

OUTLINE OF THE GROUP TRAINING COURSES IN JAPAN IN FISCAL 1993

OUTLINE OF THE GROUP TRAINING COURSES IN JAPAN IN FISCAL 1993

COURSES STARTING BETWEEN APRIL 1993 AND MARCH 1994

(平成5年度 集団コース コース概要)

JAPAN INTERNATIONAL COOPERATION AGENCY
(JICA)

研 開

JR

93-013

000
36
TAD

LIBRARY

**OUTLINE OF
THE GROUP TRAINING COURSES
IN JAPAN
IN FISCAL 1993**

COURSES STARTING BETWEEN APRIL 1993 AND MARCH 1994

(平成5年度 集団コース コース概要)

 LIBRARY



1115898[7]

**JAPAN INTERNATIONAL COOPERATION AGENCY
(JICA)**



NOTE

This catalog gives the outline (not all detailed explanation) of each of the group training courses conducted by JICA in Japan.

It is intended to describe particular points of the respective courses in the limited space of this catalog, and thus some of the common facts and conditions such as follows are not mentioned under each course.

**- common points not mentioned on each page -
(applicable to all courses)**

- 1) **PURPOSE:** to contribute to promotion of mutual understanding
- 2) **CURRICULUM:** Briefing/orientation session, country report, observation/study visit, and wrap-up/evaluation session are basic elements of curriculum.
- 3) **QUALIFICATION OF APPLICANT:**
 - (a) to be nominated by his/her government in accordance with the relevant procedures
 - (b) to have sufficient command of English (as for some courses, French) language
 - (c) to be in good health, both physically and mentally, to undergo the training (Pregnancy is regarded as a disqualifying condition.)
 - (d) not to be serving in the military

CONTENTS

DEVELOPMENT PLAN 開発計画

No. 1	Development Economics (General) 開発エコノミスト(一般)	3
No. 2	Development Economics (Industrial Project) 開発エコノミスト(工業)	4
No. 3	Seminar on Economic Development Policies 経済政策セミナー	5

ADMINISTRATION 行政

No. 4	Seminar on Control of Narcotic Offences II 麻薬犯罪取締セミナー II	9
No. 5	Crime Prevention (Treatment of Offenders) II 犯罪防止(矯正保護) II	10
No. 6	Crime Prevention (Senior Seminar) II 犯罪防止(上級) II	11
No. 7	Crime Prevention (The Administration of Criminal Justice) II 犯罪防止(刑事司法) II	12
No. 8	Local Government II 地方行政 II	13
No. 9	National Government Administration II 国家行政 II	14
No. 10	Seminar on National Government Administration (Senior Class Officials) 上級国家行政セミナー	15
	Traffic Police Administration Seminar 交通警察行政セミナー	16
No. 11	Seminar on Criminal Investigation 国際捜査セミナー	17
No. 12	Rescue and First Aid Techniques 救急救助技術	18
No. 13	Fire Fighting Techniques 消火技術	19
No. 14	Fire Service for Administrative Officers 消防行政管理者	20
No. 15	Disaster Prevention Technology 防災技術	21
No. 16	Fire Prevention Technics 火災予防技術	22
No. 17	Government Auditing Seminar (Computer Auditing) 政府会計検査セミナー(コンピュータ会計検査)	23
No. 18	Seminar on Taxation (General Tax Course) 国際税務行政セミナー(一般租税コース)	24
No. 19	Seminar on Taxation (Senior Tax Course) 国際税務行政セミナー(上級租税コース)	25
No. 20	Customs Techniques II 税関行政 II	26
No. 21	Environmental Policy 環境政策	27

No. 22	Environmental Engineering (Water Pollution Control)..... 環境技術(水質保全)	28
No. 23	Environmental Engineering (Air Pollution Control) 環境技術(大気保全)	29
No. 24	Environmental Monitoring (Water Quality)..... 環境モニタリング(水質)	30
No. 25	Nature Conservation and Natural Parks Management..... 自然保護管理	31
No. 26	Lake Water Quality Management 湖沼水質保全	32
No. 27	System of Environment Management on Enclosed Coastal Seas..... 閉鎖性海域の環境管理技術	33
No. 28	Marine Environment Protection 海洋保全	34
No. 29	Air Pollution Control 大気汚染対策	35
No. 30	Air Pollution Source Monitoring Practice..... 大気汚染源モニタリング実習	36
No. 31	Measures to Reduce the Use of the Ozone Depleting Substances..... オゾン層破壊物質削減技術	37
No. 32	Environmental Radioactivity Analysis and Measurement 環境放射能分析	38
No. 33	Environmental Impact Assessment 環境影響評価	39
No. 34	Industrial Pollution Control Engineering 産業環境対策	40
No. 35	Industrial Pollution Control Research 産業公害防止	41
No. 36	Industrial Waste Water Treatment Technique 産業廃水処理技術	42
No. 37	Domestic Waste Water Treatment Technique..... 生活排水対策	43
No. 38	Practical Statistics II 統計実務 II	44
No. 39	Automatic Data Processing for Statisticians 統計職員のためのADP	45
No. 40	Electronic Data Processing for Government Information Activities..... 行政情報システム	46
No. 41	Information Processing Personnel (Senior Programmer Mainframe Based)..... 情報処理要員養成(シニア・プログラマー)	47
No. 42	Information Processing Personnel (Personnal Computer Programmer)..... 情報処理要員養成(パソコン・プログラマー)	48
No. 43	Information Processing Personnel (Personal Computer Network System Designer (A))..... 情報処理要員養成(パソコンネットワークシステム設計者(A))	49
No. 44	Information Processing Personnel (Personal Computer Network System Designer (B))..... 情報処理要員養成(パソコンネットワークシステム設計者(B))	50
No. 45	Information Processing Personnel (Instructor (Personal Computer Based)) 情報処理要員養成(パソコン専任インストラクター)	51
No. 46	Information Processing Personnel (Instructor (Mainframe Based))..... 情報処理要員養成(メインフレーム専任インストラクター)	52
No. 47	Information Processing Personnel (Senior System Analyst/Designer (A)) 情報処理要員養成(上級システム・アナリスト(A))	53

No. 48	Information Processing Personnel (Senior System Analyst/Designer (B)) 54 情報処理要員養成(上級システム・アナリスト(B))	54
No. 49	Information Processing Personnel 55 (Online Database System Designer (Mainframe Based (A)) 情報処理要員養成(オンラインデータベースシステム設計者(A))	55
No. 50	Information Processing Personnel 56 (Online Database System Designer (Mainframe Based (B)) 情報処理要員養成(オンラインデータベースシステム設計者(B))	56
No. 51	Information Processing Personnel (UNIX Database System Designer)..... 57 情報処理要員養成(UNIXデータベース・システム設計者)	57
No. 52	Information Processing Personnel (DP Division Manager)..... 58 情報処理要員養成(情報処理部門管理者)	58
No. 53	Microelectronics Engineering (Microcomputer)..... 59 マイクロエレクトロニクス技術	59
No. 54	Office Automation Technology..... 60 OA化技術	60

PUBLIC UTILITY WORKS 公益事業

No. 55	Water Supply Engineering II..... 63 上水道施設 II	63
No. 56	Sewage Works Engineering II..... 64 下水道技術 II	64
No. 57	Solid Waste Management and Night Soil Treatment II..... 65 廃棄物処理 II	65
No. 58	Waste Management Practice 66 廃棄物処理実習	66

TRANSPORTATION AND TRAFFIC 運輸交通

No. 59	Administration System for Motor Vehicles 69 自動車技術行政	69
No. 60	Modernization of Physical Distribution (Cargo Transportation)..... 70 物流近代化	70
No. 61	Seminar on Highway Construction II 71 ハイウェイセミナー II	71
No. 62	Terminal Facility Planning and Urban Design..... 72 ターミナル計画とデザイン	72
No. 63	Railway Management and Planning..... 73 鉄道経営・計画	73
No. 64	Seafarer's Management System..... 74 船員管理システム	74
No. 65-1	Marine Technique (Navigator)..... 75 航海技術(航海士)	75
No. 65-2	Marine Technique (Engineer) 76 航海技術(機関士)	76
No. 66	Aids to Marine Navigation II 77 航路標識 II	77
No. 67	Marine Disaster Prevention and Rescue Operation 78 救難防災	78

No. 68	Liner Shipping Business	79
	定期船実務	
No. 69	Seminar on Port Administration and Management.....	80
	港湾管理運営セミナー	
No. 70	Port and Harbour Engineering II.....	81
	港湾工学 II	
No. 71	Development of Container Terminal	82
	コンテナ埠頭整備計画	
No. 72	Seminar on Aerodrome	83
	空港セミナー	
No. 73	Seminar on Aviation Security	84
	航空保安セミナー	
No. 74	Seminar on Air Traffic Control.....	85
	航空管制セミナー	
No. 75	Urban Transport Seminar	86
	都市交通セミナー	
No. 76	Comprehensive Urban Transportation Planning	87
	総合都市交通施設計画	
No. 77	Seismology and Earthquake Engineering II.....	88
	地震工学 II	
	Seminar on Seismology and Earthquake Engineering.....	89
	地震工学セミナー	
No. 78	Meteorology II.....	90
	気象学 II	
No. 79	Science and Technology for Disaster Prevention	91
	防災科学技術	
No. 80	Volcanology and Volcanic Sabo Engineering.....	92
	火山学・火山砂防工学	

INFRASTRUCTURE 社会基盤

No. 81	Bridge Engineering II	95
	橋梁工学 II	
No. 82	Construction Engineering II (Civil Works).....	96
	建設施工 II	
No. 83	Construction Project Manager.....	97
	建設施工管理者	
No. 84	Soil Mechanics and Foundation Engineering.....	98
	土質及び基礎工学	
No. 85	Regional Development Planning Seminar.....	99
	国土開発セミナー	
No. 86	Seminar on Administration for Disaster Prevention.....	100
	防災行政管理者セミナー	
No. 87	River and Dam Engineering II.....	101
	河川及びダム工学 II	
No. 88	City Planning II.....	102
	都市計画 II	
No. 89	Urban Development	103
	都市整備	
No. 90	Housing	104
	住宅建設	

No. 91	Seminar on Improvement of Housing and Living Environment.....	105
	住宅・住環境改善セミナー	
No. 92	Building Engineering	106
	建築技術	
No. 93	Advanced Technology of Construction	107
	建設工事先進技術	
No. 94	Survey and Mapping II	108
	測量技術 II	
No. 95	Hydrographic Survey (International Accredited Category B Course)	109
	水路測量(国際認定B級)	
	Physical Oceanographic Survey	110
	海洋物理調査	
No. 96	Nautical Charting	111
	海図作製	

POSTAL SERVICE, TELECOMMUNICATION AND BROADCASTING 通信・放送
--

No. 97	Radio Frequency Monitoring	115
	電波監視	
No. 98	Postal Executives' Seminar II.....	116
	郵便幹部セミナー II	
No. 99	Executive Seminar on Postal Banking Services.....	117
	為替貯金国際幹部セミナー	
No. 100	International Telecommunication Services (Administration and Commercial) II	118
	国際通信業務管理 II	
No. 101	International Telephone Communication Engineering	119
	国際電話通信技術	
No. 102	International Data Communication Engineering	120
	国際データ通信技術	
No. 103	Data Communication Engineering	121
	データ通信技術	
No. 104	Radio Communication Engineering	122
	無線通信技術	
No. 105	Satellite Communication Engineering II	123
	衛星通信技術 II	
No. 106	Satellite Communication Engineering (Planning and Management) II.....	124
	衛星通信技術(計画管理) II	
No. 107	Digital Telecommunication Network Planning and Designing	125
	デジタル通信網計画設計	
No. 108	Telecommunication Outside Plant Engineering Technique	126
	通信線路技術指導者育成	
No. 109	Seminar on Telecommunication Management	127
	電気通信経営管理セミナー	
No. 110	Telecommunication Executives' Seminar II.....	128
	電気通信幹部セミナー II	
No. 111	Digital Switching Engineering	129
	デジタル交換技術	
No. 112	Digital Transmission Systems Engineering.....	130
	デジタル伝送技術	
No. 113	Fiber Optic Outside Plant Engineering.....	131
	光線路技術	

No. 114	International ISDN Engineering 132 国際ISDN技術
No. 115	Integrated Services Digital Network Engineering 133 ISDN技術
No. 116	Rural Telecommunication Engineering 134 ルーラル通信技術
No. 117	CBT Courseware Development Technology for Telecommunication 135 電気通信CAI教材作成技術
No. 118	Television Programme Production Engineering 136 テレビジョン番組制作技術
No. 119	Television Programme Production 137 テレビジョン番組制作
No. 120	Television Engineering 138 テレビジョン放送技術
No. 121	Television Social Education Programme 139 テレビジョン社会教育番組
No. 122	Television Broadcasting Management II 140 テレビジョン放送管理 II
No. 123	Broadcasting Executives' Seminar II 141 放送幹部セミナー II
No. 124	Audio Broadcasting Engineering 142 音声放送技術

AGRICULTURE 農業

No. 125	Agricultural Co-operatives II 145 農業協同組合 II
No. 126	Agricultural Extension Service for Leader II 146 農業普及指導者 II
No. 127	Women Leaders of Farm Household Development 147 農家生活水準向上女性指導者
No. 128	Rice Production 148 米生産
No. 129	Production du Riz 149 米生産(仏語)
No. 130	Rice Cultivation Technology 150 稲作技術
No. 131	Vegetable Crops Production II 151 野菜生産 II
No. 132	Vegetable Seed Production 152 野菜採種
No. 133	Sugar Cane Cultivation 153 サトウキビ栽培
No. 134	Pesticide Utilization and Safety 154 農薬の利用と安全性
No. 135	Integrated Pest Management for Plant Protection 155 植物保護のための総合防除
	Plant Genetic Resources 156 植物遺伝資源
No. 136	Plant Quarantine (Disinfestation of Fruit Flies) 157 植物検疫(ミバエ類殺虫技術)

No. 137	Soil Analysis and Improvement	158
	土壤分析改良	
No. 138	Effective Utilization of Tropical Agriculture and Forestry Resources	159
	熱帯農林資源の有効利用	
No. 139	Environmental Planning and Management in Agricultural and Rural Development.....	160
	農業・農村開発環境保全	
No. 140	Distribution of Fresh Fruits and Vegetables	161
	青果物流通	
No. 141	Irrigation and Drainage II	162
	灌漑排水 II	
No. 142	Agricultural Land and Water Resources Development II	163
	農地水資源開発 II	
No. 143	Irrigation Water Management	164
	水管理	
No. 144	Water Resources Development and Its Use in Arid Areas.....	165
	乾燥地水資源の開発と利用	
No. 145	Farm Mechanization II.....	166
	農業機械化 II	
No. 146	Farm Machinery Design	167
	農業機械設計	
No. 147	Agricultural Machinery Management	168
	農業機械管理	
No. 148	Agricultural Machinery Testing and Evaluation.....	169
	農業機械評価試験	
No. 149	Post-Harvest Rice Processing.....	170
	米の収穫後処理技術	

ANIMAL HUSBANDRY 畜産

No. 150	Poultry Production and Breeding Technology	173
	鶏育種・生産技術	
No. 151	Breeding and Artificial Insemination in Cattle	174
	牛育種・人工授精	
No. 152	Embryo Transfer for Cattle	175
	受精卵移植技術	
No. 153	Twinning and Invitro Fertilization Technology for Cattle.....	176
	双子生産・体外授精技術	
No. 154	Dairy Farming and Related Industries	177
	酪農振興・検査技術	

FORESTRY 林業

No. 155	Reforestation Techniques and Forest Management	181
	森林造成技術者	
No. 156	Forest Soil	182
	森林土壌	
No. 157	Forest Management and Planning	183
	森林管理計画	
No. 158	Forest Research	184
	森林研究	

FISHERIES 水産

No. 159	Fishery Cooperatives	187
	漁業協同組合	
No. 160	Fishing Science and Technology	188
	漁具漁法学	
No. 161	Coastal Fishing Technology	189
	沿岸漁業技術	
No. 162	General Aquaculture	190
	養殖一般	
No. 163	Prawn Propagation Technique.....	191
	エビ増養殖技術	
No. 164	Marine Ranch (Marine Farm) System	192
	海洋牧場システム	
No. 165	Fish Physiology and Prevention of Epizootics.....	193
	魚類生理・防疫	
No. 166	Hull and Engine Maintenance of Small Fishing Boat	194
	小型漁船の船体・機関保守	
No. 167	Fish Processing (with Marketing and Management)	195
	水産加工流通経営	
No. 168	Marine Food Processing and Technology	196
	水産食品加工	

MINING AND MINERALS 鉱業

No. 169	Coal Mine Safety.....	199
	石炭鉱山保安	
No. 170	Mineral Processing and Metallurgy	200
	選鉱製練	
No. 171	Mining and Metallurgy	201
	資源開発	
No. 172	Research and Development on Materials and Resources.....	202
	材料および資源に関する技術研究	

INDUSTRY 工業

No. 173	Senior Class Seminar on Small Industry Development II.....	205
	中小工業開発セミナー II	
No. 174	Implementation of TQC and Standardization Activities II	206
	TQC・標準化活動実践 II	
No. 175	Seminar on Industrial Standardization and Quality Control	207
	工業標準化・品質管理シニアセミナー	
No. 176	Industrial Property System	208
	工業所有権制度	
No. 177	Seminar on Industrial Property	209
	工業所有権セミナー	
No. 178	Legal Metrology	210
	法定計量	
No. 179	Certification Systems	211
	認証検査制度	

No. 180	Industrial Design 212 インダストリアルデザイン	212
No. 181	Ceramic Kiln and Firing Technology 213 セラミック窯炉及び焼成技術	213
No. 182	Ceramic Building Materials Technology..... 214 セラミック建材技術	214
No. 183	High Technology Materials Application (Fine ceramics, composites, metals)..... 215 ファインセラミックス応用技術	215
No. 184	Petrochemical Industry 216 石油化学工業	216
No. 185	Chemical Technology 217 化学技術研究	217
No. 186	Catalytic Science 218 触媒科学研究	218
No. 187	Bioindustries 219 バイオインダストリー	219
No. 188	Organic Fine-Chemicals Technology 220 有機ファインケミカルズ工学	220
No. 189	Polymer Materials and Technology 221 高分子材料工学	221
No. 190	Polymer Science and Technology 222 高分子研究	222
No. 191	Advanced Glasses Technology 223 先進ガラス材料	223
No. 192	Qualified Metal Casting Technology II (Advanced Foundry Engineering)..... 224 高品位鋳物技術 II	224
No. 193	Surface Modification Technology for Materials..... 225 (Anti-Corrosion, Surface Treatment of Metal, Non-Metal and New Materials) II 表面改質技術(金属・非金属・新素材及び防食)II	225
No. 194	Arc Furnace and Continuous Casting Control Technology 226 電炉・連鋳管理技術	226
No. 195	Steel Properties for Fabrication..... 227 鋼材の加工と加工特性	227
No. 196	Heat Treatment Technology 228 熱処理技術	228
No. 197	Maintenance of Construction Machinery II 229 建設機械整備 II	229
No. 198	D'Entretien et de Reparation de L'Equipement de Construction 230 建設機械整備(仏語)	230
No. 199	Mecanique Automobile Vehicules Diesel (Autobus, Camions Poids-Lourd) 231 バス・トラック整備技術(仏語)	231
No. 200	Plant Maintenance Engineering 232 プラントメンテナンス技術	232
No. 201	Automatic Control (General Introduction)..... 233 自動制御	233
No. 202	Machine Condition Diagnosis Technique (Inspection Technique for Plant Maintenance)..... 234 設備診断技術	234
No. 203	Plant Maintenance Management 235 保全管理	235
No. 204	Spare Parts for Plant Maintenance 236 プラント用保全部品	236
No. 205	High Technology of Metal Works II 237 金属加工高品質化技術 II	237

No. 206	Factory Management for Production Managers in Machining Industry 238 生産工程管理技術	238
No. 207	Welding Technology 239 溶接技術	239
No. 208	Air-conditioning Engineering 240 空調技術	240
No. 209	Design and Manufacturing of Material Handling Equipment..... 241 荷役機械の設計・製造	241
No. 210	Oil Hydraulics and Its Application 242 油圧とその応用	242
No. 211	Inspection and Testing Techniques for Household Electrical Appliances..... 243 家庭用電気製品検査技術	243
No. 212	Shipbuilding, Repairing and Maintenance 244 船舶建造メンテナンス	244
No. 213	Automobile Safety and Pollution Control Technology 245 自動車の安全・公害対策技術	245
No. 214	Renovation of Industrial Equipment..... 246 設備のリノベーション	246
No. 215	Inspection and Testing Technique for Textile Products..... 247 繊維製品検査技術	247
No. 216	Wood Based Materials Application Technology 248 木質材料高度利用技術	248
No. 217	Ceramics Development Technology 249 陶磁器開発・活用技術	249
No. 218	Packaging Engineering 250 包装技術	250
No. 219	Advanced Industrial Technology 251 産業技術研究	251

ENERGY エネルギー

No. 220	Energy Conservation..... 255 省エネルギー	255
No. 221	Energy Management 256 エネルギー管理	256
No. 222	Hydro-Electric Power Generation II..... 257 水力発電 II	257
No. 223	Operation and Maintenance of Coal-Fired Thermal Power Plants..... 258 石炭火力発電	258
No. 224	Nuclear Power Generation..... 259 原子力発電	259
No. 225	Electric Power Management II..... 260 電気事業経営 II	260
No. 226	Electric Power Distribution System Management 261 配電システム管理	261
No. 227	Coal Science and Technology 262 石炭資源開発・利用	262
No. 228	Coal Mining and Preparation 263 採炭・選炭技術	263
No. 229	Nuclear Technology 264 原子力基礎実験	264

No. 230	Seminar on Nuclear Safety and Regulation..... 原子力安全規制行政セミナー	265
No. 231	Geothermal Energy (Advanced)..... 地熱エネルギーアドバンス	266
No. 232	Radiological Protection for Radiation Safety Officers at Nuclear Facilities..... 放射線安全管理実務者	267

COMMERCE AND TRADE 商業・貿易

No. 233	Measures for Smaller Industries II..... 中小企業対策 II	271
No. 234	Consultancy Service for Small Industries 中小企業診断	272
No. 235	Production Management (Theory and Practice on Work Improvement) 生産性向上技術	273
No. 236	Productivity Management..... 実践的総合生産性向上	274
No. 237	Seminar on Shipbuilding Management..... 造船経営管理セミナー	275
No. 238	Investment Promotion Seminar (1) (Asian Countries)..... 投資促進セミナー(1)(アジア諸国)	276
No. 239	Investment Promotion Seminar (2) (Latin American Countries) II..... 投資促進セミナー(2)(ラテンアメリカ諸国)II	277
No. 240	Trade Promotion Seminar (1) (Asian and Pacific Countries)..... 貿易振興セミナー(1)(アジア・太平洋諸国)	278
No. 241	Trade Promotion Seminar (2) (African, Middle-Eastern and Caribbean Countries) II..... 貿易振興セミナー(2)(アフリカ・中近東・カリブ諸国)II	279
No. 242	Foreign Trade Practice for Leaders..... 貿易実践指導者	280
No. 243	Intellectual Property Rights in Technology Transfers..... 国際知的財産権	281

TOURISM 観光

No. 244	Seminar on Comprehensive Tourism II..... 総合観光セミナー II	285
---------	---	-----

HUMAN RESOURCES 人的資源

No. 245	Intensive Japanese Language (A)..... 日本語専修(A)	289
No. 246	Intensive Japanese Language (B)..... 日本語専修(B)	290
No. 247	Sound Slide Production (Production and Use of Audio Visual Media)..... サウンドスライド制作	291
No. 248	Video Production (Basic) ビデオ制作	292
No. 249	Audio Visual Technology..... 視聴覚技術	293
No. 250	Practice of Science Education 科学教育実技	294

No. 251	Seminar for Training Specialist for Supervisors II.....	295
	監督者訓練専門家セミナー II	
No. 252	Seminar on Training Management in Vocational Training Institutions.....	296
	職業訓練管理セミナー	
No. 253	Seminar on Human Resources Development Administration.....	297
	職業能力開発行政セミナー	
No. 254	High Technology Research	298
	ハイテク・リサーチ	
No. 255-1	Vocational Training Instructors (Information and Computer Engineering)	299
	職業訓練指導員(情報工学)	
No. 255-2	Vocational Training Instructors (Architectural Engineering).....	300
	職業訓練指導員(建築工学)	
No. 255-3	Vocational Training Instructors (Electronic Engineering) II.....	301
	職業訓練指導員(電子工学)II	
No. 255-4	Vocational Training Instructors (Mechanical Engineering for Industry).....	302
	職業訓練指導員(産業機械工学)	
No. 255-5	Vocational Training Instructors (Mechanical Engineering for Production)	303
	職業訓練指導員(生産機械工学)	
No. 255-6	Vocational Training Instructors (Products Design and Wood Work Engineering).....	304
	職業訓練指導員(造形工学)	

SCIENCE AND CULTURE 科学・文化

No. 256	Remote Sensing Technology (Fundamental)	307
	リモート・センシング技術(基礎)	
No. 257	Enzyme Technology.....	308
	酵素工学	
No. 258	Medical and Biological Application of Radiation and Radioisotopes	309
	アイソトープ・放射線の医学・生物学利用	
No. 259	Biotechnology	310
	バイオテクノロジー	

MEDICAL TREATMENT 保健・医療

No. 260	Tuberculosis Control II.....	313
	結核対策 II	
No. 261	Tuberculosis Control for Administrative Medical Officers.....	314
	結核対策指導者	
No. 262	Laboratory Works for Tuberculosis Control.....	315
	結核対策細菌技術	
No. 263	Clinical Oncology II	316
	がん対策 II	
No. 264	Early Gastric Cancer Detection and Related Digestive Tumors II.....	317
	早期胃癌診断 II	
No. 265	Seminar on Blood Transmitted Diseases (Special Reference to AIDS, ATL and Hepatitis)...	318
	血液由来感染症	
No. 266	Clinical Training for Patients Care of Infectious Diseases.....	319
	感染症患者臨床研修	
No. 267	Management and Technology in Microbiological Laboratory Diagnosis.....	320
	感染症診断の技術と管理	

No. 268	Advanced Microbial Diseases Study	321
	上級微生物病研究	
No. 269	Pediatrics and Pediatric Surgery	322
	小児専門医療	
No. 270	Seminar on Polio Eradication, Its Theory and Practice.....	323
	小児麻痺根絶計画の理論と実際	
No. 271	Technology for Neonatal and Infantile Screening	324
	新生児・乳児マス・スクリーニング検査技術	
No. 272	Clinical Dentistry	325
	歯学	
No. 273	Advanced Medical Radiological Technology	326
	医療放射線技術指導者	
No. 274	Medical Technology	327
	医療技術	
No. 275	Hospital Administration.....	328
	病院管理技術	
No. 276	Food Microbial Control	329
	食品微生物検査技術	
No. 277	Import and Export Food Inspection	330
	輸出入食品検査技術	
No. 278	Mycotoxin Inspection in Food	331
	輸出入食品マイコトキシン検査	
No. 279	Seminar on Parasite Control Administration for Senior Officers.....	332
	寄生虫予防指導者セミナー	
	Nursing Administration	333
	看護管理	
No. 280	Specialized Nursing	334
	専門看護	
No. 281	Clinical Nursing	335
	臨床看護実務	
No. 282	Cardiovascular Diseases	336
	循環器病対策	
No. 283	Seminar on National Health Administration.....	337
	衛生行政セミナー	
No. 284	Public Health Technologists.....	338
	公衆衛生技術者	
No. 285	Seminar on Human Resources Development in Public Health.....	339
	公衆衛生教育	
No. 286	Occupational Health.....	340
	産業医学	
No. 287	Research for Tropical Medicine.....	341
	熱帯医学研究	
No. 288	Biological Products Technology	342
	生物製剤技術	
No. 289	Maintenance Engineering for Medical Equipment	343
	医療機器保守管理技術	
No. 290	Seminar on Emergency/Disaster Medicine	344
	救急・大災害医療セミナー	
No. 291	Seminar on Evaluation of Drug Efficacy	345
	医薬品の効果判定セミナー	
No. 292	Community Health Services	346
	地域保健指導者	

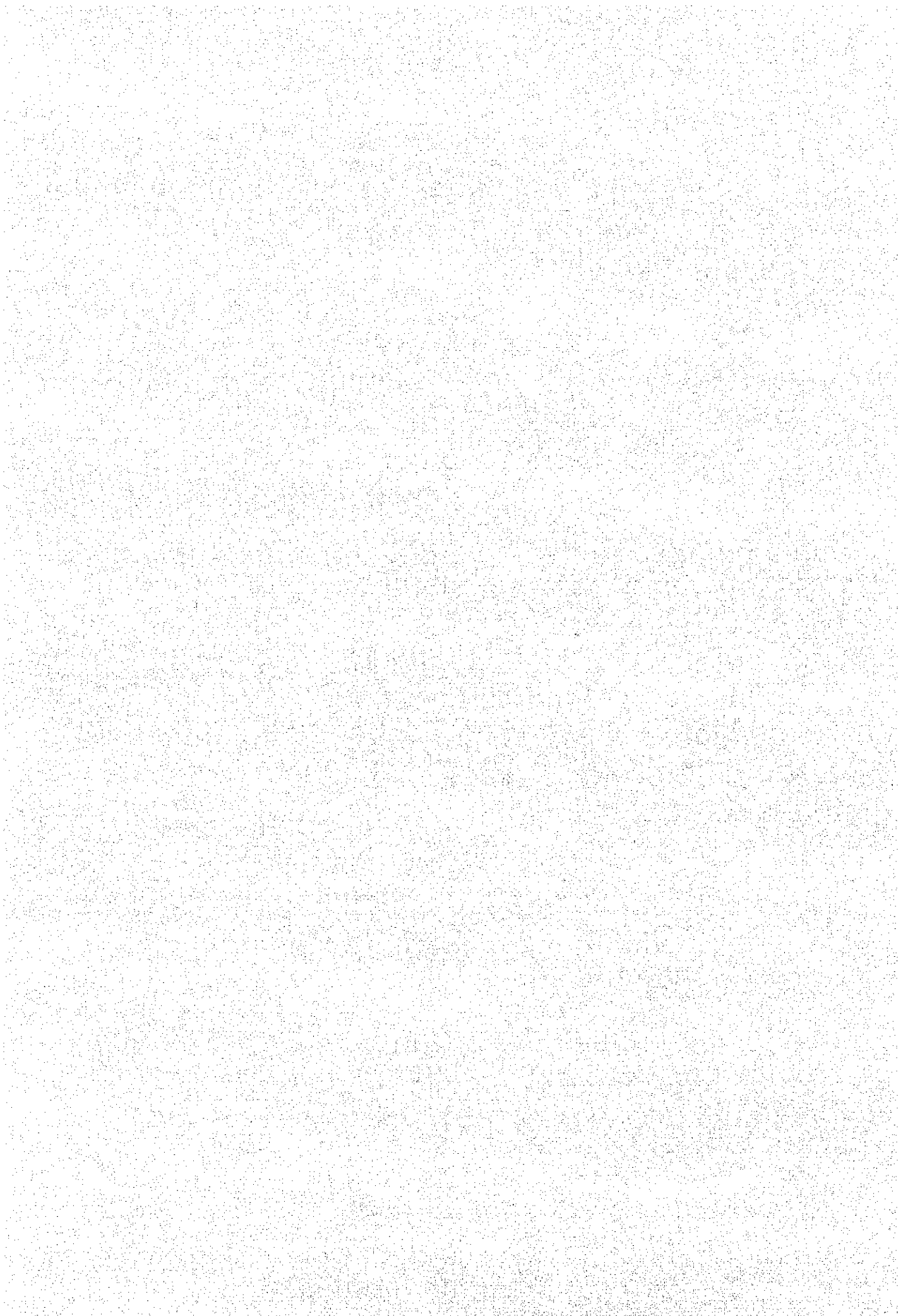
No. 293	Seminar on the Control of Health Hazards in..... 347 the Modernizing Process of Agriculture and Rural Area 農村近代化過程の健康障害対策セミナー
No. 294	Seminar on Family Planning Administration for Senior Officers II..... 348 家族計画指導者セミナー II
	Seminar on Community-Based Family Planning Strategy..... 349 家族計画組織活動セミナー

WELFARE 社会福祉

No. 295	Mental Retardation..... 353 精神薄弱福祉
No. 296	Prosthetic and Orthotic Technicians 354 補装具製作技術
No. 297	Rehabilitation of Physically Disabled Persons 355 -Vocational Rehabilitation and Workshop Management- 障害者リハビリテーション指導者(専門家コース)
No. 298	Leadership of Physically Disabled Persons..... 356 障害者リハビリテーション指導者(身体障害者コース)
No. 299	Sports Instructor of Physically Disabled Persons 357 身障者スポーツ指導者
No. 300	Seminar on Improvement of the Status of Women (WID) II..... 358 婦人の地位向上セミナー II
No. 301	Seminar on Industrial Safety and Health..... 359 労働安全衛生行政セミナー
No. 302	Labour-Management Relations Administration Seminar..... 360 労使関係行政セミナー
No. 303	Labour Statistics for Policy Planning Seminar 361 労働統計・政策セミナー
No. 304	Employment Administration Seminar 362 雇用行政セミナー

DEVELOPMENT PLAN

開発計画



DEVELOPMENT ECONOMICS (GENERAL)**1. PURPOSE**

The purpose of the course is to train the participants to learn the way of applying development economics to development planning in developing countries. The participants will be introduced to (1) national and regional development planning, and the interrelationship of individual projects, using case studies of developing countries and Japan, (2) the method of preparing feasibility studies of agricultural, industrial, transportation, public utility, and mining development projects, (3) the theory of project appraisal and planning by case studies so as to apply new knowledge to the workshops as practice.

2. DURATION

From September 7, 1993 to March 13, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The following major subjects will be covered in the course.

- 1) development economics
- 2) theories and techniques of project planning
- 3) macro development planning
- 4) Japanese economic development
- 5) statistical analysis and national accounts
- 6) macro-sectoral workshop
- 7) thesis making

All the participants will be requested to write a research paper based on the knowledge and techniques of economic analysis.

5. QUALIFICATION OF APPLICANT

- 1) working on the planning or implementation of national or regional development projects and policy, and preferably be under 35 years of age
- 2) have an undergraduate degree in economics or business administration as well as basic experience and knowledge regarding development projects
- 3) have a good background of mathematics

6. TRAINING INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) International Development Center of Japan (IDCJ)

7. REMARKS

DEVELOPMENT ECONOMICS (INDUSTRIAL PROJECT)**1. PURPOSE**

The purpose of the course is to present to the participants an overview of theory and practice of industrial development drawing upon the Japanese experiences as well as the methods of financial and economic analysis of industrial projects practiced at the World Bank, the Asian Development Bank and other international development organizations including the Overseas Economic Cooperation Fund of Japan. (The linkage between macro economic planning and micro project analysis is discussed through lectures, workshop and observation tours.)

2. DURATION

From June 7, 1993 to August 22, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course is mainly composed of three parts: (1) Japanese Experience of Economic Development, (2) Project Appraisal, and (3) Workshop. Japanese Experience introduces the applicability to developing countries on macro-economic and sectoral development planning, and the relations between macro-economic approach and micro-economic (project) analysis. The part on Project Appraisal presents theory and technique of financial, economic and social analysis of industrial projects, as well as case studies.

At the final part, it is requested to apply knowledge and technique obtained through lectures and discussions to practical use in group work as workshop of project appraisal, and make a report as a result of participating in this training program.

5. QUALIFICATION OF APPLICANT

- 1) minimum of three year's work experience in the fields covered by the course i.e. industrial development planning and/or industrial project formulation, implementation or evaluation, together with a reasonable length of time in their present position
- 2) between 30 and 40 years of age
- 3) possess a university degree and academic background in economics

6. TRAINING INSTITUTIONS

- 1) Hachioji International Training Centre (HITC), JICA
- 2) International Development Center of Japan (IDCJ)

7. REMARKS

SEMINAR ON ECONOMIC DEVELOPMENT POLICIES**1. PURPOSE**

This Seminar is designed to introduce Japan's experiences of economic development policies to the participants, and derive some relevance for their further development planning through lectures, report presentations, discussions and field trip.

2. DURATION

From September 13, 1993 to November 7, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eighteen (18) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This seminar covers the following.

- 1) Country Report Presentation and Discussion
- 2) Lecture-cum-Discussion
 - a. Macroeconomic Aspects
 1. Japan's economic development
 2. economic planning in Japan
 3. trade and development
 4. infrastructure investment and economic development
 5. role of government in economic development
 6. industrial policy of Japan
 7. technology development of Japan
 8. human resources development in Japan
 9. financial development
 10. social aspect of economic development
 - b. sectoral aspects
 11. agricultural development in Japan
 12. linkage between agricultural and industrial development
- 3) Final Report Writing, Presentation, and Revision

5. QUALIFICATION OF APPLICANT

- 1) central government planner engaged in economic development planning and have at least years' occupational experience in this field
- 2) have an academic background in economics or those having a proper experience and knowledge on economic policy and planning
- 3) between 30 and 40 years of age

6. TRAINING INSTITUTIONS

- 1) Institute for International Cooperation (IFIC), JICA
- 2) Economic Planning Agency (EPA)
- 3) International Development Center of Japan (IDCJ)

7. REMARKS

ADMINISTRATION

行 政

SEMINAR ON CONTROL OF NARCOTIC OFFENCES II**1. PURPOSE**

The purpose of the Seminar is to study effective and practical measures to eradicate drug offences as well as to further intensify international cooperation and deepen mutual understanding among the nations concerned through discussion and exchange of experiences with the problems, thus to contribute to the eradication of drug offences.

2. DURATION

From October 11, 1993 to October 28, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eighteen (18) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This seminar covers the following topics.

1. Lecture

- 1) police activities in Japan
- 2) current trends and situation in drug offences and their countermeasures in Japan
- 3) Japanese organized crime syndicates (Yakuza)
- 4) international investigative cooperation
- 5) outline of system and activities of ICPO
- 6) outline of drugs identification in Japan

2. Comparative study (Country Report Presentation)

- 1) major drug problems facing each society
- 2) current situation of drug abuse in each country
- 3) laws and regulation (confiscation of proceeds, etc.)
- 4) investigative methods/techniques
- 5) deportation procedures

3. Discussion and problem solving

- 1) major drug problems in each country/region
- 2) ways to improve international investigative cooperation

5. QUALIFICATION OF APPLICANT

- 1) official in the rank of Director of Division or its equivalent in charge of Drug Law Enforcement at the Central Government
- 2) have experience of more than three years in drug law enforcement
- 3) have identification techniques

6. TRAINING INSTITUTIONS

- 1) Institute for International Cooperation (IFIC), JICA
- 2) National Police Agency (NPA)

7. REMARKS

CRIME PREVENTION (TREATMENT OF OFFENDERS) II**1. PURPOSE**

The purpose of the course is to provide the participants with an opportunity to study and to discuss various contemporary problems concerning the treatment of offenders in correctional institutions and their effective development.

2. DURATION

From April 5, 1993 to July 4, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course is mainly conducted in the form of discussions based upon the knowledge and experience of the participants with the advice of the faculty and visiting experts.

A characteristic feature of the course is group discussions, through which the knowledge and experience of the participants will be utilized to the fullest extent.

The major training programmes for the course are as described below.

- 1) comparative study on institutional treatment of offenders.
- 2) group workshops on topics selected by the participants.
- 3) lectures by specialists on subjects relating to the main theme of "Current Problems in Institutional Treatment and their Solution" and other subjects of general interest.

5. QUALIFICATION OF APPLICANT

- 1) hold relatively senior position in a central bureau, department or field agency concerned with the treatment of offenders, and who has at least five years of practical experience in one's field
- 2) university graduate or equivalent
- 3) over 26 and under 50 years of age

6. TRAINING INSTITUTIONS

- 1) Hachioji International Training Centre (HITC), JICA
- 2) United Nations Asia and Far East Institute for the Prevention of Crime and the Treatment of Offenders (UNAFEI)

7. REMARKS

CRIME PREVENTION (SENIOR SEMINAR) II**1. PURPOSE**

The purpose of the seminar is to provide the participants with the opportunity to exchange information on the current situation and characteristics of organized crime in each country, to discuss various issues regarding organized crime and thus to formulate efficacious and appropriate policies to combat organized crime on a national and international level.

2. DURATION

From January 24, 1994 to March 6, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Twenty (20) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

To achieve the above purpose, this course emphasizes the discussions on the efficacious and appropriate criminal justice policies for organized crime control, innovative legislation for organized crime suppression, and development of international cooperation for organized crime control and the role of the United Nations, through which the participants will acquire the abilities in: (1) analyzing the current situation of organized crime, (2) exploring efficacious and appropriate criminal justice policies for organized crime control, (3) elaborating innovative legislation for the suppression of organized crime, and (4) studying international instruments to combat organized crime and examining effective ways and means for further development of international cooperation in this field.

In the course, the participants will be divided into small groups chosen by themselves and given ample opportunity to exchange views and experiences on selected problems. The result of the discussions will be summarized and published.

5. QUALIFICATION OF APPLICANT

- 1) high-ranking criminal justice administrator at the policymaking level whose duties are closely related to the main theme of the seminar, and the rank of divisional director level or above in the central bureau of the agencies concerned with criminal justice, e.g., Ministry of Justice, Ministry of Interior, Supreme Court, etc.
- 2) between 35 and 55 years of age with the expectation to continue to work in this field for a minimum period of two years

6. TRAINING INSTITUTIONS

- 1) Hachioji International Training Centre (HITC), JICA
- 2) United Nations Asia and Far East Institute for the Prevention of Crime and the Treatment of Offenders (UNAFEI)

7. REMARKS

**CRIME PREVENTION (THE ADMINISTRATION
OF CRIMINAL JUSTICE) II**

1. PURPOSE

The purpose of the course is to provide the participants with an opportunity to study and to discuss contemporary problems concerning crimes and their effective countermeasures.

2. DURATION

From September 6, 1993 to December 5, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

To achieve the above purpose, the course emphasizes the discussions on crime prevention activities, effective investigation of urban crime, urbanization and juvenile delinquency, and role of criminal justice in protecting environment, through which the participants will acquire the abilities in (1) analyzing the present situation of urban crime and to find possible measures to prevent it, (2) examining the effective measures to cope with difficulties in criminal justice administration related to urban crime, (3) searching the effective juvenile justice administration, (4) collecting enough information on legislation regarding environmental crime, (5) understanding what role criminal justice administration should play in protecting the natural environment.

In the course, the participants will be divided into small groups chosen by themselves and given ample opportunity to exchange views and experiences on selected problems. The result of the discussions will be summarized and published.

5. QUALIFICATION OF APPLICANT

- 1) hold relatively a senior position in a central bureau, department or field agency concerned with investigation, prosecution, trial or prevention of crime or treatment of offenders, and who has at least eight years of experience in one's field years of practical experience plus a university degree or its equivalent.
- 2) not more than 50 years of age

6. TRAINING INSTITUTIONS

- 1) Hachioji International Training Centre (HITC), JICA
- 2) United Nations Asia and Far East Institute for the Prevention of Crime and the Treatment of Offenders (UNAFEL)

7. REMARKS

LOCAL GOVERNMENT II**1. PURPOSE**

The purpose of the course is to contribute to the development and improvement of Local Government administration methodology in developing countries through introducing the roles, systems and functions of Japanese Local Government and providing opportunities to exchange ideas and information among the participants.

2. DURATION

From May 11, 1993 to July 21, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the following major subjects will be covered through lectures, discussions, comparative studies, field studies in local governments and observation trips.

- 1) local government system in Japan
- 2) election system in Japan
- 3) local public administration
- 4) local public finance
- 5) regional development

5. QUALIFICATION OF APPLICANT

- 1) university/college graduate or equivalent with occupational experience of more than seven years in the civil service relating to local public administration
- 2) between 30 and 40 years old
- 3) civil service personnel holding responsible government position (managerial or supervisory) and be promising candidate for the post of top management in the local government or that of senior management in the central government in the future

6. TRAINING INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) Local Autonomy College

7. REMARKS

- 1) Country Reports will be highly utilized both for the selection of participants and for the Comparative Studies.

NATIONAL GOVERNMENT ADMINISTRATION II**1. PURPOSE**

The main purposes of this course are:

- 1) to assist participants in seeking better ways to improve public administration in order to assure efficient formation of policy.
- 2) to introduce them to modern public administration appropriate to economic and social development.

2. DURATION

From May 18, 1993 to July 4, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course focuses on the early stage (fundamental phase) of modernization in development countries with reference to the Japanese experience after the Meiji Restoration (1868).

It covers the following topics.

- | | |
|---|--|
| <ol style="list-style-type: none"> 1) Modernization in Japan <ul style="list-style-type: none"> - public administration and civil service system - modernization process 2) Fundamental Policy Areas for Modernization - Case Study
(Lectures on the policy process of specified cases will be given with reference to previously made observations of actual policy implementation.)
This year's case study will come from the following subjects: <ul style="list-style-type: none"> - developmental policy of private industry - educational system - infrastructure building - transportation - infrastructure building - communication | <ol style="list-style-type: none"> 3) Fundamental Policy Areas - Framework Analysis <ul style="list-style-type: none"> - policy process in Japan - human resource management - financial management - role of administration in development 4) Modernization of Public Administration in Participating Countries - Discussion <ul style="list-style-type: none"> - developmental policy of private industry - modernization of educational system - improvement of human resource management in the public sector |
|---|--|

* Chairpersons and reporters will be nominated by participants. The reporters are obliged to report the conclusions of their discussions at the concluding discussion session.

5. QUALIFICATION OF APPLICANT

- 1) governments officer promising to be a senior member of the staff in the national government offices, and be related with policy formation
- 2) university graduate or equivalent, with occupational experience of more than five years in public administration (at least two years of experience in the government)
- 3) not less than 30, and not more than 40 years of age

6. TRAINING INSTITUTIONS

- 1) Institute for International Cooperation (IFIC), JICA
- 2) National Personnel Authority

7. REMARKS

SEMINAR ON NATIONAL GOVERNMENT ADMINISTRATION
(SENIOR CLASS OFFICIALS)

1. PURPOSE

The purposes of this seminar are:

- 1) to introduce participants to recent trends in public administration and policy formation
- 2) to assist them in considering ways to refine public administration in order to assure the creation of flexible and adequate policy formation and implementation appropriate to economic and social development.

2. DURATION

From October 19, 1993 to November 21, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

As the targeted period of development, this seminar focuses on take-off stage of modernization referring to Japanese experience in the era of her high-speed economic growth after W.W.II.

It covers the following topics.

- 1) modernization of government administration
case study
 - public facilities
 - research & developmentpolicy formation
 - intervention by the government for development
 - industrial policy
 - research & development
 - role of administration for development
- 2) economic and social development in the participating countries
 - economic development for developing countries
 - industrial policy for development

5. QUALIFICATION OF APPLICANT

- 1) ranked senior class official (at least director of division and who is participant in policy formation)
- 2) university graduate or equivalent, with occupational experience of more than ten years (at least two years of experience in the government)
- 3) not less than 35, and not more than 45 years of age

6. TRAINING INSTITUTIONS

- 1) Institute for International Cooperation (IFIC), JICA
- 2) National Personnel Authority

7. REMARKS

TRAFFIC POLICE ADMINISTRATION SEMINAR**1. PURPOSE**

The purpose of the seminar is to broadly introduce traffic police administration in Japan to participants through lectures and technical visits, and also to provide opportunities to exchange information on traffic police in participating countries and to study measures to solve traffic problems of their mutual concern, thus to contribute to the betterment of traffic police administration in the developing countries.

2. DURATION

(not conducted this year)

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This seminar covers the following topics.

- | | |
|--|--|
| 1. General Subjects (Lecture) | 7) traffic police activities on expressways |
| 1) Japanese police system | 8) outline of driver licence system |
| 2) chronological summary of road traffic measures | 9) measures to be taken for drivers |
| 3) application of computers by the police | 10) prevention of traffic accidents and traffic engineering |
| 2. Specialized Subjects (Lectures) | 11) structure, maintenance and management of road |
| 1) Japanese Police System | 12) vehicle safety standards |
| 2) traffic accidents statistics and analysis | 13) aid to victims of automobile accidents and automobile insurance system |
| 3) traffic law enforcement | 14) traffic count |
| 4) method for disposition of road traffic law violation | 3. Presentation of country reports by participants and exchange of views on them among participants and related staff of NPA |
| 5) actuality and definitive implementation of traffic control | |
| 6) traffic control & monitoring system and traffic safety facilities | |

5. QUALIFICATION OF APPLICANT

- 1) director or chief police superintendent who supervises or is dealing with traffic police affairs in the central police organization
- 2) university graduate or equivalent

6. TRAINING INSTITUTIONS

- 1) Institute for International Cooperation (IFIC), JICA
- 2) Traffic Planning Division, Traffic Bureau, National Police Agency (NPA)

7. REMARKS

The course is conducted every other year. This year (in fiscal 1993) it will not be conducted; it is planned to be conducted in Japanese fiscal 1993.

SEMINAR ON CRIMINAL INVESTIGATION**1. PURPOSE**

This Seminar is designed with a view to contributing to further development of knowledge and techniques of criminal investigation:

- 1) to familiarize participants with the system, equipment, and facilities for criminal investigation and identification now in operation in Japan, and
- 2) to provide participants with common arena for study and discussion of problems and issues concerning criminal investigation.

2. DURATION

From April 6, 1993 to April 30, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This Seminar covers the following topics.

1. Lecture
 - 1) police system in Japan
 - 2) outline of criminal police
 - 3) outline of international criminal investigation
 - 4) safety police activities (firearms control etc.)
 - 5) investigation of organized crime
 - 6) investigation of drug offences
 - 7) crime identification activities
2. Country Report Presentation and Discussion

5. QUALIFICATION OF APPLICANT

- 1) commanding police officer (superintendent, major, or higher) in charge of criminal investigation in the central police organization

6. TRAINING INSTITUTIONS

- 1) Institute for International Cooperation (IFIC), JICA
- 2) National Police Agency (NPA)

7. REMARKS

RESCUE AND FIRST AID TECHNIQUES**1. PURPOSE**

The purpose of the course is to provide participants with opportunities to acquire high-level knowledge and skills in rescue operations in Japan so they can subsequently enhance rescue techniques of training personnel engaged in rescue service in their home countries.

2. DURATION

From August 24, 1993 to November 25, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course will be conducted mainly in the form of rescue practice on the following subjects.

- 1) physical strength development method
- 2) rope knotting
- 3) ascending, descending and traversing by rope
- 4) usage of rescue tools
- 5) entry technique
- 6) rescue technique
- 7) searching technique
- 8) first aid

5. QUALIFICATION OF APPLICANT

- 1) university graduate or equivalent with occupational experience
- 2) have experience in rescue service and expected to play key roles in this field
- 3) expected to become a leader in the field of rescue service
- 4) under 30 years of age in principle

6. TRAINING INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) Fire Defence Agency (FDA), Ministry of Home Affairs

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks.

FIRE FIGHTING TECHNIQUES

1. PURPOSE

The main purposes of this training course are as follows:

- 1) to enable participants to understand the outline of organization, systems and roles of fire service administration, as well as present situation of various disasters in Japan.
- 2) to help participants acquire knowledge and techniques to rescue people and extinguish fires; e.g. buildings fires, hazardous materials (petroleum) fires, mountains and forest fires, ships fires, aircrafts fires etc., at an early stage by commanding fire fighting units at the ground, utilizing various fire engines and tools.

2. DURATION

From July 19, 1993 to November 4, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The course will be conducted in the form of lectures, practical training, visits, study trips, and presentation of country reports and so on. Lectures will be given mainly by using text books and audio visual equipment such as video tapes and films. Practical training will be given by utilizing all kinds of fire engines, fire fighting equipment and tools.

The training course is programmed to provide following knowledge and techniques:

- 1) rescuing people from different types of fires promptly and controlling fires by commanding fire fighting units effectively
- 2) roles and functions of fire engines and equipment in Japan
- 3) outline of the history and systems of fire service administration in Japan
- 4) present situation of disaster, and measures to cope with disasters caused by urbanization
- 5) roles of fire service organizations and activities of fire fighting personnel in Japan
- 6) fire service administration of the participating countries by comparing and discussing the present situation of fire service administrative activities of respective countries

5. QUALIFICATION OF APPLICANT

- 1) presently engaged in fire service, have at least five years' experience
- 2) university graduate or equivalent
- 3) 40 years of age or less

6. TRAINING INSTITUTIONS

- 1) Kyushu International Centre (KIC), JICA
- 2) Fire Defence Agency, Ministry of Home Affairs
- 3) Kitakyushu City Fire Department, Fire Training Centre

7. REMARKS

- 1) A compulsory intensive Japanese language course will be conducted prior to the technical training for 75 hours.

FIRE SERVICE FOR ADMINISTRATIVE OFFICERS**1. PURPOSE**

The purpose of this course is to provide the participants with opportunities for studying administrative methods such as fire defence setups, system and fire personnel training & education through lectures, about and observations of Japanese fire service activities, and through exchanging opinions about issues in the participating countries through seminars, thereby contributing to further fire service improvement in each country.

2. DURATION

From September 13, 1993 to November 7, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the following major subjects will be covered through lectures, country report and field trips.

- 1) administrative functions
 - effective administrative systems in fire service
 - optimum standards for fire equipment and personnel
 - effective communication & cooperation among fire authorities
- 2) fire service personnel
 - improving capabilities of fire personnel
 - development and improvement of fire protection equipment
- 3) dissemination of fire protection awareness
 - fire education for school children and citizens
 - current status of fire insurance
- 4) promotion of fire prevention
 - consent to & control over facilities and their management
 - control of hazardous materials
- 5) volunteer fire corps
 - fire equipment standards and on-duty casualty compensation systems
 - linkage with volunteer fire corps

5. QUALIFICATION OF APPLICANT

- 1) university graduate or equivalent with occupational experience
- 2) under 40 years of age
- 3) administrative officer or candidate for administrative officer, who is presently engaged in planning/drafting of Fire Service Systems, or in work in administrative sections for Fire Service Implementation

6. TRAINING INSTITUTIONS

- 1) Tokyo International Center (TIC), JICA
- 2) Fire Defence Agency (FDA)

7. REMARKS

DISASTER PREVENTION TECHNOLOGY**1. PURPOSE**

The purpose of this course is to provide the participants with opportunities for studying disaster prevention administrative methods such as fire defense setup, systems and fire personnel training and education through lectures and observations, referring to Japanese fire service activities. The course will include seminars for the exchange of opinions about issues among participating countries, thereby contributing to further fire service improvement in each country.

2. DURATION

From October 12, 1993 to December 5, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The following major subjects will be covered in the course:

- 1) legislation governing disaster prevention
- 2) present status of disaster prevention systems
- 3) operation of disaster prevention systems
- 4) disaster information
- 5) role of fire service in disaster prevention
- 6) trend of recent disasters
- 7) improvement of disaster prevention system

5. QUALIFICATION OF APPLICANT

- 1) university graduate or equivalent
- 2) administrative officer or a person belonging to fire defense organization presently engaged in planning/drafting of Fire Service System, or in administrative section for the service implementation
- 3) not more than 40 years of age

6. TRAINING INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) Fire Defence Agency (FDA), Ministry of Home Affairs

7. REMARKS

FIRE PREVENTION TECHNICS**1. PURPOSE**

The course is designed for administrative officer or candidate engaged in planning/drafting of Fire Service System, in order to upgrade the knowledge about the Japanese administration for fire fighting and disaster prevention and the activities to prevent fires and natural disasters through lectures and observations.

2. DURATION

From September 20, 1993 to December 9, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In the course, the emphasis is put on lectures, practical training and observations. The main theme are;

- 1) system of fire services and preventing disasters in Japan
- 2) system to prevent fires in advance
- 3) system to prevent natural disasters

5. QUALIFICATION OF APPLICANT

- 1) university graduate or equivalent with occupational experience
- 2) administrative officer or candidate for it, who is presently engaged in planning/drafting of Fire Service System, or in administrative section for Fire Service Implementation
- 3) not more than 40 years of age

6. TRAINING INSTITUTIONS

- 1) Nagoya International Training Centre (NITC), JICA
- 2) Nagoya City Fire Department
- 3) Fire Stations in Nagoya City

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (50 hours).

GOVERNMENT AUDITING SEMINAR (COMPUTER AUDITING)**1. PURPOSE**

The purpose of this seminar is to give SAI auditors an opportunity to study and discuss computer audit aspects and techniques and thus contributes to SAI auditors' audit capabilities in this field.

2. DURATION

From June 21, 1993 to July 25, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This seminar aims to introduce Japan's experience in computer auditing. The main themes are:

- 1) computer system in the Board of Audit
- 2) system audit and case study
- 3) evaluation of computer system
- 4) audit of computerized system
- 5) computer-assisted audit techniques

5. QUALIFICATION OF APPLICANT

- 1) official of the Supreme Audit Institution, who have no less than ten years of audit experience
- 2) have basic knowledge of computer
- 3) have actual work experience of computer auditing
- 4) under 45 years of age

6. TRAINING INSTITUTIONS

- 1) Hachioji International Training Centre (HITC), JICA
- 2) Board of Audit

7. REMARKS

SEMINAR ON TAXATION (GENERAL TAX COURSE)**1. PURPOSE**

The purposes of this seminar are to contribute to the improvement of the tax systems and tax administrations of developing countries through transferring technical knowledge and skills of the Japanese tax system and tax administration, and to have participants well-versed in Japanese tax administration, and to promote mutual understanding among participating countries.

2. DURATION

From August 30, 1993 to December 5, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Twenty (20) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This seminar places major emphasis on the administration of internal taxes, and mainly covers:

- 1) public finance of Japan
- 2) outline of the Japanese tax system
- 3) outline of main taxes in Japan
- 4) operation of taxation department
- 5) efficient examination
- 6) tax dispute

5. QUALIFICATION OF APPLICANT

- 1) official of the department in charge of tax administration except customs
- 2) under 40 years of age
- 3) have more than five years of occupational experience in tax administration or in planning of tax system
- 4) university graduate or equivalent

6. TRAINING INSTITUTIONS

- 1) Hachioji International Training Centre (HITC), JICA
- 2) National Tax Administration

7. REMARKS

SEMINAR ON TAXATION (SENIOR TAX COURSE)**1. PURPOSE**

This seminar is conducted with the following purposes:

- 1) to contribute to the improvement of the tax system and tax administrations of developing countries through transferring technical knowledge and skills of the Japanese tax system and tax administration.
- 2) to have participants well-versed in Japanese tax administration, and to promote friendly relations among participating countries, including Japan.

2. DURATION

From September 12, 1993 to October 9, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This seminar places major emphasis on the administration of internal taxes.

It covers the following topics.

- 1) outline of public finance, tax system and tax administration in Japan
 - (1) public finance of Japan
 - (2) outline of Japanese tax system
 - (3) tax administration in Japan (general introduction)
 - (4) tax administration in Japan (detail)
 - (i) system of assessment
 - (ii) system of collection
 - (iii) public relations on taxation
 - (5) international taxation
- 2) presentation of country reports and round discussion
topics of round table discussion:
 - (1) system of assessment
 - (2) system of collection

5. QUALIFICATION OF APPLICANT

- 1) ranked as a senior-class official of the department in charge of tax administration except customs

(Note) This seminar is designed for the Deputy Commissioner or Assistant Commissioner of the Head Office, the Commissioner or the Deputy Commissioner of the Regional Taxation Bureau, or the District Director of the Tax Office.

6. TRAINING INSTITUTIONS

- 1) Institute for International Cooperation (IFIC), JICA
- 2) National Tax Administration

7. REMARKS

CUSTOMS TECHNIQUES II**1. PURPOSE**

The purpose of the course is to contribute to the development and improvement of the Customs techniques in developing countries through introducing Japanese Customs system and techniques and carrying out comparative studies.

At the same time, it aims at deepening mutual understanding and promoting friendly relationship among participating countries and Japan.

2. DURATION

From August 31, 1993 to October 27, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Twenty (20) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The course covers following subjects;

- 1) organization and function of the Japanese Customs Administration
- 2) Customs and tariff policy, the revision of tariff rates
- 3) export and import clearance procedures and those for postal items and containerized cargoes, and computerized clearance system
- 4) classification techniques under the Harmonized System
- 5) "Hozei" (bond) area system
- 6) differences between the GATT Valuation code and Brussels Definition of Value, and characteristics and modus operandi of the GATT Code
- 7) surveillance and control
- 8) provisions and Customs powers in connection with Customs offences, and the system for legal disputes and appeals concerning Customs administration

5. QUALIFICATION OF APPLICANT

- 1) university graduate or equivalent
- 2) currently Customs officials at middle level
- 3) under 35 years of age

6. TRAINING INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) Custom and Tariff Bureau, Ministry of Finance
- 3) Tokyo, Yokohama, Kobe, Osaka and Nagoya Custom House

7. REMARKS

ENVIRONMENTAL POLICY**1. PURPOSE**

The purpose of the course is to introduce through lectures and observation of facilities the Japanese comprehensive measures on environmental issues to the administrators who are in charge of policy making on environmental administration in developing countries.

This course is also aimed at making a contribution to the progress of environmental administration in developing countries by means of exchanging opinions concerning to the present conditions and prospects on environmental administration of each country.

2. DURATION

From October 4, 1993 to November 26, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course is so designed that the participants would (1) understand the overall Japanese environmental administration including the technical progress, and (2) acquire the knowledge to manage the environmental administration of their countries in consideration of global environmental problems.

The main subjects (tentative) are as follows:

- 1) framework and historical, technological background of Japanese environmental administration
- 2) economic approach to environmental administration
- 3) attitude toward global environmental problems both in Japan and other countries
- 4) environmental impact and development
- 5) technological field of environmental measurement (observation)
- 6) development site (observation)
- 7) present conditions and prospects in developing countries
- 8) action plan

5. QUALIFICATION OF APPLICANT

- 1) presently engaged directly in policy-drafting in environmental administration in the governmental or related public organization with experience of at least five years
- 2) university graduate or equivalent
- 3) under 45 years of age

6. TRAINING INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) Global Environmental Department, Environmental Agency
- 3) Japan Environmental Sanitation Center

7. REMARKS

ENVIRONMENTAL ENGINEERING (WATER POLLUTION CONTROL)**1. PURPOSE**

The main purpose of the course is to provide technical officials with professional knowledge and techniques required for environmental engineering, especially water pollution control. The course is also intended to introduce Japanese experiences and the current conditions in the field of water pollution control and to provide the participants with principles and approaches for problem solution.

2. DURATION

From September 6, 1993 to October 28, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The course is focused on the introduction of Japanese administration in water pollution control and the exchange of information among participants, therefore the course is conducted mainly in the form of lectures, discussions, and observation tours.

The following major subjects will be covered in the course: 1) environmental sanitation and framework of water pollution control in Japan, 2) present situation in participating countries, 3) planning and implementation of water pollution control, 4) technologies for waste and wastewater management, 5) effects of water pollution on water use and its countermeasures

5. QUALIFICATION OF APPLICANT

- 1) technical official presently in charge of water pollution control administration including domestic and industrial wastewater management in central or local governments with more than three years of experience in this field
- 2) university graduate or equivalent
- 3) not more than 40 years of age

6. TRAINING INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) Water Quality Bureau, Environment Agency
- 3) Japan Society on Water Environment

7. REMARKS

ENVIRONMENTAL ENGINEERING (AIR POLLUTION CONTROL)**1. PURPOSE**

The purpose of the course is to contribute to the improvement of the air pollution control policy making in the participating countries from technical point of view also covering socio-economic development and welfare aspects by giving technical training through lectures and observation tours on general condition of air pollution control.

2. DURATION

From January 24, 1994 to March 13, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course aims to present Japanese experience in this field as a case study for preparation of comparative study and action plan.

It mainly covers;

- 1) administration
- 2) principles of air pollution subjects
- 3) planning and countermeasures
- 4) measurement and assessment
- 5) comprehensive study

5. QUALIFICATION OF APPLICANT

- 1) technical official directly responsible for air pollution control administration at central or local governmental organizations and have more than three years of experience,
- 2) university graduate or equivalent

6. TRAINING INSTITUTIONS

- 1) Hachioji International Training Centre (HITC), JICA
- 2) Environment Agency
- 3) Japan Environmental Sanitation Center

7. REMARKS

ENVIRONMENTAL MONITORING (WATER QUALITY)**1. PURPOSE**

The purpose of the course is to develop the knowledge of senior government researchers and technical officials who are engaged in water quality monitoring for the promotion of preventive measures against water pollution.

Through participation in this course, the participants will learn methods of planning water quality monitoring and fundamental techniques of water quality analysis as applied to rivers, lakes, reservoirs, and estuaries. Special applications for water-use facilities will also be covered.

2. DURATION

From September 20, 1993 to November 13, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The course is aimed to introduce methods of planning water quality monitoring, techniques of analyzing water pollutants, and administrative management of monitoring, therefore the course mainly consists of lectures, discussions, demonstration and laboratory exercise, and field-trips.

The following major subjects will be covered in the course: 1) environmental administration in Japan, 2) significance of water quality monitoring, 3) water quality monitoring planning, 4) water quality analytical measurement techniques, 5) utilization of analytical data on water quality

5. QUALIFICATION OF APPLICANT

- 1) university graduate who majored in chemistry, chemical engineering, environmental engineering, environmental science, or equivalent
- 2) senior government researcher or technical official with more than three years of occupational experience in the field of water pollution research and administration at the agencies of national or local governments, with emphasis on water quality monitoring
- 3) not less than 25 and not more than 35 years of age

6. TRAINING INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) National Environmental Training Institute, Environment Agency

7. REMARKS

NATURE CONSERVATION AND NATURAL PARKS MANAGEMENT**1. PURPOSE**

The purpose of the course is to provide government/technical officials in charge of nature conservation and/or management administration with the professional knowledge and techniques required for nature conservation and natural parks management. The course is also intended to introduce the Japanese experience and current conditions in this field and to provide the participants with principles and approaches for problem solution.

2. DURATION

From September 13, 1993 to October 17, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The course is focused on the introduction of Japanese administration in nature conservation and natural parks management and the information exchange among participants; therefore, the course is mainly conducted in the form of lectures, discussions, and observation tours.

The following major subjects will be covered in the course: 1) basic concepts and framework of nature conservation and natural parks management, 2) present situation in participating countries, 3) techniques for research on nature, 4) management of nature

5. QUALIFICATION OF APPLICANT

- 1) technical official presently in charge of nature conservation and/or management administration in central or local governments with five or more years of experience in this field
- 2) university graduate or equivalent
- 3) not more than 45 years of age

6. TRAINING INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) Nature Conservation Bureau, Environment Agency
- 3) Japan Wildlife Research Center

7. REMARKS

LAKE WATER QUALITY MANAGEMENT

1. PURPOSE

This course is intended for technical administrators and leading researchers engaged in establishment and implementation of policies and measures for preservation and management of water quality of lakes (natural and artificial) in developing countries.

Techniques needed for water quality management of lakes, such as measurement, prevention, estimation and control techniques at higher level, will be introduced to the participants through lectures and practices. It is expected of them to acquire fundamental knowledge required for making plans and programmes for proper management of lake water quality. It is hoped that this course will contribute to the qualitative improvement and sound development of environmental conservation of lakes and reservoirs in developing countries.

2. DURATION

From January 6, 1994 to March 27, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on workshop practice.

The main themes are:

- 1) lectures
 - environmental problems related to lakes and reservoirs
 - water pollution prevention techniques
 - water quality management
 - water pollution estimation techniques
 - environment management techniques
 - administrative measures for environmental preservation
- 2) practices
 - water treatment techniques
 - measurement techniques
 - environment management techniques

5. QUALIFICATION OF APPLICANT

- 1) technical administrator in charge of management of water quality measurement laboratories (with occupational experience of at least five years) who is expected to assume executive administrative posts in the field of water quality management in the future.
- 2) university graduate having majored in analytical chemistry or microbiology, or those with equivalent technical knowledge
- 3) under 35 years of age

6. TRAINING INSTITUTIONS

- 1) Osaka International Training Centre (OITC), JICA
- 2) International Lake Environment Committee

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for one week (25 hours).

**SYSTEM OF ENVIRONMENT MANAGEMENT
ON ENCLOSED COASTAL SEAS**

1. PURPOSE

The purpose of the course is to provide the officials in administrative bodies which are engaged in the environmental management of enclosed coastal seas with the following aspects: (1) technical knowledge related to environmental management strategies specifically applied to Seto Inland Sea, which would give the participants opportunities to examine possible applicabilities of these strategies to their respective countries. (2) an opportunity in which the participants can discuss with Japanese expert in environmental management field and exchange views and opinions.

2. DURATION

From September 16, 1993 to December 3, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on introduction of comprehensive knowledge on the following subjects through lecture, practice and field trip.

- 1) general view
- 2) phenomena and mechanism of water pollution
- 3) modeling
- 4) investigation and measurement
- 5) management techniques
- 6) environmental management policies
- 7) public awareness

5. QUALIFICATION OF APPLICANT

- 1) leading officer in administrative body presently engaged in environmental management of enclosed coastal seas and coastlines
- 2) university graduate and/or those who have equivalent practical experience of not less than three years in the field of environment on enclosed coastal seas
- 3) not less than 26, and not more than 40 years of age

6. TRAINING INSTITUTIONS

- 1) Hyogo International Centre (HIC), JICA
- 2) Environmental Conservation Association of Seto Inland Sea
- 3) Environmental Science Institute of Hyogo Prefecture

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for about 50 hours.

MARINE ENVIRONMENT PROTECTION**1. PURPOSE**

The course is organized for the officials who are engaged, by profession, in the protection of marine environment. The course introduces technology and developments in the subject area and gives description on the method of control and investigation of illegal discharge of dumping; and organization and activities of our government agencies and private organizations concerned with the protection of marine environment and the safety at sea.

2. DURATION

From August 19, 1993 to November 22, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on lectures and laboratory work, focusing on surveillance and analysis of oil.

The main themes are;

- 1) protection of marine environment
- 2) discrimination and identification of oil
- 3) oil sample analysis

5. QUALIFICATION OF APPLICANT

- 1) university graduate or equivalent, or have an occupational experience of more than five years in the field of marine pollution prevention,
- 2) presently engaged in the above-mentioned field,
- 3) under 40 years of age

6. TRAINING INSTITUTIONS

- 1) Okinawa International Center (OIC), JICA
- 2) Maritime Safety Agency
- 3) 11th Regional Headquarters of Maritime Safety Agency

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for ten days.

AIR POLLUTION CONTROL**1. PURPOSE**

This course is intended for administrative engineers and leading researchers engaged in the air pollution control measures in developing countries. Measurement techniques, emission source control techniques, dispersion calculation techniques, management, etc. related to air pollution, all on an advanced level, will be introduced to the participants. It is expected that the course will help upgrade the technical ability of the participants, thus contribute to the prevention of environmental pollution in their respective countries.

2. DURATION

From July 8, 1993 to October 30, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on workshop practice at laboratory experiments and introduction of Japanese experience.

The main themes are:

- 1) fundamentals of air pollution
- 2) measurement technique
- 3) emission source control
- 4) management
- 5) application of dispersion models
- 6) planning of master plan related to comprehensive airpollution control

5. QUALIFICATION OF APPLICANT

- 1) administrative engineer who have at least five years experience in the administration of air pollution prevention
- 2) between 30 and 40 years of age

6. TRAINING INSTITUTIONS

- 1) Osaka International Training Centre (OITC), JICA
- 2) Foundation of Global Environment Centre
- 3) Environment Division, Environment and Public Health Bureau, Osaka Municipal government
- 4) Osaka City Institute of Public Health and Environmental Science

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (50 hours).

AIR POLLUTION SOURCE MONITORING PRACTICE**1. PURPOSE**

The purpose of the training course is to upgrade the technical skills of personnel who are currently engaged in air pollution monitoring practice.

2. DURATION

From September 6, 1993 to December 22, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on introduction of Japanese experience on air pollution control through the air pollution monitoring practice such as ambient air and automobile exhaust gas, in order to acquire the knowledge and skills to enable participants to apply them to each country.

The subject covered in the course are:

- 1) basic theory on local administration
- 2) basic theory on environmental engineering and health effect by air pollution
- 3) administrative framework on air pollution control in Kitakyushu and Japan
- 4) practical training on ambient air quality monitoring
- 5) air pollution monitoring by biological methods
- 6) practical training on air pollution source monitoring
- 7) simulator operation in coal-fired thermal power station
- 8) monitoring methods of automobile exhaust gas

5. QUALIFICATION OF APPLICANT

- 1) technical administrator who have three or more years of experience in air pollution source monitoring and/or equivalent technical knowledge
- 2) university graduate or equivalent
- 3) 40 years of age or less

6. TRAINING INSTITUTIONS

- 1) Kyushu International Centre (KIC), JICA
- 2) Kitakyushu International Techno-cooperative Association
- 3) Kitakyushu City Government

7. REMARKS

- 1) A compulsory intensive Japanese language course will be conducted prior to the technical training for 25 hours.

**MEASURES TO REDUCE THE USE OF
THE OZONE DEPLETING SUBSTANCES**

1. PURPOSE

The purpose of the course is to provide participants with the latest scientific knowledge and information, a legal framework and other policy measures, substitutes and alternative technologies, in relation to reducing the use of O.D.S.

2. DURATION

From January 25, 1994 to February 27, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The participants are expected to acquire knowledge and information on the following:

- 1) state of ozone science and its research
- 2) outline of the Vienna Convention and the Montreal Protocol
- 3) policy measures for the protection of the ozone layer
- 4) substitutes for controlled substances
- 5) alternative technologies to reduce consumption of ozone depleting substances

5. QUALIFICATION OF APPLICANT

- 1) presently engaged in a Government organization administering either industrial policy or environmental policy related to CFCs or other ozone depleting substances
- 2) university graduate or equivalent
- 3) from 30 to 45 years of age

6. TRAINING INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) Ministry of International Trade and Industry
- 3) Japan Industrial Conference for Ozone Layer Protection (JICOP)

7. REMARKS

ENVIRONMENTAL RADIOACTIVITY ANALYSIS AND MEASUREMENT**1. PURPOSE**

The purpose of the course is to give the participants practical knowledge of environmental radioactivity analysis and measurement, and to give them an opportunity to learn the relevant techniques through lectures and practical exercises.

2. DURATION

From September 13, 1993 to October 24, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The course is aimed to introduce technology of environmental radioactivity analysis and measurement in Japan; therefore, the course mainly consists of lectures, laboratory exercises, and observation.

The following major subjects will be covered in the course: 1) basic concepts, 2) sampling and pretreatment, 3) analysis and measurement for tritium, radioactive strontium, uranium and plutonium in environmental samples, 4) gamma ray spectrometry, 5) environmental gamma ray measurement

5. QUALIFICATION OF APPLICANT

- 1) university/college graduate in science or technology, or equivalent
- 2) working or going to work in organization concerned with environmental radioactivity analysis and measurement fields

6. TRAINING INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) Japan Chemical Analysis Center (JCAC)

7. REMARKS

ENVIRONMENTAL IMPACT ASSESSMENT**1. PURPOSE**

In order to promote sustainable development in the world, it is imperative to execute appropriate environmental impact assessments. The purpose of the course is to transfer fundamental knowledge and technology on EIA to technical administrators from participating countries through lectures on experiences of conducting EIA in recent years both in Japan and other countries, field trips, and discussions with experts practicing EIA in Japan.

2. DURATION

From May 31, 1993 to June 27, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The course is focused on introduction of Japanese administration and technologies in EIA, activities of international organizations regarding with EIA, and information exchange among participants; therefore, the course mainly consists of lectures, discussions, and observation tours.

The following major subjects will be covered in the course is: 1) introduction to EIA, 2) EIA system and practice in Japan, 3) topics related to EIA (wildlife survey, infectious disease, communication techniques), 4) technology for EIA, 5) institutional framework for EIA

5. QUALIFICATION OF APPLICANT

- 1) technical administrator presently engaged in EIA in governmental or related public organization with experience of at least three years
- 2) university graduate or equivalent
- 3) under 45 years of age

6. TRAINING INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) Planning and Coordination Bureau, Environment Agency
- 3) Overseas Environmental Cooperation Center

7. REMARKS

INDUSTRIAL POLLUTION CONTROL ENGINEERING**1. PURPOSE**

Keeping abreast of industrialization and urbanization in developing countries, environmental pollution problems have been increasing. Therefore, it is indispensable for those countries to develop countermeasures against industrial pollution.

The purpose of this course is to enhance the capability of engineers who have an experience handling the environmental problems.

2. DURATION

From June 14, 1993 to October 21, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

Participants will attend lectures, training and factory tours to understand the past and present environmental problems in Japan, as well as prevention and control measures executed by corporations. Through the study in this course, participants will acquire basic knowledge, information and technology required for planning the environmental administrative measures suitable for respective countries, and further, finding the solutions for preventing the environmental pollution.

The major subjects covered in the course are:

- 1) health effects of environmental pollutants
- 2) environmental engineering
- 3) environmental administration
- 4) environmental pollutants measuring method
- 5) international cooperation in the field of environment
- 6) environmental pollution control measures taken by industries
- 7) measures for improving working environment

5. QUALIFICATION OF APPLICANT

- 1) have three years' occupational experience or more in the field of Industrial Pollution Control
- 2) university graduates (faculty of engineering) or have the equivalent academic background
- 3) 40 years of age or less

6. TRAINING INSTITUTIONS

- 1) Kyushu International Centre (KIC), JICA
- 2) Kyushu International Techno-cooperative Association
- 3) Kyushu Institute of Technology
- 4) University of Occupational and Environmental Health, Japan
- 5) Kitakyushu Municipal Government

7. REMARKS

- 1) A compulsory intensive Japanese language course will be conducted prior to the technical training for 25 hours.

INDUSTRIAL POLLUTION CONTROL RESEARCH**1. PURPOSE**

The purpose of this course is to contribute to upgrading knowledge and techniques of scientists and researchers in the field of pollution control engineering, including computer technology through lectures, exercise, practical training and observation tours.

2. DURATION

From August 23, 1993 to December 19, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course consists of common subjects for all participants and individual training at laboratory. Each participant is to take one of the following subjects for their individual research:

- 1) Flue Gas deNOx Technology.
- 2) Control Technology for SOx & NOx during Pulverized Coal Combustion.
- 3) SOx and NOx abatement Techniques of Circulating Fluidized Bed Combustion.
- 4) Advanced Measurement Technology in Coal Combustion Research.
- 5) Acquisition and Processing of Data on Atmospheric Environment.
- 6) Simulation Models of Air Pollution.
- 7) Ecological Modelling and Ecological Analysis of Coastal Environments.
- 8) Catalytic Hydrocarbon Reactions for Air Pollution Control.
- 9) Practical Measurement of Environmental VOC Using Gas Chromatograph.
- 10) Biodegradation of Chemical Substances and Application.
- 11) Oxidative Degradation of Organic Compounds in Wastewater
- 12) Determination of Inorganic and/or Organic Pollutants in Water.
- 13) Production of Liquid Fuel from Biomass
- 14) Carbon Dioxide Fixation by Artificial Photosynthesis
(The above subjects may be subject to change.)

5. QUALIFICATION OF APPLICANT

- 1) scientist or engineer in the field of pollution control technology with more than three years occupational experience
Generally, administrative officers are not qualified for this course.
- 2) university graduate or equivalent
- 3) have the knowledge of computer programming with FORTRAN or BASIC languages in the course of simulation technology
- 4) under 40 years of age

6. TRAINING INSTITUTIONS

- 1) Tsukuba International Centre (TBIC), JICA
- 2) National Research Institute for Pollution Resources (NRIPR)

7. REMARKS

INDUSTRIAL WASTE WATER TREATMENT TECHNIQUE**1. PURPOSE**

In industrializing countries the environmental pollution due to industrial wastewater has become a serious problem. The purpose of this course is to enhance the capabilities of managers and engineers in charge of pollution control so as to take the appropriate and cost-effective actions for solving pollution problems.

2. DURATION

From July 26, 1993 to December 8, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on introduction of Japanese experience for dealing with practical industrial wastewater treatment through lectures, discussions, practice, field studies and visits to related factories and industries.

The major subjects covered in the course are:

- 1) introduction to water pollution prevention
- 2) basic theory of wastewater treatment
- 3) wastewater analysis
- 4) automatic control
- 5) fundamental planning of wastewater facilities
- 6) design and construction of wastewater treatment facilities
- 7) maintenance management of wastewater treatment facilities
- 8) wastewater control in enterprises

5. QUALIFICATION OF APPLICANT

- 1) either engineer in charge of wastewater treatment in governmental or municipal office, or site manager of these organization in charge of the field
- 2) university graduate specialized in chemical, mechanical, electrical or civil engineering or have the equivalent academic background
- 3) 40 years of age or less

6. TRAINING INSTITUTIONS

- 1) Kyushu International Centre (KIC), JICA
- 2) Kitakyushu International Techno-cooperative Association
- 3) Kyushu Institute of Technology
- 4) Kitakyushu Municipal Government

7. REMARKS

- 1) A compulsory intensive Japanese language course will be conducted prior to the technical training for 25 hours.

DOMESTIC WASTE WATER TREATMENT TECHNIQUE**1. PURPOSE**

The purpose of this training course is to upgrade the administrative and managerial skills of technical administrators who are currently engaged in domestic wastewater treatment.

2. DURATION

From August 30, 1993 to December 16, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The training programme which is rather comprehensive consists of lectures, exercise and study tours. However, the emphasis is put on making action plan in each participants' country and introduction of Japanese experiences.

The subjects covered in the course are:

- 1) basic theory on local administration
- 2) basic theory on water quality conservation
- 3) administrative framework on water pollution control in Kitakyushu and Japan
- 4) basic exercise on water quality analysis
- 5) practical training on water supply
- 6) practical training on sewage/drainage treatment
- 7) practical training on human excreta treatment
- 8) practical training on jokaso system
- 9) outline of domestic refuse treatment
- 10) outline of river/waterway management in urban area

5. QUALIFICATION OF APPLICANT

- 1) technical administrator who have three or more years of experience in domestic wastewater treatment and/or equivalent technical knowledge
- 2) university graduate or equivalent
- 3) 40 years of age or less

6. TRAINING INSTITUTIONS

- 1) Kyushu International Centre (KIC), JICA
- 2) Kyushu International Techno-cooperative Association
- 3) Kitakyushu City Government

7. REMARKS

- 1) A compulsory intensive Japanese language course will be conducted prior to the technical training for 25 hours.

PRACTICAL STATISTICS II**1. PURPOSE**

This course is focused on the training needs of official statisticians in government and is intended to contribute to the strengthening of National Statistical Offices of the developing countries in the ESCAP region.

2. DURATION

From September 20, 1993 to March 27, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Thirty-three (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course consists of common subjects for all participants (for first three months) and individual project work (for latter three months).

The common subjects concentrate on the following methodological aspects of statistics:

- 1) data collection
- 2) summarization and presentation of data
- 3) interpretation, analysis and dissemination

For the project work, each participant is to choose one of the following topics, and write a report on it for presentation at a seminar. They should choose a topic which is related to official statistics of their country.

- a) demographic analysis
- b) economic statistics and applied analysis
- c) national accounts
- d) statistical methods and sampling

5. QUALIFICATION OF APPLICANT

- 1) university graduate specialized in statistics, economics or sociology or equivalent
- 2) over 25 but under 35 years of age
- 3) have a sufficient knowledge of basic mathematics

6. TRAINING INSTITUTIONS

- 1) Tokyo International Center (TIC), JICA
- 2) Statistical Institute for Asia and the Pacific (SIAP)

7. REMARKS

This course is conducted according to the agreement between the Government of Japan and the United Nations Development Programme, and organized mainly for ESCAP countries.

AUTOMATIC DATA PROCESSING FOR STATISTICIANS**1. PURPOSE**

This course is geared for practicing statisticians who have responsibilities for statistical compilation and analysis and who will benefit from a better understanding of the potentialities and limitations of the use of computers in statistical work.

The course is aimed at instructing participants in the operations and functions of modern computing equipment and in the potentialities of available software for use in statistical computing, including the recording, storing, processing and retrieval of data for the purpose of statistical analysis. An introduction to systems analysis and design will also be provided.

2. DURATION

From May 11, 1993 to July 18, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Twenty (20) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The curriculum consists of the following major subjects.

- 1) introduction to computing
- 2) data management and presentation and Transfer of data between different software packages through the use of dBASE and Lotus 1-2-3
- 3) statistical Analysis using SAS or SPSS
- 4) practical work

5. QUALIFICATION OF APPLICANT

- 1) middle level statisticians with little or no experience in statistical computing
- 2) under 40 years of age
- 3) university graduate in statistics of equivalent

6. TRAINING INSTITUTIONS

- 1) Tokyo International Center (TIC), JICA
- 2) Statistical Institute for Asia and the Pacific (SIAP)

7. REMARKS

This course is conducted according to the agreement between the Government of Japan and the United Nations Development Programme, and organized mainly for ESCAP countries.

**ELECTRONIC DATA PROCESSING FOR
GOVERNMENT INFORMATION ACTIVITIES**

1. PURPOSE

The purpose of this course is to provide participants with the fundamental knowledge and methodology necessary for overall management, promotion and coordination of GIS, and to train such participants to implement GIS efficiently in their respective countries.

2. DURATION

From January 10, 1994 to March 9, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course mainly consists of lectures and individual research work.

The main topics of the lectures are;

- 1) present situation and policies for overall management and coordination of GIS
- 2) basic matters for construction of GIS (database, network, office automation, systems security, etc.)
- 3) trends of new information-oriented society (freedom of information, protection of privacy, etc.)
- 4) latest information technologies

At the end of the course, each participant is to present the report written in their individual work.

5. QUALIFICATION OF APPLICANT

- 1) official who belongs to a government body responsible for overall management and coordination of Government Information Systems, or a government body in a state of planning, which shall be responsible or considered suitable for the task mentioned above
- 2) have the knowledge and skills in computer data processing, preferably with experiences in developing and/or managing Government Information Systems
- 3) under 40 years of age
- 4) university graduate or equivalent

6. TRAINING INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) Office of Government Information systems Planning Division,
Administrative Management Bureau, Management and Coordination Agency

7. REMARKS

INFORMATION PROCESSING PERSONNEL
(SENIOR PROGRAMMER MAINFRAME BASED)

1. PURPOSE

This course is designed to train personnel who will be chief programmers for programmer teams. Through the lectures, workshop, and observation tours, the course introduces the programming skills, basic knowledge and methodology of system development with online database environment, and so forth.

2. DURATION

From June 24, 1993 to October 25, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on lectures, discussions, hands-on exercise, workshops and observation tours.

The main themes are:

- | | |
|--|--|
| 1) Hardware Introduction | 11) Online Programming |
| 2) OS (Operating System) Introduction | 12) Online Application System Design |
| 3) Module Design | 13) Data Communication Network Introduction |
| 4) Test Planning | 14) System Development Outline |
| 5) Programme Structure Design | 15) System Development Workshop |
| 6) Online Database System Introduction | 16) Introduction to Personal Computer |
| 7) Database Programming | 17) CASE (Computer Assisted Software Engineering) Introduction |
| 8) TSS (Time Sharing System) Usage | 18) Advanced Computer Technology |
| 9) JCL (Job Control Language) Usage | |
| 10) Database Design | |

5. QUALIFICATION OF APPLICANT

- 1) university graduate or have the equivalent knowledge in the field
- 2) have one to five years experience in system development and maintenance, and have more than three years programming experience in at least one of programming languages as COBOL, FORTRAN, PL/I
- 3) being able to make a programme in COBOL
- 4) have experience in system design by using conventional files
- 5) under 36 years of age

6. TRAINING INSTITUTIONS

Okinawa International Centre (OIC), JICA

7. REMARKS

INFORMATION PROCESSING PERSONNEL
(PERSONAL COMPUTER PROGRAMMER)

1. PURPOSE

This course is designed to train personnel who works with personal computers in the office. Through lectures, workshop and observation tours, this course introduces concepts, basic knowledge and technical skills required for implementing small-scale information processing systems with personal computers.

2. DURATION

From August 5, 1993 to December 2, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eleven (11) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on lectures, computer exercise, system development workshop.

The main themes are:

- i) spreadsheet spreadsheet
- ii) BASIC programming
- iii) database
- iv) system development workshop

5. QUALIFICATION OF APPLICANT

- 1) university graduate or equivalent
- 2) have a half years to two years programming experience which includes programming in software packages, such as database, spread sheet, and so forth
- 3) under 31 years of age

6. TRAINING INSTITUTIONS

Okinawa International Centre (OIC), JICA

7. REMARKS

INFORMATION PROCESSING PERSONNEL
(PERSONAL COMPUTER NETWORK SYSTEM DESIGNER (A))

1. PURPOSE

This course is designed to train personnel who work with personal computers and will implement personal computer network system as a LAN (Local Area Network). Through lectures, workshop and observation tours, this course introduces function and designing method of personal computer network systems and LAN systems.

2. DURATION

From April 15, 1993 to August 16, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on lectures, discussions, hands-on exercise, workshops and observation tours.

The main themes are;

- 1) personal computer introduction
- 2) spreadsheet
- 3) C programming
- 4) database
- 5) PC system design
- 6) test planning
- 7) network design outline
- 8) PC network system design
- 9) PC networking usage
- 10) UNIX fundamentals
- 11) PC networking usage
- 12) system development workshop
- 13) case study
- 14) CASE introduction
- 15) advanced computer technology

5. QUALIFICATION OF APPLICANT

- 1) person with one to three years experience in system development and maintenance
- 1) have more than three years' experience in programming in any one of programming language such as C, BASIC and so forth
- 2) university graduate or equivalent
- 3) under 36 years of age

6. TRAINING INSTITUTIONS

Okinawa International Centre (OIC), JICA

7. REMARKS

INFORMATION PROCESSING PERSONNEL
(PERSONAL COMPUTER NETWORK SYSTEM DESIGNER (B))

1. PURPOSE

This course is designed to train personnel who work with personal computers and will implement personal computer network system as a LAN (Local Area Network). Through lectures, workshop and observation tours, this course introduces function and designing method of personal computer network systems and LAN systems.

2. DURATION

From November 25, 1993 to April 3, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on lectures, discussions, hands-on exercise, workshops and observation tours.

The main themes are;

- 1) personal computer introduction
- 2) spreadsheet
- 3) C programming
- 4) database
- 5) PC system design
- 6) test planning
- 7) network design outline
- 8) PC network system design
- 9) PC networking usage
- 10) UNIX fundamentals
- 11) PC networking usage
- 12) system development workshop
- 13) case study
- 14) CASE introduction
- 15) advanced computer technology

5. QUALIFICATION OF APPLICANT

- 1) person with one to three years experience in system development and maintenance
- 1) have more than 3 years' experience in programming in any one of programming language such as C, BASIC and so forth
- 2) university graduate or equivalent
- 3) under 36 years of age

6. TRAINING INSTITUTIONS

Okinawa International Centre (OIC), JICA

7. REMARKS

**INFORMATION PROCESSING PERSONNEL
(INSTRUCTOR (PERSONAL COMPUTER BASED))**

1. PURPOSE

This course is designed to train personnel who are presently or will be engaged in programmer training using personal computers. Through the lectures, workshop, observation tours and training as an instructor, this course introduces both the technical skills such as programming, system design and development under personal computer environment, and instruction skills including educational material development.

2. DURATION

From April 22, 1993 to October 7, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on lectures, discussions, hands-on exercise, workshops and observation tours.

The main themes are;

- | | |
|---------------------------------------|----------------------------------|
| 1) introduction to personal computer | 10) PC network system design |
| 2) OS (Operating System) introduction | 11) PC networking usage |
| 3) programme structure design | 12) system development outline |
| 4) module design | 13) system development workshop |
| 5) test planning | 14) instructor training I - IV |
| 6) database | 15) case study |
| 7) C programming | 16) CASE introduction |
| 8) UNIX fundamentals | 17) advanced computer technology |
| 9) network design outline | |

5. QUALIFICATION OF APPLICANT

- 1) (i) person with one to three years experience in system development and maintenance
- (ii) person with more than three years' experience in programming in any one of programming language as C, BASIC, and so forth.
- 1)' person who will be an instructor for personal computer programmers training
- 2) university graduate or equivalent
- 3) under 36 years of age

6. TRAINING INSTITUTIONS

Okinawa International Centre (OIC), JICA

7. REMARKS

INFORMATION PROCESSING PERSONNEL
(INSTRUCTOR (MAINFRAME BASED))

1. PURPOSE

This course is designed to train the personnel who are presently or will be engaged in programmer training using mainframe. Through the lectures, workshop, observation tours and training as an instructor, this course introduces both the technical skills such as programming, system design and development under online database environment using mainframe computer, and instruction skills such as design, development and presentation of the training courses.

2. DURATION

From October 7, 1993 to March 28, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on lectures, discussions, hands-on exercise and workshops.

The main themes are:

- i) database programming
- ii) online programming
- iii) system development workshop
- iv) instructor training

5. QUALIFICATION OF APPLICANT

- 1) university graduate with more than one to three years experience in system development and maintenance
- 2) have more than three years experience in programming in any one of programming languages; such as COBOL, FORTRAN, PL/I, etc., and being able to make a programme in COBOL
- 3) person who will be a instructor for programmers training
- 4) under 36 years of age

6. TRAINING INSTITUTIONS

Okinawa International Centre (OIC), JICA

7. REMARKS

INFORMATION PROCESSING PERSONNEL
(SENIOR SYSTEM ANALYST/DESIGNER (A))

1. PURPOSE

This course is designed to train the personnel who are presently or will be system analysts and designers. Through the lectures, group exercises and observation tours, this course provides the knowledge and skills necessary for analyzing, designing, developing and evaluating an online database system, and way of project management.

2. DURATION

From May 6, 1993 to August 16, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on lectures, computer exercise, hands-on exercise and workshops.

The main themes are;

- i) system analysis/design subjects
- ii) system estimation/evaluation subjects
- iii) project management subjects

5. QUALIFICATION OF APPLICANT

- 1) university graduate with more than three to seven years experience in system development and programming or, have the equivalent background
- 2) have more than three years experience in programming in any one of programming languages: such as COBOL, FORTRAN, PL/I, etc.
- 3) under 36 years of age

6. TRAINING INSTITUTIONS

Okinawa International Centre (OIC), JICA

7. REMARKS

INFORMATION PROCESSING PERSONNEL
(SENIOR SYSTEM ANALYST/DESIGNER (B))

1. PURPOSE

This course is designed to train the personnel who are presently or will be system analysts and designers. Through the lectures, group exercises and observation tours, this course provides the knowledge and skills necessary for analyzing, designing, developing and evaluating an online database system, and way of project management.

2. DURATION

From November 4, 1993 to February 26, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on lectures, computer exercise, system development and workshops.

The main themes are:

- i) system analysis/design subjects
- ii) system estimation/evaluation subjects
- iii) project management subjects

5. QUALIFICATION OF APPLICANT

- 1) university graduate with more than three to seven years experience in system development and programming or, have the equivalent background
- 2) have more than three years experience in programming in any one of programming languages: such as COBOL, FORTRAN, PL/I, etc.
- 3) under 36 years of age

6. TRAINING INSTITUTIONS

Okinawa International Centre (OIC), JICA

7. REMARKS

INFORMATION PROCESSING PERSONNEL
(ONLINE DATABASE SYSTEM DESIGNER (MAINFRAME BASED (A)))

1. PURPOSE

This course is designed to train the personnel who will be in charge of online database system development under mainframe computer environment. Through lectures, workshop and observation tours, this course provides the knowledge and skills necessary for designing and development of online database system applying relational type database.

2. DURATION

From May 6, 1993 to October 16, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Fourteen (14) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on lectures, discussions, hands-on exercise, workshops and observation tours.

The main themes are;

- | | |
|--|---|
| 1) module design | 14) system estimation/evaluation |
| 2) programme structure design | 15) reliable system design |
| 3) online database system introduction | 16) data communication network design |
| 4) database programming | 17) system configuration design workshop |
| 5) TSS (time sharing system) usage | 18) project management |
| 6) JCL (job control language) usage | 19) database recovery design |
| 7) database design | 20) system development workshop |
| 8) online programming | 21) introduction to personal computer |
| 9) test planning | 22) case study |
| 10) online application system design | 23) CASE (computer aided software engineering) introduction |
| 11) online system definition | 24) advanced computer technology |
| 12) database creation | |
| 13) file system design | |

5. QUALIFICATION OF APPLICANT

- 1) (i) personnel who have one to three years' experience in system development and maintenance, and have more than three years' programming experience in at least one of the programming languages such as COBOL, FORTRAN AND PL/I.
- (ii) able to make a programme in COBOL
- (iii) experienced in system design in batch processing system
- 2) university graduate or equivalent
- 3) under 35 years of age

6. TRAINING INSTITUTIONS

Okinawa International Centre (OIC), JICA

7. REMARKS

INFORMATION PROCESSING PERSONNEL
(ONLINE DATABASE SYSTEM DESIGNER (MAINFRAME BASED (B)))

1. PURPOSE

This course is designed to train the personnel who will be in charge of online database system development under mainframe computer environment. Through lectures, workshop and observation tours, this course provides the knowledge and skills necessary for designing and development of online database system applying relational type database.

2. DURATION

From October 7, 1993 to March 28, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Fourteen (14) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on lectures, discussions, hands-on exercise, workshops and observation tours.

The main themes are;

- | | |
|--|---|
| 1) module design | 14) system estimation/evaluation |
| 2) programme structure design | 15) reliable system design |
| 3) online database system introduction | 16) data communication network design |
| 4) database programming | 17) system configuration design workshop |
| 5) TSS (time sharing system) usage | 18) project management |
| 6) JCL (job control language) usage | 19) database recovery design |
| 7) database design | 20) system development workshop |
| 8) online programming | 21) introduction to personal computer |
| 9) test planning | 22) case study |
| 10) online application system design | 23) CASE (computer aided software engineering) introduction |
| 11) online system definition | 24) advanced computer technology |
| 12) database creation | |
| 13) file system design | |

5. QUALIFICATION OF APPLICANT

- 1) (i) personnel who have one to three years' experience in system development and maintenance, and have more than three years' programming experience in at least one of the programming languages such as COBOL, FORTRAN and PL/I
- (ii) able to make a programme in COBOL
- (iii) experienced in system design in batch processing system
- 2) university graduate or equivalent
- 3) under 35 years of age

6. TRAINING INSTITUTIONS

Okinawa International Centre (OIC), JICA

7. REMARKS

INFORMATION PROCESSING PERSONNEL
(UNIX DATABASE SYSTEM DESIGNER)

1. PURPOSE

This course is designed to train the personnel who are presently or will be in charge of system development using database system under the UNIX environment. Through lectures, workshop and observation tours, this course provides the knowledge and skills necessary for design and development of online database system under the UNIX environment.

2. DURATION

From November 4, 1993 to March 26, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on lectures, discussions, hands-on exercise, workshops and observation tours.

The main themes are:

- | | |
|------------------------------------|---------------------------------|
| 1) programme structure design | 9) UNIX database system usage |
| 2) module design | 10) UNIX database programming |
| 3) test planning | 11) UNIX database design |
| 4) UNIX fundamentals | 12) UNIX database definition |
| 5) UNIX programming utilities | 13) network design outline |
| 6) C programming | 14) UNIX networking usage |
| 7) UNIX system administration | 15) system development outline |
| 8) C language advanced programming | 16) system development workshop |

5. QUALIFICATION OF APPLICANT

- 1) university graduate or equivalent
- 2) have one to three years' experience in system development and maintenance, and have more than three year's programming experience in at least one of programming languages such as BASIC
- 2) having a plan to be a personnel who will develop a system under UNIX environment
- 3) under 36 years of age

6. TRAINING INSTITUTIONS

Okinawa International Centre (OIC), JICA

7. REMARKS

INFORMATION PROCESSING PERSONNEL
(DP DIVISION MANAGER)

1. PURPOSE

This course is designed to train personnel who are presently the managers under one year experience in the information processing division or who are appointed to the manager of the information processing division. Through lectures, group exercises and observation tours, this course provides the skills necessary for information processing system planning and its operation, and management of information processing division.

2. DURATION

From August 26, 1993 to October 25, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on lectures, discussions, hands-on exercise, workshops and observation tours.

The main themes are;

- 1) DP system planning
- 2) case study
- 3) project management simulation
- 4) DP division management
- 5) system audit
- 6) DSS (decision support system)
- 7) word processing

5. QUALIFICATION OF APPLICANT

- 1) person with over three years experience in information processing system development and/or maintenance
- 2) presently the manager and have less than one year experience of data processing division management
- 2) personnel who are appointed to the manager of information processing division
- 3) university graduate or equivalent
- 4) under 46 year of age

6. TRAINING INSTITUTIONS

Okinawa International Centre (OIC), JICA

7. REMARKS

MICROELECTRONICS ENGINEERING
(MICROCOMPUTER)

1. PURPOSE

This course is designed to provide technical knowledge and practical experience in digital logic, microcomputer hardware and software design.

2. DURATION

From November 18, 1993 to February 26, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on practical experience by participants.

It mainly covers:

- 1) Z80 assembly languages
- 2) digital logic
- 3) microcomputer
- 4) PLD design
- 5) C language
- 6) LAN design

5. QUALIFICATION OF APPLICANT

- 1) able to operate DOS (Disc Operating System) and Text Editor of personal computers
- 2) design or development engineer who have experienced more than three years of developing and designing software or hardware for personal computer or microprocessor
- 3) have experience in developing programs by C-language or assembly language
- 4) have experience in designing and developing digital circuits or print circuited board
- 5) over 25 and under 35 years of age

6. TRAINING INSTITUTIONS

- 1) Hokkaido Branch Office, JICA
- 2) Sapporo Electronics Center

7. REMARKS

OFFICE AUTOMATION TECHNOLOGY

1. PURPOSE

Even though it may be desirable to automate office work through the use of computers and other equipment, a computer system alone will not provide excellent results if the present methods of conducting business transactions are not change.

That is why this course seeks to deepen an understanding of new office work systems by re-evaluating present systems and planning methods before proceeding to the use of computers and automation. At the same time, the course will be interwoven with lectures, practice, and field trips dealing with the new way of thinking about and advancing with the use of computers in office automation. This course will produce the capable with leadership qualities who will be able to reform and promote operations in their own countries.

2. DURATION

From August 5, 1993 to October 31, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on report presentation and discussions by participants, and introduction of Japanese experience and basic theories of Office Automation.

The main themes are;

- | | |
|--|---|
| 1) actual situation of computer usage in Japanese government | 7) office LAN (office communication) |
| 2) how to advance record management | 8) how to advance project management |
| 3) how to advance business system design | 9) end user computing |
| 4) how to advance system planning | 10) system inspection and security |
| 5) how to advance on-line system design | 11) case studies (company visits) |
| 6) design and actual situation of data base systems | 12) panel discussion (human resource development in promotion of office automation) |

5. QUALIFICATION OF APPLICANT

- 1) have university diploma or equivalent
- 2) governmental administrator who have more than five years experiences in the work of information oriented systems as end user
- 3) administrator who shall be planning improves ways of undertaking office work, and planning the development of new structures through the effective use of present-day office automation and information systems. (or the applicant must be a project leader in the promotion of office automation)

Exceptions:

1. Administrators in computer (information system) departments, specializing in operations associated with computers, SE's (system engineers), or programmers
2. Not necessary to be administrators with deep technical knowledge - but advisable to possess at least basic knowledge of personal computers know-how to operate "d BASE III" and "Lotus 1-2-3"
- 4) about 35-45 years of age

6. TRAINING INSTITUTIONS

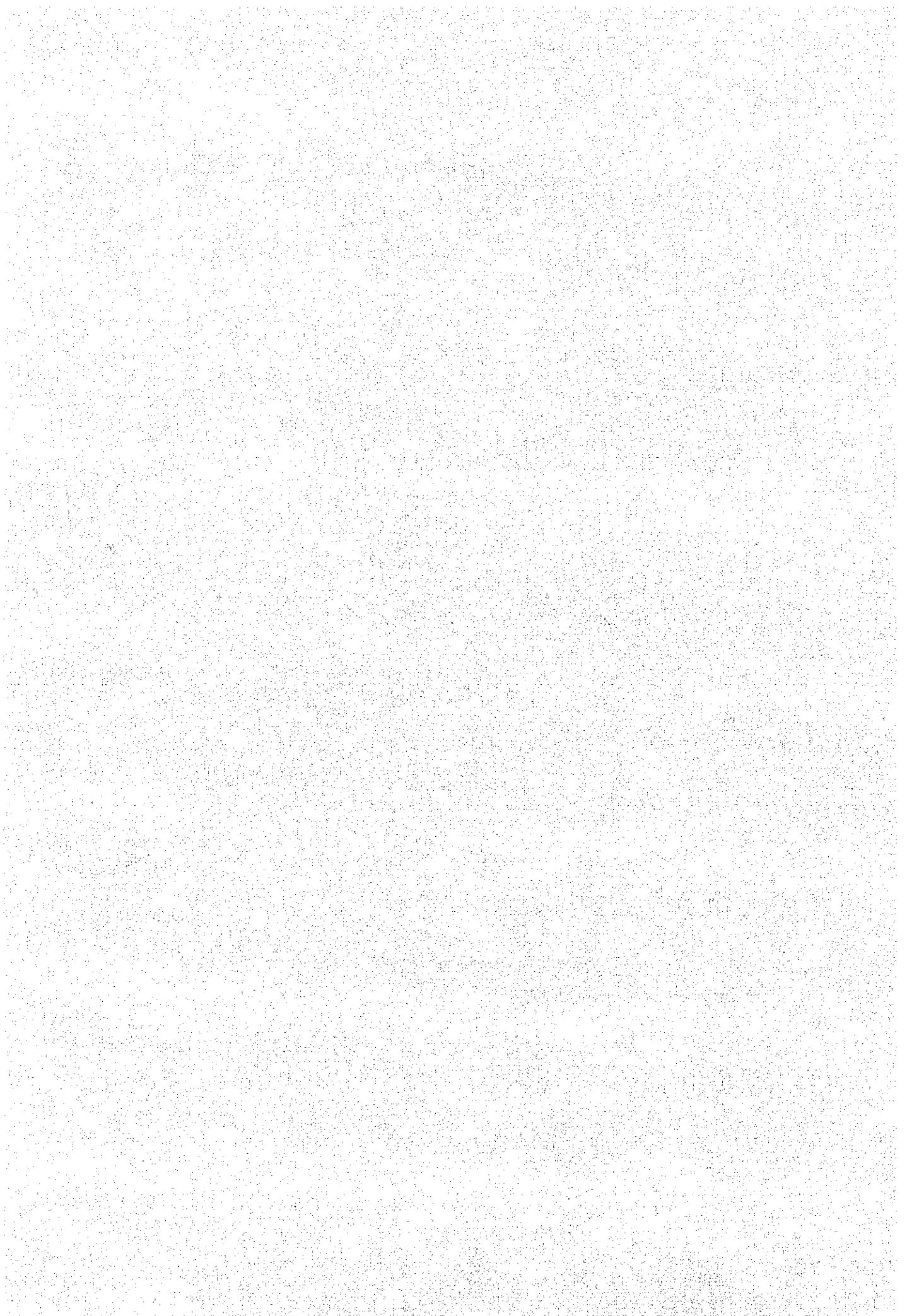
- 1) Osaka International Training Centre (OITC), JICA
- 2) Kansai Institute of Information Systems

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for one week (25 hours).

PUBLIC UTILITY WORKS

公 益 事 業



WATER SUPPLY ENGINEERING II**1. PURPOSE**

The purpose of this course is to provide the participants with an opportunity to broaden theoretical and practical knowledge of water supply systems with surface water resource and sanitary engineering systems including its planning, designing, operation and maintenance through lectures, laboratory practice and observations.

2. DURATION

From May 11, 1993 to July 30, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course is designed to cover the following themes.

- 1) water supply planning
- 2) waterworks management
- 3) water purification system and water quality
- 4) pipeline design and its maintenance

5. QUALIFICATION OF APPLICANT

- 1) presently engaged in the field of water supply with surface water resource in the relevant authority and have more than three years of occupational experience in the field
- 2) university graduate or equivalent
- 3) not less than 26 and not more than forty-five (45) years of age

6. TRAINING INSTITUTIONS

- 1) Tokyo International Center (TIC), JICA
- 2) Japan Water Works Association (JWWA)

7. REMARKS

SEWAGE WORKS ENGINEERING II**1. PURPOSE**

The purpose of the course is to provide participants with a basic knowledge of sewage collection, urban drainage systems, sewage treatment and disposal, and sludge handling, as well as to furnish them so that the participants would be able to play their greater role for further progress and advancement of sewage works in their respective countries.

2. DURATION

From August 17, 1993 to November 17, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Thirteen (13) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course covers the following themes:

- 1) basic theory of sewerage and sewage purification
- 2) process and methods for planning and designing sewers, pumping stations, and sewage and sludge treatment facilities
- 3) rough master plan for a sewage systems
- 4) pretreatment of industrial wastewater
- 5) significance and methods of water quality analysis
- 6) advanced sewage and sludge treatment technology

5. QUALIFICATION OF APPLICANT

- 1) university graduate or equivalent and has more than three years of practical experience
- 2) senior technical officer in charge of sewage works in central or provincial government, or in local bodies
- 3) under 40 years of age

6. TRAINING INSTITUTIONS

- 1) Tokyo International Center (TIC), JICA
- 2) Sewerage Planning Division, Sewerage and Sewage Purification Department, City Bureau, Ministry of Construction
- 3) Japan Sewage Works Agency

7. REMARKS

Country Reports will be highly utilized both for the selection of participants and for the country report presentation.

SOLID WASTE MANAGEMENT AND NIGHT SOIL TREATMENT II**1. PURPOSE**

The main purpose of the course is to provide university graduates or their equivalent with knowledge and techniques required for solid waste management and night soil treatment (excluding sewerage system), particularly those for domestic and industrial solid waste management, through lectures, discussions, laboratory practice and field studies. The lectures are intended to provide the participants not only with knowledge and techniques but also principles and approaches to the problem solution.

The course is also intended to introduce recent aspects of solid waste management in Japan and its international technical cooperation activities in this field.

2. DURATION

From May 20, 1993 to July 24, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The following major subjects will be covered in this course, mainly by means of lectures.

- 1) problem identification and national/master plan elaboration
- 2) solid waste management
 - collection and transportation
 - treatment and disposal (incineration, sanitary landfills)
- 3) industrial waste management (especially hazardous waste)
- 4) night soil treatment
- 5) institutional development for solid waste management service
- 6) solid waste management/night soil treatment in developing countries

5. QUALIFICATION OF APPLICANT

- 1) technical official presently in charge of solid waste management (domestic and industrial solid waste management and night soil treatment excluding sewerage system) in central or provincial governments or in local bodies, with three or more years of experience in this field
- 2) under 50 years of age
- 3) university graduate or equivalent

6. TRAINING INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) Environmental Health Bureau, Ministry of Health and Welfare
- 3) Japan Environmental Sanitation Centre

7. REMARKS

WASTE MANAGEMENT PRACTICE**1. PURPOSE**

The purpose of this course is to upgrade the administrative and managerial skills of personnel who are currently engaged in solid waste management, for the purpose of dealing with environmental problems due to the rapid progress of urbanization and industrialization in developing countries.

2. DURATION

From January 10, 1994 to April 27, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The training programme which is rather comprehensive consists of lectures, exercise and study tours. However, the emphasis is put on making action plan in each participant's country and introduction of Japanese experiences.

The subjects covered in the course are:

- 1) basic theory on local administration
- 2) household refuse treatment
- 3) strategies for public awareness building on solid waste management
- 4) night soil treatment
- 5) administrative framework of industrial solid waste management
- 6) industrial waste processing
- 7) solid waste management produced in local government enterprise
- 8) hazardous wastes management
- 9) landfilling of solid wastes
- 10) ocean dumping of wastes
- 11) study tours

5. QUALIFICATION OF APPLICANT

- 1) technical administrator who have three years or more of experience in solid waste management and/or equivalent technical knowledge
- 2) university graduate or equivalent
- 3) not more than 40 years of age

6. TRAINING INSTITUTIONS

- 1) Kyushu International Centre (KIC), JICA
- 2) Kitakyushu International Training Association

7. REMARKS

- 1) A compulsory intensive Japanese language course will be conducted prior to the technical training for 25 hours.

TRANSPORTATION AND TRAFFIC

運輸交通

ADMINISTRATION SYSTEM FOR MOTOR VEHICLES**1. PURPOSE**

The purpose of the course is to provide participants with both basic and practical knowledge of administrative systems for motor vehicle engineering, and thus to contribute to creating the most suitable system for motor vehicle engineering in their respective countries.

2. DURATION

From January 20, 1994 to March 2, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course mainly consists of lectures and field visits.

The following are the major subjects to be covered in the course.

- 1) administrative systems and related laws and regulations in Japan
 - safety and pollution control regulations
 - maintenance, repair and inspection systems
 - registration system
 - road transport business regulations
 - insurance system
 - driver's licence system, etc.
- 2) motor vehicle safety and pollution control engineering
- 3) motor vehicle standards and production activities
- 4) business and services for traffic safety

5. QUALIFICATION OF APPLICANT

- 1) university graduate or equivalent
- 2) have been engaged in the field of motor vehicles administration for safety and pollution control of vehicle construction, (for example, periodical inspection and rule making)
- 3) occupy a responsible position at present in governmental or public organization
- 4) under 50 years of age

6. TRAINING INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) Road Transport Bureau, Ministry of Transport
- 3) Automobile Inspection & Registration Association (AIRA)

7. REMARKS

MODERNIZATION OF PHYSICAL DISTRIBUTION
(CARGO TRANSPORTATION)

1. PURPOSE

This course aims at providing officials who are currently engaged in the field of physical distribution (cargo transport) at governmental or public organizations with opportunities to study plans, techniques, and information about modernization of physical distribution. The course shall be focusing on land transport, especially on truck transport. The curriculum comprehends packaging, storing, handling, transport and information management.

2. DURATION

From April 19, 1993 to June 24, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on lectures and observation tours.

The main themes are:

- 1) administration of physical distribution
- 2) planning and coordination for physical distribution
- 3) modernization for physical distribution
- 4) strategy for physical distribution

5. QUALIFICATION OF APPLICANT

- 1) currently engaged in the field of physical distribution (cargo transport, especially land transport) at governmental or public organizations, with three years or more of experience in this field
- 2) university graduate or equivalent
- 3) not engaged in the field of road construction and management, traffic survey and control and passenger transport

6. TRAINING INSTITUTIONS

- 1) Nagoya International Training Centre (NITC), JICA
- 2) Transport Policy Bureau, Ministry of Transport
- 3) Chubu District Transport Bureau, Ministry of Transport
- 4) Industrial Research Institute, Aichi Prefectural Government
- 5) private enterprises

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (50 hours).

SEMINAR ON HIGHWAY CONSTRUCTION II**1. PURPOSE**

The course is designed to improve the knowledge of personnel who are currently engaged in highway construction and maintenance through the introduction of road construction technology developed in Japan.

2. DURATION

From September 16, 1993 to November 7, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The most important part of this seminar is Country Report presentation and discussion for comparative study.

Another major part is introduction of Japanese systems, situations and cases as follows.

- 1) present situation of roads and road transportation, which includes traffic safety, disaster prevention, new transportation systems, etc.
- 2) outline of special large-scale projects in which the most advanced techniques in this field are concentrated
- 3) road environmental problems and measures for protecting the living environment along the highways
- 4) technical standards for designs of highways, bridges, and pavements

5. QUALIFICATION OF APPLICANT

- 1) university graduate or equivalent
- 2) engineer with more than two years of experience in the field of highway construction and maintenance
- 3) under 35 years of age

6. TRAINING INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) Road Bureau, Ministry of Construction

7. REMARKS

TERMINAL FACILITY PLANNING AND URBAN DESIGN**1. PURPOSE**

The purpose of this course is to provide participants with a knowledge of the principles and methods of transport terminal planning, urban design, and transport information systems in general through lectures, discussions and field studies covering planning of urban facilities, urban management systems, transportation facilities and systems of urban transport.

2. DURATION

From September 30, 1993 to November 27, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the following major subjects will be covered through lectures, discussions, practices and observation trips.

- 1) system and history of urban transportation in Japan
- 2) planning, project and management of terminals
- 3) comprehensive management of terminals
- 4) street design

5. QUALIFICATION OF APPLICANT

- 1) university graduate or equivalent with occupational experience of more than three years
- 2) under 40 years of age
- 3) presently engaged in urban planning and urban management

6. TRAINING INSTITUTIONS

- 1) Tokyo International Center (TIC), JICA
- 2) Street Division, Ministry of Construction

7. REMARKS

Country Reports will be highly utilized both for the selection of participants and for the country report presentation.

RAILWAY MANAGEMENT AND PLANNING**1. PURPOSE**

The purpose of this course is to introduce Japanese railway management to the participants so as to contribute to railway management in developing countries by establishing sound methods of railway operations and railway project management.

2. DURATION

From February 1, 1994 to March 6, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course consists of observation of various types of railway companies in Japan and lectures on the following topics.

- 1) present situation of railway enterprises in Japan
- 2) restructuring of the former Japanese National Railway
- 3) different operation forms (private, public and joint-ventures between private and public sectors)
- 4) different types of railway transportation (monorail, new transit system, etc.)
- 5) methods of multiple management
- 6) systematic and efficient management (maintenance program, financial management, personnel management, etc.)

5. QUALIFICATION OF APPLICANT

- 1) at the chief or director level, engaged in a planning or administrative division in the field of railway management
- 2) have more than five years of practical experience after graduation from university
- 3) university graduate or equivalent
- 4) under 40 years of age

6. TRAINING INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) Railway Bureau, Ministry of Transport
- 3) Japan Railway (JR) Group

7. REMARKS

SEAFARER'S MANAGEMENT SYSTEM**1. PURPOSE**

The purpose of this course is to provide knowledge and techniques concerned with seafarer training and labour control systems based on seafarer administration, using the seafarer management system in Japan as an example, and to contribute to creating suitable seafarer management systems for participating countries.

2. DURATION

From August 5, 1993 to November 17, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course is designed so as to let participants be versed in the following subjects;

- 1) labor management of seafarers
 - (a) standards of labor management
 - (b) actual labor control in oceangoing vessels
 - (c) seafarer salaries and unions
- 2) administration of and certification system for seafarers
 - (a) administration system
 - (b) certification system
 - (c) national examination system for ship's officers
- 3) education system for seafarers
- 4) circumstances of Japanese shipping
 - (a) standards of labor management
 - (b) mixed-manning system

5. QUALIFICATION OF APPLICANT

- 1) person with occupational experience of more than three year either as a) human development manager or personnel in charge of organizing training curriculum for seafarers in shipping corporations or training institutions for seafarers, or b) governmental or other public official in managerial or leading position in administrative organizations for shipping corporation or training institutions for seafarers
- 2) university graduate or equivalent
- 3) between 25 and 45 years of age

6. TRAINING INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) Seafarers Dept., Maritime Technology and Safety Bureau, Ministry of Transport
- 3) Maritime International Cooperation Center of Japan (MICC)

7. REMARKS

MARINE TECHNIQUE (NAVIGATOR)**1. PURPOSE**

The aim of the course is to hand over to the participants the marine technique and experience which Japan has long accumulated, and by so doing to make them conscious of the status quo of a higher marine technology and management.

Furthermore, the participants, through their own training, are to acquire the knowledge and technique concerning the seamen's training methods, and after they return to their respective countries, they are expected to spread their fruits so gained among their successors.

2. DURATION

From June 24, 1993 to December 10, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course consists of common subjects for all participants, seminar at laboratory (optional subjects), on board practice and observation tours.

Common Subjects (10 weeks)

- | | |
|---|---|
| 1) terrestrial and celestial navigation | 12) ship engineering |
| 2) nautical instruments | 13) computer mathematics |
| 3) ship maintenance | 14) computer and information science |
| 4) ship maneuvering and marine accident | 15) computer practice |
| 5) ship cargo handling | 16) fundamentals of physical Science |
| 6) safety management | 17) fundamentals of chemical science |
| 7) watch keeping | 18) fundamentals of maritime management |
| 8) naval architecture | 19) bridge simulator training |
| 9) marine meteorology | 20) radar simulator training |
| 10) navigational regulations | 21) practice on board |
| 11) maritime law | |

Seminar at laboratory (optional subjects) (4 weeks)

- | | |
|---------------------------------|--|
| 1) simulator training | 4) navigational regulations and maritime law |
| 2) nautical instruments | 5) loading calculation |
| 3) weather and radar navigation | |

5. QUALIFICATION OF APPLICANT

- 1) in possession of the certificate of Third of higher Grade Maritime Officer (Officer) with more than one year of seetime, or those who have the equivalent knowledge and experience engaged in official affairs or education for maritime with more than one year
- 2) male, between 25 and 35 years of age
- 3) presumed to contribute to fostering mercantile officials or instructors who will play a leading role in this field in their respective countries

6. TRAINING INSTITUTIONS

- 1) Hyogo International Center (HIC), JICA
- 2) Marine Technical College

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for three weeks (75 hours).

MARINE TECHNIQUE (ENGINEER)**1. PURPOSE**

The aim of the course is to hand over to the participants the marine technique and experience which Japan has long accumulated, and by so doing to make them conscious of the status quo of a higher marine technology and management.

Furthermore, the participants, through their own training, are to acquire the knowledge and technique concerning the seamen's training methods, and after they return to their respective countries, they are expected to spread their fruits so gained among their successors.

2. DURATION

From June 24, 1993 to December 10, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course consists of common subjects for all participants, seminar at laboratory (optional subjects), on board practice and observation tours.

Common Subjects (12 weeks)

- | | |
|----------------------------------|--|
| 1) boiler | 10) thermodynamics, hydrodynamics, mechanics and materials |
| 2) steam turbine engine | 11) computer |
| 3) diesel engine and gas turbine | 12) marine propulsion system based on energy flow |
| 4) propeller and shafting | 13) engine room simulator training |
| 5) auxiliary machinery | 14) maritime laws and international conventions |
| 6) electrical engineering | 15) ship's survey inspection |
| 7) automatic control | 16) safety management |
| 8) instrumentation | 17) practice on board |
| 9) fuel oil and lubricant | |

Seminar at laboratory (optional subjects) (2 weeks)

- | | |
|---|----------------------------|
| 1) steam plant | 6) instrumentation |
| 2) internal combustion engine | 7) information engineering |
| 3) electrical engineering and electronics | 8) engine room simulator |
| 4) auxiliary machineries | 9) propulsion |
| 5) automatic control | |

5. QUALIFICATION OF APPLICANT

- 1) in possession of the certificate of Third of higher Grade Maritime Officer (Engineer) with more than one year of seetime, or those who have the equivalent knowledge and experience engaged in official affairs or education for maritime with more than one year
- 2) male, between 25 and 35 years of age
- 3) presumed to contribute to fostering mercantile officials or instructors who will play a leading role in this field in their respective countries

6. TRAINING INSTITUTIONS

- 1) Hyogo International Center (HIC), JICA
- 2) Marine Technical College

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for three weeks (75 hours).

AIDS TO MARINE NAVIGATION II**1. PURPOSE**

The purpose of the training course is to provide participants with the comprehensive and latest theory, knowledge and techniques of systems of aids to marine navigation in Japan, thus contributing to the improvement of the managerial and technological level of aids to navigation in each participating country, and to promote cooperative relations among the participating countries and Japan in carrying out their duties of providing aids to marine navigation.

2. DURATION

From August 19, 1993 to October 23, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on introduction of Japanese system and basic knowledge and techniques.

The following themes will be covered in the course.

- 1) administration of aids to marine navigation and related activities in Japan
- 2) visual aids navigation system
(planning, design, operation and maintenance)
- 3) radio aids navigation system
(planning, design, operation and maintenance)
- 4) system engineering
(power sources, floating aids, construction, microwave equipment, monitoring and control)

5. QUALIFICATION OF APPLICANT

- 1) high school graduate or equivalent with a sufficient knowledge of physics
- 2) middle-class officer engaged in administration and management of aids to navigation
- 3) under 45 years of age

6. TRAINING INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) Aids to Navigation Department, Maritime Safety Agency
- 3) Japan Association for Aids to Navigation (JAAN)

7. REMARKS

MARINE DISASTER PREVENTION AND RESCUE OPERATION

1. PURPOSE

The purpose of this course is to provide the participants with an administrative concept and actual ways of managing maritime search and rescue and maritime disaster prevention through lectures, practices and observations. The training will contribute to further promotion of the friendship and cooperation between the participating countries and Japan.

2. DURATION

From September 2, 1993 to December 10, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on introduction of comprehensive knowledge on the following subjects through lecture, practice and field trip.

The main themes are:

- | | |
|---|---|
| <p>1) Lectures</p> <ul style="list-style-type: none"> - organization and function of JMSA - international maritime search and rescue activities under the International Convention on Maritime Search and Rescue, 1979 - maritime search and rescue systems in Japan - maritime search and rescue operations - case studies of maritime search and rescue operations - method on rescue of capsized and grounded ships - Global Maritime Distress and Safety System (GMDSS) - information collection system of JMSA | <ul style="list-style-type: none"> - prevention of marine pollution system - JMSA's activities on marine disaster prevention <p>2) Practice</p> <ul style="list-style-type: none"> - experimental sail on a JMSA's fire fighting vessel or craft - work on marine disaster prevention - experimental sail on a JMSA's patrol vessel - experimental fly in a JMSA's aircraft (observation of Special Rescue Station) - rescue training including special rescue <p>3) Observation and Study Tour</p> <ul style="list-style-type: none"> - training of Special Rescue Team and patrol vessels with improved rescue capability of JMSA |
|---|---|

5. QUALIFICATION OF APPLICANT

- 1) university graduate or equivalent with occupational experience of more than five years in the field of marine disaster prevention and, search and rescue operation
- 2) presently engaged in the above-mentioned field
- 3) under 40 years of age

6. TRAINING INSTITUTIONS

- 1) Hyogo International Center (HIC), JICA
- 2) Maritime Safety Agency
- 3) 5th Regional Maritime Headquarters
- 4) Maritime Safety Academy
- 5) Disaster Prevention Training Centre

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for about 25 hours.

LINER SHIPPING BUSINESS**1. PURPOSE**

The purpose of the course is to provide participants with an opportunity to acquire basic knowledge and up-to-date information on liner shipping operations in Japan as well as those in global situations.

For this purpose, the course provides lectures on shipping policy of Japan and liner shipping operation, centering on container operation. In addition, observation and study tours shall contribute to better understanding of lectures as a supplement guide.

2. DURATION

From May 11, 1993 to June 25, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on introduction of Japanese system and basic information. The following major subjects will be covered in the course.

- | | |
|---|---|
| 1) government administration for shipping | (b) containerization in the shipping field |
| (a) administration for international shipping of Japan | (c) purchasing and leasing at container |
| (b) present situation and future planning of container terminals in Japan | (d) management and operation at containers |
| (c) administration for seafarers | (e) container terminal operation |
| 2) maritime law | (f) international combined transportation |
| (a) ocean carrier's liability | (g) activities of Japanese shipper's council |
| (b) charter party and maritime arbitration | 4) others around liner shipping business |
| (c) cargo claim | (a) liner shipping service at the world |
| 3) liner shipping business | (b) profitability calculation in building new vessels |
| (a) liner shipping business and shipping conference | (c) technological innovation at vessels |
| | (d) marine insurance |

5. QUALIFICATION OF APPLICANT

- 1) university graduate or equivalent
- 2) have practical experience of more than three years in shipping business, and be asked to acquire basic knowledge of the liner shipping business
- 3) presently engaged in shipping corporations
- 4) under 35 years of age

6. TRAINING INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) International Shipping Division, Maritime Transport Bureau, Ministry of Transport.
- 3) Maritime International Cooperation Center of Japan (MICC)

7. REMARKS

SEMINAR ON PORT ADMINISTRATION AND MANAGEMENT**1. PURPOSE**

The seminar is designed to contribute to cultivating the human resources development of port administrators and managers who are expected to play an important role in port development in developing countries so as to improve port administration and management systems in developing countries.

2. DURATION

From September 28, 1993 to November 27, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Seventeen (17) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on case study at one of the six biggest ports in Japan, report presentation and discussion.

The main themes are;

- 1) present situation of ports and harbours in Japan
 - port development policy
 - system and organization of port administration and management
 - labour problems
- 2) techniques on port management and operation services
- 3) ports and harbours in participating countries

5. QUALIFICATION OF APPLICANT

- 1) university graduate or equivalent
- 2) presently engaged in the port administrative works and/or management with more than three years of occupational experience in the field of ports and harbours
- 3) between 30 and 45 years of age

6. TRAINING INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) Ports and Harbours Bureau, Ministry of Transport

7. REMARKS

PORT AND HARBOUR ENGINEERING II**1. PURPOSE**

The course is designed to contribute to cultivating the human resources development of port engineers who are expected to play an important role in port development in developing countries so as to improve the technology in solving various technical problems in port development.

2. DURATION

From May 11, 1993 to September 19, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course consists of lectures, exercises, observations, intensive field study at the Port of Onahama and discussions.

It covers:

- 1) basic theories of port and harbour engineering
- 2) advanced technology for port development
- 3) port development in Japan

5. QUALIFICATION OF APPLICANT

- 1) university graduate or equivalent
- 2) presently engaged in civil engineering with more than three years of occupational experience
- 3) under 35 years of age

6. TRAINING INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) Ports and Harbours Bureau, Ministry of Transport
- 3) Ports and Harbours Research Institute

7. REMARKS

DEVELOPMENT OF CONTAINER TERMINAL**1. PURPOSE**

The purpose of this training course is to help participants understand the background to containerization and methods of planning, construction, maintenance and management of container terminals as well as the containerization policy currently applied in Japan, and thus to help each of the participants figure out the future prospects for containerization in their respective countries.

2. DURATION

From January 18, 1994 to March 13, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course mainly consists of lectures, intensive study at Kobe Port (one of the leading ports in Japan) and group work. Participants will be divided into several groups to study a subject which is chosen by them (such as engineering, computers, etc.) and to make presentations at the end of the course.

The following are the major subjects to be covered in the course.

- 1) containerization and development of container terminals
- 2) method of planning container terminals
- 3) management and maintenance of container terminals

5. QUALIFICATION OF APPLICANT

- 1) presently engaged in or will be engaged in container terminal planning and/or container terminal management
- 2) university graduate or equivalent with more than five years of occupational experience in the field of ports and harbours
- 3) not less than 30 and not more than 40 years of age

6. TRAINING INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) Ports and Harbours Bureau, Ministry of Transport

7. REMARKS

SEMINAR ON AERODROME**1. PURPOSE**

The seminar is designed to contribute to the levelling-up of technical knowledge and knowhow about airport civil engineering for engineers who mainly work in the areas of airport planning, airport construction, and maintenance and operation of airport facilities.

The participants will be given opportunities to take lectures, have discussions and conduct on-site observations. The participants will also study how to execute their own airport development plans through discussions on the country reports submitted by the participants.

2. DURATION

From August 24, 1993 to October 14, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this seminar, the emphasis is put on introduction of Japanese situation and systems and basic theories on airport planning and management.

The major subjects are;

- 1) civil aviation in general
- 2) operation of airports
- 3) planning of airports
- 4) design and construction of airports
- 4) maintenance of airports

5. QUALIFICATION OF APPLICANT

- 1) university graduate in civil engineering or architecture or equivalent
- 2) currently employed by their government or by public authorities for civil aviation as airport engineer or be newly-appointed personnel who will manage airport civil engineering matters
- 3) have more than five years of occupational experience in the fields of airport civil engineering such as in airport planning, airport construction, or maintenance
- 4) under 40 years of age

6. TRAINING INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) Civil Aviation Bureau, Ministry of Transport

7. REMARKS

SEMINAR ON AVIATION SECURITY**1. PURPOSE**

The purpose of this seminar is to provide participants with the fundamental knowledge of aviation security practiced in Japan as a reference, including ICAO specifications, and with the opportunities to exchange views in the field of aviation security among participants and Japanese lecturers, this contributing to investigating the applicable improvements of aviation security in participating countries.

2. DURATION

From January 27, 1994 to March 2, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Fourteen (14) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this seminar, the emphasis is put on introduction of Japanese systems as a reference.

The following major subjects will be covered in the seminar.

- 1) civil aviation
- 2) airport management and security guard
- 3) countermeasures against acts of unlawful interference
- 4) security control systems
(preventive measures by air carriers, manuals, training of security personnel, security equipment, etc.)

This seminar is designed so as to let participants

- (1) acquire the fundamental knowledge of international measures for aviation security.
- (2) acquire the fundamental knowledge of countermeasures for aviation security and of security control system practiced in Japan as a reference.
- (3) obtain the fundamental technical knowledge of security equipment, and
- (4) identify the problems of aviation security in each participating countries, and thus contributing to considering the improvement for the problems.

5. QUALIFICATION OF APPLICANT

- 1) university graduate in civil aviation or equivalent
- 2) currently employed by their governments or other public authorities for civil aviation
(It is desirable to be in the leading positions of administrative and/or policy-planning sections for aviation security.)
- 3) have not less than five years of occupational experience in the field of aviation security
- 4) under 45 years of age

6. TRAINING INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) Civil Aviation Bureau, Ministry of Transport
- 3) Airport Security Business Center (ASBC)

7. REMARKS