training Centre University of Roorkee, Roorkee 247667 Uttar Pradesh, India Tel:2349, 2604 Tlx:0577-201 UOR IN	Held at C.S. Azad University of Agri. and Technology, Kanpur, India. Topics include: Land resource and capability assessment, watershed hydrology, common property resources and its management, soil and water conservation and management, environmental considerations, sociological and organization aspects, watershed management case studies, watershed management modelling.	
Feb 05 - 06 Feb 1990	Central Plains Irrigation Short Course	Israel Broner Cooperative Extension Services of Colorado State University, Univ. of Nebraska, Kansas State University Tel:(303)491-6172 Fax(303)491-7369	To be held in Wray, Colorado. The short course is designed to provide state-of-the art information on sprinkler irrigation technology and irrigation management.	Producer/irrigators, agricultural consultants, agency personnel \$ 25 - \$ 30
Feb 05 - 08 Feb 1990	Design for sustainable farmer-managed irrigation systems in sub-saharan Africa	Sylvester Pavel, Organizing Secretary Department of Irrigation and Soil and Water Conservation, Mienwe Kanaal II 6709 PA Wageningen, The Netherlands Tel:8370-84190 Fax:8370-84739	Design of irrigation systems in relation to local farming systems, social structure of farmer-communities, external relations. Project-strategies, participation	Professionals in irrigation design, project creation and research. \$ 200
Feb 05 - 10 Feb 1990	International Conference in Agronomy	Dr. Ganga Saran, Agronomy Division Indian Agricultural Research Institute Pusa Complex New Delhi 110012, India Tel:5734830	Conference registration at India International Centre, New Delhi. Theme: Natural Resources Management for Sustainable Agriculture.	Rs. 1000 \$ 60

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Feb 05 - 30 Mar 1990	Irrigation Project Rehabilitation and Management	Dr. N.C. Austriaco, Director, C.E.C. Continuing Education Center Asian Institute of Technology S.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374	Planning and design criteria consideration; hydrological data analysis; project water requirements; planning for rehabilitation and construction; optimal water allocation; reservoir operation and irrigation scheduling; irrigation system capability evaluation organizational make-up and logistics of irrigation systems operating monitoring methods and models; case studies; project work and field visits.	Planning and Design Engineers. \$ 3200
Feb 05 - 30 Mar 1990	Planning and Design of Small Scale Irrigation Project	Dr. N.C. Austriaco, Director, C.E.C. Continuing Education Center Asian Institute of Technology S.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374	Feasibility study; hydrological data analysis; crop and project water requirements; selection and design of cropping patterns; design of small dams diversion weirs; irrigation and drainage canal and control structures; drainage control structures; deep and shallow tube wells; project works; case studies and technical visits.	Planning and Design Engineers. \$ 3200
Feb 06 - 08 Feb 1990	Principles of Ground Water Hydrology	NWMA Education Department National Water Well Association 6375 Riverside Dr, Dublin, OH 43017, USA Tel:(614)761-1711 Fax:(614)761-3446	This course focuses on essential concepts in hydrogeology. Insight is provided into Darcy's law, monitoring well design, groundwater flow, aquifer pump tests, solute transport, and remediation.	Groundwater scientists and engineers NWMA Members \$ 575; Non-members \$ 675
Feb 12 - 17 Feb 1990	Third Expert Group W/shop on River/Lake Basin Approaches to Environmentally Sound Management of Water Resources	H. Kotani Head of General Affairs Division International Lake Environment Committee 3-4-22 Kyomachi, Otsu, Shiga, Japan Tel:81-775-25-1076 Tlx:5464850 ILEC Fax:J/775-23-1581	The main objective is to identify alternative strategies and approaches for environmentally sound management and development of water resources.	Professionals involved in river/ lake management or development.
Feb 18 - 17 Mar 1990	Potential Crop Production from Irrigated and Dryland Agriculture (English and Spanish)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150 Tel:801-750-2800 Tlx:3789426 UTAHSTATE LOGN Fax:801-750-1248	Course at Logan, Utah	\$ 2700

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Feb 19 - 22 Feb 1990	Training Seminar on River/ Lake Basin Management with Focus on Water Quality	H. Kotani Head of General Affairs Division International Lake Environment Committee 3-4-22 Kyomachi, Otsu, Shiga, Japan Tel:81-775-25-1076 Tlx:5464850 ILEC Fax:J/775-23-1581	The main objective is to identify essential components of training modules on river/lake water quality management	Professionals involved in river/ lake management
Feb 19 - 23 Feb 1990	4th African Water Technology Exhibition	David Dononey International Conferences & Exhibitions Ltd. 29 Dering Street, London W1R 9AA, UK Tels:01-499-7774 Tlx:21591 COMFEI 6 Fax:01-409-0712	Held in Nairobi, Kenya.	
Feb 25 - 03 Mar 1990	Land Drainage for Salinity Control in Arid and Semi Arid Regions (Symposium plus Study Tours)	Dr. Mahmoud Abu-Zeid, Chairman, WRC Drainage Research Institute, Water Research Centre, P.O. Box 13621/5 - Delta Barrage, 13 Giza Street, El Giza Cairo, Egypt	Session topics: Physical features of areas in need of drainage, design of drainage systems, drainage technology, ecological aspects including the reuse of drainage water, and economics of drainage. 3 day study tour Alexandria-Delta (optional); 4 day Luxor-Aswan (optional).	Civil and Agricultural Engineers in Drainage activities. \$ 250 4 day study tour - \$ 700 3 day study tour - \$ 400
Feb 26 - 02 Mar 1990	Mathematical Modeling of Lake and Reservoir Water Quality	Julie Gay Duke University, School of Forestry and Environmental Studies, 212 Biological Sciences Building, Duke University Durham, N.C. 27706, USA Tel:919-684-2135	Expose participants to a wide variety of techniques that have utility in predicting the response of lakes and impoundments to pollutants	\$ 600

## MARCH

Mar 05 - 08 Mar 1990	Basic and Laser Surveying	Larry C. Brown Ohio State University, Agricultural Engg. 590 Woody Hayes Dr, Columbus, OH 43210, USA Tel:614-292-3826 Fax:614-292-9948	Class room and field instruction on: Map and plan reading; Basic introduction to leveling; Differential/profile leveling; Keeping field notes/cut sheets; Plotting/interpretation of field data; Layout of a soil and water conservation practice; Introduction to Lecker rod; Principles of laser surveying; Field notes for laser leveling; Instrument checks for accuracy; Earthwork computations.	Contractors, producers, farmers, technicians, educators. Full sessions \$ 150
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DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Mar 06 - 08 Mar 1990	3 - day Course on River Engineering	Flora M. Farnworth Overseas Development Unit Hydraulics Research Ltd., Wallingford Oxfordshire, OX10 8BA, UK Tel:+44-491-35381 Tlx:848552 HRSWAL G Fax:0491-32233 6, 6a	Hydraulic resistance, flood plain flows, flow measurement, sediment transport, groundwater, hydrology, urban drainage, road and roof runoff.	Junior and senior engineers actively involved in river engineering. £471.50
Mar 14 - 27 Mar 1990	Study Trip and Seminar Program on Small Scale Water Resources Development	Dr. W.C. Austriaco, Director, C.E.C. Continuing Education Center Asian Institute of Technology P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374	Strategic approaches used by the Thai government to develop and manage their small scale water resources and irrigation projects. Meet local officials to discuss and share their experiences. Observe the projects under construction. Visit the completed projects and discuss with the beneficiaries.	Senior government administrators like directors, division heads and project managers. \$ 1000
Mar 14 - 15 May 1990	Applied Microcomputer Course for Irrigation and Drainage Professionals	Training Program Organizer c/o Sheladia Associates, Inc. National Irrigation Training Institute Shore Protection Building Shoubra El-Mezalat-Cairo, Egypt	Held at NITI Training Center, Cairo. Areas covered include microcomputer operating system, commercial software, Basic language programming, computer applications in irrigation design and evaluation, computer applications in drainage and salinity, computer applications in open channel hydraulics, computer modelling and simulation, and specialized training in irrigation management.	Professionals planning, designing, implementing and management of irrigation projects. \$ 3000
Mar 15 - 04 Apr 1990	Water Use Management	C.P. Sinha, Course Coordinator W.R.D.T.C., University of Roorkee Roorkee 247667, Uttar Pradesh, India Tel:2430(off),2445(res) Tlx:0597-201 UOR IN	The course deals with irrigation water management with emphasis on farm level. It includes agronomy, soil science, irrigation methods, drainage, land reclamation and economic evaluation.	Irrigation engineers, agricultural scientists and managers. Rs. 1100
Mar 19 - 23 Mar 1990	Irrigation	Shortcourse Administrator Silsoe College, Silsoe, Beds MK 45 4BT, UK	This course on irrigation principles, problem and practices, has a strong international flavour & particularly emphasizes irrigation in developing countries. Topics include crop water requirements, design methods, irrigation scheduling, management, drainage needs, economics of irrigation and health issues	All involved in irrigation. £345 (Residential)
Mar 19 - 13 Apr 1990	Management of Irrigation Projects	Andrew Dorward Mananga Agricultural Management Centre P.O. Box 20, Mhlushe, Swaziland	Irrigation Technology: Soil-plant-water relations; water requirements, water application, water conveyance management: farm planning, project cycle, organizational management, budgeting - visits, case study, simulations, action planning (Course in association with Silsoe College, U.K.)	Professional staff involved with irrigation project management, especially in Africa.

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Mar 20 - 22 Mar 1990	Project Management and System Modelling (Wallingford Procedure)	Jacqueline Watts Overseas Development Unit Hydraulics Research Ltd., Wallingford Oxfordshire, OX10 8BA, UK Tel:+44-491-3538 Tlx:848532 HRSMAI G Fax:0491-32233 G, G		
Mar 25 - 05 May 1990	Waterlogging, Drainage and Salinity Control	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150 Tel:801-750-2800 Tlx:3789426 UTAHSTATE LOGN Fax:801-750-1248	Course at Logan, Utah; Grand Junction, Colorado; Yuma, Arizona; Imperial and San Joaquin Valleys of California.	\$ 3900
Mar 26 - 20 Apr 1990	Project Analysis	Dr. Prentiss deJesus International Institute for Development Graduate School, USDA 600 Maryland Avenue SW, Room 134, Washington, DC 20024, USA Tel:(202)447-7476 Tlx:756563 GS INTL WASH	Project analysis; identifying critical factors; estimating costs and benefits; distinguishing between financial and economic analysis; estimating financial and economic impacts; identifying risks, complications, and methods for their inclusion in the analysis; and presenting data on alternative projects for comparison.	Analysts and managers from private and public sectors of developing countries. \$ 2500

## APRIL

Apr 01 - 10 Jun 1990	Irrigation Water Management	Prof. Zu Zhifan, Course Director Department of Irrigation and Drainage Engg. Wuhan University of Hydraulic & Electric Engg Wuhan, Hubei Province, P.R. China, 430072 Tel:812212-510 Tlx:c/o 40170 WCTEL CN	Course includes irrigation in China, design of irrigation system, water management of irrigation system, computer application in irrigation management, techno-economical evaluation of irrigation water management, drainage problem in irrigation area, 15-20 days for practice in irrigation area.	Professionals in irrigation management. \$ 2600
Apr 02 - 20 Apr 1990	Environmental Impact Assessment for Developing Countries (Bangkok, Thailand in English)	M.C. Thanh, Director, Asia Division, CEFIGRE International Training Centre for Water Resources Management (CEFIGRE) Sophia Antipolis - B.P. 113 06561 VALBONNE CEDEX (FRANCE) Tel:9365 4900 Tlx:461 311 F Fax:93654402	Designed to provide participants with an appraisal of the environmental, health and socio-economic implications of alternative courses of a development plan. It will cover objectives and scopes of E.A, EIA methods, mitigation methods, monitoring and auditing, public participation, institutional and economical aspects, review of case-studies.	Engineers, planners, consultants, project developers, etc.... involved in the project. \$ 3000

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Apr 03 - 13 Apr 1990	Hydraulics of Over Land Flow	Prof. K.R. Swaminathan, Water Technology Centre, College of Agricultural Engg. Tamil Nadu Agri. University, Coimbatore 641003, India Tel:41222 Tlx:855-360 TNAU-IN	Flood irrigation, furrow irrigation, run off-infiltration flow rate-models-efficiency-defects-recession flow-puddle factor and frictional aspects-prediction-opportunity time-case studies.	Teachers working in the Agri. Universities, Professors working in the irrigation department and command areas development. \$ 400
Apr 04 - 06 Apr 1990	Fifth Annual Seminar On Irrigation and Water Resources	Richard Wooldridge Overseas Development Unit, Hydraulics Research Ltd., Wallingford, Oxon OX10 8BA Tel:0491-35381 Tlx:848552 Fax:0491-32233	Seminar for students from or working in, developing countries. It will cover aspects of research at HRL which are particularly relevant for managers and engineers.	Final year MSc./Diploma students £ 180
Apr 09 - 20 Apr 1990	Reclaimed Municipal Waste-Water for Irrigation	Richard Snyder, Coralie Turbitt, Alice Warrick International Training & Education Center University Extension, University of California, Davis, California 95616, USA Tel:916-757-8686 Tlx:405838 Fax:916-757-8676	Includes topics under: Wastewater for irrigation, irrigation requirements and soil storage capacity, water movement and the fate of contaminants, crops and crop water management, irrigation method management. Includes field demonstrations and computer workshop.	Civil, sanitary and agricultural engineers, agronomists, etc. \$ 1000
Apr 11 - 05 May 1990	Waterlogging and Salinity Technical Study Tour of Western States (English)	Admissions Committee International Irrigation Center Utah State University, Logan, Utah 84322 - 4150, USA Tel:801-750-2800 Tlx:3789426 UTAHSTATE LOGN Fax:801-750-1248	Tour through Logan, Utah-Grand Junction, Colorado -Yuma, Arizona-Imperial and San Joaquin Valleys of California.	\$ 2400
Apr 17 - 20 Apr 1990	17th Annual Conference on Water Resources Planning and Management; & Water Resources Infrastructure Symposium	Michael Armenti American Society of Civil Engineers 345 East 47th Street, New York 10017-2398 Tel:212 705-7350 Fax:212-980-4681	Held at Worthington Hotel, Ft. Worth, Texas, USA. Identifying and prioritizing water resources infrastructural needs, managing ageing infrastructure, financing legal issues, case studies, financing adequate O & M, innovative financing strategies, capital budgeting, privatization, etc.	\$ 250 Approximately
Apr 17 - 20 Apr 1990	National Forum on Education & Continuing Development for the Civil Engineer	American Society of Civil Engineers Education Activities Division P.O. Box 832, Somerset, New Jersey 08873-0832 USA Tel:212-705-7020 Fax:212-421-1826	Held at Las Vegas, Nevada. "Track" group discussion items include areas on construction, environmental engineering, hydraulics, surveying and mapping, engineering management, computers, professional development, professional considerations, etc.	Engineering educators, practitioners and human resource managers. \$ 275 Members \$ 345 Non-members

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Apr 18 - 19 Apr 1990	Environmental Site Assessments	NWMA Education Department National Water Well Association 6375 Riverside Dr, Dublin, OH 43017, USA Tel:(614)761-1711 Fax:(614)761-3446	This course focuses on scientific investigations performed in conjunction with property transactions. The course looks at subsurface investigations performed as a prerequisite to commercial and industrial property transfers.	Groundwater scientists and engineers Call NWMA for further information.
Apr 23 - 26 Apr 1990	International Symposium on Regionalization in Hydrology	M. Brilly, Faculty of Architecture Department of Civil Engineering University of Ljubljana Hajdrihova 28, 61000 Ljubljana, Yugoslavia	Held in Ljubljana, Yugoslavia.	
Apr 23 - 13 Jul 1990	Agricultural Water Management 3 months post experience programme	E K Weatherhead, Course Director Silsoe College, Silsoe, Beds MK 45 4DT, UK Tel:0525 60428 Tlx:265871 MONREF 6 EYM 300 Fax:0525 61527	Topics selected are from within a flexible but structured framework to provide programmes in: irrigation, drainage, land reclamation, soil conservation, dry land farming, rural water supplies.	Professionals currently working in agricultural or rural development worldwide. £ 4650
Apr 23 - 13 Jul 1990 (+ twice yearly)	Management Development Programme for the Rural Sector	Student Recruitment Office Silsoe College, Silsoe, Bedford, MK45 4DT, UK Tel:0525 60428 Tlx:265871 MONREF 6 EYM 300 Fax:0525 61527	Provide managers working agriculture with an opportunity to develop their managerial capability and competence in way which will contribute to the effectiveness of the client organization. Opportunities are provided to carry out a negotiated and often self directed period of study and explore concepts of management with colleagues from many parts of the world.	Senior and middle management in agriculture and related sectors. £ 4500 + living accommodation costs.
Apr 24 - 27 Apr 1990	'Water and Wastewater 90' International Conference and Exhibition	Pamela Wolfe, Conference Organizer 'Water and Wastewater 90' P.O. Box 125, Scotch Plains, New Jersey 07076, USA Tel:201-322-9461 Fax:201-322-8976	Conference in English and Spanish is held in Barcelona, Spain. Sessions will cover international water policy issues, water resource development, irrigation, water supply, sanitation, and wastewater/sewage treatment, special sessions on groundwater vs. surface water, water quality, etc.	Professionals in water resources including irrigation. \$ 350 (\$ 150 developing countries!)
Apr 29 - 04 May 1990	International Congress on Irrigation and Drainage	B.C. Garg, ICID International Commission on Irrigation and Drainage, 48 Nyaya Marg, Chanakyapuri New Delhi 110021, India Tel:3016837 Tlx:031-65920 ICID IN	Conference to be held in Rio de Janeiro, Brazil. Topic areas include: Impact of irrigation on quality of surface waters, impact of irrigation on quality of ground waters, environmental effects of irrigation on the quality of life, preparedness for drought, operation of irrigation systems during drought, climatic and hydrological trends and their implications for irrigation policy, plus special session and symposium on real-time water scheduling, etc.	

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Apr 30 - 11 May 1990	Environmental Impact Analysis	Robert Mashburn International Institute for Development Graduate School, USDA 600 Maryland Avenue, SW Room 134, Washington, DC 20024, USA Tel:(202)447-7476 Tlx:756563 GS INTL WASH	Designing Environmental Impact Analysis (EIA); making EIA cost-effective; simplifying assessment and evaluation methodologies; implementing EIA, microcomputer software packages, applications in environmental impact analysis.	Environmentalists, managers. \$ 1500
Apr 30 - 25 May 1990	Management Roles for Women in Development	Judith Jenkins International Institute for Development Graduate School, USDA 600 Maryland Avenue, SW Room 134, Washington, DC 20024, USA Tel:(202)447-7476 Tlx:756563 GS INTL WASH	Planning, decision-making; interpersonal communications; managing special problems that may occur when women are leaders in predominantly male organizations; leadership development; implementing change.	International women officials in government and private concerns. \$ 2500
Apr 30 - 01 Jun 1990	Project Planning for Agriculture and Rural Development TC - 140 - 15	Howard Oppen, PM 132 USDA/OICD/ITD, Washington, DC 20250-4300 Tel:202-653-7675 Tlx:740022B CDOP UC Fax:202-653-8367	Emphasis on the application of planning concepts and techniques in the identification and design of ag. development projects. Participants interested in economic analysis of projects should take TC 140-2, Project Analysis for Ag. and Rural Development, in conjunction with this course.	Project planners, technical resource personnel, decision-makers, and others who are involved in the identification, design, and selection of Ag. development projects. \$ 4347

## MAY

May - Jul 1990	Irrigation of Agricultural Crops	P.N.G. van Steekelenburg Institute Land Reclamation and Improvement Wageningen, The Netherlands Tel:08370-19100 Tlx:75230 VISI NL Fax:31-08370-11524 Course held at: Institute of Field and Vegetable Crops, Faculty of Agriculture University of Novi Sad, M. Gorkog 30 21000 Novi Sad, Yugoslavia	Course to be held in Yugoslavia. History, trends, problems of irrigation, climate and irrigation, soil-water-plant relationships, technical and agronomic aspects of irrigation, irrigation scheduling, practices for various crops, lab and field problems and exercises, study tours. Co-organized by University of Novi Sad, Yugoslavia and ILRI, Wageningen, Netherlands.	Agricultural and irrigation engineers, agronomists and soil scientists. Sponsored by Yugoslavia and Netherlands governments.
May - Nov 1990	Irrigation Water Management Course	Training Division (TIATC) Tsukuba International Agricultural Training Centre, No 3-7 Koyadai, Tsukuba-shi Ibaraki-ken, 305 Japan Tel:02975 (6) 1771-6 Tlx:J22271	Systematically introduces civil engineers in irrigation water management to scientific aspects and technology of water management including gate operations, design of facilities, mainly for rice production.	Civil and irrigation engineers.

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
May 1990	Seminar on Water Management Strategies in Mediterranean Countries for 2010	International Training Centre for Water Resources Management (CEFIGRE) B.P. 113, Sophia Antipolis 06561 Valbonne Cedex, France Tel:93654900 Fax:93-65-44-02	Held in Algiers, Algeria.	
May 01 - 03 May 1990	Principles of Ground Water Hydrology	NWMA Education Department National Water Well Association 6375 Riverside Dr, Dublin, OH 43017, USA Tel:(614)761-1711 Tlx:461 311F Fax:93-65-44-02	This course focuses on essential concepts in hydrogeology. Insight is provided into Darcy's law, monitoring well design, groundwater flow, aquifer pump tests, solute transport, and remediation.	Groundwater scientists and engineers \$ 575 NWMA Members \$ 675 Non-members
May 02 - 18 May 1990	River Water Quality Management	N.C. Thanh International Training Centre for Water Resources Management (CEFIGRE) B.P. 113, Sophia Antipolis 06561 Valbonne Cedex, France Tel:93654900 Tlx: 461 311F Fax:93-65-44-02	Held in Bangkok, Thailand in English. Identifying pollution sources, prevention techniques, setting up water quality monitoring networks, techniques and analysis of samples, microcomputer applications in developing data banks, modelling, pollution diffusion models, river pollution control and management strategies.	Engineers, scientists and officers from river basin and environmental agencies.
May 04 1990	Environmental Site Assessments	NWMA Education Department National Water Well Association 6375 Riverside Dr, Dublin, OH 43017, USA Tel:(614)761-1711 Fax:(614)761-3446	This course focuses on scientific investigations performed in conjunction with property transactions. The course looks at subsurface investigations performed as a prerequisite to commercial and industrial property transfers.	Groundwater scientists and engineers Call NWMA for further information.
May 06 - 16 Jun 1990	On-Farm Irrigation Design and Evaluation (English and Spanish)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150, USA Tel:801-750-2800 Tlx:3789426 UTAHSTATE LODEN Fax:801-750-1248	Course held at Logan and Delta, Utah, Grand Junction, Colorado.	\$ 3900
May 13 - 26 May 1990	Keys to Rural Development at the Local Level USDA 140 - 32 - II	James Haldeman, Training Officer International Agriculture Program Cornell University P.O. Box 16, Roberts Hall, Ithaca New York 14853, USA Tel:607-255-3035 Tlx:559020 INTAG CORNELL Fax:607-255-0788	Held at Cornell University, Ithaca. Emphasis on Agricultural Development for academics, identifies social, economic and political factors in agri. development at local level. Roles of government agencies, policies, farmers organizations, etc. Includes one week in field interacting with officials and farm families.	All agriculture and rural development disciplines. \$ 1505

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
May 13 - 26 May 1990	Keys to Rural Development at the Local Level USDA 140 - 32 - I	Phil Harlon, PM 148 Short Course Coordinator USDA/OICD/TTD Washington, D.C. 20250-4300 USA Tel:202-653-7675 Tlx:7400226 CDOP UC Fax:202-653-8367	Held at New Mexico State University, Las Cruces. Emphasis on Agricultural Development for academics, identifies social, economic and political factors in agri. development at local level. Roles of government agencies, policies, farmers organizations, etc. Includes one week in field interacting with officials and farm families.	All agriculture and rural development disciplines. \$ 1306
May 14 - 16 May 1990	Third Iranian Congress of Civil Engineering	Dr. Taleb-beydokhti University of Shiraz Civil Engineering Department Shiraz, Iran	Construction, highways, hydrology, water resources, earthquakes, dams, hydroelectricity.	Open to everyone. Only registration fee.
May 14 - 25 May 1990	International Management Workshop	Dr. Kary Mathis, ICASALS Texas Technical University P.O. Box 4620, Lubbock, Texas 79409, USA Tel:806-742-2218 Tlx:910-896-4398 TTU CID LBK Fax:806-742-1900	Interdisciplinary perspective on key aspects of leadership roles and management styles. Analysis of case studies, practicing decision-making and communication skills in intercultural group, Field trips to local public and private organizations.	\$ 800
May 14 - 22 Jun 1990	Integrated Farming System Management	Dr. N.C. Austriaco, Director, C.E.C. Continuing Education Center Asian Institute of Technology 6.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374	Integrated farm systems and concepts; integrated farm layout and design; farm programming; production of selected crops; pond fertilization and fish pond dynamics; management of fish ponds; swine production; bio-energy development from animal and agricultural wastes; small farm machineries; food preservation techniques; case studies; technical visits.	Agriculturists and agricultural officers. \$ 2500
May 14 - 22 Jun 1990	Management of Rainfed Agriculture	Dr. N.C. Austriaco, Director, C.E.C. Continuing Education Center Asian Institute of Technology 6.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374	Aspects of rainfed agriculture; rainfall probabilities and distribution analysis; runoff of agricultural lands; crop response to water; cultivation practices in rainfed agriculture; optimum cropping pattern design; crop improvement for rainfed farming; soil and water conservation engineering; water harvesting techniques; groundwater exploration and development; case study; technical visits.	Agriculturists, agricultural extension officers and planners. \$ 2500

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
May 14 - 06 Jul 1990	Computer Applications in Training and Education	Dr. N.C. Austriaco, Director, C.E.C. Continuing Education Center Asian Institute of Technology G.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374		Trainers and university lecturers. \$ 3200
May 16 - 29 May 1990	Study Trip Cum Seminar on Aquaculture Development and Management	Dr. N.C. Austriaco, Director, C.E.C. Continuing Education Center Asian Institute of Technology G.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374	Strategic approaches used by the Thai government to develop and promote aquaculture program; visit and observe various types of extensive and intensive freshwater aquaculture systems including integrated livestock-crop-aquaculture system; visit and observe prawn farming industry for export; visit research and breeding stations.	Senior government administrators like directors, division heads and project managers. \$ 3200
May 20 - 01 Jun 1990	Management-Communication for Development	Robert C. Morris, Ph.D. Executive Director Management Training and Development Institute, PO Box 23975, Washington, DC 20026, USA Tel:202-646-7910 Tlx:4990921 MANSY Fax:202-646-7911	A skill-building seminar focusing on the manager as communicator interrelating people, information, projects and organizations. Key topics include: perception, information networks, presentations, motivation, leadership, team building, negotiation, technology transfer, decision making.	Professionals from developing countries seeking complementary training to academic graduate study or study-tour programs while in the US whether or not they expect to be in managerial positions on return home. \$ 1075
May 21 - 25 May 1990	International Symposium on Development of Smallscale Water Resources in Rural Areas	Carl Duisburg Gesellschaft c/o Asian Institute of Technology G.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374	To be held in Khon Kaen, Thailand.	
May 21 - 28 Jul 1990	Rehabilitation and Management of Irrigation Projects	M.A. Burton IIS, University of Southampton Department of Civil Engineering Southampton, SO9 5NH, UK Tel:0703 593491;0703 593728 Tlx:47661 a/b Sotonug Fax:0703 593017	A 10 week intensive course for engineers in positions of responsibility. For the management and implementation of rehabilitation programmes for irrigation schemes. Course content: Project identification; Project planning and management; Project implementation (management and design); Operation, maintenance and training; Post rehabilitation policy and management; Use of microcomputers in management; Study tour.	Middle and senior engineers engaged on rehabilitation and management of irrigation projects. £ 4400



DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
May 22 - 27 May 1990	Third Training Course on Industrial and Domestic Wastewater Monitoring	Dr. Anhar Suki Department of Environmental Sciences Universiti Pertanian Malaysia 43400 UPM Serdang, Selangor, Malaysia Tel:03-9486101 ext. 3683 Tlx:UNIPER MA 37454 Fax:03-9482507	Course includes EPA, 1974, specific regulations, industrial waste surveys, parameters to be measured, analytical considerations, safety, in situ measurement-demonstration, sampling procedures, flow measurement methods, flow metering devices, sludge management, sampler demonstration, flow meter demonstration, automatic monitoring, equipment and exhibition, and data analysis.	Personnel from government office and private sectors dealing with wastewater. \$ 10000
May 23 - 05 Jun 1990	Economic Appraisal and Monitoring of Water Resources Projects	Dr. C.S. Raghuvanshi Water Resources Development Training Centre University of Roorkee, Roorkee 247667 Uttar Pradesh, India Tel:2349, 2604 Tlx:0597-201 UOR IN	The course covers basic concepts of micro and macro economics, planning of water resources projects, benefit-cost ratio, system design techniques, etc.	Engineers and planners connected with water resources projects. Rs. 950
May 28 - 01 Jun 1990	International Symposium on Urban Planning and Stormwater Management	Wan Mokhtar Nawang Faculty of Civil Engineering Universiti Teknologi Malaysia Karung Berkunci 791 80990 Johor Bahru, Malaysia Tel:07-576160/1/2 ext. 4888/4889 Tlx:MA 60205 Fax:07-572555	Topics include stormwater hydrology and hydraulics, erosion and sedimentation, planning and design urban flood control, maintenance and rehabilitation, floodplain and channel management, computer modeling, remote sensing, GIS, digital mapping, land use planning, etc.	M \$ 400
May 28 - 15 Jun 1990	Rehabilitation et Maintenance des Perimetres Irrigues	J.L. Millo International Training Centre for Water Resources Management (CEFISRE) B.P. 113, Sophia Antipolis 06561 Valbonne Cedex, France Tel:93654900 Tlx:461 311F Fax:93-65-44-02	Held in Bamako, Mali in French. Present and future rehabilitation scenarios in Africa, causes and need for rehabilitation, determining objectives of rehab., project details-socio-technical-economic, management of rehab. projects, need, finance, extension services, state organizations, monitoring and evaluation of performance.	Engineers, sociologists, economists in charge of irrigation systems.
May 28 - 22 Jun 1990	Watershed and Soil Conservation Survey and Planning for Developing Countries Using Microcomputers	Prof. T.C. Sheng CADI, 1311 South College Avenue Ft. Collins, Colorado 80523, USA Tel:(303)484-2234 Tlx:9102502282 CADI	To provide training in watershed and soil conservation survey, planning, monitoring, and evaluation to professionals, instructors, and technical officials in developing countries with emphasis on using microcomputer technology.	Professionals, instructors, and technical officials in natural resources and agriculture. \$ 3600

DATES.	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
May 28 - 20 Jul 1990	Establishing Data Bases and Analytical Systems for Decision Making (TC 140 - 26)	Freeman Daniels PM 153 U.S. Department of Agriculture/OICD/ITD Washington, DC 20250-4300, USA Tlx:7400228 CDOP UC Fax:202-653-8367	Course held New Mexico State University, Las Cruces, New Mexico. Topics include specification of the processes, planning and content procedures for statistical survey, translating objectives into quantifiable variables, data requirements for project design appraisal, management and evaluation.	Technicians and managers in design, management, and evaluation at project level. \$ 4733
May 29 - 09 Jun 1990	System-Wide Water Management	Larry D. Stephens, Executive Vice President American Water Foundation P.O. Box 15577, Denver, CO 80215, USA Tel:303-236-6960 Tlx:168167 USBREC Fax:303-236-6763	Forecasting, satellite monitoring and data collection; River basin and trans-basin planning and management; System automation; Multi-use projects; Irrigation district O&M. Lectures and field tours. Project site visits.	Senior officials responsible for policy, planning and management. Senior technical staff. \$ 1500
May 29 - 29 Jun 1990	Organizational and Management Development (TC 140 - 14)	Freeman Daniels PM 153 U.S. Department of Agriculture/OICD/ITD Washington, DC 20250-4300, USA Tlx:7400228 CDOP UC Fax:202-653-8367	Held at George Washington University, Washington, DC. Topics include: problem diagnosis, planning, implementation and evaluation of change effects, leadership and communication skills, and group decision-making.	Senior level administrators and managers in agriculture and rural development. \$ 3834
May 29 - 30 Jun 1990	International Post-Graduate Course in Crop-Weather Modelling	Mrs. Z. Borsuk, Coordinator Israel Meteorological Service P.O.B. 25, Bet Dagan 50250, Israel Tel:03-9682121 Tlx:381466 Fax:03-9682126/176	Includes meteorological and biological data sets, climate requirements of crops, crop-growth simulation models, crop-weather analysis models, and case studies.	Professionals with BSc. in physical/math sciences, or agri-biological sciences.
May 31 - 22 Jun 1990	Video Communication I, Basic Concepts and Skills	James Halderson, Training Officer International Agriculture Program Cornell University P.O. Box 16, Roberts Hall, Ithaca New York 14853, USA Tel:607-255-3035 Tlx:559020 INTAG CORNELL Fax:607-255-0788	Manipulating audio and visual components through electronic editing, hands-on experience in planning, producing, editing a production. Use of message development strategies concepts, techniques, principles integrating video with wide range communication media, etc.	Government officials and program leaders, extension staff and trainers. \$ 970

## JUNE

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Jun 01 - 31 Aug 1990	Hands-On Training in Irrigation Management and Research, and study tour	Norman Krause, Director Irrigation Center, Staples Technical Inst. Staples, Minnesota 56479, USA Tel:218-894-1051	Practical experience and training on research projects in cooperation with University of Minnesota. Up to 30 different crops each year on research plots under variety of sprinkler/drip/trickle systems, on 320 acre facility. Training includes computerized scheduling, groundwater monitoring, farmers organizations, calibration of water budgets using wet station data, chemigation, fertigation, use of tensiometers, resistance blocks, infra-red meters, research data collection and analysis, etc. Includes weekly field trips and study tour to systems in Western States.	Civil engineers, agri engineers, agronomists. Approx. \$ 4500
Jun 04 - 06 Jun 1990	Training Workshop on Environmental Impact. Assessment of Flood Control Drainage and Irrigation (FCDI) Projects	M. Moniyul Bader Mirza, Secretary General Centre for Environmental Studies and Research 68/1 Purana Paltan, G.P.O. Box 3290 Dhaka 1000, Bangladesh Tel:254936 Tlx:671060 SLIMA BJ Att:CESR ID74B Fax:412074	Environmental impact assessment techniques, Env. impact assessment report writing, guidelines for data collection of FCDI projects, evaluation of specific project and remedial measures, etc.	Water resources/civil engineers, policy planners and ecologists. \$ 1000
Jun 04 - 29 Jun 1990	Project Monitoring and Evaluation	Dr. M.C. Austriaco, Director, C.E.C. Continuing Education Center Asian Institute of Technology G.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 A17 TH Fax:662-529-0374		Development project personnel. \$ 2000
Jun 04 - 29 Jun 1990	Training of Trainers for Agricultural and Rural Development	John W. Santas INTERPAKS, University of Illinois 113 Mumford Hall 1301 West Gregory Drive Urbana, Illinois 61801, USA Tel:(217)-333-3638 Tlx:206957	Designing and implementing training programs, program and cost effectiveness, effective training, motivating staff members, innovative teaching methods for groups and individuals, developing course outlines and lesson plans, evaluating knowledge, attitude and performance levels of trainees, preparing printed and audio-visual teaching aids and materials.	Training Directors in agri extension and irrigation management, directors/principals/senior trainers of training institutes, trainers from research centers, Prof. in adult/extension/irrigation management at universities. \$ 2550

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Jun 04 - 13 Jul 1990	Project Management	Dr. N.C. Austriaco, Director, C.E.C. Continuing Education Center Asian Institute of Technology 6.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374		Development project personnel and extension officers. \$ 2500
Jun 04 - 13 Jul 1990	Project Analysis for Agriculture and Rural Development TC - 140 - 2	Howard Oppen, PM 132 U.S. Dept. of Agriculture/OICD/ITD Washington D.C. 20250-4300 Tel:202-653-7675 Tlx:7400228 CDOP UC Fax:202-653-8367	Course in Washington, DC. Includes: Analyze projects, identify critical factors, estimate benefits and costs, financial and economic impacts, identify risks, complications and methods for inclusion in the analysis, present data on alternative projects for comparison, internal rate of return, benefit cost analysis and discounting, shadow prices versus market prices, etc.	Technician-level personnel in agriculture, planning boards, banks, etc. \$ 4549
Jun 04 - 13 Jul 1990	Resource Development of Watershed Lands (TC 120 - 8)	Jane Tolbert, PM 136 U.S. Dept. of Agriculture/OICD/ITD Washington D.C. 20250-4300 Tel:202-653-7675 Tlx:7400228 CDOP UC Fax:202-653-8367	Held at University of Arizona, Tucson, Arizona. Topics include range assessment and management, soil and water conservation techniques, and natural resource economics and management.	Mid-level technicians and professionals managing/developing watershed lands. \$ 3106
Jun 04 - 03 Aug 1990	Development and Operation of Ag. Extension Programs TC 110 - 5	Freeman Daniels, PM 153 U.S. Dept. of Agriculture/OICD/ITD Washington D.C. 20250-4300 Tel:202-653-8306 Tlx:7400228 CDOP UC Fax:202-653-8367	Held at University of Wisconsin, Madison, Madison, Wisc. 53706. The course covers the roles of extension, research, and training as essential elements in agricultural development. Participants will examine the roles of subject matter specialists, administrators, field officers, and various other extension staff and the methods they use to perform those roles. Methods of information dissemination are also explored during the course.	Administrators, researchers, field staff, and trainers. \$ 4301

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Jun 05 - 07 Jun 1990	Asia-Pacific Regional Conference on Engineering for Development of Agriculture	Secretary, APCEDA Faculty of Engineering Universiti Pertanian Malaysia Serdang, 43400 Selangor, Malaysia Tel:9486101 Tlx:UNIPER MA 37454 Fax:03-9482507	Held at Universiti Pertanian Malaysia, near Kuala Lumpur, Malaysia, in English. Topic areas include land and water management, energy in agriculture, education and professional development, structures and environment, and other engineering topics.	\$ 75
Jun 05 - 22 Jun 1990	Planning and Development of Water Resources	J. Mongellaz International Training Centre for Water Resources Management (CEFIGRE) B.P. 113, Sophia Antipolis 06561 Valbonne Cedex, France Tel:93654900 Tlx:461 311F Fax:93-65-44-02	Held in Sophia (France) in English. Concepts of water resource management, demand and utilization, various freshwater resources and their assessment and development, integrated water utilization impact of water development programs on environment, optimization techniques.	Water resource planners, engineers, and scientists, and implementers.
Jun 06 - 19 Jun 1990	Study Trip Cum Seminar Program on Fruits and Vegetables Farming	Dr. M.C. Austriaco, Director, C.E.C. Continuing Education Center Asian Institute of Technology 8.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374	Strategic approaches used by the Thai government to develop and promote agro-industry on fruits and vegetables; visit various horticultural farms to observe the crop maintenance and cultivation techniques; visit research stations of Thai government agencies and universities; meet scientists, extension workers.	Senior government administrators like directors, division heads and project managers. \$ 1000
Jun 06 - 03 Aug 1990	Techniques of Hydrologic Investigations for International Participants	Anna M. Lenox U.S. Geological Survey, International Water Resources Program, 436 National Center Reston, Virginia 22092, USA Tel:(703)648-5053 Tlx:160443 USGS UT Fax:(703)648-5070	Techniques and methods for collecting hydrologic data and interpreting data to evaluate the water resources of an area or region. Includes hands-on field methods of collecting and recording data and procedures for processing and storing.	B.S. in science, engineering, or related field or equivalent work experience. \$ 7000
Jun 07 - 08 Jun 1990	Environmental Site Assessments	NWMA Education Department National Water Well Association 6375 Riverside Dr, Dublin, OH 43017, USA Tel:(614)761-1711 Fax:(614)761-3446	This course focuses on scientific investigations performed in conjunction with property transactions. The course looks at subsurface investigations performed as a prerequisite to commercial and industrial property transfers.	Groundwater scientists and engineers. Call NWMA for further information.
Jun 10 - 07 Jul 1990	Applied Remote Sensing in Agriculture (English)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150, USA Tel:801-750-2800 Tlx:3789426 UTAHSTATE LOGN	Course held at Logan and Salt Lake City, Utah.	\$ 2700

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Jun 11 - 28 Jun 1990	Methods and Management of Practical Agricultural Training	David Willis, Associate Director Thessaloniki International Training Program c/o American Farm School, P.O. Box 10140 Thessaloniki 541 10, Greece Tel:030-031-471-803 Fax:030-031-472-345	This seminar provides agricultural teachers and extension workers from developing countries the opportunity to develop their professional skills in planning for and conducting practical educational programs for young people and adults. Special emphasis is placed on techniques for practical agricultural skills development and management training.	Teachers and trainers from developing countries (emphasis on Africa) who are in agricultural education, extension work or rural development projects. \$ 2500
Jun 11 - 29 Jun 1990	Operation and Maintenance of Rural Water Supply Schemes	P. Harvey International Training Centre for Water Resources Management (CEFIGRE) B.P. 113, Sophia Antipolis 06561 Valbonne Cedex, France Tel:93654900 Tlx:461 311F Fax:93-65-44-02	Held in Nairobi, Kenya in English. Socio-economic aspects of projects effecting operation and maintenance, participatory approaches in construction, operation, and maintenance, training of local people, responsive spare parts services, etc.	Managers and engineers operating/managing rural water supply schemes.
Jun 11 - 06 Jul 1990	Strategies and Tools for Effective Program Management (TC 140 - 3)	Musu Clemens, PM 157 U.S. Dept. of Agriculture/DICD/ITD Washington D.C. 20250-4300, USA Tel:202-653-7675 Tlx:7400228 CDOP UC Fax:202-653-8367	Course held at International Development Management Center, University of Maryland. Topics include assessing program environment, program design and sustainability, strategic planning, organizational structure and systems, program leadership skills, management information and financial management systems.	Senior-level executives and managers of agri/rural development programs. \$ 2960
Jun 11 - 20 Jul 1990	Communications and Media Strategies for Ag. and Rural Development (TC 110 - 3)	Musu Clemens, PM 159 U.S. Dept. of Agriculture/DICD/ITD Washington D.C. 20250-4300, USA Tel:202-653-8309 Tlx:7400228 CDOP UC Fax:202-653-8367	Course held at Iowa State University, Ames, Iowa. Course focuses on analysis and planning of effective rural communications systems in developing countries. Participants will design and produce multimedia communications projects for rural audiences. Each participant has the opportunity to increase production skills in one or two media, including small scale video, radio, print, and small media. Field experiences are included.	Agriculture, nutrition, and livestock specialists and others involved in operation of nonformal education and outreach programs in agriculture and rural development. \$ 3934
Jun 11 - 03 Aug 1990	Soil Testing, Soil Classification and Fertilizer Management (TC 120 - 5)	Phil Marlan, PM 148 U.S. Dept. of Agriculture/DICD/ITD Washington D.C. 20250-4300, USA Tel:202-653-7792 Tlx:7400228 CDOP UC Fax:202-653-8367	Course held at Auburn University, Alabama. The course focuses on classroom, laboratory, and field training in practical soil fertility management. Participants gain experience with different procedures and equipment, as well as field experience with different soil types.	Agronomists or soil scientists with a bachelor's degree. \$ 5125

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Jun 11 - 03 Aug 1990	Problems and Practices of Irrigation Systems (TC 120 -1)	Phil Harlan, PM 148 U.S. Dept. of Agriculture/DICD/ITD Washington D.C. 20250-4300, USA Tel:202-653-7792 Tlx:7400228 CDOP UC Fax:202-653-8367	Course at Colorado State University, Fort Collins, Colorado. Course includes lectures, laboratory exercises, field visits to irrigation programs and projects in the United States Southwest and West, and seminars centered on participant presentations on irrigation problems in their home countries. Emphasizes integrated, farm-level approach to O&M of Irrigation Systems. Coordinator: Dr. Willard Schaefer, Dept. of Agronomy.	Irrigation practitioners with bachelor's or master's degree in agronomy or ag. engineering. \$ 5594
Jun 12 - 15 Jun 1990	International Symposium on Water Resources Systems Applications	S.P. Simonovic Civil Engineering Dept. University of Manitoba Winnipeg, Manitoba, Canada Tel:204-474 9220 Tlx:075-87721	Held in Winnipeg, Manitoba, Canada.	
Jun 12 - 30 Jun 1990	Upland Irrigation System Design and Evaluation	Dr. Abdul Aziz Zakaria Department of Field Engineering University of Agriculture Malaysia 43400 Serdang, Selangor, Malaysia Tel:03-9486101 ext. 2013 Tlx:UNIPER MA 37454 Fax:03-9482507	Soil-plant-water relationship (overview) crop water requirements, hydraulics of piped irrigation systems. Sprinkler and localised irrigation. Design of lateral and mainline. Irrigation system evaluation and improvement.	Professionals in agricultural water management, horticultural and crop production. \$ 1000
Jun 13 - 23 Nov 1990 (24 Weeks)	Irrigation Engineering Management	Hector Malano Centre for International Irrigation Training and Research University of Melbourne, 217 Royal Parade Parkville, Vic 3052, Australia Tel:61-3-344 4512 Tlx:AA35185 UNIMEL Fax:61-3-348 1524	Course includes both academic and on-the-job training. Main topics are: O&M of irrigation systems, irrigation principles, computer use in irrigation management, organizational models, management processes, etc.	Middle level managers of irrigation and drainage systems. \$ 15000 including lodging and meals.
Jun 17 - 07 Jul 1990	On-Farm Irrigation Scheduling (English and Spanish)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150, USA Tel:801-750-2800 Tlx:3789426 UTAHSTATE LDGM Fax:801-750-1248	Course held at Alamosa, Colorado.	\$ 2100

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Jun 17 - 20 Jul 1990	International Course on Rural Extension	Director, IAC International Agricultural Center P.O. Box 88, 6700 AB Wageningen The Netherlands Tel:31-837090111 Tlx:45888 INTAS NL Fax:31-8370-18552	Objective is to increase insight and capability in methodology and approaches that lead to higher effectiveness of extension as an instrument for rural development. Treatment of 4 concepts: functional communication, agricultural knowledge systems, development intervention and management of extension services. Field work, classroom sessions, workshops.	Middle and higher level extension managers. Dfl. 5100
Jun 18 - 29 Jan 1990	Hydrometry: A course in the Measurement of Hydrological Variables	Dr. Henry H. Smith, Director International Center for Water Resources Management, 103 Banneker Hall Central State University Wilberforce, Ohio 45384, USA Tel:513-376-6153 Fax:513-376-6530	Course campus near Dayton, Ohio. Content: Measurement and recording of meteorological and hydrologic data including precipitation, wind speed and direction, humidity, evaporation, infiltration, soil moisture content, stream flow, aquifer behavior, designing data collection networks and statistical analysis of hydrological data, 3 hours field practical for each hour of classroom.	
Jun 18 - 12 Jul 1990	Planning and Implementing Technical and Vocational Training Programs	Larry Kenneke/David Acker or Trg.Coordinator Oregon State University Office of International Research and Dev. Snell Hall 400, Corvallis Oregon 97331 - 1641, USA Tel:503-737-2228 Tlx:5105960686 Fax:503-737-3447	Module A: Planning, organizing technical training programs, conducting needs assessments, task analysis, instructional analysis, program goals, objectives and course outlines. Module B: Managing and evaluating training programs, staffing for training programs, budgeting, coordination, student services, monitoring and evaluation. A-B modules are offered concurrently one on Mon-Tue, the other Wed-Thu.	Module A or B = \$ 1800 Module A + B = \$ 3400
Jun 18 - 14 Jul 1990	Design and Management of Local Irrigation Organizations	David M. Freeman/John Wilkins-Wells Colorado Institute for Irrigation Management 410 University Services Center Colorado State University Fort Collins, Colorado 80523, USA Tel:(303)491-6045 Tlx:9109309011 CSU CID FTCH Fax:(303)491-2293	Provides concepts and procedures to analyze social-organizational aspects of creating new or for improving existing local organizations to obtain effective -- local water control to enhance production of food and fibre; --farmer involvement in operation and management of local irrigation facilities; -- mobilization of local resources; -- linkages between central project managers and local farmers.	Those working in irrigation with a Bachelor's degree in related area having proficiency in English. \$ 4000
Jun 24 - 27 Jun 1990	ASAE International Summer Meeting	American Society Agricultural Engineers 2950 Niles Road, St. Joseph Missouri 64505-9659, USA Fax:616-429-3852	Conference held in Columbus, Ohio. Soil and water section includes wide range of irrigation management topics as well as others.	



DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Jun 25 - 29 Jun 1990	International Symposium of Tropical Hydrology, and 4th Caribbean Islands Water Resources Conference	American Water Resources Association	Held in San Juan, Puerto Rico.	
Jun 25 - 10 Jul 1990	Video Production II, Training and Development Applications	James Haldemon, Training Officer International Agriculture Program Cornell University P.O. Box 16, Roberts Hall, Ithaca New York 14853, USA Tel:607-255-3035 Tlx:559020 INTAG CORNELL Fax:607-255-0788	Video as a communication and training tool, concepts in organizational and communication theory, visual articulation principles, instructional design, participatory message construction and training methodologies. Group field experiment and designing project for participants' use in home country.	Field level and developmental communicators, trainers. \$ 995
Jun 25 - 03 Aug 1990	Environmental Aspects of Canals and Streams	Dr. Henry H. Smith, Director International Center for Water Resources Management, 103 Banneker Hall Central State University Wilberforce, Ohio 45384, USA Tel:513-376-6153 Fax:513-376-6530	Course campus near Dayton, Ohio. Topics include Ecology of streams/canals, water chemistry, water quality, environmental health, canal and streamflow dynamics and economics of environmental control.	Engineers and other water resources professionals. \$ 3500
Jun 25 - 03 Aug 1990	Microcomputer Applications in Agriculture Development (7C 140 - 35)	Musu Clemens, PM 159 U.S. Dept. of Agriculture/OICD/ITD Washington D.C. 20250-4300 Tel:202-653-7675 Tlx:7400228 CDDP UC Fax:202-653-8367	Course held at Oklahoma State University, Tulsa, Oklahoma. Topics include maintenance of data banks, development of budgets, projections, and analysis of cost effectiveness, use of software to do spreadsheet analysis, construction, maintenance and management of a data base, progress monitoring and compiling analytical information for decision making.	Managers and practitioners using microcomputers to plan, monitor and evaluate policies and projects. \$ 4201
Jun 26 - 29 Jun 1990	European Mechanics Colloquium Eurotech 262 Sand Transport in Rivers, Estuaries and the Sea	Jacqueline Watts Hydraulics Research Ltd. Wallingford, Oxon OX10 8BA, UK Tel:(0491)35381 Tlx:848552 Fax:0491-32233	Boundary layer processes under currents and waves separately. Physical processes of sediment suspension and bed-load transport. Movement of widely graded sediments, sediment transport by combined waves and currents.	£ 150

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Jun 27 - 29 Jun 1990	Advances in Water Treatment and Environmental Management	Mrs. Lorrabe Grove, BHRA The Fluid Engineering Centre Cranfield, Bedford, MK43 0AJ, UK Tel:0234-750422 Tlx:825059 BHRA G Fax:0234-750074	The purpose of this conference is to bring together, from an international arena, personnel involved with all aspects of water treatment and environmental management to discuss current and future practice, technology and strategy.	£ 460
Jun 27 - 11 Jul 1990	Human Resources Management	Dr. N.C. Austriaco, Director, C.E.C. Continuing Education Center Asian Institute of Technology G.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374		Top-level executives of public and private organizations. \$ 2000

## JULY

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Jul - Sep 1990	Training Course in Hydrological Forecasting at Davis, California	Mr. G. Stallings U.S. National Weather Service Silver Spring, Maryland 20910, USA & HWR Department, W.M.O., P.O. Box 2300 1211 Geneva 2, Switzerland Tel:+41 22 730 91 11 Fax: +41 22 734 23 26	10 week formal course on hydrology, data collection, remote sensing, hydrological forecasting, plus 3 weeks on-the-job training in a NWS hydrological forecasting office.	Professional hydrologists/meteorologists with university diploma working in national hydrological forecasting service. Some WHO or UNDP fellowships available.
Jul 02 - 20 Jul 1990	Drainage for Irrigated Lands (CIIM No. 02)	Carol Whittemore Colorado Institute for Irrigation Management 410 University Services Center Colorado State University Fort Collins, Colorado 80523, USA Tel:(303)491-2868 Tlx:910 930 9011 CSU CID FTCN Fax:(303)491-2293	Provides and understanding of soil and water engineering principles that are necessary for implementing effective drainage in arid areas. Also covered are: principles and theories, impacts of irrigation practices and their modifications, effects of waterlogging and salinity on crop production, drainage design, evaluation and management.	Senior level irrigation and drainage professionals, administrators, planners and section heads who have responsibilities for irrigation or drainage in irrigated areas. \$ 3000

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LDC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Jul 02 - 27 Jul 1990	Microcomputer Applications in Irrigation Data and Project Management	Dr. T.S. Sheng IICE, Civil Engineering Department Colorado State University Ft. Collins, Colorado 80523, USA Tel:303-491-7425 Tlx:9109309000 ENGR	The course is designed to develop microcomputer skills of irrigation professionals for application of software packages to irrigation data and project management. Through lectures and hands-on sessions, participants will learn how to apply database, spreadsheet, project management and word processing software to their daily irrigation operation and planning activities	Irrigation management specialists with limited or no microcomputer experience \$ 3625
Jul 02 - 24 Aug 1990	Irrigation System Management	Dr. N.C. Austriaco, Director, C.E.C. Continuing Education Center Asian Institute of Technology 6.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374	Integrated management approach; crop response to irrigation; irrigation water requirements; design of cropping patterns; water application methods and their evaluation; irrigation system capability evaluation; water allocation scheduling and monitoring; organizational and socio-economic aspects; farmers participation in water management; field project works; case studies and technical visits.	Irrigation engineers and agricultural scientists and officers. \$ 3200
Jul 02 - 24 Aug 1990	Microcomputer Applications in Irrigation Water Management	Dr. N.C. Austriaco, Director, C.E.C. Continuing Education Center Asian Institute of Technology 6.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374	Computer technology; programming and languages; software availability and access; microcomputer application; data base management; hands-on practices on microcomputer application softwares on statistics, hydrology, surface and groundwater resources development; optimum cropping pattern design; crop water requirement; water allocation scheduling and monitoring; optimum allocation of irrigation water, etc.	Irrigation and agricultural engineers. \$ 3200
Jul 02 - 07 Sep 1990	River Basin Management	Mrs. G. Briggs Thames Water International 3/4 Napier Court c/o Nugent House, Vastern Road Reading, Berkshire, RG1 8DB, UK Tlx:849098 THAMES 6 Fax:+44734 567526	Course included resource planning, hydrology, water treatment and pumping, remote sensing, computer modelling and expert systems. Rural development, environmental impact assessments. Project management, financial management and institutional development, pollution control, public health, corporate planning.	Senior managers and professionals from government departments, water authorities and parastatal organizations. £ 5995 (includes meals and accommodation)
Jul 08 - 11 Jul 1990	National Conference on Environmental Engineering	Michael Armenti American Society of Civil Engineers 345 East 47th Street New York, NY 10017, USA Tel:212 705-7350 Fax:212-980-4681	Range of environmental topic areas including environmental assessment, risk management, water pollution, water supply and treatment, and wastewater treatment. Held in Washington, DC.	\$ 250 approx.

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Jul 08 - 28 Jul 1990	Main System Irrigation Scheduling (English and Spanish)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150, USA Tel:801-750-2800 Tlx:3789426 UTAHSTATE LOGM Fax:801-750-1248	Course held at Logan and Delta, Utah.	\$ 2100
Jul 09 - 03 Jul 1990	International Conference on Groundwater in Large Sedimentary Basins	Secretariat, GLSB Conference University of Western Australia Medlands, Western Australia 6009 Tel:+619389-1722 Tlx:AA92992 Fax:+619-382-2029	Held in Perth, Australia.	
Jul 09 - 13 Jul 1990	1990 National Conference on Irrigation Drainage Engineering and Watershed Management Symposium	Angel Cappiello American Society of Civil Engineers 345 East 47th Street, New York 10017-2398 Tel:212 705-7139 Fax:212-980-4681	Watershed Management Symposium - July 9-11 and includes precipitation/climatic processes, snow hydrology, infiltration processes, remote sensing, watershed planning, role of vegetation, Geo. Information System, etc. Irrigation and Drainage Engineering Conference - July 11-13 and includes rehab and modernization of irrigation and drainage systems, supervision, control and data acquisition for Irrigation and drainage, water rights, ET and on-farm water management, etc. Held in Durango, Colorado.	\$ 250 approx.
Jul 09 - 20 Jul 1990	Construction Management Practices for Water Resources Facilities	Larry D. Stephens, Exec. Vice President American Water Foundation P.O. Box 15577, Denver, CO 80215, USA Tel:303-236-6960 Tlx:168167 USBREC Fax:303-236-6763	Design/construction coordination, construction standards and specifications, scheduling, contracts, construction administration, claim resolution, training. Three days formal presentations; seven days field tours and site visits.	Officials with responsibilities relating to construction management or supervision of the CM process. \$ 1500
Jul 09 - 03 Aug 1990	Project Analysis	Dr. Prentiss deJesus International Institute for Development Graduate School, USDA 600 Maryland Avenue SW, Room 134, Washington, DC 20024, USA Tel:(202)447-7476 Tlx:756563 GS INTL WASH	Project analysis; identifying critical factors; estimating costs and benefits; distinguishing between financial and economic analysis; estimating financial and economic impacts; identifying risks, complications, and methods for their inclusion in the analysis; and presenting data on alternative projects for comparison.	Analysts and managers from private and public sectors of developing countries. \$ 2500

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Jul 09 - 10 Aug 1990	Modern Irrigation Project Management (CIIM No. 03)	Carol Whittesore Colorado Institute for Irrigation Management 410 University Services Center Colorado State University Fort Collins, Colorado 80523, USA Tel:(303)491-2868 Tlx:910 930 9011 CSU CID FTCN Fax:(303)491-2293	Provides the framework for understanding and implementing modern management processes to improve the performance and productivity of irrigation projects. The course will involve lectures by experienced professionals, group discussion and case studies, and a closing study tour to several projects using modern management processes and technologies.	Officials who are responsible for setting policy, engaged in strategic planning, and responsible for day-to-day management processes and technologies. \$ 4500
Jul 09 - 10 Aug 1990	Farming Systems Approach to Research and Extension for Small Farms TC 110 - 20	Freeman Daniels, PM 153 U.S. Dept. of Agriculture/OICD/ITD Washington D.C. 20250-4300, USA Tel:202-653-8306 Tlx:7400228 CDOP UC Fax:202-653-8367	Course at University of Florida, Gainesville, Florida. The course stresses the importance of an interdisciplinary team approach and actively involves participants in hands-on field activities. Participants should bring information regarding a farming systems project from their country for use in class discussions. A field trip will examine the on-site application of farming systems concepts and methods.	Staff responsible for working with small farm programs including planning, implementation and outreach. \$ 3299
Jul 09 - 17 Aug 1990	Extension Methods for Reaching Smallholder Women Farmers	Carol Culler/David Acker or Trg.Coordinator Oregon State University Office of International Research and Dev. Snell Hall 400, Corvallis Oregon 97331 - 1641, USA Tel:503-737-2228 Fax:503-737-3447	Program planning, organizing groups, improving local leadership, obtaining and managing credit, etc. aimed at women farmers. Each participant develops action plan for his/her country situation, field trips.	\$ 4800
Jul 09 - 25 Aug 1990	Vegetable Crop Production and Management TC 130-11	Phil Harlan, PM 148 U.S. Dept. of Agriculture/OICD/ITD Washington D.C. 20250-4300, USA Tel:202-653-7792 Tlx:7400228 CDOP UC Fax:202-653-8367	Participants will develop knowledge and skills to identify characteristics of various types of vegetables and their adaptability to different climates; and identify proper methods for handling, storage, and shipping of different vegetable crops.	Designed for technical officers, extension specialists, and others involved with the production and marketing of vegetable crops. \$ 4125
Jul 09 - 16 Sep 1990	Microcomputers for Agricultural Development	Neil A. Chalmers, Course Director Wye College, University of London Ashford, Kent, TN25 5AH, UK Tel:(44)233 812401 Tlx:94017832 WYEC 6 Fax:(44)233 813320	An intensive, hands-on training course (10 weeks) covering word processing, spreadsheets, databases, survey analysis, project management and quantitative methods.	Professionals in agricultural development. £ 3000

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Jul 11 - 07 Aug 1990	Communication Planning and Strategy	Dr. R.D. Colle, Programme Director Department of Communication Cornell University, 640 Stewart Avenue Ithaca, N.Y. 14850, USA Tel:607-255-6500 Tlx:6713054 Fax:607-255-0788	Programme emphasizes organization of communication and non-formal education programs. Topics include developing a communication strategy, analyzing audiences, message design issues, media selection, mobilization of resources, interpersonal communication, mass media, small group communication, and communication research and evaluation. Programme includes a field trip to Washington, DC to meet with agencies in development communication. Programme has attracted persons from 55 nations over the past 10 years.	Officials and project leaders in health, agriculture, nutrition, family planning and related sectors. \$ 2200
Jul 15 - 25 Aug 1990	On-Farm Water Management (English and Spanish)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150, USA Tel:801-750-2800 Tlx:3789426 UTAHSTATE LOGN Fax:801-750-1248	Course held at Logan and Delta, Utah and Grand Junction, Colorado.	\$ 3900
Jul 16 - 10 Aug 1990	Small-Scale Irrigation and Water Management TC 120 - 25	Joseph Hoffman, PM 142 U.S. Dept. of Agriculture/OICD/ITD Washington D.C. 20250-4300, USA Tel:202-653-7777 Tlx:7400228 CDDP UC Fax:202-653-8367	Course at University of Arizona, Tucson, Arizona. The course uses the field training center of the Arizona-Sonora Field School, where unique facilities exist for research and training activities related to understanding constraints of arid lands agricultural development and appropriate small scale arid lands agricultural systems and technologies.	Agricultural personnel with a degree in plant sciences, soils, ag. engineering, or range mgmt. \$ 3004
Jul 16 - 24 Aug 1990	Project Implementation for Agriculture and Rural Development TC 140 - 16	Howard Oppen, PM 132 U.S. Dept. of Agriculture/OICD/ITD Washington D.C. 20250-4300, USA Tel:202-653-7675 Tlx:7400228 CDDP UC Fax:202-653-8367	Course in Washington D.C. Course helps participants understand and develop skills in techniques for successful project implementation. Management skills and tools are introduced that will assist in building an organization which facilitates information feedback, corrects errors, and eliminates bottlenecks as they occur.	
Jul 16 - 24 Aug 1990	Management of Training Centers	Dr. N.C. Austriaco, Director, C.E.C. Continuing Education Center Asian Institute of Technology G.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84216 AIT TH Fax:662-529-0374		Managers of training institute/center/division of government dept. \$ 2500

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL./TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Jul 16 - 07 Sep 1990	Monitoring and Evaluation of Public Sector Projects and Programmes	Jan Barlett, Course Coordinator Overseas Development Group University of East Anglia Norwich, NR4 7TJ United Kingdom Tel:(603) 57880 Tlx:975197 UEACPC 6 for ODG Fax:(603) 58553	Major themes are the need for information management, systems for generating information and the organization and implementation of information systems.	Professionals working with M & E and Information systems at any level in the public sector £ 3900 (includes bed and breakfast accommodation)
Jul 16 - 21 Sep 1990	Microcomputing and Information Technology for Development Professionals	Jan Barlett, Course Coordinator Overseas Development Group University of East Anglia Norwich, NR4 7TJ United Kingdom Tel:(603) 57880 Tlx:975197 UEACPC 6 for ODG Fax:(603) 58553	This 10 week course has a modular structure covering the following areas: Computer Systems Analysis & Design, Intro to Computer Systems, Use of packages, (Spreadsheet, database, word processing) Management Information Systems, Statistical techniques using computers, programming, Training computer trainers.	Professionals working in a wide range of institutional situations - project based, governmental or in NGOs. £ 4900 (includes bed and breakfast accommodation)
July 16, 1990 July, 1991	Post-Graduate Diploma Course in Water Use Management	Dr. G.N. Yoganarasimhan, Director Water Resources Development Training Centre University of Roorkee, Roorkee 247667 Uttar Pradesh, India Tel:2349, 2604 Tlx:0597-201 UOR IN	12 month post-graduate diploma course in water use management includes irrigation system design, hydrology, computer programming, soil science, agronomy, design of irrigation works, principles of irrigation, organization and management of irrigation projects, farm irrigation practice, ground water development, system design technique, engineering and agricultural economics, drainage and land reclamation. Since 1955 the Centre has trained over 1450 participants from 35 countries.	Civil or agri. engineers and MSc.(s) in agri. with min 3 yrs experience. \$ 1600 (tuition) approx.
Jul 17 - 19 Jul 1990	Principles of Ground Water Hydrology	NNWA Education Department National Water Well Association 6375 Riverside Dr, Dublin, OH 43017, USA Tel:(614)761-1711 Fax:(614)761-3446	This course focuses on essential concepts in hydrogeology. Insight is provided into Darcy's law, monitoring well design, groundwater flow, aquifer pump tests, solute transport, and remediation.	Groundwater scientists and engineers NNWA Members \$ 575 Non-members \$ 675
July 20, 1990	Environmental Site Assessment	NNWA Education Department National Water Well Association 6375 Riverside Dr, Dublin, OH 43017, USA Tel:(614)761-1711 Fax:(614)761-3446	This course focuses on scientific investigations performed in conjunction with property transactions. The course looks at subsurface investigations performed as a prerequisite to commercial and industrial property transfers.	Groundwater scientists and engineers Call NNWA for further information

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Jul 23 - 03 Aug 1990	Microcomputers for Engineering Analysis of Irrigation Systems	Janet Lee Montoya, Dept. of Civil Engg. International Institute for Civil Engg. Colorado State University Fort Collins, Colorado 80523, USA Tel:(303)491-7425 Tlx:910 930 9000 ENGR CSU FTCN Fax:(303)491-2249	Introduction to using microcomputers including DOS/graphical interfaces, basic user commands, file types and names, hard disk organization, batch files. Use of commercially available software such as LOTUS 1-2-3, LOTUS FREELANCE PLUS, graphics, ALLWAYS spreadsheet, MATHCAD math spreadsheet basics, scientific graphs, and LINDO linear programming basics, etc.	Irrigation, civil and agricultural engineers and other water resources professionals. \$ 2175
Jul 23 - 10 Aug 1990	Modern Surface Irrigation Design and Management	Carol Whittemore Colorado Institute for Irrigation Management 410 University Services Center Colorado State University Fort Collins, Colorado 80523, USA Tel:(303)491-2868 Tlx:910 930 9011 CSU CID FTCN Fax:(303)491-2293	Provides an understanding of soil and water engineering principles which are necessary for successful implementation of surface irrigation systems, including system selection, hydraulics, design and specifications, evaluation, and management. The course will involve lectures, laboratory exercises, computer-oriented designs and several field trips.	Senior level professionals responsible for planning and managing integrated irrigation and agricultural development projects. \$ 3000
Jul 26 - 03 Aug 1990	Workshop on Instrumentation, Control and Automation	M. Hiraoka Kyoto University Dept. of Environmental & Sanitary Engineering Yoshida, Kyoto, 606 Japan	Held in Kyoto and Yokohama, Japan.	
Jul 29 - 10 Aug 1990	Management-Communication for Development	Robert C. Morris, Ph.D. Executive Director Management Training and Development Institute, PO Box 23975, Washington, DC 20026, USA Tel:202-646-7910 Tlx:4990821 MANSY Fax:202-646-7911	A skill-building seminar focusing on the manager as communicator interrelating people, information, projects and organizations. Key topics include: perception, information networks, presentations, motivation, leadership, team building, negotiation, technology transfer, decision making.	Professionals from developing countries seeking complementary training to academic graduate study or study-tour programs while in the US whether or not they expect to be in managerial positions on return home. \$ 1075
Jul 29 - 25 Aug 1990	Instructional Methods and Products for Irrigation Training (English)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150, USA Tel:801-750-2800 Tlx:3789426 UTAHSTATE LOGN Fax:801-750-1248	Course held at Logan, Utah.	\$2700



DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Jul 30 - 03 Aug 1990	1990 National ASCE Conference on Hydraulic Engineering	Conferences Department ASCE, 345 East 47th Street New York, NY 10017, USA Fax:1-212-980-4681	Held in San Diego, California.	
Jul 30 - 21 Sep 1990	Computer Applications in Management	Dr. Prentiss deJesus International Institute for Development Graduate School, USDA 600 Maryland Avenue SW, Room 134, Washington, DC 20024, USA Tel:(202)447-7476 Tlx:756563 GS INTL WASH Fax:202-362-8403	DOS system software; beginning and advanced word processing; spreadsheet accounting with LOTUS 1-2-3; database management with dBase III; communications software; and project management software.	Government officers, managers of businesses; and directors of development projects. \$ 5500
Jul 30 - 14 Dec 1990	International Management Development Certificate Program	Dr. Judith Jenkins International Institute for Development Graduate School, USDA 600 Maryland Avenue, SW, Room 134, Washington, DC 20024 USA Tel:(202)447-7476 Tlx:756563 GS INTL WASH Fax:(202)3828403	Management Development; Financial Management; Human Resource Management; Computer Workshop; Management Information Systems; and Special Topics Seminar.	Middle and senior level managers. \$ 12500
Jul 31 - 21 Aug 1990	Participatory Approaches to Action Research	James Maldemon, Training Officer International Agriculture Program Cornell University P.O. Box 16, Roberts Hall, Ithaca New York 14853, USA Tel:607-255-3035 Tlx:559020 INTAG CORNELL Fax:607-255-0788	Based on 5 year development communication project underway in State of Maharashtra, India. Course faculty have been principle project investigators. Includes concept/framework, participatory approaches, making messages relevant to rural people, includes experiences from many countries S.E. Asia, Latin America, Africa.	Rural development implementers, researchers, action research program officers. \$ 995

## AUGUST

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Aug 05 - 09 Aug 1990	Seminar on Hydrology and Water Management of the Amazon Basin	Gleam Stout, IWRA International Water Resources Association University of Illinois 205 N. Mathews Ave. Urbana, Illinois 61801-2397 Tel:217-333-6275 Tlx:5101011969 UI TELCOMURUQ Fax:217-333-8046	Held in Manaus, Amazonas, Brazil General aspects of Hydrology & Water Resource Management of large tropical watersheds plus Discharge measurements of large rivers, Hydrologic monitoring of tropical watersheds, Impact of Land Use Changes in Tropical Forests, Water quality of large Tropical reservoirs, Impact analysis applied to watershed management, Hydrologic design with scarce data, and atmospheric-hydrologic mathematical modeling.	Researchers, planners, consultants, managers working on hydrology of large rivers
Aug 05 - 07 Sep 1990	Oxford International Seminar for Senior Executives from the Water Sector	Mrs. G. Briggs Thames Water International 3/4 Napier Court C/o Nugent House, Vastern Rd. Reading Berkshire RG1. 8DB Tlx:849098 THAMES G Fax:+44734 567526	The seminar will consider ways of institutional strengthening to improve business efficiency and strategic issues such as relations with international funding agencies, environmental & social aspects, capital works projects, assistance from professional bodies in engineering & finance, management development concepts, etc.	Senior executives from government departments, water authorities and parastatal organizations involved in water management £ 7850 (includes lodging and meals)
Aug 06 - 09 Aug 1990	5th International Symposium on Interaction between Sediments & Water	Secretariat, IASWS-90 Uppsala Water Center, Institute of Limnology, University of Uppsala, Box 557-751-22 Uppsala, Sweden Tel:+46-18-182700	Held in Uppsala, Sweden	
Aug 06 - 24 Aug 1990	Leadership and Management Development	Dr. Judith Jenkins International Institute for Development USDA Graduate School, 600 Maryland Avenue, SW Room 134, Washington, DC 20024 USA Tel:(202)447-7476 Tlx:756563 GS INTL WS Fax:(202)3828403	Nature of the management process; basic supervisory skills; communication; decision making; planning; delegation; leadership; time management; personnel administration; and evaluation.	Managers from the private and public sectors \$ 2250
Aug 06 - 24 Aug 1990	Telecommunications for Microcomputers	Dr. Prentiss deJusis International Institute for Development USDA Graduate School, 600 Maryland Avenue, SW Room 134, Washington, DC 20024 USA Tel:(202)447-7476 Tlx:756563 GS INTL WS Fax:(202)3828403	Telecommunications in information management; data communications concepts and terminology; transferring ASCII, word processing, databases, and spreadsheet to standard formats; electronic bulletin boards; choices in telecommunications hardware, software, and services.	Managers responsible for micro-computer telecommunications. \$ 2250

BATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Aug 06 - 14 Sep 1990	Training of Trainers for Agriculture and Rural Development (TC 110-15)	Howard Oppen PM 132 U.S. Dept. of Agriculture/OIDC/ITD Washington DC. 20250-4300 Tel:202-653-7675 Tlx:7400228 CDOP UC Fax:202-653-8367	Held in Washington D.C. Topics include training needs assessment, training objectives, training implementation, organizing training resources, training management, evaluations, practice training methodologies, lectures, role plays, case studies, demonstrations, etc.	Trainers, instructors & Managers of training. \$ 4494
Aug 06 - 28 Sep 1990	Management Analysis	Jane Burke, International Institute for Development USDA Graduate School, 600 Maryland Avenue, SW Room 134, Washington, DC 20024 USA Tel:(202)447-7476 Tlx:756563 GS INTL WS Fax:(202)3828403	Management development; systems analysis, report writing; conducting meetings; position description development; records management; forms design and analysis; task analysis; introducing organizational change.	Managers who will become analysts within their organizations. \$ 5950
Aug 06 - 21 Nov 1990	Management Information Systems Certificate Program	Dr. Prentiss deJesus International Institute for Development USDA Graduate School, 600 Maryland Avenue, SW Room 134, Washington, DC 20024 USA Tel:(202)447-7476 Tlx:756563 GS INTL WS Fax:(202) 3828403	Strategic management; microcomputer applications; Principles of Management Information Systems.	International participants who are responsible for integrating technology into their organizations. \$ 10500
Aug 8 - 21 Aug 1990	Irrigation System Management (Seminar Program and Study Tour)	Dr. N.C. Austriaco, Director Continuing Education Center Asian Institute of Technology 6.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AITTH Fax:662-529-0374	Strategic approaches used by the Thai government in developing and managing their irrigation projects. Visit and observe various types of irrigation structures. Meet the project officials to discuss and share experiences in O&M of the projects. Meet the farm leaders to discuss their roles in O&M of irrigation systems.	Senior Irrigation Officials like Directors, Division Heads and Project Managers. \$ 1000
Aug 12 - 15 Aug 1990	'Conserv 90' Conference and Exposition on Water Supply Solutions for the 1990s	'Conserv 90' 6375 Riverside Drive Dublin, Ohio 43017 USA Tel:614-761-1711	Held in Phoenix, Arizona	
Aug 12 - 18 Aug 1990	14th International Congress of Soil Science	Dr. K. Kumizawth Japanese Society of Soil Sciences 26-10-202 Hongo 6 - Chome Bunkyo -KU, Tokyo 113 Japan	Held in Kyoto, Japan	

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Aug 12 - 24 Aug 1990	Training of Trainers and the Management of Training	Robert C. Morris, Ph.D, Executive Director Management Training & Development Institute PO Box 23975 Washington, DC 20026 Tel:202/646-7910 Tlx:4990821 MANSY Fax:202/646-7911	Designed 1) to improve the training program development and presentation skills of the participant and 2) to enhance skills needed to implement effective training. Participants leave with experience in critiqued presentations and their own training plan.	Professionals from developing countries seeking complementary training to academic graduate study or study-tour programs while in the U.S. who expect to have training responsibilities on return home. \$ 1265
Aug 12 - 24 Aug 1990	Project Management & Evaluation	Robert C. Morris, Ph.D., Executive Director Management Training & Development Institute PO Box 23975 Washington, DC 20026 Tel:202/646-7910 Tlx:4990821 MANSY Fax:202/646-7911	A skill-building seminar helping participants to identify appropriate circumstances for project development, apply various project management tools such as PERT & CPM, build effective teams, schedule, monitor & evaluate.	Professionals from developing countries seeking complementary training to academic graduate study or study-tour programs while in the U.S. who are or expect to be involved in development projects on return home. \$ 1075
Aug 13 - 24 Aug 1990	AIT-UC Berkeley Advanced Management Program for Asia-Pacific Managers	Dr. N.C. Austriaco, Dir, C.E.C. Continuing Education Center Asian Institute of Technology G.P.O. Box 2754 Bangkok 10501, Thailand Tel:529-0100-13 Tlx: 84276 AIT TH Fax:662-529-0374		Engineers and Technologists at Managerial Position. \$ 2500
Aug 13 - 24 Aug 1990	Design and Construction of Roller Compacted Concrete Dams	Larry D. Stephens, Executive Vice President American Water Foundation P.O. Box 15577 Denver, CO 80215 USA Tel:303-236-6760 Tlx:168167 USBREC Fax:303-236-6763	Design and Construction Techniques; Research Studies and Results, Site Studies and Conditions; Economics; Case Studies. One week in Denver, Colorado, one week of visits to RCC dams.	Managers and technical staff with responsibilities relating to design, construction, O&M of dams. \$ 1500
Aug 13 - 31 Aug 1990	Leadership and Management Development	Dr. Judith Jenkins International Institute for Development Graduate School, USDA 600 Maryland Avenue, SW Room 134, Washington, DC 20024 USA Tel:(202)447-7476 Tlx:756563 65 INTL WASH	Nature of the management process; basic supervisory skills; communication; decision-making; planning; delegation; leadership; time management; personnel administration; and evaluation.	Managers from public and private sector \$ 1500

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Aug 13 - 07 Sep 1990	Flow Regulation and Measurement in Irrigation Systems (CIIM No. 05)	Carol Whittemore Colorado Institute for Irrigation Management 410 University Services Center Colorado State University Fort Collins, CO 80523 Tel:(303)491-2868 Tlx 910 930 9011 CSU CID FTCM Fax:(303)491-2293	Provides an understanding of the principles of hydraulic control and their applications in flow control, measurement and regulation in surface irrigation systems. The course will include flow regulation structures, their design and analysis and the use of flow data in management of irrigation systems. The course will involve lectures, field exercises and several field trips.	Engineers who are involved in the design and management of irrigation systems. \$ 3500
Aug 14 - 31 Aug 1990	Automatic Operation of Irrigation canals	J. Mohan Reddy Dept. of Agricultural Eng. University of Wyoming Laramie, WY 82071, USA Tel:307-766-4882 Fax:307-766-4444	Discuss upstream and downstream control; Local V/S centralized control; control based upon constant-level, constant-volume and controlled volume; Detailed discussion of equipment used; and field visits to Salt River project, Coachella Valley, and Central Arizona project.	Agricultural Engineers, Irrigation/ Hydraulic Engineers \$ 3500 (including field trip)
Aug 19 - 22 Sep 1990	Soil and Water Conservation and Management (English & Spanish)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150 Tel:801-750-2800 Tlx:3789426 UTAHSTATE LOGN Fax:801-750-1248	Course in Logan, Utah, Colorado, Nebraska, Kansas and Iowa.	\$ 3300
Aug 20 - 24 Aug 1990	International Symposium on Remote Sensing and Water Resources	Convention Bureau Twente Convention Bureau Twente (Organized by the Intl Assoc. of Hydrogeologists and the Netherlands Society for Remote Sensing), P.O. Box 1003, 7500 BA Enschede, the Netherlands Tel:31-0-53-30-30-70/31-0-53-30-41-62 Tlx:44525 ITC NL Fax:053-304596	The symposium aims at presenting recent developments in application and operational aspects of remote sensing in the field of water resources management.	Hydrogeologists and related scientists. Dfl. 700-800 (registration fee)
Aug 20 - 14 Sept 1990	Managing Rural Development	Dr. M.C. Austriaco, Dir, C.E.C. Continuing Education Center, Asian Institute of Technology S.P.O. Box 2754 Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374		Rural Development Planners and Managers \$ 2000

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLI/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Aug 20 - 14 Sep 1990	Environmental Impact Assessment and Review	Dr. M.C. Austriaco, Dir, C.E.C. Continuing Education Center, Asian Institute of Technology, S.P.O. Box 2754 Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374		Environmental Protection and Planning Officials \$ 2000
Aug 20 - 21 Nov 1990	Project Analysis Certificate Program	Jane Burke International Institute for Development USDA Graduate School, 600 Maryland Avenue, SW Room 134, Washington, DC 20024 USA Tel:(202)447-7476 Tlx:756563 GS INTL WS Fax:(202)3828403	Computer workshop; project analysis; project management; principles of management information systems.	International participants who are analysts and managers of develop- ment projects. \$ 8500
Aug 20 - 30 Nov 1990	International Course on Land Drainage, a post-graduate course.	P.C.M. Brussel ILRI P.O. Box 45 6700 AA WAGENINGEN, The Netherlands Tel:08370 19100 Tlx:75230 VisiM Fax:08370 11524	Subsurface drainage systems in humid regions and arid zones under irrigation; surface drainage systems in flat/undulating lands with high rainfall; salinity control; statistics; computer application; cost-benefit analysis; drainage theory, surveys, design; case studies; optional programs.	Professionals working on drainage for agriculture: planners, design- ers, researchers, university faculty members. Tuition fee: Dfl.4.000;
Aug 21 - 23 Aug 1990	Conservation Tillage Symposium	James H. Stiegler, Program Chairman Oklahoma State University 364 Ag. Hall- Agronomy Dept. Stillwater, OK 74078 Tel:(405)744-6421 Fax:(405)744-5339	Held in Bismarck, North Dakota. Collection of presentations of Great Plains research dealing with arid and semi-arid crop production utilizing conservation tillage methods.	Professionals in water conservation, Tillage, Residue Management. \$ 75
Aug 21 - 01 Sep 1990	International Conference on Water Resources in Mountainous Regions	Aurele Parriaux Laboratory of Geology EPFL (GEOLEP) GCBB (Ecublens) CH-1015 Lausanne, Switzerland Tel:021-572355 Tlx:454478 EPFV Fax:021-475060	22nd IAH Congress, Held in Lausanne, Switzerland	

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLI/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Aug 22 - 15 Sep 1990	Irrigation Water Management (Trainer's) Study Tour of U.S. Western States (English)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150 Tel:801-750-2800 Tlx:3789426 UTAHSTATE LDGM Fax:801-750-1248	Tour in Utah, Colorado, Arizona and California	\$ 2400
Aug 26 - 07 Sep 1990	Managing Development with Microcomputers	Robert C. Morris, Ph.D., Executive Director Management Training & Development Institute PO Box 23975 Washington, DC 20026 Tel:202/646-7910 Tlx:4990821 MAWSY Fax:202/646-7911	Course in Washington D.C. An introduction to the nature, potential and limitations of microcomputers as an important tool in development. Includes hands-on introduction to word processing, spreadsheets, data-bases, and needs appraisal, maintenance, case studies.	Professionals from developing countries seeking complementary training to academic graduate study or study-tour programs while in the U.S. \$ 1265
Aug 26 - 15 Sep 1990	Farmer Participation and Irrigation Organization (English & Spanish)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150 Tel:801-750-2800 Tlx:3789426 UTAHSTATE LDGM Fax:801-750-1248	Course at Logan, Utah	\$ 2100
Aug 26 - 29 Sep 1990	Design of Wells and Pumps for Irrigation (English and Spanish)	Admissions Committee International Irrigation Center Utah State University Logan Utah 84322-4150 Tel:801-750-2800 Tlx:3789426 UTAHSTATE LDGM Fax:801-750-1248	Course in Logan, Utah and Alamosa, Colorado	\$ 3300
Aug 27 - 31 Aug 1990	Infrastructure for Low Income Communities, Conference.	John Pickford Water, Engineering and Development Centre Loughborough University of Technology Leics LE11 3TU U.K. Tel:509-222642 Tlx:34319 UNITEC 6 Fax:509-610231	Conference held in Hyderabad, India	

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Aug 27 - 26 Oct 1990	Development and Operation of Ag. Extension Programs TC 110-5	Freeman Daniels, PM 153 U.S. Dept. of Agriculture/DICD/ITD Washington D.C. 20250-4300 Tel:202-653-8306 Tlx:7400228 CDOP DC Fax:653-8367	Course held at University of Wisconsin, Madison. The course covers the roles of extension, research, and training as essential elements in agricultural development. Participants will examine the roles of subject matter specialists, administrator, field officer, and various other extension staff and the methods they use to perform those roles. Methods of information dissemination are also explored during the course.	Administrators, researchers, field staff, and trainers.  \$ 4301
Aug 27 - 14 Sep 1990	Financial Management	Dr. Judith Jenkins International Institute for Development USDA Graduate School, 600 Maryland Avenue, SW Room 134, Washington, DC 20024 USA Tel:(202)447-7476 Tlx:756563 SS INTL WS Fax:(202)3828403	Overview of accounting; types of accounts; financial statement analysis; types of financial decisions; capital budgeting; investment decisions; privatization; computer applications; and optimization of investment decisions over time.	Managers in government and the private sector who have responsibilities for financial management.  \$ 2250
Aug 27 - 21 Sep 1990	Project Analysis	Jane Burke International Institute for Development USDA Graduate School, 600 Maryland Avenue, SW Room 134, Washington, DC 20024 USA Tel:(202)447-7476 Tlx:756563 SS INTL WS Fax:(202)3828403	Analyzing projects; identifying critical factors; estimating costs and benefits; distinguishing between financial and economic analysis, estimating financial and economic impacts; identifying risks; complications and methods for their inclusion in analysis; and presenting data for comparison.	Analysts and managers from private and public sectors of developing countries.  \$ 2950
Aug 27 - 19 Oct 1990	Computer Applications in Management	Dr. Prentiss deJesus International Institute for Development USDA Graduate School, 600 Maryland Avenue, SW Room 134, Washington, DC 20024 USA Tel:(202)447-7476 Tlx:756563 SS INTL WS Fax:(202)3828403	DOS system software; beginning and advanced word processing; spreadsheet accounting with LOTUS 1-2-3; database management with dBase III; communications software; and project management software.	Government officers, managers of business, and directors of development projects.  \$ 6150

Aug 27 - 03 Oct 1990

Irrigation Water Management  
Training Course

Dr. S.I. Bhuiyan or Mr. D.R. Minnick  
International Rice Research Institute (IRRI)  
P.O. Box 933  
Manila, Philippines  
Tel:88-48-69 Tlx:45365 RICE PM  
Fax:63-2-8178470

COURSE CONTENT:

- i) Technical consideration in water management: the plant soil-water systems
- ii) Rice and rice production systems
- iii) Research methodologies for water management
- iv) Economic, social and communication considerations

Researchers, Educators or Professionals from national agencies with interest in irrigated crop production



## SEPTEMBER

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Sep - Oct 1990	Short Course on Irrigation System Management	M. Jarrrens, IIRI P.O. Box 45, 6700 AA Wageningen The Netherlands Tel:8370 19100 Tlx:75230 VisinWl Fax:8370 11524	Scheduling, operation and monitoring of water distribution, maintenance and related tasks in irrigation systems. Organization procedures, tools and techniques. Problem identification and remedial measures. Farmers relations and participation.	High and middle level staff working in irrigation system management and operation Dfl. 11000
Sep 03 - 06 Sep 1990	International Conference on Calibration and Reliability in Groundwater Modeling	K. Kovar, R.I.V.M. P.O. Box 1, 3720 BA Bilthoven The Netherlands Tel:31-30-749111 Tlx:47215 RIVM NL Fax:31-30-742971	Held in The Hague, The Netherlands	
Sep 03 - 14 Sep 1990	Computer Applications for Agricultural and Natural Resource Management	Dr. D.E. Johnson or Training Coordinator Oregon State University Office of International Research and Development, Snell Hall 400, Corvallis Oregon 97331-1641, USA Tel:503-737-2228 Tlx:510-596-0646 OSU CID COVS ESL Fax:503-737-3447	Use of micro-computers to organize and analyze natural resource and agri. data, systems tailored to developing countries, build and use spreadsheets, statistically summarize and graphically present info, word processing.	\$ 1300
Sep 03 - 21 Sep 1990	Command Area Development and Irrigation Management	C.P. Sinha, Course Coordinator Water Resources Development Training Center University of Roorkee Roorkee 247667, Uttar Pradesh, India Tel:2430(off),2445(res) Tlx:0597-201 UOR IM	The course covers topics related to development of irrigation command areas. It includes irrigation principles, conjunctive use management, organization, on-farm development, modernization of irrigation projects, drainage etc.	Irrigation engineers, agricultural scientists and managers. Rs. 1100/- Tuition
Sep 03 - 28 Sep 1990	Organization and Management of Agri. Extension Systems: A New Look at Knowledge Transfer	John W. Santas, Training Officer INTERPAKS, University of Illinois 113 Mumford Hall 1301 West Gregory Drive Urbana, Illinois 61801, USA Tel:(217)-333-3638 Tlx:206957	Includes historical development and recent trends in extension in various countries, organizing and managing extension systems, leadership, team-building, program development, staff training, evaluation, etc. Class problems, case studies and field trips.	Extension or training administrators. \$ 2550

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Sep 03 - 28 Sep 1990	Monitoring, Evaluation, Feedback and Management of Irrigation Agricultural Systems	Carol Whittemore Colorado Institute for Irrigation Management 410 University Services Center Colorado State University Fort Collins, CO 80523 Tel:(303)-491-2868 Tlx:910 930 9011 CSU CID FTEN Fax:(303) 491-2293	Provides an understanding of integrated irrigation and agricultural development projects. Case studies with successful integration of monitoring, evaluation and feedback application will be analyzed. The principles of monitoring, evaluation, feedback and management of irrigation systems will be covered in lectures and in several field trips.	Senior level professionals who have responsibilities for managing integrated, irrigated agricultural development projects. \$ 3,500
Sep 05 - 09 Sep 1990	Fourth International Conference on Conservation and Management of Lakes "Hangzhou 90"	Pr. Liu Hongliang, Director of Preparatory Committee, Chinese Research Academy of Environmental Sciences, Beiyuan, Annai, Beijing, Peoples Republic of China Tel:46-1025 (Beijing) Tlx:210364 CRAES CN	Topics include: lake pollution and its technical aspects; social, economic, institutional and legal aspects of lake management; sustainability of lake management; and, lake management as a joint effort of authorities, scientists and citizens.	Senior professionals involved in management of inland waters. \$ 250 - \$ 300
Sep 05 - 22 Sep 1990	Soil Conservation and Management Study Tour of U.S. Mid-Western States (English & Spanish)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150, USA Tel:801-750-2800 Tlx:3789426 UTAHSTATE LOGN Fax:801-750-1248	Study tour in Utah, Colorado, Nebraska, Kansas and Iowa.	\$ 1800
Sep 06 - 08 Sep 1990	International Conference: Monitoring, Maintenance and Rehabilitation of Boreholes and Tubewells	Dr. Peter Howsan Silsoe College, Silsoe, Bedford, MK45 4BT, UK Tel:0525 60428 Tlx:265871 MDNREF 6 EYM 300 Fax:0525 61527	Subject areas: Cause processes (particulate, chemical, microbial, mechanical); monitoring and diagnosis in practice, cure processes (hydrodynamical, chemical, physical, combinall) maintenance and rehabilitation in practice, economics of monitoring, maintenance and rehabilitation.	Groundwater engineers, hydrogeologists, irrigation engineers, chemists, microbiologists, borehole/tubewell operators and drillers.
Sep 10 - 13 Sep 1990	International Conference on Conservation and Management of Rivers	P.J. Boon, Dept. FBB Nature Conservancy Council Northminster House, Peterborough, PE1 1UA, UK	Held in York, Great Britain.	

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLI/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Sep 10 - 19 Oct 1990	Hydrometeorological Measurements and Data Analysis Techniques	Dr. N.C. Austriaco, Director, C.E.C. Continuing Education Center Asian Institute of Technology 6.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374	Planning for hydrometeorological field station site selection; and surveying; instrument selection; installation, calibration and measurements water level; stream flow; raingauges, evaporationmeter, psychrometer, thermohygrograph, anemometer, radiation recorder, etc.; microcomputer and software applications; data processing; data storage and retrieval; Hands-on Practices/ Field Trip	Hydrologists and Water Resources Engineers. \$ 2500
Sep 10 - 19 Oct 1990	Senior Advanced Course on Appropriate Modernization and Management of Irrigation Systems (in English)	Ir. P.J.M. Van Hofwegen (IHE Delft) International Institute for Hydraulic and Environmental Engineering P.O. Box 3015, 2601 DA Delft, Netherlands Tels:31-15-783404 Tlx: 38099 IHENL Fax:31-15-122921	Topics include: Problems and constraints in Irrigation Development, Problems analysis and problem-solving, Objective-oriented planning, Monitoring and evaluation, Water division, Distribution and control, Efficiency of water division and distribution, Data collection and processing for operation, O & M, Water users associations, Water legislation, Cost recovery, computer applications, Telemetry, Remote control and sensing, etc. Field trips. Concludes with study tour to irrigation organizations and projects in Southern Europe.	Senior professionals involved in Irrigation Development in South and South-East Asia. Dfl. 7500
Sep 11 - 14 Sep 1990	15th Symposium on the IAHR Sec. on Hydraulic Machinery, Equipment and Cavitation	Organizaing Committee, IAHR Symposium Faculty of Mechanical Engineers 11000 Beograd, 27 Marta 80 Yugoslavia Tel:11-329021 Tlx:11324 YU PUTNIK Fax:11-344505	Held in Belgrade, Yugoslavia.	
Sep 17 - 20 Sep 1990	International Conference on River Flood Hydraulics	Jacqueline Watts Hydraulics Research Ltd. Wallingford, Oxon OX10 8BA, UK Tel:(0491)35381 Tlx:848552 Fax:0491-32233	Held in Queens College, Oxford, U.K. Flood analysis and prediction; Field data; Hydraulics of flood flows; sediment transport and morphological effects; physical and numerical modelling; Engineering design, maintenance and operation of schemes.	£ 300 - £ 400
Sep 17 - 28 Sep 1990	Hydropower - Design, Construction and Equipment Requirements	Larry D. Stephens, Executive Vice President American Water Foundation P.O. Box 15577, Denver, CO 80215, USA Tel:303-236-6760 Tlx:168167 USBREC Fax:303-236-6763	Feasibility studies and data requirements; Economic considerations; Run of River vs. Peaking power; Design and construction of civil works; Environmental considerations, hydraulic modeling; Power generation equipment; Power plant control requirements. Lectures and field tours in Eastern U.S.	Senior officials with management and technical responsibilities relating to hydro-power facilities. \$ 1500

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Sep 17 - 26 Oct 1990	Human Resource Development	Dr. Judith Jenkins International Institute for Development Graduate School, USDA 600 Maryland Avenue, SW, Room 134, Washington, DC 20024 USA Tel:(202)447-7476 Tlx:756563 65 INTL WASH Fax:(202)3828403	Organization and the role of human resource development; the human resource development process; establishing the human resource system; microcomputers and the human resource function; managing and developing the human resource system.	Human resource development officers from the public and private sectors. \$ 4450
Sep 20 1990 - July 1991	Water Management in Tropical Areas	Prof. Dr. H.D. Olbrisch, Course Director Fachhochschule Nordostniedersachsen Herbert Meyer-Strasse 7 D-3113 Suderburg/Fed. Rep. of Germany Tel:05826/8051	Water management, hydrology, hydrogeology, water supply and sewerage, sanitary engineering, small scale water power, irrigation & drainage, tropical crops and cultivation, pedology, erosion-prevention, climate ecology and environmental impact assessments, economic feasibility studies, planning, design, operation and maintenance. Ten-month post-graduate study programme in Suderburg and practical in dev. country.	Professionals in Irrigation design, operation sanitary engineering, hydrology.
Sep 20 - 23 Sep 1990	4th International Symposium on Refined Flow Modelling and Turbulence Measurements	Liang Zaichao Wuhan University of Hydraulic and Electrical Engineering, Wuhan, China.	Held in Wuhan, China.	
Sep 24 - 19 Oct 1990	Community Water Supply and Sanitation for Developing Countries	Dr. N.C. Aostriaco, Director, C.E.T. Continuing Education Center Asian Institute of Technology S.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374		Environmental engineers and scientists. \$ 2000
Sep 24 - 19 Oct 1990	Planning, Design and Implementation of Irrigation Schemes	N.C. Thanh, Director, Asia Division, CEFIGRE International Training Centre for Water Resources Management (CEFIGRE) B.P. 113, Sophia Antipolis 06561 Valbonne Cedex, France Tel:93654900 Tlx:461 311F Fax:9365 4402	Course held in Bangkok, Thailand. Designed to provide participants with appropriate technical alternatives for effective planning, design and implementation, considering local socio-economic and cultural aspects and giving adequate emphasis to environmental issues: on-farm water management, design of distribution system and control structures, water logging and drainage systems, community participation.	Project engineers/managers preferably with background in irrigation/civil/agricultural engineering. \$ 3800

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED & COST
Sep 24 - 19 Oct 1990	Project Management/Evaluation	Jane Burke International Institute for Development Graduate School, USDA 600 Maryland Avenue, SW, Room 134, Washington, DC 20024 USA Tel:(202)447-7476 Tlx:756563 GS INTL WASH Fax:(202)3828403	Project identification, establishing project priorities; planning design; implementation; monitoring, and evaluation.	Managers in public and private sectors who are responsible for developing, managing, and monitoring development projects. \$ 2950
Sep 24 - 14 Dec 1990	Community Technology for Rural Development	Richard Franceys Water, Engineering & Dev. Centre (WEDC) Loughborough University of Technology Leicestershire LE11, 3TU, England Tel:0509-222617 Tlx:34319 UNITEC G Fax:0509 610231	Agriculture and water: integrated rural development; agrarian systems; increasing productivity; water stress sensitivity; sources of water for irrigation; irrigation practices; soil moisture; crop water use; drainage; water supply; sanitation. Roads and bridges: transport and communications; power and industry; Building for development; materials; improved low-cost housing; building design for social infrastructure.	Holders of professional appoint- ments in rural development or similar activities or intending to work in less developed countries. £ 4950 (includes lodging & meals)
Sep 30 - 20 Oct 1990	Maintenance of Pumping System Components (English and Spanish)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150, USA Tel:801-750-2800 Tlx:3789426 UTAHSTATE LOGN Fax:801-750-1248	Course in Logan and Northern Utah.	\$ 2100
Sep 30 - 10 Nov 1990	Operation, Maintenance, and Management of Irrigation Delivery Systems (English & Spanish)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150, USA Tel:801-750-2800 Tlx:3789426 UTAHSTATE LOGN Fax:801-750-1248	Course in Logan and Delta, Utah - Twin Falls, Idaho - Yuma, Arizona - and Imperial Valley of California.	\$ 3900

## OCTOBER

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Oct - Nov 1990 (1 week duration)	Water Well Drilling	Short Courses Administrator Silsoe College Silsoe, Beds, MK45 4DT, UK Tel:0525 60428 Tlx:265871 MDMREF & EYM 300 Fax:0525 61527	The aim of the course is to familiarise participants with the complete process of well drilling and construction, beginning with the selected site & finishing with the completed water well. It is highly practical in nature.	Drillers, Geologists, Engineers, Project Planners Details on request
1 to 26 Oct 1990	Training of Trainers for Irrigation Management	Carol Whittemore Colorado Institute for Irrigation Management 410 University Services Centre Colorado State University Fort Collins, CO 80523 Tel:(303) 491-2868 Tlx:910-930-9011 CSU CID FTCH Fax:491-2293	Provides an understanding of the role of irrigation management training in improving the performance of irrigation projects. Participants will learn how to conduct training needs assessments by analyzing and using learning principles in exercises and case studies. Participants will learn systematic processes for designing training courses & programs, how to identify and use various training methods and aids, and how to evaluate the effectiveness of training and manage training programs.	Senior level professionals responsible for training programs and experienced trainers. \$ 3500
Oct 03 - 22 Mar 1991	Irrigation Engineering Management	Hector Malano Centre for International Irrigation Training and Research University of Melbourne, Australia 217 Royal Parade, Parkville, Vic 3052 Australia Tel:61-3-344 4512 Tlx:AA35185 UNIMEL Fax:61-3-348 1524	Course includes both academic and on-the-job training. Main topics are: D & M of Irrigation Systems, Irrigation principles, computer use in irrigation management, organizational models, management processes, etc.	Middle level managers of Irrigation & Drainage Systems \$ 15000 (includes accommodation and meals)
Oct 04 - 1990	Environmental Site Assessments	NWMA Education Dept National Water Well Association 6375 Riverside Drive Dublin, OH 43017 Tel:(614) 761-1711 Fax:(614) 761-3446	This course focuses on scientific investigations performed in conjunction with property transactions. The course looks at subsurface investigations performed as a prerequisite to commercial and industrial property transfers.	Ground water scientists & engineers Call NWMA for further information
Oct 08 - 16 Dec 1990	Microcomputers for Agricultural Development	Neil A Chalmers, Course director Wye College (University of London) Ashford, Kent, TN25 5AH UK Tel:(44) 233-812401 Tlx:94017832 WYEC 6 Fax:(44) 233-813320	An intensive, hands-on training course (10 weeks) covering word processing, spread sheets, databases, survey analysis, projects management and quantitative methods.	Professionals in agricultural development £ 3000

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Oct 13 - 15 Oct 1990	Introductory Course on New Hydraulics & Hydrology	Mrs Flora M Fanworth Hydraulics Research Ltd Wallingford, Oxon, OX10 8BA, England Tel:0491-35381 Tlx:848552 Fax:0491-32233	The topics will include: <ul style="list-style-type: none"> <li>• Hydrological cycle and runoff estimation</li> <li>• Flow measurement and discharge estimation</li> <li>• Introduction to the Flood Studies Report</li> <li>• Flood routing</li> <li>• River flow processes</li> <li>• Open channel flow and hydraulic resistance of open channels</li> <li>• Hydraulic structures</li> <li>• Flood alleviation</li> <li>• River morphology</li> <li>• Hydraulic modelling</li> <li>• Project planning</li> </ul>	Junior engineers involved in river engineering £ 523
Oct 15 - 02 Nov 1990	Participation communautaire aux projets de Developpement Rural	J. Forkasiewicz International Training Centre for Water Resources Management (CEFIGRE) Sophia Antipolis - B.P. 113 06561 VALBONNE CEDEX (FRANCE) Tel:93654900 Tlx:461 311F Fax 9365 4402	Held in Lome (Togo) in French	Senior Administrators responsible for project planning
Oct 22 - 02 Nov 1990	Crisis and Risk Management	Dr. N.C. Austriaco, Dir, C.E.C Continuing Education Center Asian Institute of Technology G.P.O. Box 2754 Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374		Top-level executives of public & private organizations. \$ 2000
Oct 22 - 02 Nov 1990	Strategic Management for Senior Officials	Jane Burke International Institute for Development USDA Graduate School, 600 Maryland Avenue, SW Room 134, Washington DC 20024, USA Tel:(202) 447-7476 Tlx:756563 GS INTL WS Fax:(202) 3828403	The role of the senior government executive; managing large and complex organizations; setting a motivational climate; leadership excellence; national development in a global economy; decision making and planning; trends for the future; and staffing and employee development.	Senior policy making officials from developing countries. \$ 2250

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Oct 22 - 14 Dec 1990	Rural Physical Infrastructure Development	Dr. M.C. Austraioco Continuing Education Center Asian Institute of Technology G.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374		Rural Development Planners and Managers \$ 3200
Oct 23 - 26 Oct 1990	International Symposium on Hydrologic Basis of Water Resources Management	Chen Jiagi, Local Organizing Comm. P. O. Box 366, IWHR Beijing 100044 P. R. China Tlx:22786 ITCES CN	Held in Beijing, China	
Oct 24 - 27 Oct 1990	International, Conference Agri, Engineering 'AG Eng'90"	Dipl. - Ing. Erich Luckey, Verein Deutscher Ingenieure, VDI - Gesellschaft Agrartechnik Postfach 1139 D 4000 Duesseldorf Federal Republic of Germany	Conference held in International Congress Center, Berlin	Ag Engineers
Oct 27 - 29 Oct 1990	3rd International Conference on Valves & Actuators	Conference Organizer BHRA, The Fluid Engineering Center Cranfield, Bedford MK 43 0AJ, England Tel:0234-750422 Tlx:825059 BHRA G Fax:0234-750074	Held in Bournemouth, UK	
Oct 29 - 01 Nov 1990	1990 National Irrigation Symposium & Irrigation Assoc. Exposition ( "Visions of Irrigation Technology to Enrich our Environment" )	ASAE Meetings Dept. ASAE, 2950 Miles Road, St. Joseph, Missouri 64501-9659 USA Tel:616-429-0300	Held in Phoenix, Arizona Topics include: System & Hardware Advances, Design Considerations, O&M, Water Mgt & Conservation, Scheduling, Salinity-Water Quality, Crop Production, Nursery & Landscaping, Economics, Future Irrigation Strategies, etc.	



BATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Oct 29 - 16 Nov 1990	Water Users Associations in Irrigation Management (CIIM No. 08)	Carol Whittemore Colorado Institute for Irrigation Management 410 University Services Center Colorado State University Fort Collins, Colorado 80523, USA Tel:(303)491-2868 Tlx:910 930 9011 CSU CID FTCN Fax:(303)491-2293	Provides an understanding of effective water user groups by reviewing goals, objectives, strategies, institutional alternatives and organizational approaches by analyzing case studies and by field trips to farmer-managed irrigation systems. Procedures for determining legal, social, economic and technical requirements and approaches for implementing new or improving existing organizations will be reviewed.	Senior level irrigation professionals and administrators who have responsibilities for managing integrated irrigated agricultural projects. \$ 3000
Oct 31 - 16 Nov 1990	Dam Safety, Operation and Maintenance	Larry D. Stephens, Executive Vice President American Water Foundation P.O. Box 15577, Denver, CO 80215, USA Tel:303-236-6960 Tlx:168167 USBREC Fax:303-236-6763	Co-sponsored by U.S. Bureau of Reclamation. Lecture topics include: Geologic and seismotectonic concerns; Earthquake Analysis; Hydrological Considerations; Sedimentation and Channel Degradation, Examination and Evaluation; Instrumentation; D&M; Standing Operating Procedures, Training; and Emergency Preparedness. Case Studies. First portion will take place in Denver, Colorado. Final week observe and examine dams in western U.S.	Managers and technical staff (engineers, geologists, etc.) with responsibilities relating to dam safety, inspection D&M. \$ 1800

## NOVEMBER

November 1990	International Seminar on Groundwater Resources Management	Dr. Asit K. Biswas, President, IWRA 76 Woodstock Close, Oxford OX2 8DD, UK. or International Water Resources Association University of Illinois 205 No Mathews Avenue Urbana, Illinois 61801, USA Tel:217-333-0536 Fax:217-333-8046	Held in Bangkok, Thailand.	
Nov 01 - 15 Dec 1990	International Post-Graduate Basic Course in Agricultural Meteorology	Mrs. Z. Borsuk, Coordinator Israel Meteorological Service P.O.B. 25, Bet Dagan 50250, Israel. Tel:03-9682121 Tlx:381466 Fax:03-9682126/176	Includes meteorology of arid and semi-arid zones, the radiation balance, climate, water balance, special meteorological features of arid and semi-arid zones (dust, etc.), agri. of arid and semi-arid zones, agrometeorology of arid and semi-arid zones, desertification and reverse desertification, study tours.	Professionals with B.Sc. in Physical /Math Sciences, Agri. Sciences. Meteorology or Geography.

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED & COST
Nov 06 - 07 Nov 1990	International Irrigation Exposition and Conference	Tel:202-447-3656 U.S.A.	Las Vegas, Nevada, USA.	
Nov 13 - 15 Nov 1990	Intro Course on River Hydraulics and Hydrology	Jacqueline Watts, Overseas Development Unit Hydraulics Research Wallingford, Oxfordshire OX10 8BA, U.K Tel:+44-491-3538 Tlx:848552 HRSWALG Fax:0491-32233 6a 6a		
Nov 19 - 30 Nov 1990	Enseignement Intelligemment Assisté par Ordinateur (EIAO) dans le Domaine de L'eau	M. Detay International Training Centre for Water Resources Management (CEFIGRE) B.P. 113, Sophia Antipolis 06561 VALBONNE CEDEX, France Tel:93654900 Tlx:461 311F Fax:9365 4402	Held in Ouagadougou, Burkina Faso in French	Hydrogeologists, Technicians, Supervisors, etc.
Nov 19 - 14 Dec 1990	Irrigation Systems Rehabilitation (CIIM No.09)	Carol Whittemore Colorado Institute for Irrigation Management 410 University Services Center Colorado State University Fort Collins, Colorado 80523, USA Tel:(303)491-2868 Tlx:910 930 9011 CSU CID FTCN Fax:(303)491-2293	Provides an understanding of basic principles and methods used to analyze irrigation problems and projects that require rehabilitation. The course will focus on data requirements, methods or analysis, feasibility report preparation, and post-implementation evaluation processes. The course will involve case study analysis and a two-week study tour of rehabilitation projects in the USA.	Middle and senior level irrigation professionals and administrators who have responsibility for irrigation system rehabilitation and modernization. \$ 3500

## DECEMBER

December 1990 (Annually) (4 days)	Satellite Remote Sensing for Land Applications	Short Courses Administrator Silscoe College, Silscoe, Beds MK 45 4BT, UK Tel:0525 60428 Tlx:265871 MONREF 6 EYM 300 Fax:0525 61527	As the technical quality of satellite imagery has improved, so there needs to be advance awareness of applications. The course covers fundamental principles, image collection, soil/plant/water reflectance relationships, basic image interpretation, digital image processing, planning a quantitative remote sensing study, case studies.	Specialists from consultancy companies, governmental and non-governmental organizations with an interest in Agriculture, Range Management, Ecology, Forestry, Hydrology. £ 415 (Residential)
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DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED & COST
Dec 03 - 05 Dec 1990	Principles of Ground Water Hydrology	NMWA Education Department National Water Well Association 6375 Riverside Dr, Dublin, OH 43017, USA Tel:(614)761-1711 Fax:(614)761-3446	This course focuses on essential concepts in hydrogeology. Insight is provided into Darcy's law, monitoring well design, groundwater flow, aquifer pump tests, solute transport, and remediation.	Groundwater scientists and engineers NMWA Members \$ 575 Non-Members \$ 675
Dec 03 - 14 Dec 1990	Asian School on Computer Science	Dr. N.C. Austriaco, Director, C.E.C. Continuing Education Center Asian Institute of Technology 6.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374		University professors, lecturers and researchers. \$ 800
Dec 03 - 21 Dec 1990	Technologies nouvelles et gestion des Grands Fleuves	J.L. Mille International Training Centre for Water Resources Management (CEFIGRE) B.P. 113, Sophia Antipolis 06561 VALBONNE CEDEX, France Tel:93654900 Tlx:461 311F Fax:9365 4402	Held in Niamey (Niger) in French. Les bases de la gestion des grands Fleuves, les outils de gestion technique, les mesures électroniques, la télétransmission, la télédétection, le traitement informatique de l'information, la modélisation mathématique, les outils d'aide à la décision, simulation, optimisation.	Hydraulics technicians, Hydrologists Hydrogeologists responsible for water distribution systems.
Dec 03 - 21 Dec 1990	Island and Coastal Water Resources Management	N.C. Thanh International Training Centre for Water Resources Management (CEFIGRE) B.P. 113, Sophia Antipolis 06561 VALBONNE CEDEX, France Tel:93654900 Tlx:461 311F Fax:9365 4402	Held in Bangkok, Thailand in English. Intro to island and coastal water resources management demand and availability (surface and ground water) nonconventional water sources, pollution abatement technology, salt water intrusion, magnitude of problems, causes, remedial actions, environmental consequences.	Engineers, government officials and scientists developing/protecting island and coastal water resources.
Dec 17 - 28 Dec 1990	Computer Applications for Agricultural and Natural Resource Management	Dr. D.E. Johnson or Training Coordinator Oregon State University Office of International Research and Development, Snell Hall 400, Corvallis Oregon 97331-1641, USA Tel:503-737-2228 Tlx:516-596-0686 OSU CID COVS ESL 62819595 Fax:503-737-3447	Use of microcomputers to organize and analyze natural resource and agri. data, systems tailored to developing countries, build and use spreadsheets, statistically summarize and graphically present info, word processing.	\$ 1300

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Dec 26, 1990 - Jan 05, 1991	Project Management and Evaluation	Robert C. Morris, Ph.D. Executive Director Management Training and Development Institute, PO Box 23975, Washington, DC 20026, USA Tel:202-646-7910 Tlx:4990821 MANSY Fax:202-646-7911	A skill-building seminar helping participants to identify appropriate circumstances for project development, apply various project management tools such as PERT & CPM, build effective teams, schedule, monitor and evaluate.	Professionals from developing countries seeking complementary training to academic graduate study or study-tour programs while in the US who are or expect to be involved in development projects on return home. \$ 1075
Dec 26, 1990 - Jan 05, 1991	Management-Communication for Development	Robert C. Morris, Ph.D. Executive Director Management Training and Development Institute, PO Box 23975, Washington, DC 20026, USA Tel:202-646-7910 Tlx:4990821 MANSY Fax:202-646-7911	A skill-building seminar focusing on the manager as communicator interrelating people, information, projects and organizations. Key topics include: Perception, Information networks, Presenta- tions, Motivation, Leadership, Team Building, Negotiation, Technology Transfer, Decision Making.	Professionals from developing countries seeking complementary training to academic graduate study or study-tour programs while in the US whether or not they expect to be in managerial positions \$ 1075

# 1991 - SCHEDULED PROGRAMS

## JANUARY

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Jan 03 - 22 Mar 1991	Irrigation and Water Resources	Jan Smout Water, Engineering and Development Centre (WEDC) Loughborough University of Technology Leics LE11 3TU England Tel: 0509-222642 Tlx: 34319 UNITEC 6 Fax: 0509-610231	Irrigation planning, management, operation and maintenance; crop water use; design of surface and sprinkler systems structures, drainage. Surface water: data analysis; floods; droughts; reservoir and structures design; earth dams; river engineering. Groundwater location, surveys, abstraction; recharge and geochemistry; test pumping; borehole logging; well design; borehole rehabilitation; resource evaluation.	Holders of professional appointments concerned with irrigation in developing countries  £ 4950 including lodging and meals.
Jan 06 - 16 Feb 1991	Applied Microcomputer Use in Irrigation and Drainage (English and Spanish)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150 Tel: 801-750-2800 Tlx: 3789426 UTAHSTATE LOGN Fax: 801-750-1248	Course at Logan, Utah	\$ 3975 2 wk add-on = \$ 1250
Jan 06 - 14 Dec 1991	Computer-Assisted Irrigation System Management	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150 Tel: 801-750-2800 Tlx: 3789426 UTAHSTATE LOGAN Fax: 801-750-1248	49 week course in English at Logan, Utah; Grand Junction and Alamosa, Colorado; Twin Falls, Idaho; Yuma, Arizona; and Imperial Valley of California.	Irrigation personnel responsible for installing/operating project microcomputer systems  \$ 29750
Jan 09 - 20 Mar 1991	Design and Implementation of Monitoring and Evaluation	Neil A Chalmers Wye College (University of London) Ashford, Kent, TN25 5AH UK Tel: (44) 233 812401 Tlx: 94017832 WYEC 6 Fax: (44) 233 813320	A ten week course covering M&E objectives and concepts; project planning, monitoring and management; project impact and policy evaluation. Use of microcomputer and case studies feature prominently.	Professionals working in M&E  £ 3600

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Jan 14 - 31 May 1991	International Management Development Certificate Program	Dr. Judith Jenkins International Institute for Development USDA Graduate School, 600 Maryland Avenue, SW Room 134, Washington, DC 20024 USA Tel: (202) 447-7476 Tlx: 756563 6S INTL WS Fax: (202) 3828403	Management Development, Financial Management; Human Resource Management; Computer Workshop; Management Information Systems; and Special Topics Seminar	Middle and senior level managers  \$ 12500
Jan 22 - 08 Feb 1991	Leadership and Management Development Program	Dr. Judith Jenkins International Institute for Development USDA Graduate School, 600 Maryland Avenue, SW Room 134, Washington, DC 20024 USA Tel: (202) 447-7476 Tlx: 756563 6S INTL WS Fax: (202) 3828403	Nature of the management process, basic supervisory skills; communication; decision making; planning; delegation; leadership; time management; personnel administration; and evaluation	Managers from the private and public sectors
Jan 22 - 08 Feb 1991	Telecommunications for Microcomputers	Dr. Prentiss deJesus International Institute for Development USDA Graduate School, 600 Maryland Avenue, SW Room 134, Washington, DC 20024 USA Tel: (202) 447-7476 Tlx: 756563 6S INTL WS Fax: (202) 3828403	Telecommunications in information management; data communications concepts and terminology; transferring ASCII, word processing; databases, and spreadsheet to standard formats; electronic bulletin boards; choices in telecommunications hardware, software, and services.	Managers responsible for micro-computer telecommunications  \$ 2250
Jan 22 - 10 May 1991	Management Information Systems Certificate Program	Dr. Prentiss deJesus International Institute for Development USDA Graduate School, 600 Maryland Avenue, SW Room 134, Washington, DC 20024 USA Tel: (202) 447-7476 Tlx: 756563 6S INTL WS Fax: (202) 3828403	Strategic management; microcomputer applications; Principles of Management Information Systems.	International participants who are responsible for integrating technology into their organizations  \$ 10500

## FEBRUARY

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Feb 04 - 29 Mar 1991	Irrigation Project Rehabilitation and Management	Dr. N.C. Austriaco Director Continuing Education Center Asian Institute of Technology S.P.O. Box 2754 Bangkok 10501, Thailand Tel: 529-0100-13 Tlx: 84276 AIT TH Fax: 662-529-0374		Irrigation Engineers
Feb 04 - 29 Mar 1991	Planning and Design of Small Scale Irrigation Projects	Dr. N.C. Austriaco Director Continuing Education Center Asian Institute of Technology S.P.O. Box 2754 Bangkok 10501, Thailand Tel: 529-0100-13 Tlx: 84276 AIT TH Fax: 662-529-0374		Planning and Design Engineers
Feb 04 - 10 May 1991	Project Analysis Certificate Program	Jane Burke International Institute for Development USDA Graduate School, 600 Maryland Avenue, SW Room 134, Washington, DC 20024 USA Tel: (202) 447-7476 Tlx: 756563 GS INTL WS Fax: (202) 3828403	Computer workshop; project analysis, project management, principles of management, information systems	International participants who are analysts and managers of development projects  \$ 8500
Feb 11 - 08 Mar 1991	Project Analysis	Jane Burke International Institute for Development USDA Graduate School, 600 Maryland Avenue, SW Room 134, Washington, DC 20024 USA Tel: (202) 447-7476 Tlx: 756563 GS INTL WS Fax: (202) 3828403	Analyzing projects; identifying critical factors; estimating costs and benefits; distinguishing between financial and economic analysis, estimating financial and economic impacts; identifying risks; and complications and methods for their inclusion in analysis; and presenting data for comparison	Analysts and managers from private and public sectors of developing countries  \$ 2950

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Feb 11 - 01 Mar 1991	Financial Management	Dr. Judith Jenkins International Institute for Development USDA Graduate School, 600 Maryland Avenue, SW Room 134, Washington, DC 20024 USA Tel: (202) 447-7476 Tlx: 756563 GS INTL WS Fax: (202) 3828403	Overview of accounting; types of accounts; financial statement analysis; types of financial decisions; capital budgeting; investment decisions; privatization; computer applications; and optimization of investment decisions over time.	Managers in government and the private sector who have responsibilities for financial management  \$ 2250
Feb 11 - 05 Apr 1991	Computer Applications in Management	Dr. Prentiss deJesus International Institute for Development USDA Graduate School, 600 Maryland Avenue, SW Room 134, Washington, DC 20024 USA Tel: (202) 447-7476 Tlx: 756563 GS INTL WS Fax: (202) 3828403	DOS system software; beginning and advanced word processing; spreadsheet accounting with LOTUS 1-2-3; database management with dBase III; communications software; and project management software.	Government officers, managers of businesses, and directors of development projects  \$ 6150
Feb 17 - 21 Feb 1991	African Regional Symposium on Techniques for Environmentally Sound Water Resources Development	Richard Wooldridge Overseas Development Unit Hydraulics Research Ltd. Wallingford, Oxfordshire OX 10 8BA, UK Tel: 0491-35381 Tlx: 848552 Fax: 0491-32233	To be held in Alexandria, Egypt. Topics to be discussed will cover the whole range of physical and biological process of project formulation and implementation. Papers under sub-topics: Techniques for Rapid Appraisal, Techniques for Prediction, Techniques for Modification and Control, Monitoring and Evaluation.	Engineers, scientists, research workers and planners  Cost to be advised
Feb 17 - 16 Mar 1991	Potential Crop Production from Irrigation and Dryland Agriculture (English and Spanish)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150 Tel: 801-750-2800 Tlx: 3789426 UTAHSTATE LOGN Fax: 801-750-1248	Course at Logan, Utah	\$ 2800



# MARCH

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Mar 04 - 12 Apr 1991	Human Resource Development	Dr. Judith Jenkins International Institute for Development USDA Graduate School, 600 Maryland Avenue, SW Room 134, Washington, DC 20024 USA Tel: (202) 447-7476 Tlx: 756563 GS INTL WS Fax: (202) 3828403	Organization and the role of human resource development, the human resource development process, establishing the human resource system; microcomputers and the human resource function; managing and developing the human resource system.	Human Resource Development Officers from the Public and Private Sectors  \$ 4450
Mar 11 - 05 Apr 1991	Project Management/Evaluation	Jane Burke International Institute for Development USDA Graduate School, 600 Maryland Avenue, SW Room 134, Washington, DC 20024 USA Tel: (202) 447-7476 Tlx: 756563 GS INTL WS Fax: (202) 3828403	Project identification, establishing project priorities; planning design; implementation, monitoring; and evaluation.	Managers in public and private sectors who are responsible for developing, managing and monitoring development projects.  \$ 2950
Mar 13 - 26 Mar 1991	Small Scale Water Resources Development	Dr. M.C. Austriaco Director Continuing Education Center Asian Institute of Technology S.P.O. Box 2754 Bangkok 10501, Thailand Tel: 529-0100-13 Tlx: 84276 AIT TH Fax: 662-529-0374		Senior Government administrators
Mar 24 - 04 May 1991	Waterlogging, Drainage and Salinity Control (English)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150 Tel: 801-750-2800 Tlx: 3789426 UTAHSTATE LOGN Fax: 801-750-1248	Course at Logan, Utah, Grand Junction, Colorado, Yuma, Arizona, Imperial and San Joaquin Valleys of California.	\$ 3950

## APRIL

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Apr - Jun 1991	International Land Drainage Course (Drainage for Control of Waterlogging and Salinity)	Dr Robert S. Broughton, Director Center for Drainage Studies Dept. Of Agricultural Engineering Macdonald College of McGill University 21-111 Lakeshore Road Ste. Anne de Bellevue P. Quebec, Canada H9X 1C0	Analysis and design, field and lab measurements of soil and water parameters, inspection of drainage materials, field excursions observing drainage problems and solutions and drainage facilities. Field observations in Ottawa and St. Lawrence Lowlands of East Central Canada and Irrigated semi-arid areas of S. Alberta in West Canada. Course concludes with 10 days of special field and laboratory experience.	Engineers and soils/agronomists working on irrigation and drainage projects.  \$ 4500 approx.
Apr 10 - 04 May 1991	Waterlogging and Salinity Technical Study Tour of Western States (English)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150 Tel:801-750-2800 Tlx:3789426 UTAHSTATE LOGN Fax:801-750-1248	Tour through Logan, Utah - Grand Junction, Colorado - Yuma, Arizona - Imperial and San Joaquin Valleys of California.	\$ 2450 approx.

## MAY

May 05 - 15 Jun 1991	On-Farm Irrigation Design and Evaluation (English and Spanish)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150 Tel:801-750-2800 Tlx:3789426 UTAHSTATE LOGN Fax:801-750-1248	Course held at Logan and Delta, Utah, Grand Junction, Colorado.	\$ 3975 approx.
May 06 - 31 May 1991	Training of Trainers	Jane Burke International Institute for Development USDA Graduate School, 600 Maryland Avenue, SW Room 134, Washington, DC 20024 USA Tel:(202) 447-7476 Tlx:756563 GS INTL WS Fax:(202) 3828403	Development and utilization of training materials; effective use of audio-visual aids and video equipment; design of course curriculum; principles of adult education; evaluation techniques; participant preparation and presentation of training lessons.	Public and private sector personnel who have responsibility for training functions.  \$ 2950

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
May 13 - 18 May 1991	Water for Sustainable Development in the 21st Century	The Secretariat, M. Benzekri, Comm. Chair VIIth World Congress on Water Resources Administration de l'Hydraulique Direction de la Recherche et de la Planification de l'Eau, Rue Hassan Ben Chekroun, Agdal-Rabat, Morocco Tel:212-7-786-90 Tlx:PLANEAU 310-82 Fax:212-7-766-58 OR Dr. A.K. Biswas, President, IMRA 76 Woodstock Close, Oxford OX2 8DD, UK	To be held in Rabat, Morocco Topics include: Water for sustainable development, water policies, institutional and funding arrangements, multilateral and bilateral aid agencies, water development in Africa in 21st century, economic-social-environmental-health impacts of water development, water management practices, groundwater management, education, training and research.	
May 13 - 05 Jul 1991	Computer Applications in Training and Education	Dr. W.C. Austriaco, Director Continuing Education Center Asian Institute of Technology G.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-3 Tlx:84276 AIT TH Fax:662-529-0374		Trainers and university lecturers.
May 27 - 03 Jul 1991	Management Roles for Women in Development	Dr. Judith Jenkins International Institute for Development USBA Graduate School, 600 Maryland Avenue, SM Room 134, Washington, DC 20024 USA Tel:(202) 447-7476 Tlx:756563 IS INTL WS Fax:(202) 3829403	Planning; decision making; interpersonal communications; managerial problems that may occur when women are leaders in predominantly male organizations; leadership development; imple- menting change; and microcomputer applications in management.	International women officials in government and private concerns. \$ 4450.

## JUNE

June 1991	17th International Congress on Large Dams	International Congress on Large Dams Secretariat, 151 Boulevard Haussmann 75008, Paris, France	To be held in Vienna, Austria.	
Jun 02 - 22 Jun 1991	Workshop on Policy, Planning and Strategies for Irrigated Agriculture (English)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150 Tel: 801-750-2800 Tlx: 3789426 UTAHSTATE LOGN Fax:801-750-1248	Course at Logan, Utah - San Joaquin and Sacramento Valleys of California.	\$ 2975

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Jun 03 - 28 Jun 1991	Project Monitoring and Evaluation	Dr. M.C. Austriaco, Director Continuing Education Center Asian Institute of Technology G.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374		Development Project Personnel.
Jun 03 - 28 Jun 1991	Environmental Management for International Development	Dr. Robert Mashburn International Institute for Development USDA Graduate School, 600 Maryland Avenue, SW Room 134, Washington, DC 20024 USA Tel:(202) 447-7476 Tlx:756563 GS INTL WS Fax:(202) 3828403	Building an environmental ethic, ecological economics - strategies for environmentally sustainable development; controlling pollutions; developing management and assessment tools; and developing environmental policy options.	International development officers working in a broad cross-section of fields.  \$ 2950
Jun 03 - 12 Jul 1991	Project Management	Dr. M.C. Austriaco, Director Continuing Education Center Asian Institute of Technology G.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374		Development project personnel and extension officers.
Jun 09 - 06 Jul 1991	Applied Remote Sensing in Agriculture (English)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150 Tel: 801-750-2800 Tlx: 3789426 UTAHSTATE LOGN Fax:801-750-1248	Course at Logan and Salt Lake City, Utah.	\$ 2750
Jun 16 - 06 Jul 1991	On-Farm Irrigation Scheduling (English and Spanish)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150 Tel: 801-750-2800 Tlx: 3789426 UTAHSTATE LOGN Fax:801-750-1248	Course at Alamosa, Colorado.	\$ 2200

# JULY

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Jun 26 - 10 Jul 1991	Human Resource Management	Dr. N.C. Austriaco, Director Continuing Education Center Asian Institute of Technology G.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374		Top level executives of public and private organizations.
Jul 01 - 23 Aug 1991	Microcomputer Applications in Irrigation Water Management	Dr. N.C. Austriaco, Director Continuing Education Center Asian Institute of Technology G.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374		Irrigation and agricultural engineers
Jul 01 - 23 Aug 1991	Irrigation System Management	Dr. N.C. Austriaco, Director Continuing Education Center Asian Institute of Technology G.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374		Irrigation engineers and agricultural scientists and officers.
Jul 03 - 06 Jul 1991	International Conference on Computer Applications in Water Resources, Taipei, Taiwan	Dr. Shaw L. Yu, Dept. of Civil Engineering University of Virginia Charlottesville, VA 22901, USA Tel:(804)924-6377 Fax:(804)924-6270	Held in Taipei, Taiwan	
Jul 07 - 27 Jul 1991	Main System Irrigation Scheduling	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150 Tel:801-750-2800 Tlx: 3789426 UTAHSTATE LDGN Fax:801-750-1248	Course at Logan and Delta, Utah.	\$ 2200

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Jul 10 - 06 Aug 1991	Communication Planning and Strategy	Dr R.D. Colle, Program Director Department of Communication Cornell University, 640 Stewart Avenue Ithaca, N.Y. 14850, USA Tel:607-255-6500 Tlx:6713054 Fax:607-255-0788	Programme emphasizes organization of communication and non-formal education programs. Topics include developing a communication strategy, analyzing audiences, message design issues, media selection, mobilization of resources, interpersonal communication, mass media, small group communication, and communication research and evaluation. Programme includes a field trip to Washington, DC to meet with agencies in development communication. Program has attracted persons from 55 nations over the past 10 years.	Officials and project leaders in health, agriculture, nutrition, family planning and related sectors.  \$ 2200
Jul 14 - 24 Aug 1991	On-Farm Water Management	Admissions Committee International Irrigation Center Utah State University Logan, Utah State University Tel:801-750-2800 Tlx: 3789426 UTAHSTATE LOGN Fax:801-750-1248	Course at Logan and Delta, Utah and Grand Junction, Colorado.	\$ 3975
Jul 15 - 23 Aug 1991	Management of Training Centers	Dr. M.C. Austriaco, Director Continuing Education Center Asian Institute of Technology G.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374		Managers of training institute/center /division of government departments.
Jul 28 - 24 Aug 1991	Instructional Methods and Products for Irrigation Training	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150 Tel: 801-750-2800 Tlx: 3789426 UTAHSTATE LOGN Fax:801-750-1248	Course at Logan, Utah.	\$ 2800

## AUGUST

Aug 07 - 20 Aug 1991	Irrigation System Management	Dr. M.C. Austriaco, Director Continuing Education Center Asian Institute of Technology G.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374		Senior government administrators, directors, division heads and project managers.
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DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Aug 11 - 24 Aug 1991	20th General Assembly of IUGG	F. Wiederstein BM fur Landund Forstwirtschaft Hydrographisches Zentralburo Marxergasse 2, A-1030, Vienna, Austria	Held in Vienna, Austria	
Aug 12 - 23 Aug 1991	AIT-UC Berkeley Advanced Management Program for Asia-Pacific Managers	Dr. N.C. Austriaco, Director Continuing Education Center Asian Institute of Technology G.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374		Engineers and technologists in Managerial positions.
Aug 18 - 21 Sep 1991	Soil and Water Conservation and Management (English and Spanish)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150 Tel: 801-750-2800 Tlx: 3789426 UTAHSTATE LOGN Fax:801-750-1248	Course in Logan, Utah, Colorado, Nebraska, Kansas and Iowa.	\$ 3375
Aug 19 - 13 Sep 1991	Managing Rural Development	Dr. N.C. Austriaco, Director Continuing Education Center Asian Institute of Technology G.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374		Rural development planners and managers.
Aug 19 - 13 Sep 1991	Environmental Impact Assessment and Review	Dr. N.C. Austriaco, Director Continuing Education Center Asian Institute of Technology G.P.O. Box 2754, Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374		Environmental protection and planning officials.
Aug 21 - 14 Sep 1991	Irrigation Water Management (Trainer's) Study Tour of U.S. Western States (English)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150 Tel: 801-750-2800 Tlx: 3789426 UTAHSTATE LOGN Fax:801-750-1248	Tour in Utah, Colorado, Arizona and California.	\$ 2450

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Aug 25 - 14 Sep 1991	Farmer Participation and Irrigation Organization (English and Spanish)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150 Tel: 801-750-2800 Tlx: 3789426 UTAHSTATE LOGN Fax: 801-750-1248	Course at Logan, Utah.	\$ 2200
Aug 25 - 28 Sep 1991	Design of Wells and Pumps for Irrigation (English and Spanish)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150 Tel: 801-750-2800 Tlx: 3789426 UTAHSTATE LOGN Fax: 801-750-1248	Course in Logan, Utah and Alamosa, Colorado.	\$ 3375

## SEPTEMBER

Sep 04 - 21 Sep 1991	Soil Conservation and Management Study Tour of U.S. Mid-Western States (English & Spanish)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150 Tel: 801-750-2800 Tlx: 3789426 UTAHSTATE LOGN Fax: 801-750-1248	Study tour in Utah, Colorado, Nebraska, Kansas and Iowa	\$ 1850
Sep 09 - 13 Sep 1991	24th IAHR Biennial Congress	M. Diaz de Rabago Dir. del Laboratorio de Hidraulica Paseo Bajo de la Virgen del, Puerto 3, Madrid 5, Spain	Held in Madrid, Spain	
Sep 09 - 18 Oct 1991	Hydrometeorological Measurements and Data Analysis	Dr. N.C. Austriaco, Dir. C.E.C. Continuing Education Center Asian Institute of Technology G.P.O. Box 2754 Bangkok 10501, Thailand Tel: 529-0100-13 Tlx: 84276 AIT TH Fax: 662-529-0374		Hydrologists & Water Resources Engineers



DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Sep 23 - 18 Oct 1991	Community Water Supply and Sanitation for Developing Countries	Dr. M.C. Austriaco, Dir. C.E.C. Continuing Education Center Asian Institute of Technology G.P.O. Box 2754 Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374		Environmental Engineers and Scientists
Sep 29 - 19 Oct 1991	Maintenance of Pumping System Components (English & Spanish)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150 Tel:801-750-2800 Tlx:3789426 UTAHSTATE LOGN Fax:801-750-1248	Course in Logan and Northern Utah.	\$ 2150
Sep 29 - 09 Nov 1991	Operation, Maintenance, and Management of Irrigation Delivery Systems (English & Spanish)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150 Tel:801-750-2800 Tlx:3789426 UTAHSTATE LOGN Fax:801-750-1248	Course in Logan & Delta, Utah, Twin Falls, Idaho-Yuma, Arizona - and Imperial Valley of California.	\$ 3975
Sep 30 - 20 Dec 1991	Community Technology for Rural Development	Richard Franceys Water, Engineering and Development Centre (WEDC) Loughborough University of Technology Leics LE11 3TU England Tel:0509-222617 Tlx:34319 UNITEC 6 Fax:0509 610231	Agriculture and waters: integrated rural development; agrarian systems; increasing productivity; water stress sensitivity; sources of water for irrigation; irrigation practices; soil moisture; crop water use; drainage; water supply; sanitation Roads and bridges; transport and communications; power and industry; Building for development: materials; improved low-cost housing; building design for social infrastructure.	Holders of professional appointments in rural development or similar activities or intending to work in less developed countries.  \$ 4950 including accommodation and all meals

## OCTOBER

DATES	COURSE TITLE	CONTACT PERSON, INSTITUTION LOC./TEL/TLX/FAX	DETAILS	PARTICIPANTS SUGGESTED AND COST
Oct 21 - 01 Nov 1991	Crisis and Risk Management	Dr. N.C. Austriaco, Dir. C.E.C. Continuing Education Center Asian Institute of Technology 6.P.O. Box 2754 Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374		Top-level executives of Public and Private Organizations
Oct 21 - 13 Dec 1991	Rural Physical Infrastructure Development	Same as above		Rural Development Planners and Managers

## NOVEMBER - DECEMBER

Nov 10 - 23 Nov 1991	Financial Management of Irrigation Systems (English)	Admissions Committee International Irrigation Center Utah State University Logan, Utah 84322-4150 Tel:801-750-2800 Tlx:3789426 UTAHSTATE LOGN Fax:801-750-1248	Course in Logan and Northern Utah	\$ 1500
Nov 18 - 23 Nov 1991	8th Afro-Asian Regional Conference on "Land and Water Management in Afro-Asian Countries"	Secretary-General International Committee on Irrigation & Drainage 48, Nyaya Marg, Chanakyapuri, New Delhi: 110 021 Tel:3016837 or 3015962 Tlx 03165920 ICID IN	Held in Bangkok, Thailand	
Dec 02 - 13 Dec 1991	Asian School on Computer Science	Dr. N.C. Austriaco, Dir. C.E.C. Continuing Education Center Asian Institute of Technology 6.P.O. Box 2754 Bangkok 10501, Thailand Tel:529-0100-13 Tlx:84276 AIT TH Fax:662-529-0374		University Professors, Lecturers and researchers

# UNSCHEDULED PROGRAMS AVAILABLE ON REQUEST

<p><u>Water Resources Development Training Centre</u></p> <p>Since 1953 over 1460 engineers from 35 countries have received training at WRDTC in long-term and special short-courses.</p> <p>Short-term courses available on request include:</p> <ul style="list-style-type: none"> <li>- Construction Planning &amp; Management through System Design</li> <li>- Groundwater Development</li> <li>- Hydrology &amp; Flood Control</li> <li>- Water Use Management</li> <li>- Conjunctive Use of Surface &amp; Groundwater</li> <li>- Others</li> </ul>	<p>For further information contact:</p> <p>Dr. B.N. Yoganarasimha, Director WRDTC Roorkee University Roorkee (U.P.) 247 667 India Tel. 2349</p>
<p><u>Resources Management Associates, Phoenix, Arizona</u></p> <p>Courses are from 2 - 10 weeks in duration</p> <ul style="list-style-type: none"> <li>- Water Resource Planning (3-5 weeks)</li> <li>- Irrigation Organization and Operations (4-8 weeks)</li> <li>- Farm Management (3-7 weeks)</li> <li>- Construction Management (6-10 weeks)</li> <li>- Preventive Maintenance (4-8 weeks)</li> <li>- Water User Organizations (2-5 weeks)</li> <li>- Irrigation District Management (4-6 weeks)</li> <li>- Water Measurement (3-6 weeks)</li> <li>- Watershed Management (3-4 weeks)</li> </ul>	<p>For further information contact:</p> <p>Robert E. Moore, P.E., Pres. P.O. Box 36444 Phoenix, Arizona 85067 Tel: 602-246-1791</p>
<p><u>Murrumbidgee College of Agriculture, Yanco, Australia</u></p> <ul style="list-style-type: none"> <li>- The soil/plant/water team (\$250) (5 days) (several times per year)</li> <li>- Irrigation efficiency (\$250) (offered several times/year)</li> <li>- Land forming for irrigators (\$250) (5 days) (several times in June/July &amp; August)</li> </ul>	<p>For further information contact:</p> <p>The Principal Murrumbidgee College of Agriculture Yanco N.S.W. 2703 Australia Tel: 069-530211</p>

UNSCHEDULED SHORT COURSES AVAILABLE UPON REQUEST

<p><u>Asian Institute of Technology</u></p> <p>In addition to scheduled training programs, AIT also conducts tailored short-courses in irrigation management related topics on request such as:</p> <ul style="list-style-type: none"> <li>- Planning and design of small scale irrigation projects</li> <li>- Microcomputer applications in water management</li> <li>- Management of rainfed agriculture</li> <li>- Groundwater resource evaluation and management</li> <li>- Rehabilitation of large scale irrigation projects</li> <li>- Environmental impact assessments</li> <li>- Irrigation system management</li> <li>- Irrigation project rehabilitation &amp; management</li> <li>- Small scale water resource management</li> <li>- Management of training centers</li> </ul>	<p>For further information contact:</p> <p>Micanor C. Austriaco Continuing Education Center Asian Institute of Technology G.P.O. Box 2754 Bangkok 10501, Thailand Tel: 5290100-13 Tlx: 84276 AIT TH</p>
<p><u>NIACONSULT, INC.</u></p> <p>In recent years over 600 trainees (80 Training Groups) from 16 countries have been trained. Training programs available on:</p> <ul style="list-style-type: none"> <li>- Institutional Development (community organizers, farmer participation)</li> <li>- Project Management (project planning, managing projects, design of infrastructures, construction supervision, quality testing and control, monitoring and evaluation)</li> <li>- Operation &amp; Maintenance of Irrigation Systems (Water management, training, senior, mid and field level O&amp;M personnel training, cultural practices)</li> <li>- Training of Trainers (Determining training needs, program design, managing &amp; evaluation of training, learning techniques etc.)</li> <li>- Custom Designed Training Program such as interdisciplinary courses &amp; courses transferred to other countries.</li> <li>- Study tours (over 100 large &amp; medium sized systems and 250 ongoing communal irrigation projects in progress etc.)</li> </ul>	<p>For further information contact:</p> <p>The President NIACONSULT, INC. NIA Building Complex, EDSA Duezon City, Metro Manila Philippines Tel: 976071 to 79 Tlx: (117) 42802 NIA PH</p>
<p><u>University of Arizona</u></p> <p>The University of Arizona offers short-courses in the U.S. or overseas on specialized topics including:</p> <p>"Waterlogging, Drainage and Salinity Control" (English) (\$3500) (Tucson plus Field trips)</p> <p>"Increasing Irrigation Efficiencies" (English or translators) (Tucson or Host country)</p> <p>"Micro-Irrigation" (English) (\$2500) (Tucson or Host country)</p> <p>"Irrigation Engineering Laboratory" (English) (\$2500) (Tucson)</p> <p>"Farming Research &amp; Extension Emphasizing Arid Lands" (English, Portuguese, Spanish) (Tucson or host country)</p>	<p>For further information contact:</p> <p>W. Hart Deptt. of Agricultural Engineering Shantz Building, Rm 533 University of Arizona Tucson, Arizona 85721 USA Tel. 602-621-7232 Telex 9109321202 Fax 602-621-7196</p>

UNSCHEDULED SHORT COURSES AVAILABLE UPON REQUEST

<p><u>Management Training and Development Institute</u></p> <p>The following international short-courses are available on request in host countries:</p> <ol style="list-style-type: none"> <li>1. Management-communication for Development (2 wks)</li> <li>2. Project Management and Evaluation (2 wks)</li> <li>3. Training of Trainers/Management of Training (2 wks)</li> <li>4. Managing Development with Computers (2 wks)</li> <li>5. Entrepreneurship for Development (2 wks)</li> <li>6. Reentry and Professional Reintegration (2 days)</li> </ol>	<p>For further information contact:</p> <p>Dr. Robert C. Morris, Exec. Dir. Management Training and Development Institute P.O. Box 23975 Washington D.C. 20026, USA Tel: 202-646-7910 Telex: 4990821 MANSY Fax: 202-646-7911</p>
<p><u>Colorado Institute for Irrigation Management</u></p> <p>The following short-term training is available from CIIM:</p> <ul style="list-style-type: none"> <li>- Irrigation Management Study Tours (1-3 weeks) (Tailored to needs of trainees) Western U.S.)</li> <li>- Design &amp; Management of small Sprinkler and Drip Systems. (3 weeks) (Classroom &amp; Field Trips) (Fort Collins, Colorado)</li> <li>- Remote Sensing, Image Processing, G.I.S.. (4 weeks) (Fort Collins and Field Trips)</li> <li>- Other</li> </ul>	<p>For further information contact:</p> <p>Colorado Institute for Irrigation Management Colorado State University Fort Collins, Colorado 80523, USA Tel: 303-491-2888 Tlx: 9109309011 Fax: 303-491-2293</p>
<p><u>World Meteorological Organization</u></p> <p>WMO is organizing roving seminars in 1990 and 1991 on "Efficient Use of Water Resources"</p>	<p>For further information contact:</p> <p>Geoffrey M. Rudder, Chief Training Activities Division World Meteorological Organization 41, Giuseppe - Matta Case postale No 2300 CH - 1211 Geneva 2, Suisse (Switzerland) Tel: 022-730-8111 Tlx: 23 260 OMN CH Fax: 41 22 734 2326</p>

UNSCHEDULED SHORT COURSES AVAILABLE UPON REQUEST

<p><u>Oregon State University</u></p> <ul style="list-style-type: none"> <li>- Watershed Management (6-10 weeks)</li> <li>- Remote Sensing Techniques (6-10 weeks)</li> <li>- Irrigation Systems Design (6-10 weeks)</li> <li>- Drainage System Design &amp; Analysis (6-10 weeks)</li> <li>- Groundwater Transport Modeling (6-10 weeks)</li> <li>- Personnel Management (6-10 weeks)</li> <li>- Irrigation Science (6-10 weeks)</li> <li>- Developing Training Programs</li> <li>- Training Strategies for Developing Countries</li> <li>- Project Evaluation and Management</li> <li>- Computer Application for Agricultural and National Resource Management (2 wks)</li> <li>- Soil survey, Morphology and Classification (5 wks)</li> </ul>	<p>For further information contact:</p> <p>Buck Deines Snell Hall 400 Corvallis, Oregon 97331-1641, USA Tel: 503-754-2228 Tlx: 510-596-0686. OSU</p>
<p><u>Water Technology Center, New Delhi</u></p> <p>The WTC conducts tailored short-term training programs of one week to several months in duration upon request in topics as:</p> <ul style="list-style-type: none"> <li>- Soil and Water Management</li> <li>- Irrigation, O&amp;M &amp; Management</li> <li>- Drainage of irrigated lands</li> <li>- On-Farm Water Management</li> <li>- Others</li> </ul>	<p>For further information contacts:</p> <p>Dr. T.K. Sarkar, Director Water Technology Center Indian Agricultural Research Institute Pusa Complex New Delhi: 110 012, India Tel: 586790</p>
<p><u>Centre for Water Resources, Madras</u></p> <p>The C.W.R. conducts tailored short-term training programs in Water Resource Management on request:</p> <ul style="list-style-type: none"> <li>- Irrigation Management</li> <li>- Water Resources Development</li> <li>- Groundwater Development</li> <li>- On-Farm Water Management</li> <li>- Conjunctive use of Surface and Groundwater</li> <li>- System Operation &amp; Maintenance</li> <li>- Diagnostic Analysis Training</li> <li>- Rehabilitation &amp; Management of Irrigation Tanks</li> </ul>	<p>For further information contact:</p> <p>Dr. M. Narayanan, Director Centre for Water Resources College of Engineering Anna University Madras: 600 025, India Tel: 415723 Tlx: 041-21077-ANON-IN</p>

<p><u>Silsoe College (Cranfield Institute of Technology)</u></p> <p>Short courses available in U.K. or in Host countries include:</p> <ul style="list-style-type: none"> <li>- Irrigation</li> <li>- Drainage</li> <li>- Land Reclamation</li> <li>- Soil Conservation</li> <li>- Dry Land Farming</li> <li>- Rural Water Supplies</li> </ul>	<p>For further information contact:</p> <p>Keith Weatherhead          Silsoe College (Cranfield Institute of Technology)          Silsoe, Bedford          MK45 4DT UK          Tel: 0525-60428          Tlx: 265871 (MONREF G) EUM 300          Fax: 0525-61527</p>
<p><u>Central Luzon State University</u></p> <p>Short-term training programs are available in:</p> <ul style="list-style-type: none"> <li>- Water Resources Project Planning and Evaluation (4 weeks)</li> <li>- Irrigation System Management (5 weeks)</li> <li>- On-Farm Water Management (5 weeks)</li> <li>- Participatory Approach in Irrigation Development (4 weeks)</li> <li>- Social Aspects of Water Management (4 weeks)</li> <li>- Training of Trainers on Water Management (2 weeks)</li> </ul>	<p>For further information contact:</p> <p>Dr. Honorato Angeles, Chairman          Dept. of Agricultural Engineering          Central Luzon State University          Munoz, Nueva Ecija          3120 Philippines</p>
<p><u>Hydraulics Research, Wallingford</u></p> <ul style="list-style-type: none"> <li>- Specialist training and technology transfer in irrigation and water resources.</li> </ul> <p>Trainees can join project teams within the Overseas Development Unit to work on current research projects, and to attend courses at associated academic and research institutes in the U.K. Projects are in the following areas:</p> <ul style="list-style-type: none"> <li>- Irrigation Water Management</li> <li>- Reservoir Sedimentation</li> <li>- Erosion Control in Catchments</li> <li>- Sediment Control in Channels</li> <li>- Drainage &amp; Land Reclamation</li> <li>- Health &amp; Environmental Aspects of Irrigation</li> <li>- Minor Irrigation Design</li> <li>- Canal Seepage</li> <li>- Development of Appropriate Equipment</li> </ul> <p>Individually tailored programs for 1-3 months</p>	<p>For further information contact:</p> <p>Dr. K. Sanmuganathan, Head, or          Richard Wooldridge          Overseas Development Unit          Hydraulics Research Ltd.          Wallingford          Oxfordshire OX10 8BA, UK          Tel: 0491-35381          Tlx: 848552          Fax: 0491-32233</p>

UNSCHEDULED SHORT COURSES AVAILABLE UPON REQUEST

<p><u>International Training Centre for Water Resources Management</u></p> <p>C.E.F.I.G.R.E. conducts training programs in France as well as host countries in English and in French. Tailored programs in host countries can be requested in a range of topics including:</p> <ul style="list-style-type: none"> <li>- Planning, design and implementation of irrigation schemes</li> <li>- Operation and maintenance of rural water supply schemes</li> <li>- Environmental impact assessments in developing countries</li> <li>- Rehabilitation and maintenance of irrigation schemes</li> <li>- Planning &amp; development of water resources</li> <li>- River Management</li> <li>- Others</li> </ul>	<p>For further information contact:</p> <p>N.C. Thanh, Dir. Asia Division or J. Mongellaz, Africa C.E.F.I.G.R.E. Sophia Antipolis B.P. 113 06560 VALBONNE CEDEX FRANCE Tel: 93-65-49-00 Tlx: 461-311 F Fax: 93-65-44-02</p>
<p><u>Cornell University</u></p> <p>Cornell provides special tailored courses 3-12 months in length in irrigation management and communications topics as well as:</p> <ul style="list-style-type: none"> <li>- Agriculture</li> <li>- Extension</li> <li>- Computer Applications</li> <li>- etc.</li> </ul>	<p>For further information contact:</p> <p>Coordinator, Special Programs Dept. of Communications Roberts Hall, Cornell University Ithaca, New York 14853 U.S.A. Tlx: 559020 INTAG CORNELL Fax: 607-225-0788</p>
<p><u>International School for Water Resources, C.S.U.</u></p> <p>"Practical Water Resources Systems Analysis" has been conducted in Dominican Republic, Egypt, India &amp; Yugoslavia. This is an intensive 2-week course for engineers and technical managers of water resource systems.</p>	<p>For further information contact:</p> <p>Dr. Darrell Fontane Civil Engineering Department Colorado State University Fort Collins, Colorado 80523 U.S.A. Tel: 303-491-7425 Tlx: 910-930-9000 ENGR CSU FTCN Tlx: 910-930-9000 ENGR CSU FTCN</p>



17

UNSCHEDULED SHORT COURSES AVAILABLE UPON REQUEST

<p><u>SEARCH II</u></p> <p>Tailored Study Tours of California Water Projects, irrigation districts, specialized agricultural crop production, planning and policy issues in agriculture, water and energy.</p> <p>For professional policy makers and managers in developing countries</p>	<p>For further information contact:</p> <p>W.R. Johnston/R.E. Johnston SEARCH II 1342 W. San Jose Fresno, California 93711, U.S.A. Tel: 209-439-7277</p>
<p><u>Ohio State university</u></p> <p>Offers Short-term Training from few days to several months in length on 20 topics including:</p> <ul style="list-style-type: none"> <li>- Irrigation Design</li> <li>- Drainage Design</li> <li>- Irrigation Management</li> <li>- Crop Production</li> <li>- Soil Conservation</li> <li>- Laboratory Science</li> </ul>	<p>For further information contact:</p> <p>GAIL MILLER, International Programs The Ohio State University Agricultural Technical Institute 1328 Dover Road Wooster, OHIO 44691 Tel: (216)264-3911 Fax: (216)262-7634</p>
<p><u>Centre International De L'Irrigation (Morocco)</u></p> <p>Tailored Study Tours on irrigation development, system management, irrigated agricultural development and management. Topics include:</p> <ul style="list-style-type: none"> <li>- Strategy/policies in Irrig. Agriculture, organizational structures in Irrigation, Land consolidation, system design and management, D&amp;M, water charges and recovery methods, Management Information Systems, Farmers Participation and Organization, and training of professionals and non-professionals in Irrigation.</li> </ul>	<p>For further information contact:</p> <p>Dr. M. Ait Kadi, Dept. Head Institut Agronomique et Veterinaire Hassan II Dept. De L'Equipment et De L'Hydraulique B.P. 6202, RABAT - Institut Rabat, Maroc (Morocco) Tlx: 320.89 M</p>

UNSCHEDULED SHORT COURSES AVAILABLE UPON REQUEST

<p><u>Center for Irrigation Technology</u></p> <p>Custom short-courses, seminars and study tours available tailored to trainees needs. Topics include:</p> <ul style="list-style-type: none"><li>- Irrigation</li><li>- Water Management</li><li>- Water Resource Development</li><li>- Irrigation Research</li><li>- Sprinkler and Drip Irrigation</li><li>- Related topics</li></ul>	<p>For further information contact:</p> <p>Kenneth H. Solomon Center for Irrigation Technology California State University, Fresno Fresno, California 93740-0018 USA Tel: 209-294-2066 Tlx: 510 600 1919 CSUF AB</p>
<p><u>California State Department of Water Resources</u></p> <p>Variety of topics utilizing California DWR's extensive network and experience in water resource management throughout the state. Tailored training and study tours are available and cover a wide range of topics from System Design &amp; Management, to automation and computerized operation, to personnel training, etc., etc. Tours typically include site visits to DWR installations, US Bureau of Reclamation, and local agencies. (3-5 days suggested)</p>	<p>For further information contact:</p> <p>James Bailey, Training Officer California State Department of Water Resources 1416 Ninth Street, P.O. Box 942836 Sacramento, California 95814, USA Tel: 916-323-1685 Fax: 916-445-0109</p>
<p><u>International School for Agricultural and Resource Development</u></p> <p>ISARD offers Professional Enhancement Program (PEP) for participants to take individually tailored, non-degree training from 2 to 12 months in duration. Programs stress disciplines in the fields of agricultural and resource development including irrigation management.</p>	<p>For further information contact:</p> <p>Ronald Tinmermeier, Director International School for Agricultural and Resource Development B 303 Clark Building Colorado State University Fort Collins, Colorado 80523 Tel: 303-491-7292 Tlx: 452014 ICARD Fax: 303-491-6441</p>

Salt River Project, Phoenix, Arizona

International Affairs office of the Salt River Project regularly provides short-term study tours and training in Irrigation Management topics. These include:

- Executive Management Skills and Participative Management Concepts. For Executives/managers of water and power authorities.
- Basic Management Skills. For middle management personnel in water and power authorities.
- Operation, Maintenance & Management of Irrigation Systems. For Engineers and Technicians in Water operations and management.
- Data Collection and Telemetry in Water Supervisory Control. For engineers and technicians in canal network operations.
- Construction Contract Planning & Administration. For officials and engineers in construction contracting.
- Heavy Equipment Operation, Maintenance, Management. For Heavy Equipment and Senior Mechanical Engineers in water and power authorities.
- Operation, Maint., and Mgmt of Coal/Gas/Oil fired electric generating stations. For Engineers & Technicians in generating station O&M.
- Design of Electric Facilities. For Civil Engineers designing, maintaining electric facilities.
- Design, Construction, Maintenance of Hydraulic facilities for Water Operations. For Engineers and technicians designing, operating hydraulic facilities.
- Design of Irrigation Structures. For Civil engineers designing irrigation structures.
- Basic and/or advanced audio-visual applications and production methods. For AV production personnel.
- Water Transmission & Distribution. For Engineers & Technicians in water distribution for agricultural irrigation or municipal use.
- Water Measurement, Scheduling, Delivery. For Engineers & Technicians.
- Groundwater hydrology & conjunctive use. For personnel in groundwater applications.
- Hydro-electric Generation with a Pumped Storage System. Engineers & technicians on Pumped Storage hydroelectric systems.
- Watershed Management. For engineers and technicians managing watershed.
- Personnel Management. For administrators of personnel in water & power authorities.

For further information contacts:

Ed Kirdar, Manager, or  
Richard Etter  
Office of International Affairs  
Salt River Project  
P.O. Box 52025  
Phoenix, Arizona 85072-2025  
Tel: 602-326-3483  
Tlx: 667-318 SRPPS PHX

University of Wyoming

The following are available for presentation in host countries upon request:

- Prediction and Control of Soil Erosion
- Design and Evaluation of Surface Irrigation Systems
- Computer-Aided Engineering Applications
- Evapotranspiration Processes
- Water Resource and Microclimate Measurements
- Soil Conservation
- Laboratory Science

For further information contact:

J. Mohan Reddy  
Dept. Agricultural Engineering  
College of Engineering  
University of Wyoming  
P.O. Box 3295, Univ. Station  
Laramie, Wyoming 82071

Tel: 307-766-4882/4295

UNSCHEDULED SHORT COURSES AVAILABLE UPON REQUEST

International Irrigation Center

The IIC conducts its regularly scheduled courses upon request - some can be offered in host countries. The IIC offers a wide range of short courses and workshops in irrigation management including:

Water Resource Systems Analysis, River Basin Planning, Reservoir operating rules for Agriculture, hydropower and municipal requirements, Field Techniques for instream flow assessment, Main System management, On-farm system design and scheduling, Waterlogging and Salinity Control, Applied Remote Sensing, Farmer Participation and Organization, Design of Wells and Pumps for Irrigation, Soil and Water Conservation, Applied Microcomputer applications in Irrigation, etc. etc.

For further information contacts:

International Irrigation Center  
Utah State University  
Logan, Utah 84322-4150  
Tel: (801) 750-2800  
Tlx: 3789426 UTAHSTATE LOGN  
Fax: (801) 750-1248

Irrigation Center, Staples, Minnesota

The Irrigation Center provides short-term training in:

- Research applications in irrigation management
- Research techniques in irrigation design, scheduling, system monitoring, groundwater monitoring, and irrigated crop production for wide range of crops
- Sprinkler and drip irrigation
- Chemigation and fertigation
- Study tours on sprinkler, drip and surface irrigation in mid and western states.

For further information contacts:

Norm Krause  
Irrigation Center  
Staples Technical College  
Staples, Minnesota 56479  
Tel: 218-894-1053