

2. Project Guideline の事例 (マレーシア FIDA センター)

I センター設立の背景

1 背景

マレーシア政府は、第3次マレーシア計画(1976-1980)において製造部門の育成を計ることにより一層の発展を意図している。このため、従来輸入にたよってきた製造品部品の国内供給を高め輸入代替を計るとともに輸入の増加を計画している。一方わが国から、マレーシアへの進出企業は約200社におよび、外資投資額では第2位を占めている。マレーシアとしては日本の技術レベルを信頼し、電気メッキ、プレス技術指導訓練を行うFIDA センターへの協力を要請してきたものである。

2 経緯

| | |
|------------|---|
| 昭和 52. 3 | プロジェクト選定調査団派遣 |
| 51. 12. 21 | マ側 機械リスト案の提出および督促 |
| 51. 7. 23 | FIDA センターに対する問い合わせ(機械供与額等) |
| 51. 5. 30 | FIDA センター正式要請(大使発外務大臣宛 0465号) |
| 49. 12. | Report on Survey of the Electroplating Industry in West Malaysia 提出(FIDA) |
| 49. 5. 24 | 野中専門家派遣(派遣事業部)(元シンガポール原型製造訓練センター専門家) |
| 49. 1 | 電気メッキ専門家派遣要請 |

II 設立計画の概要

1 設立の目的

マレーシアにおける部品工業の振興を計るため電気メッキ、プレス、溶接等の分野における技術開発、技術指導、人材の養成および情報の収集をはかることを目的とする。

2 行政上の位置づけ

Federal Industrial Authority(連邦工業開発局)の下に新設される。

3 センターの機能および業務

1) センターの機能

- i 既存企業に対する経営、品質管理および実用技術に関する開発および指導
- ii 人材養成
- iii 技術情報の収集

2) センターの業務(関連企業と密接なコンタクトを持つ)

i 次の分野の技術指導

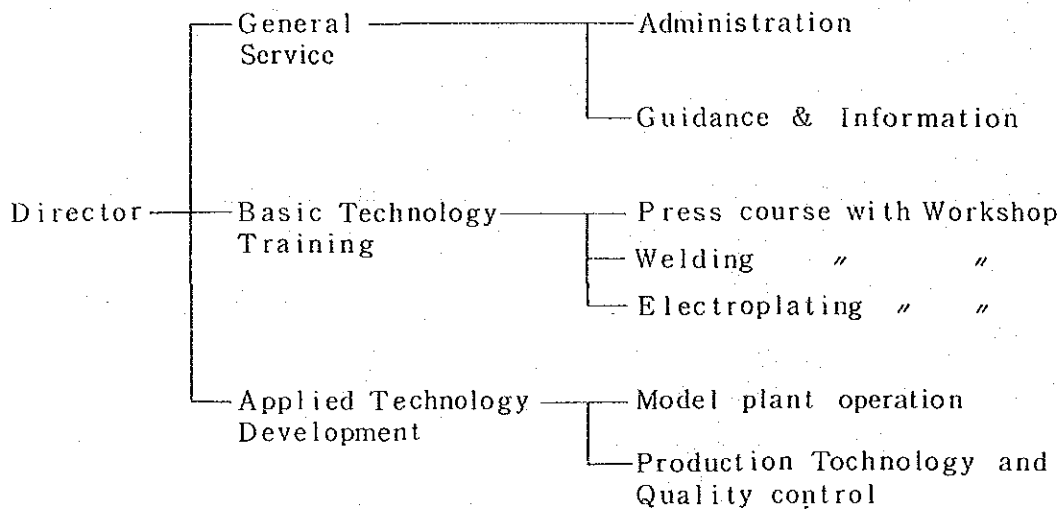
- a Press Die
- b Press Work
- c Welding

- d Electroplating
- ii 次の分野の技術訓練
 - a Press Die
 - b Press Work
 - c Welding
 - d Electroplating

4 組織と人員：日本側の調査団と相談の上決定したいとしている。

○ A案

1) 組織

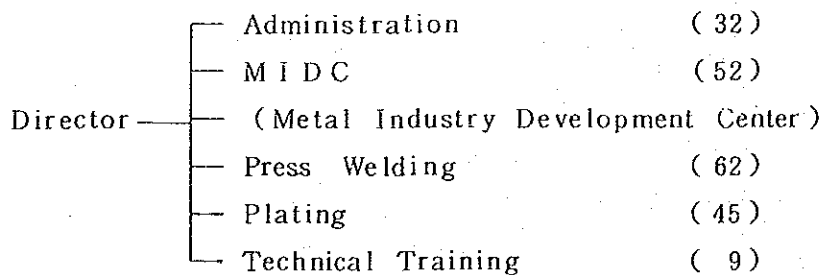


| | 所長 | 次長 | 部長 | 課長及主任 | 技術者 事務担当 | 雇員 |
|-----------------|----|----|----|-------|-------------|----|
| General Service | 1 | | 1 | 2 | 25 | 13 |
| B.T.Training | | | 1 | 6 | 12 | 15 |
| A.T.Development | | 1 | 1 | 5 | 10 | 16 |
| 計 | 1 | 1 | 3 | 13 | 47 | 44 |

計 109名

○ B案 (マレーシア 51.5 要請)

1) 組織



2) 人員 209名

2 施設

- 1) 敷地 } FIDAとしては、非公式に旧N I S I R (National Institute of
2) 建物 } Science and Industrial Research) の敷地と建物の使用を考えている。
約 1,710 m² × 3 棟

III 協力のすすめ方

1 基本事項

(協力の範囲)

- ① 技術協力の期間は4年とする。

(費用の分担)

- ② 本センターの費用については、土地、建物、現地スタッフの確保その他ローカルコストはマレーシア側の負担とし、日本側は機材供与、専門家派遣費用、研修員受入費用を予算の範囲内で負担する。

(協力の方式)

- ③ 本協力の推進はR Dによって行う。

(協力の重要点)

- ④ 本協力の重要点は部品の効率的な生産方法の技術移転にある。

(人材の養成方法)

- ⑤ マ側カウターパートの養成は1ケ年で行うこととし、日本での研修を6ヶ月 マレーシアでの研修を6ヶ月行う。

(機材供与)

- ⑥ 機材供与はC I F 価格2.4億円を目途とし、センターの開所に間に合うよう基礎的機材から送付する。

(プロジェクト マネージャー)

- ⑦ プロジェクト マネージャーを早急に決定し、本プロジェクトの技術面の準備を推進する。

(年次協議会)

- ⑧ 年次協議会を毎年マレーシア国において開催しエバリュエーションと次年度の計画を討議する。

(実施機関)

- ⑨ マレーシア側はF I D Aとし、日本側はJ I C Aが実施機関とする。

2 協力のスケジュール

Preparation → Basic Establishment → Initial Operation

| | 52/4 | 53/4 | 54/4 | 55/4 | 56/4 | 57/4 | 58/4 |
|-----------------------------------|------|--------------|--------------|--|--------------|-------------------------|------|
| 1) Survey | | 52/7 事前調査 | 53/4 実施調査 | 54/4 計画打合せ | 55/4 巡回指導 | 56/4 機材修理 エバレーション | |
| 2) Expert | | | | Expert Director 1名 Die - making Expert 1" Press work " 1" Welding " 1" Electroplating " 1" Coordinator " 1" | | | |
| 3) Fellowship | | | 2名 | 3名 | 2名 | | |
| - Observation | | | | | | | |
| - Instructor for Basic Training | | | | | | | |
| - Instructor for Applied Training | | | | 3名 | 2名 | 2名 | |
| 4) Equipment | | | 53/10 | 54/10 | | | |
| - Basic Training | | | | | | | |
| - Applied " | | | | | | | |
| 5) Building Construction | | 53/1 | | | | | |

3 予算措置

i 日本側

(単位 千円)

| | 1 | | 2 | | 3 | | 4 | |
|------------------|---------------|------------------------|----------------|---------------|--------------------------------|---------------|---------|--|
| | 5 2 | 5 3 | 5 4 | 5 5 | 5 6 | 5 7 | 計 | |
| 調 査 | 事前調査 3,766 | (P/D) 実施協議 3,360 | 計画打合せ 3,568 | 巡回指導 2,603 | 機材修理 エバリュ エーション 6,285 | 0 | 19,582 | |
| 専 門 家 派 遣 | | 2人(新規) 14,000 | 6人 65,000 | 6人 65,000 | 6人 65,000 | 6人(帰国) 600 | 209,600 | |
| 機 材 供 与 | | 20,000 | 180,000 | 30,000 | 10,000 | 0 | 240,000 | |
| 研 修 員 受 入 | | 3人 | 3人 | 2人 | 2人 | | | |
| 金額(研修費受 入を除く) | 3,766 | 37,360 | 248,568 | 97,630 | 81,285 | 600 | 469,182 | |

ii マレーシア側

マレーシアの予算年度は歴年と同一である。

マ側の一応の予算措置は 7,220,000 Mドル(5年間) = 866,400千円

参 考

F I D Aセンター設立構想 案

1 目 的

本センターは、マレーシアの機械部品工業の近代化と育成を図ることを目的とし、当面部品工業のうち溶接、プレス、電気メッキの三業種に関する技術指導センターとして発足させる。

マレーシアには、先進工業国の企業進出による自動車をはじめ電気機器、電子材器、農業用材器などの製造工場が沢山あるが、これらの機器生産に必要な部品の大部分は輸入に頼っている。

マレーシアには、上記三業種に関する中小企業が相当数存在するものの、これらマレーシア部品企業は、中古品市場が部品修理市場への部品供給が主であり、また、その企業規模も殆んどが10人以下（平均5人以下）の零細企業であり、経営能力、技術能力から、先進工業国による進出企業の近代的な材器製造工場への部品供給能力を備えていない。

これら零細部品工業の近代化および育成は長期的、多角的検討が必要である。

本センターは、マレーシア部品工業の技術能力、経済能力を適格に把握し、また、先進工業国による進出企業のニーズを把握しつつ、マレーシア部品工業に対し適切な助言、改善指導を行うことを第1の目的とする。

また、併せて、将来のマレーシア部品工業の近代化のために必要な指導者の育成を行う。

特に、F I D Aセンターに、この部品工業の中心的役割を果させるため、本センターのマレーシア人による運営、指導が可能となるよう、日本からの派遣専門家は指導者の育成に努力するものとする。

2 事業実施内容

(1) 巡回指導及び調査事業

マレーシア企業および進出企業を巡回訪問し、各企業の技術レベル、能力等を調査し、また、経営者や技術指導者の欲しているニーズ把握を行う。同時に、必要な助言および改善策を提案する。

本巡回事業は、本センターの発足の初年度および二年度に重点的に実施し、本センター事業実施計画推進の参考資料を得るとともに、本センターのマレーシア企業への浸透を図る。

| | 既存企業 | | | 初年度実施計画 | | | 二年度実施計画 | | |
|-----------------|------|-------|-----|---------|----|-----|---------|----|-----|
| | プレス | 溶接 | メッキ | プレス | 溶接 | メッキ | プレス | 溶接 | メッキ |
| Selangor | 50 | 300 | 23 | 10 | 10 | 10 | 10 | 10 | 10 |
| Malacca | 5 | 50 | 3 | | | | 5 | 10 | 3 |
| Johore | 10 | 100 | 11 | 5 | 10 | 5 | | | |
| Perak | 30 | 100 | 11 | 10 | 10 | 10 | | | |
| Penang | 40 | 50 | 18 | 5 | 5 | 5 | 5 | 5 | 5 |
| Negeri Sembilan | 20 | 30 | 4 | | | | 5 | 10 | 4 |
| Kedah | 10 | 10 | - | | | | 5 | 5 | |
| Penang | 10 | 30 | - | | | | 5 | 5 | |
| Trengganu | 5 | 10 | - | | | | 5 | 5 | |
| Kelantan | 5 | 20 | - | | | | 5 | 5 | |
| 工場数 計 | 185 | 700 | 70 | 30 | 35 | 30 | 45 | 55 | 22 |
| 従業員数 計 | 860 | 2,660 | 447 | | | | | | |

(注)

巡回チーム

日本派遣専門家 2名とマレーシア技師 2～3名で1チームを編成

巡回指導日数 1日 2工場

別途 初年度に進出企業 約 30企業の調査を行う。

(ii) 技術講習会の実施

既存企業の Fore man クラスを対象として、下記のような技術別講習会を定期的を実施する。

- a. 自動車, 農機器用 Press コース
- b. 家電用 Press コース
- c. 金型設計, 修理, 改良コース
- d. 溶接検査コース
- e. 特殊溶接 (薄板, 非鉄金属) コース
- f. 電気メッキ コース
- g. メッキ排水処理コース
- h. その他

日本からの派遣専門家は, 溶接, プレス, メッキの各分野1各であり, 各コースは受講者を10名程度とし当面1週間を年2回が限度と考えられる。

なお, 進出企業から特別講師を招いたり, 進出企業の最新機器による実習を行うよう制度の確立を図る必要がある。

また、特殊技術や高度の測定技術、品質管理などに関し日本の特殊専門家を短期間（1ヶ月程度）招いて各地で特別講習会を行う制度を確立する必要がある。

(iii) F I D A センター技術スタッフの養成

日本からの専門家の派遣期間は約3年間を目途とし、その後は原則としてマレーシア人スタッフによりF I D A センターを運営するものとする。そして、4年目以降はマレーシア側の要請により日本から新たな特定分野の専門家の短期又は長期の派遣を行うものとする。

このため、最初の3年間は次の体制によるものとする。

- a 初年度（実質活動6ヶ月）は、各分野毎に日本人専門家1名に対し、マレーシア専門家2名、アシスタント2名合計5人を各分野のテクニカルアドバイザーグループとして編成し、アドバイザー活動を行う。
- b 2年度には、各分野のマレーシア専門家1名 合計3～4人を1年間の日本研修に出す。
- c 3年度には、各分野の他の専門家を同じく1年間日本研修に出す。

上記のマレーシア専門家の日本研修には、マレーシア民間企業の優秀技師2～3名をつけて同じ研修を行うことも考慮する。

(iv) マレーシア製品の試験業務

巡回指導などにより、マレーシア製品のサンプルを試験し問題点と技術改善点を指摘する。

また、各分野の品質管理上必要な試験方法の指導を行う。このためF I D A センターに必要な試験装置と、試験片の製作に必要な工作機械を整備する。

また、一定期間、マレーシア企業に試験装置を開放しマレーシア企業の試験研究の指導を行う。

試験内容は概ね次のようなものとする。

| | |
|-------|--------------|
| 材料試験 | (溶接, プレス製品) |
| 非破壊試験 | (" ") |
| 塑性試験 | (" ") |
| 精密測定 | (" " メッキ製品) |
| 化学分析 | (メッキ液, 排水) |

3 F I D A センターの機械設備の整備

<初年度>

(i) 工作機械（試験片製作用）

| | | |
|-------|-----|--------|
| 旋盤 | 1 台 | 250 万円 |
| セーパー | " | 150 |
| ミーリング | " | 100 |

| | | |
|------------|-----|--------|
| 卓上ボール盤 | 1 台 | 100 万円 |
| ノコ盤 | " | 100 |
| バンドソウ | " | 50 |
| 両面グラインダー | " | 50 |
| アングルグラインダー | " | 50 |

計 1,000 万円

(ii) 溶接機

| | | |
|----------|-----|-----|
| 交流アーク溶接機 | 3 台 | 150 |
| 炭酸ガス | 1 台 | 50 |
| スポット | 1 台 | 150 |
| 高周波 | 1 台 | 150 |

計 500 万円

(iii) 試験機

| | | |
|---------|------------------|--------|
| 万能材料試験機 | 50 t | 400 万円 |
| 超音波探傷機 | FO-210 2台 | 400 |
| 工業用×線装置 | (現像装置を含む) 300kvp | 500 |

計 1,400 万円

(iv) その他工具類

計 100 万円

以上、初年度 合計 3,000 万円 × 1.2 = 3,600 万円

(輸送, 梱包)

<二年度>

(i) 工作機械

| | |
|-----------|--------|
| 万能工具フライス盤 | 300 万円 |
| 放電加工機 | 2,000 |
| 万能研削盤 | 300 |
| 形削盤 | 200 |

計 2,800 万円

(ii) プレス, 金型

| | | |
|---------|--------|--------|
| マイティプレス | 75 ton | 800 万円 |
| プレス | 50 | 500 |
| " | 25 | 300 |
| 金型一式 | | 1,000 |

計 2,600 万円

(iii) メッキ
 メッキ装置一式 (銅, 亜鉛, 錫) 計 2,000 万円

(iv) 溶接機

| | | |
|---------|-----|----------|
| Tig 溶接機 | 1 台 | 60 万円 |
| Mig " | " | 150 |
| 超音波 " | " | 100 |
| アルゴン " | " | 60 |
| 自動切断機 | " | 20 |
| | | 計 390 万円 |

(v) 試験機

| | | |
|------------|-----------|------------|
| 表面アラサ測定機 | | 400 万円 |
| 万能測定顕微鏡 | | 500 |
| 万能投影機 | | 350 |
| 磁気探傷装置 | | 700 |
| 原子吸光分光光度計 | | 500 |
| 万能電解分析装置 | | 200 |
| 塩水噴霧試験機 | | 100 |
| 膜厚測定機 | | 100 |
| 排水処理装置 | | 250 |
| 純水装置 | | 100 |
| 金属薄板深紋り試験機 | | 400 |
| 万能金属顕微鏡 | | 500 |
| 試料研磨機 | | 50 |
| 〃 切断機 | | 50 |
| 超音波厚み測定機 | | 100 |
| 小型電子顕微鏡 | | 500 |
| 工業用 X 線装置 | 100 K V P | 200 |
| 電気分析用電解装置 | | 200 |
| | | 計 5,200 万円 |

(vi) 予備費 (工具類, 周辺機器, スペーパーパーツ) 3,000 万円

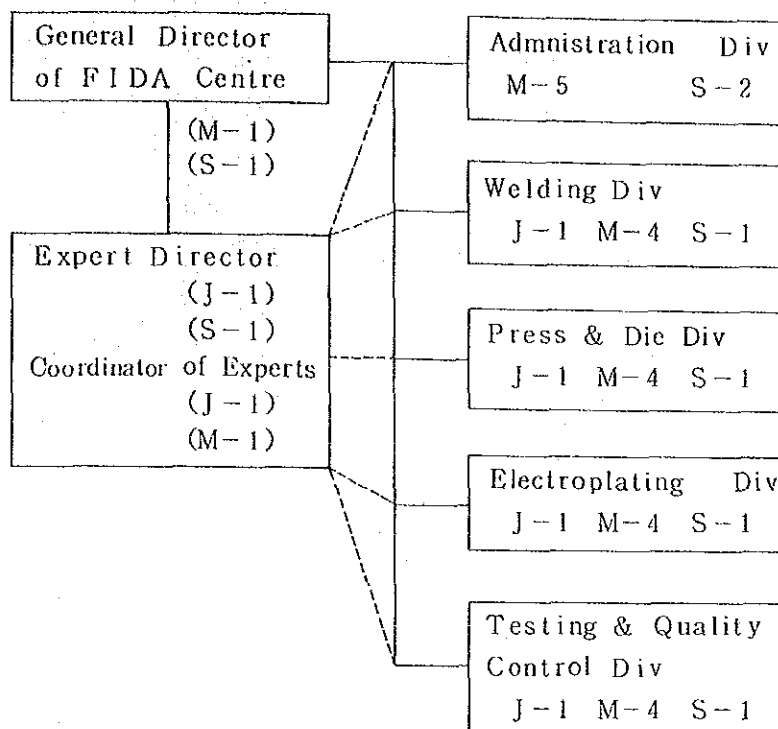
二年度 合計 15,990 万円 × 1.2 = 19,180 万円

初年度 + 二年度 = 2 億 2,780 万円

なお, 上記経費 C I F 価格の概算であり, 調査団編成後, 専門家による機器リストの見直し, および価格調査を行う必要がある。

また、現地搬入、据付費、動力電源設備、上下水道、機械基礎工事、空調設備、材料費はマレーシア側で経費負担されることを前提としている。

4. FIDAセンターの組織



J - Japanese experts 6人

M - Malaysian staffs 23

S - Secretaries, Typists 8

計 37人

5. マレーシア側の必要経費概算

(1) 第1棟の改善費 (事務室, 会議室, 図書室, 講義室および試験室)

$$1,700m^2 \times 200,000\text{円}/m^2 = 340,000,000\text{円}$$

(空調設備, 電気配線, 照明, 上下水道, 間仕切, 内装費を含む。)

(2) 第2棟 改造費 (機械棟)

$$1,700m^2 \times 100,000\text{円}/m^2 = 170,000,000\text{円}$$

(3) 事務機, ロッカー類

公用車 2,500,000円 × 4台 = 10,000,000円

机, 椅子 150,000円/式 × 50 = 7,500,000

ロッカー 30,000円 × 60 = 1,800,000

ソファーセット 200,000円 × 5 = 1,000,000

| | | | |
|-----------------------|-------|----------------|----------------|
| 会議室 | テーブル | 100,000 × 6台 = | 600,000 |
| | 椅子 | 30,000 × 30 = | 900,000 |
| 書庫戸棚 | | 50,000 × 10 = | 500,000 |
| タイプライター | | 200,000 × 8 = | 1,600,000 |
| | | 100,000 × 4 = | 400,000 |
| 講義室 | 机, 椅子 | 30,000 × 40 = | 1,200,000 |
| 映写装置 | 一式 | | 500,000 |
| スライド | | | 200,000 |
| 電卓計算器ほかコピー事務機および事務用品等 | | | 3,000,000 |
| | | | 計 29,200,000 円 |

(4) 機器搬入, 据付

初年度 100,000,000 円 × 0.2 = 20,000,000 円

二年度 140,000,000 円 × 0.2 = 28,000,000 円

(5) 試験機器等 維持費

100,000,000 円 × 0.2 = 20,000,000 円/年

(2年度 240,000,000 × 0.2 = 48,000,000 円/年)

(6) 材料費 Steel, sheets, chemicals, × Ray film,

(電気代, 水代を含む) 20,000,000 円/年

(7) 人件費 (マレーシア人 40人)

平均 2,500,000 円/年 × 31人 = 77,500,000 円/年

(8) 事務費

通常経費 50,000 × 12ヶ月 × 37人 = 25,800,000 円/年

会議費 300,000 × 12ヶ月 = 3,600,000

巡回旅費 100,000 円 × 10人 × 12ヶ月 = 12,000,000

公用車維持費 100,000 円 × 4台 × 12ヶ月 = 4,800,000

その他 100,000 円 × 12ヶ月 = 1,200,000

計 47,400,000 円/年

以上合計 初年度必要経費概算 723,100,000 円

2年度 210,900,000

3年度 200,000,000

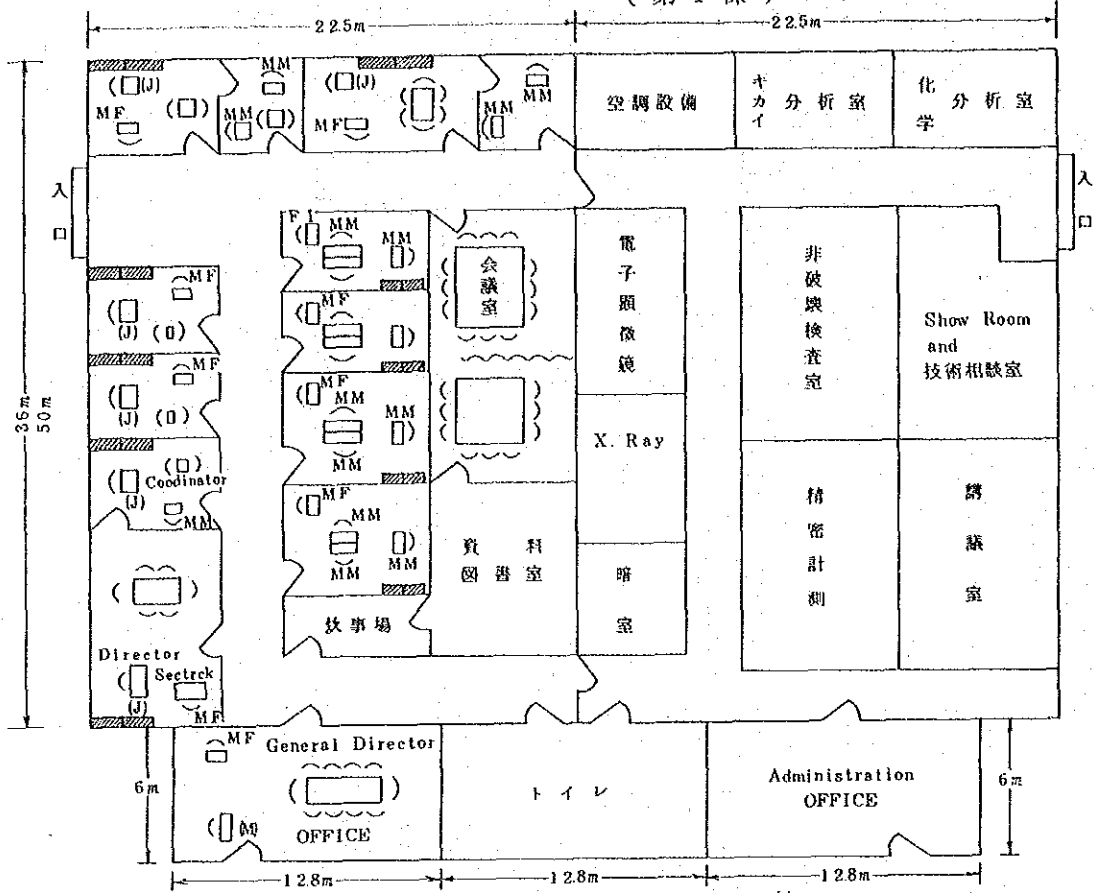
4年度 220,000,000

計 1,354,000,000 円

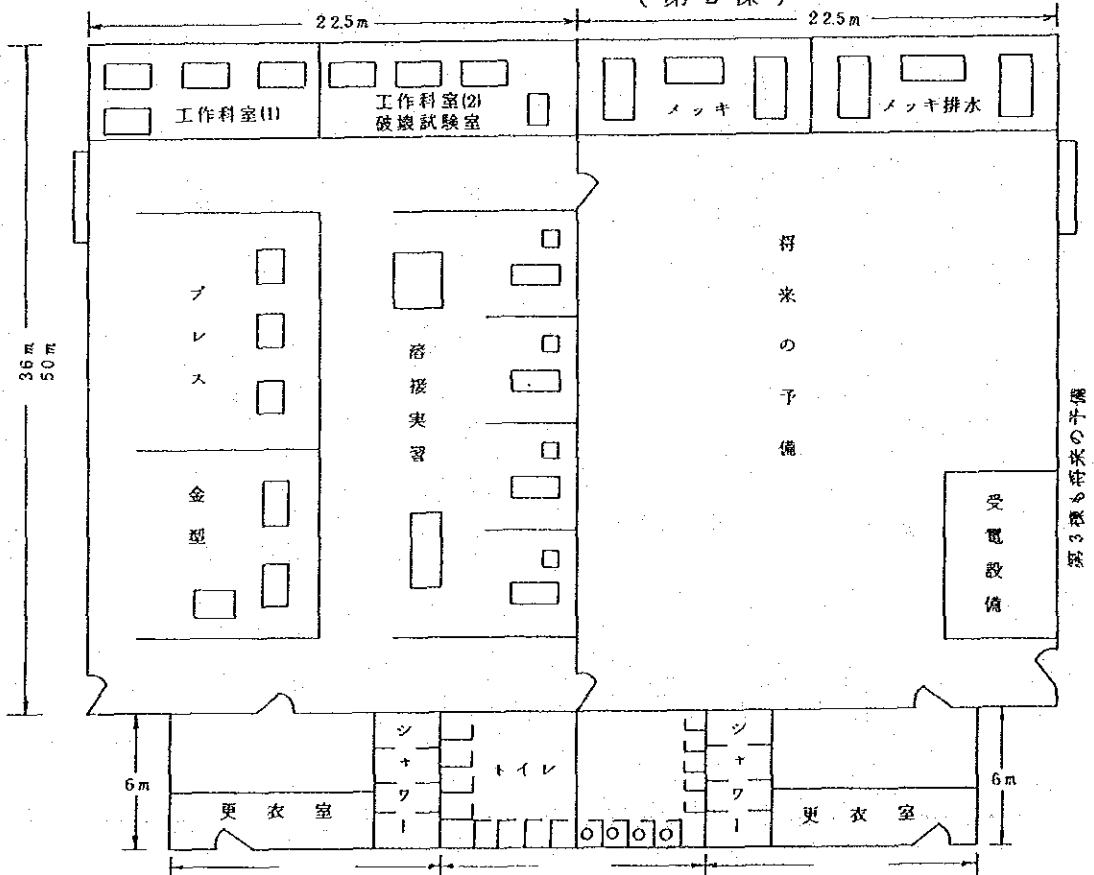
6. 初年度および二年度のスケジュール

| 年 | 月 | マレーシア側 | 日本側 | 年 | 月 | マレーシア側 | 日本側 |
|------|------|---------------------------|--------------------------|------|------|----------------------------|------------------------|
| 1978 | Jan | NISIR 建物改造設計 改造工事発注 | 最終的機器配置のため専門 家派遣 (3名) | 1979 | Jan | (本格活動開始) | (本格活動開始) |
| | Feb | | | | | Feb | |
| | Mar | 改造工事 | 試験機器等発注 | | Mar | | 日本での研修コース、 スケジュール作成 |
| | Apr | | | | | Apr | FIDA センタースタッフ 研修計画 |
| | May | | 船積 | | May | | |
| | Jun | 内装工事 | | | Jun | (FIDA センタースタッフ 7日本研修4名) | (研修受入) |
| | July | 事務機等発注 | 現地着 | | July | | |
| | Aug | 試験機器等搬入, 据付 | 据付指導専門家派遣4名 | | Aug | | |
| | Sept | Malaysian staff 決定, 配置 | 正式専門家6名派遣 | | Sept | | |
| | Oct | Open | 活動準備 | | Oct | | |
| | Nov | | K.L. 周辺企業巡回訪問 | | Nov | | |
| | Dec | 翌年度計画策定 | 翌年度計画策定 | | Dec | | |

7. NISIR 建物 1700m 1棟
(第1棟)



NISIR 建物 1700m 1棟
(第2棟)



2 国内協力体制について

1) 技術協力提供機関の選定

2) 推進体制の確立

3 事前調査用の派遣について

1) 派遣時期 52年・8月

2) 派遣期間 30日以内

3) 団員構成 5人(人数・分野)

4 今後の作業予定

7月27～

方針決定 野中氏に資料送付

8月1日～15日

事前調査の準備 団員決定

8月4～5日頃

外務省を通じ事前調査団員構成、派遣時期を正式に連絡

| | | | | | | |
|------------|---|-------------|----------|--------|----|--|
| 構成 (5名) | { | 団長 | 時期 | 9月15日 | 出発 | |
| | | 溶接専門家 | | 10月15日 | 帰国 | |
| | | プレス, 金型専門家 | スケジュール…… | 別途作成 | | |
| | | 材料検査, 試験専門家 | | | | |
| | | コーディネーター | | | | |

8月22日～27日

事前調査団 打ち合せ 資料収集 構想見直し

8月29日～9月3日

資料整理, 英訳資料の発注

9月10日

準備完了

9月15日～10月15日

事前調査

10月17日～10月31日

調査結果とりまとめ

11月1日～11月15日

最終案の作成

3. ミニッツの事例(タイ労災リハビリセンター)

MINUTES OF MEETING FOR TECHNICAL COOPERATION ON THE PROJECT OF THE INDUSTRIAL REHABILITATION CENTER IN THAILAND

The Japanese Preliminary Survey Team (hereinafter called "the Team") headed by Mr. Kunihiro Matsumoto, Director of the Labour Welfare Projects Corporation, was dispatched by the Japan International Cooperation Agency from March 13 to 26, 1983 for the purpose of making the study on the request of technical co-operation on the Project of the Industrial Rehabilitation Center (hereinafter called "IRC") and of exchanging views with the Department of Labour's officials of the Ministry of Interior (hereinafter called "the DOL officials") on the proposed project.

As a result of the study and a series of discussions, the Team and DOL Officials came to the tentative understanding of the matters referred to below.

1. Purpose

The DOL Officials indicated that IRC aims at promoting the vocational independence of those who are disabled due to work-related accidents, taking measures to expand their job opportunities as well as contributing to welfare of workers as a whole in Thailand by providing above-mentioned disabled workers with mainly the vocational rehabilitation services and, if necessary, the remedial medical rehabilitation services.

2. Functions

2.1 The Team advised that the clients at IRC are at least those who have received the medical rehabilitation services at hospitals and that the medical rehabilitation services offered at IRC should be limited to such functional training as to improve and/or maintain the clients' present physical functions which are considered to be necessary for receiving the vocational rehabilitation services.

2.2 The Team advised that the vocational rehabilitation services at IRC aims mainly at enabling the clients to return to the previous jobs and that it is also necessary to provide those who are considered not to be appropriate to return to the previous jobs with suitable services according to their needs.

2.3 Related to the Item 2.2 above, the Team also advised that DOL should positively consider to take necessary measures to provide the clients

with financial assistance during their stay at IRC as well as to secure job opportunities for those who graduate from IRC.

3. Budget

The Team affirmed that DOL is now taking measures to secure budget necessary for the operation of IRC and if necessary, to amend the Announcement No. 103 of the National Executive Council on Labour Protection and/or the related Ministry of Interior Announcements in order to make use of the Workmen's Compensation Fund in this respect.

4. Project Site

The DOL Officials stressed that they are now taking measures to secure the site for IRC, infrastructure as well as necessary budget for maintaining the facilities.

5. Others

The DOL Officials indicated that they try to establish supportive systems for successful implementation of the Project.

Bangkok, March 24, 1983.

松本邦宏

Kunihiro Matsumoto
Leader
Preliminary Survey Team
Japan International Cooperation Agency

Vijit Sangtong

Vijit Sangtong
Director-General
Department of Labour
Ministry of Interior

CONTENTS OF DISCUSSIONS

1. PURPOSE OF THE PROJECT

- 1.1 The Japanese Side indicated that the IRC is expected to be a pilot project for strengthening rehabilitation for the disabled workers in Thailand.
- 1.2 The Thai Side indicated that they would consider to expand the same project in the next five-year National Development Plan if the IRC would achieve great success.

2. TARGET OF IMPLEMENTATION OF TECHNICAL COOPERATION

- 2.1 Concerning the Master Plan, the Japanese Side explained its contents based upon the attached material (No. 1).

The Thai Side agreed to it.

- 2.2 The Thai Side expressed that they are going to establish the Industrial Rehabilitation Advisory Committee (IRAC) for giving advice to the DOL on policy planning and administration of the IRC as well as referring the candidates to the IRC.

As to the clients' selection of the IRC, the Japanese Side stressed that the final decision should not be done by the IRAC, but by the Director of the IRC.

- 2.3 The Japanese Side proposed that a Joint Steering Committee should be set up, besides the IRAC, to secure the effective operation of the IRC project.

The Thai Side agreed to it.

- 2.4 Both Sides came to the mutual understanding concerning the importance of the placement services as a function of the IRC and also both sides shared the same point of views as to the necessity of placement services system as well as establishing financial assistance system for those clients of the IRC who are going to engage in self-employment.

- 2.5 Concerning the function of the IRC, the Japanese Side pointed out that it was necessary to establish close cooperation with the nearby hospitals concerning the medical rehabilitation services.

The Thai Side said that they were going to do so.

- 2.6 The Thai Side mentioned that they were going to secure the following personnel for the IRC:

July 1983 - the establishment of the Preparatory Office for the IRC, consisting of 4 full-time and 1 part-time staff members.

July - Sept. 1984 - as the attached materials (No. 2).

October 1984 - as the attached materials (No. 3)

- 2.7 As OT and PT concerned, the Thai Side said that they will employ new graduates from the relevant universities. The Japanese Side insisted that the Thai Side should employ an experienced supervisor for PT.
- 2.8 As chief of vocational assessment (CVA) is concerned, the Japanese Side asked the Thai Side about any prospect of securing experts as CVA. The Thai Side answered that they understand its importance. But, at present, it is not easy to recruit an appropriate person.
- 2.9 The Japanese Side indicated that the Thai Side should recruit as far as possible CVA, social worker, psychologist, and vocational counselor whose majors in universities or colleges are related to the positions concerned.
- 2.10 The Japanese Side stressed that the Director of the IRC should be full-time after the Centre has started its operation.
- 2.11 The Japanese Side indicated that the Thai Side will take necessary measures to reduce any economic hardship of the clients during their stay at the IRC.

The Thai Side would try to do so.

3. CONTENTS OF TECHNICAL COOPERATION

- 3.1 The Thai Side explained that they would like to send four staff members of the preparatory office for the IRC for further training in Japan. The Thai Side stressed that the number of counterparts will be in accordance with the number of experts who would be assigned to the Project for technical transfer.
- 3.2 The Thai Side requested the following fields of Japanese experts: from Medical Rehabilitation one (1) OT, from Vocational Rehabilitation one (1), one Vocational Evaluator, two Vocational Instructors, one Workshop

Supervisor in addition to the Chief Advisor and a coordinator.

The Japanese Side explained that several experts will be sent.

3.3 Both Sides came to the understanding that the technical cooperation would last for 3-5 years.

3.4 The Japanese Side stressed that the Chief Advisor can provide necessary technical and managerial advice on the Project not only to the Director of the IRC but also to the Director of the WCF and the Director-General of the Department of Labour.

4. BUILDINGS AND FACILITIES OF THE IRC

4.1 The Thai Side requested the Japanese Side for the necessary buildings, equipment and facilities and etc. for the IRC as the attached materials (No. 4).

4.2 The Thai Side, at the beginning, proposed two sites, but later withdraw one of them due to the uncertainty in securing the land. After the Japanese Side had studied the site (about 27 rais) at Bangpoon, Prathum Thani Province, they pointed out that the land needed to be levelled up.

The Thai Side mentioned that they are going to take the necessary steps to secure the budget in 1983 fiscal year. They also mentioned that they are consulting with the Treasury Department on the transfer of the site, which is now under the Accelerated Rural Development Office, to the Department of Labour.

4.3 The Thai Side mentioned that they can secure the budget both for 1983 and 1984 which would be necessary to establish the IRC as soon as they got the confirmation letter from the Japanese Government in this respect.

And also the Thai Side mentioned that they are requesting the Budget Bureau for necessary budget for infrastructural improvement of the Site as well as the maintenance costs for the buildings, equipment and facilities of the IRC.

5. ORGANIZATION

5.1 For organizing the IRC, the attached materials (No. 4) were submitted by the Thai Side.

The Japanese Side emphasised that the studies and preparation of

research project concerning the causes and ways to prevent such accidents which is now included as one of the functions of the vocational studies and planning of the IRC, should be removed from the IRC and should be left to the WCF.

5.2 Capacity and Vocational Training Courses

- (1) Concerning the capacity of the IRC, the Thai Side mentioned that the capacity of the IRC should be one hundred.

The Japanese Side agreed that it would be appropriate for the time being, based on the statistics of injured workers provided by the Thai Side.

- (2) The Japanese Side pointed out that the following vocational training courses would be appropriate for the time being under the present situation in Thailand:

- Repairing of electric and electronic appliances
- Sewing
- Wood work
- Machine work
- Metal work
- Printing work

- (3) The Japanese Side also pointed out that the capacity for training of each course should be 8-10 persons, and the total capacity for vocational training courses should be appropriate at around 50 persons.

- (4) The Japanese Side pointed out that the length of each training course should be flexibly fixed between 4-12 months according to the needs of the clients and labour market as well.

The Thai Side agreed to it.

Bangkok, March 25, 1983.

参 考 资 料

1. Questionnaire

(1) Survey Items for Industrial Rehabilitation Center Project in Thailand

Outline of the Project

(1) Purpose

Referring to National Development Plan in Thailand commenting project effects according to indications of economical and employment statistics.

(2) Utilization Plan of Technical Transfer

Referring to how to utilize actual results of technical transfer influencing to national development plan with what organization and what provision of budget available---name of organization, summary of existing organization or institute, number of staff, technicians, experts and their technical position.

(3) Other Technical Cooperation

Referring to the same organization proposed or under operation from other foreign countries or international units. If any, commenting mutual relation and function of these projects.

(4) Priority

Referring to priority and urgency reflecting Government Development Program.

Target of Technical Cooperation

(1) Definite Target

Referring to materialized picture of the overall project formation in the linkage of the National Development Programme.

(2) Period of Technical Cooperation

Referring to certain accomplishments of technical transfer mentioned above (1).

(3) Necessary Measures to be Taken

Major responsibilities as a premise of attaining target must be made clear in building construction, securing of counterpart personnels, provision of

technical extension structure and other necessary factors leading to well implementation.

Institution of Implementation

(1) Summary of Budget

Referring to total and yearly budget available through technical cooperation provided by the implementation organization and the Government.

(2) Detailed Items of Budget

Referring to personnel cost per a person, average personnel cost, total running cost including administrative and managerial expenditure per a training course in a reasonable basis.

(3) Major Classification of Budget

Referring to respectively personnel cost, administrative cost and training cost with materials.

(4) Project Budgetary Plan

Referring to a total period of technical cooperation with each implementation year.

(5) Relation of Government Budget and Workmen's Compensation Fund

Referring to scope and accurate difference between Government Budget and its Fund in their disbursement based on Government rules and regulations.

(6) Tentative Schedule of Project Implementation and Timing of Securing Request of Budget

Perspective of Securing Counterpart Personnels

(1) Number of Counterpart Personnels

(2) Qualification, Prospect of Recruiting and Name of Candidates

(3) Overall Chart of Allocation

Referring to total number of staff and experts available in each departments.

(4) Recruiting Condition

Referring to their salary (income), employment stabilization condition in comparizon to other private enterprises. If necessary, commenting government countermeasure to decrease their outflow.

Project Organization

(1) Administrative and Managerial Structure

Referring to clarification of Government direction and project function possessing responsibilities.

(2) Improvement Schedule of Infrastructure

Referring to water supply, capacity of electricity and access roads and etc.

(3) Other Measures to Be Taken for Effective Implementation

(2) Questionnaire to the Dept. of Labour

1. Statistical information of injured workers who are covered by the Workmen's Compensation Fund, especially those of 1,275 permanent partially disabled workers among those who received benefits from the Fund.

1-1 Number of disabled workers by disability conditions of extremities, and in case of upper extremities, of which extremity is affected.

Table 1

1-2 Number of disabled workers by severity of disability.

Table 1

1-3 Number of disabled workers by educational level and marital status.

Table 2

1-5 Number of disabled workers by employment status and place.

Table 3

2. Interview with those disabled workers who are considered to be most difficult to return to working lives among those of 1,275 permanent partially disabled workers, and who are selected by a random sampling method.

(1) Number of disabled workers to be interviewed with --- 10 persons.

(2) Scheduled date of the interview --- March 16 (full day)

(3) Items to be questioned through the interview are as follows;

a. Factors which prevent them from securing employment.

b. Living conditions of those disabled workers.

c. Needed rehabilitation services for them to return to vocationally independent lives.

3. Activities of referral officers

3-1 Number and function of referral officers.

3-2 Number of disabled workers who were provided services by referral officers.

4. Factory survey related to selecting vocational training courses

(1) Type and number of factories to visit.

Each one of the following four type of factories where relatively severely disabled workers are employed.

- a. Machine and metal
- b. Machine assembly
- c. Carpentry & woodworking
- d. Electronics

(2) Scheduled date of the survey --- March 18 (full day)

(3) Items to be checked by the survey

- a. Type of machines, equipments and tools used.
- b. Type of jobs done by disabled workers.
- c. Employers' assessment concerning the performance of disabled workers, etc.

5. Masterplan of the Industrial Rehabilitation Center

5-1 Infrastructure around the site.

5-1-1 Hospital, employment service office and enterprises around the Center.

5-1-2 Employment services for disabled workers at the nearby employment service office.

5-1-3 Electricity supply, water supply and drainage situation.

5-1-4 Shape, size and situation of the site.

5-1-5 Traffic situation

5-2 Staffing plan

Recruitment and training of specialists who are needed to provide rehabilitation services at the Center.

Ex. Occupational psychologist, vocational instructor, social worker, etc.

5-3 Budget allocation

Present situation of budgetary allocation for the Center

5-4 Technical assistance

5-4-1 Type and number of specialists to be sent to Japan for training, and its training period.

5-4-2 Type and number of specialists to be sent from Japan to Thailand, and its cooperation period.

I. QUESTIONARY

- I-1 How many medical facilities are there in Thailand
How many of them have rehabilitation facility?
(rehabilitation facility = having more than one PT and training room)
Please classify by areas and capacity for patient.
- I-2 According to your sampling study in 1982, 75% of disabled persons
caused on labour accident desire physical rehabilitation.
How many of them have received medical rehabilitation service
actually?
- I-3 It is to be desired that the center have some functions of recreation
for clients.
- I-4 If this center will be expanding in accesibility feature, what do you
think about limitation of capacity in one such facility?

II. REQUEST

- II-1 To determine the scale of facilities and function in medical re-
habilitation section of the center.
If you have selected a medical doctor who advice you about this
plan, I wish his or her advice about it.
- II-2 I wish some advices from PT and OT of Thailand about the character-
istics of ADL training of Thailand, because I think there are some
difference in ADL from Japan caused on different customs.
- II-3 If it is enabled, I'll visit to local hospital having rehabilitation
facility except in Bangkok and provinces near Bangkok.

4. Record of Discussion (R / D) の事例

—日・シ技術学院—

THE RECORD OF DISCUSSIONS
BETWEEN THE JAPANESE IMPLEMENTATION SURVEY TEAM
AND THE AUTHORITIES CONCERNED OF
THE GOVERNMENT OF THE REPUBLIC OF SINGAPORE
ON THE JAPANESE TECHNICAL COOPERATION FOR
THE JAPAN-SINGAPORE TECHNICAL INSTITUTE PROJECT

The Japanese Implementation Survey Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Mr. Yoshiro Okai, visited the Republic of Singapore from June 5, 1983 to June 18, 1983 for the purpose of working out the details of the technical cooperation program concerning the Japan-Singapore Technical Institute Project.

During its stay in the Republic of Singapore, the Team exchanged views and had a series of discussions with the Singapore authorities concerned in respect of the desirable measures to be taken by both Governments for the successful implementation of the above-mentioned project.

As a result of the discussions, both parties agreed to recommend to their respective Governments the matters referred to in the document attached hereto.

Singapore, June 16, 1983

小 粥 義 朗

(YOSHIRO OKAI)
LEADER
IMPLEMENTATION SURVEY TEAM,
JAPAN INTERNATIONAL
COOPERATION AGENCY,
JAPAN



(P. Y. HWANG)
CHAIRMAN
ECONOMIC DEVELOPMENT BOARD,
REPUBLIC OF SINGAPORE

THE ATTACHED DOCUMENT

I COOPERATION BETWEEN BOTH GOVERNMENTS

1. The Government of Japan and the Government of the Republic of Singapore will cooperate with each other in implementing the Japan-Singapore Technical Institute Project (hereinafter referred to as "the Project") for the purpose of providing practical and theoretical training to Industrial Technicians and thus contributing to the industrial development of the Republic of Singapore.
2. The Project will be implemented in accordance with the Master Plan which is given in section I of the Annex.

II DISPATCH OF JAPANESE EXPERTS

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense services of the Japanese experts as listed in section II of the Annex through the normal procedures under the Colombo Plan Technical Cooperation Scheme.
2. The Japanese experts referred to in 1 above and their families will be granted in the Republic of Singapore the privileges, exemptions and benefits no less favourable than those accorded to experts of third countries working in the Republic of Singapore under the Colombo Plan Technical Cooperation Scheme.

III PROVISION OF MACHINERY AND EQUIPMENT

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense such machinery, equipment and other materials (hereinafter

referred to as "the Equipment") necessary for the implementation of the Project as listed in Section III of the Annex through the normal procedures under the Colombo Plan Technical Cooperation Scheme.

2. The Equipment will become the property of the Government of the Republic of Singapore upon being delivered c.i.f to the Singapore authorities concerned at the ports and/or airports of disembarkation, and will be utilized exclusively for the implementation of the Project in consultation with the Japanese experts referred to in section II of the Annex.

IV TRAINING OF SINGAPORE PERSONNEL IN JAPAN

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to receive at its own expense the Singapore personnel connected with the Project for technical training in Japan through the normal procedures under the Colombo Plan Technical Cooperation Scheme.
2. The Government of the Republic of Singapore will take necessary measures to ensure that the knowledge and experience acquired by the Singapore personnel from technical training in Japan will be utilized effectively for the implementation of the Project.

V SERVICES OF SINGAPORE COUNTERPARTS AND ADMINISTRATIVE PERSONNEL

1. In accordance with the laws and regulations in force in the Republic of Singapore, the Government of the Republic of Singapore will take necessary measures to secure at its own expense the necessary services of Singapore counterparts and administrative personnel as listed in section IV of the Annex.

2. The Government of the Republic of Singapore will allocate the necessary number of suitably qualified personnel corresponding to each Japanese expert to be dispatched by the Government of Japan as specified in section II of the Annex for the effective and successful transfer of technology under the Project.

VI MEASURES TO BE TAKEN BY THE GOVERNMENT
OF THE REPUBLIC OF SINGAPORE

1. In accordance with the laws and regulations in force in the Republic of Singapore, the Government of the Republic of Singapore will take the necessary measures to provide at its own expense:
 - (1) Land, buildings and facilities as listed in section V of the Annex;
 - (2) Supply or replacement of machinery, equipment, instrument, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than those provided through JICA under III above;
 - (3) Transportation facilities and travel allowance for the official travel of Japanese experts within the Republic of Singapore;
 - (4) Suitably furnished accommodations or equivalent housing allowance under the Colombo Plan Technical Cooperation Scheme for the Japanese experts and their families.
2. In accordance with the laws and regulations in force in the Republic of Singapore, the Government of the Republic of Singapore will take the necessary measures to meet:
 - (1) Expenses necessary for the transportation of the Equipment within the Republic of Singapore as well as for the installation, operation and maintenance thereof;

- (2) Customs duties, internal taxes and any other charges, imposed on the Equipment in the Republic of Singapore;
- (3) All running expenses necessary for the implementation of the Project.

VII ADMINISTRATION OF THE PROJECT

1. The Chairman of the Economic Development Board (hereinafter referred to as "EDB") will bear overall responsibility for the implementation of the Project.
2. The Director of the Japan-Singapore Technical Institute (hereinafter referred to as the "Director of Institute"), as the Head of the Project, will be responsible for the administrative and managerial matters of the Project.
3. The Japanese Chief Advisor will provide necessary recommendation and advice on technical and administrative matters concerning the implementation of the Project to the Head of the Project.
4. The Japanese experts will give necessary technical guidance and advice to the Singapore counterparts on matters pertaining to the implementation of the Project.
5. For the effective and successful implementation of the Project, a Management Committee will be established with the functions and composition as referred to in section VI of the Annex.
6. The organisation chart of the project is given in section VII of the Annex.

VIII CLAIMS AGAINST JAPANESE EXPERTS

The Government of the Republic of Singapore undertakes to bear claims, if any arises, against the Japanese experts engaged in the Project resulting from, occurring in the course of, or otherwise connected with the discharge of their official functions in the Republic of Singapore except for those arising from the willful misconduct or gross negligence of the Japanese experts.

IX MUTUAL CONSULTATION

There will be mutual consultation between the two Governments on any major issues arising from, or in connection with this Attached Document.

X TERM OF COOPERATION

The duration of the technical cooperation for the Project under this Attached Document will be five (5) years from June 29, 1983.

However, there will be a general review by the Management Committee and the relevant personnel dispatched by JICA on the progress of the implementation of the Project during the third year of the cooperation period in order to assess whether the term of cooperation should be modified for the successful implementation of the Project.

I MASTER PLAN1. Objective of the Project

The objective of the Project is to establish the Japan-Singapore Technical Institute (hereinafter referred to as "the Institute") for the purpose of training industrial technicians by means of providing theoretical and practical training to secondary school graduates of General Certificate of Education Ordinary Level.

2. Objective of the Japanese Technical Cooperation

The objective of the Japanese Technical Cooperation Program is to assist and advise Singapore counterparts in conducting training courses for Process Control Engineering, Mechatronics Engineering and Industrial Electronics Engineering.

(1) The courses to be set up in the Institute, and the number of trainees are listed in the following table:

| | Course | Enrolment | Intake per 6 Months |
|-----|--|-----------|---------------------------|
| (A) | Process Control Engineering | 60 | 15 |
| (B) | Mechatronics Engineering (Electronics-Oriented Mechanical Engineering) | 160 | 40 |
| (C) | Industrial Electronics Engineering | 280 | 70 |
| | Total | 500 | 125 |

- (2) The training targets of each course referred to in (1) above are as follows:

(A) Process Control Engineering Course

(a) To provide knowledge and skill in process quantity measurement and process control.

(b) To provide techniques in diagnosis and maintenance of measuring equipment and control equipment.

(c) Trainees, upon successful completion of the course:

(i) will be able to conduct diagnosis and maintenance of digital process control system in the process industry;

(ii) will be able to understand the principles in the control of temperature, pressure and flow, and to operate process control equipment;

(iii) will be able to conduct measurements of process quantities, eg temperature and pressure, with the use of analogue and digital measuring equipment;

(iv) will be able to conduct diagnosis and maintenance of instrumentation piping and wiring; and

(v) will be able to understand process control engineering principles.

(B) Mechatronics Engineering Course

(a) To provide knowledge and skill in the operation, maintenance, troubleshooting and repair of automatic machinery and equipment.

(b) Trainees, upon successful completion of the course:

(i) will have knowledge of the various machine tools and be able to operate them to produce components/parts, and to perform assembly, inspection and calibration of machines and components;

(ii) will have knowledge of electrical and electronic circuits and be able to maintain, troubleshoot and repair control circuits;

(iii) will have knowledge of pneumatics and hydraulics and be able to operate, maintain, troubleshoot and repair pneumatic and hydraulic control circuits;

(iv) will have knowledge of NC machine tools and be able to program, operate, maintain and troubleshoot them; and

(v) will be able to understand the principles and operation of industrial robots, and be able to troubleshoot them.

(C) Industrial Electronics Engineering Course

(a) To provide knowledge and skill in the operation, maintenance and troubleshooting of industrial electronic equipment.

(b) Trainees, upon successful completion of the course:

(i) will be able to understand electrical and electronic circuits, and to troubleshoot and repair related equipment;

(ii) will be able to understand the principles of electrical and electronic measuring equipment and to make measurements;

(iii) will have knowledge of automatic control equipment and perform troubleshooting and repair of such equipment;

(iv) will be able to understand the principles of microprocessors, microcomputer peripherals, and other microprocessor-based equipment, and to troubleshoot them; and

(v) will be able to perform programming in Machine language, Assembly language and Basic language.

(3) The duration of training at the Institute will be for a period of two years.

(4) The entry qualification of trainees will be at least ten (10) years of education with the minimum grades in the following subjects at the General Certificate of Education Ordinary Level (GCE "O" Level) Examination.

(i) Credit in Mathematics

(ii) Pass in English

(iii) Pass in an acceptable Science subject.

II JAPANESE EXPERTS

1. Chief Advisor

2. Coordinator

3. Experts in the field of:

(a) Process Control Engineering

(b) Mechatronics Engineering

(c) Industrial Electronics Engineering

(d) Japanese Language.

NOTE: Short-term experts may be dispatched when the necessity arises for the smooth implementation of the Project.

III LIST OF EQUIPMENT

List of main articles to be provided by the Government of Japan will be as follows:

(1) PROCESS CONTROL ENGINEERING

- (a) Single Loop Digital Control System
- (b) Programmable Logic Control System
- (c) Process Distributed Control System
- (d) Digital Measuring Instrument
- (e) Temperature Measurement Experimental Equipment
- (f) Electronic Fundamental Experimental Equipment

(2) MECHATRONICS ENGINEERING

- (a) Industrial Robot
- (b) Training Robot
- (c) Hardware and Software for Pneumatics
- (d) Hardware and Software for Hydraulics
- (e) Automatic NC Tape Preparation System (including software package)
- (f) Calibration and Metrological Equipment

(3) INDUSTRIAL ELECTRONICS ENGINEERING

- (a) Personal Computer System
- (b) Programmable Controller
- (c) Microprocessor Trainer
- (d) Logic Analyser
- (e) Single-Board Microcomputer
- (f) Circuit Trainer

(4) JAPANESE LANGUAGE

Sound-proof Recording Booth.

IV LIST OF SINGAPORE COUNTERPARTS AND
ADMINISTRATIVE PERSONNEL

1. Director
2. Deputy Director
3. Instructors in the fields of:
 - (a) Process Control Engineering
 - (b) Mechatronics Engineering

(c) Industrial Electronics Engineering

(d) Japanese Language

4. Administrative Personnel

(a) Personal Assistants

(b) Clerks

(c) Storekeepers

(d) Guards

(e) Others.

V LIST OF LAND, BUILDINGS AND FACILITIES

(1) Land (Bukit Merah)

(2) Buildings (air-conditioned)

(A) Administrative Rooms

(a) Director's Room

(b) Chief Advisor's Room

(c) Experts' Room

(d) Staff Room

(e) Office

(f) Conference Room

(g) Library

(h) Others

(B) Workshops

(a) Process Control Workshops

(b) Mechatronics Workshops

(c) Industrial Electronics Workshops

(C) Rooms

(a) Classrooms

(b) Audio-Visual Room

(c) Language Laboratory Room (including recording room and others)

(d) Drawing Rooms

(e) Lecture Hall

(f) Others

(3) Facilities

(A) Store

(B) Canteen

(C) Other Necessary Facilities.

VI THE MANAGEMENT COMMITTEE

1. Functions

The Management Committee will be responsible for the following:

- (1) To formulate the Annual Work Plan of the Project in line with the Tentative Schedule of Implementation formulated under the framework of this Record of Discussions;
- (2) To review the overall progress of the technical cooperation program as well as the achievements of the above-mentioned Annual Work Plan;
- (3) To review and exchange views on major issues arising from or in connection with the technical cooperation program.
- (4) Other functions.

2. Composition

(1) Singapore Side:

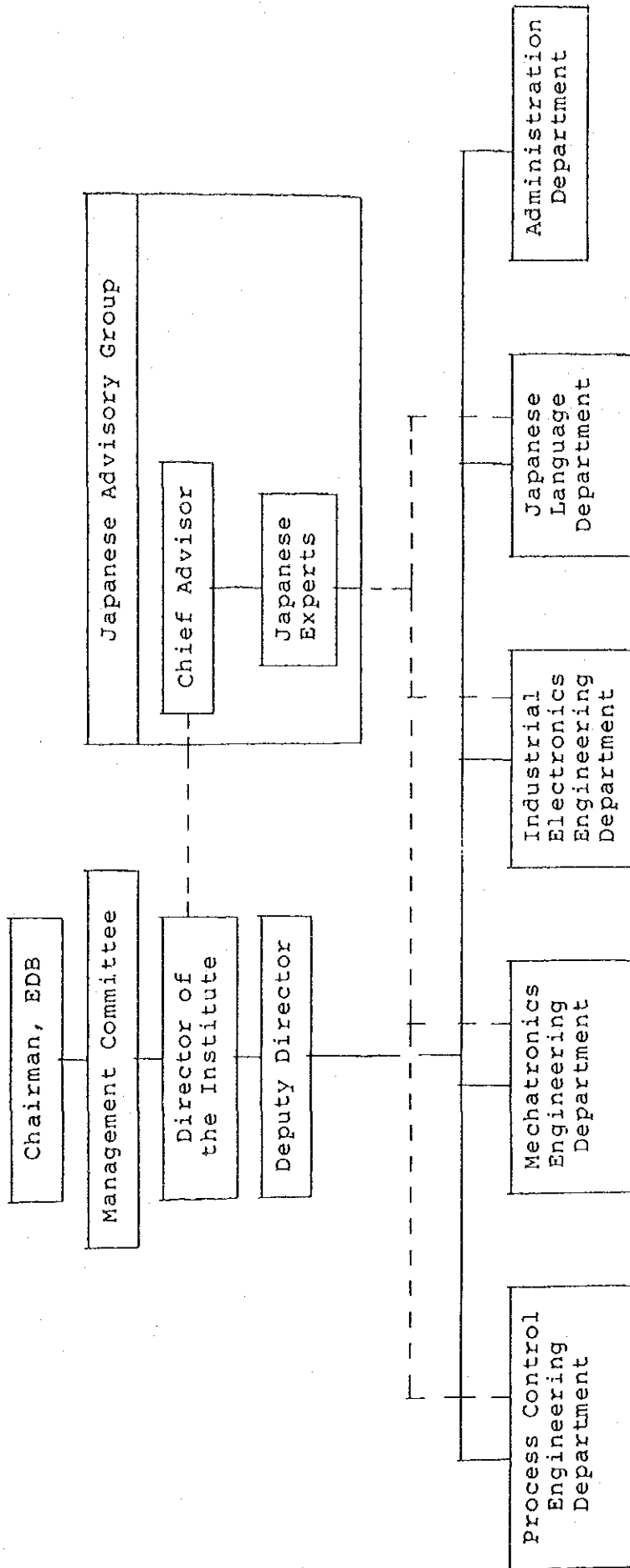
- (a) Chairman: - Representative of EDB
- (b) Members : - Four members from relevant organisations to be nominated by EDB.

(2) Japanese Side:

- (a) Chief Advisor
- (b) Coordinator
- (c) Expert nominated by Chief Advisor
- (d) Resident Representative of Singapore Office,
JICA

NOTE: Official of the Embassy of Japan may attend the Management Committee meeting as an observer.

VII ORGANIZATION CHART OF THE PROJECT



5. Tentative Schedule of Implementation の事例


—日・シ技術学院—

The Japanese Implementation Survey Team and the Chairman of Economic Development Board have jointly formulated, for reference to the 'Record of Discussions between the Japanese Implementation Survey Team and the Authorities concerned of the Government of the Republic of Singapore on the Japanese Technical Cooperation for the Japan-Singapore Technical Institute Project', the Tentative Schedule of Implementation and the Five Year Plan of Technical Cooperation and Its Yearly Targets as annexed hereto.

Singapore, June 16, 1983



(YOSHIRO OKAI)
LEADER
IMPLEMENTATION SURVEY TEAM
JAPAN INTERNATIONAL
COOPERATION AGENCY
JAPAN



(P Y HWANG)
CHAIRMAN
ECONOMIC DEVELOPMENT BOARD
REPUBLIC OF SINGAPORE

TENTATIVE SCHEDULE OF IMPLEMENTATION

| Item | Fiscal Year | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 |
|---|-------------|--------------------|----------|------|------|------|------|
| Term of Cooperation (R/D) | | — five (5) years — | | | | | |
| (Construction of Building and Facilities) | | | May | | | | |
| (Commencement of Courses) | | | November | | | | |
| (Dispatch of Japanese Experts) | | | | | | | |
| 1. Chief Advisor | | | July | | | | |
| 2. Coordinator | | | July | | | | |
| 3. Experts | | | July | | | | |
| (a) Process Control Engineering | | | | | | | |
| (b) Mechatronics Engineering | | | | | | | |
| (c) Industrial Electronics Engineering | | | | | | | |
| (d) Japanese Language | | | | | | | |
| (Provision of Machinery/Equipment) | | | | | | | |
| (Training of Singapore Personnel in Japan) | | | | | | | |
| (Services of Counterpart Personnel/ Administrative Personnel) | | | | | | | |
| 1. Director | | | June | | | | |
| 2. Deputy Director | | | June | | | | |
| 3. Counterpart Personnel | | | June | | | | |
| (a) Process Control Engineering | | | | | | | |
| (b) Mechatronics Engineering | | | | | | | |
| (c) Industrial Electronics Engineering | | | | | | | |
| (d) Japanese Language | | | | | | | |
| 4. Administrative Personnel | | | June | | | | |
| (a) Personal Assistants | | | | | | | |
| (b) Clerks | | | | | | | |
| (c) Storekeepers | | | | | | | |
| (d) Guards | | | | | | | |
| (e) Others | | | | | | | |

NOTES: This schedule is formulated tentatively on the assumption that necessary budget will be acquired by both sides.

This schedule is subject to change within the Scope of the "Record of Discussions" if necessity arises during the course of implementation of the Project.

FIVE YEAR PLAN OF TECHNICAL COOPERATION AND
ITS YEARLY TARGETS

- 1st year:
- 1) Making Guide Plan for Curriculum
 - 2) Making Guide Plan for Workshop Layout
 - 3) Making Plan of Instructor Training for Counterpart Personnel
 - 4) Training Counterpart Personnel (Fundamental Theory and Fundamental Practice)
 - 5) Checking Machinery and Equipment and Training Counterpart Personnel in their Operation and Maintenance
- 2nd year:
- 1) Reviewing Curriculum (Fundamental Theory and Fundamental Practice)
 - 2) Making Teaching Materials (Fundamental Theory and Fundamental Practice)
 - 3) Training Counterpart Personnel (Advanced Theory and Advanced Practice)
 - 4) Checking Machinery and Equipment and Training Counterpart Personnel in their Operation and Maintenance
- 3rd year:
- 1) Reviewing Training Plan of Counterpart Personnel (Fundamental Theory and Fundamental Practice)
 - 2) Reviewing Curriculum (Advanced Theory and Advanced Practice)
 - 3) Making Teaching Materials (Advanced Theory and Advanced Practice)
 - 4) Checking Machinery and Equipment and Training Counterpart Personnel in their Operation and Maintenance
 - 5) Interim Evaluation
- 4th year:
- 1) Reviewing Training Plan of Counterpart Personnel (Advanced Theory and Advanced Practice)
 - 2) Reviewing Curriculum (Advanced Practice)

- 3) Making Teaching Materials (Advanced Theory and Advanced Practice)
- 4) Checking Machinery and Equipment and Training Counterpart Personnel in their Operation and Maintenance

- 5th year:
- 1) Final Reviewing of Overall Training for Counterpart Personnel
 - 2) Overall Checking of Curriculum
 - 3) Final Checking of Machinery and Equipment through the Inventory
 - 4) Consultation for Self-reliant Operation
 - 5) Evaluation

JAPAN-SINGAPORE TECHNICAL INSTITUTE (JSTI)
MINUTES OF MEETING

The Japanese Implementation Survey Team and officials authorised by the Chairman of the Economic Development Board have jointly agreed upon and executed a 'Record of Discussions' to establish the basis for technical cooperation for the Japan-Singapore Technical Institute Project. The following Minutes of Meeting are intended to clarify and specify the issues as described in the Record of Discussions.

1 Administration of the Project

The EDB mentioned that the Chairman EDB will appoint a Management Committee to act on his behalf.

Both parties agreed that in the initial two years or until a Director of Institute is appointed whichever is earlier, the Chief Advisor will function as the Director of Institute.

2 Dispatch of Japanese Experts

Apart from the Chief Advisor and the Coordinator, 7 other Japanese experts will be dispatched for the Project.

3 Provision of Machinery & Equipment

The Team mentioned that the cost of machinery, equipment and other materials (CIF Singapore) is about Y300 million. However, the Team noted that the Singapore Government requested for machinery, equipment and other materials worth S\$3 million (CIF Singapore), which is equivalent to Y330 million based on current exchange rate.

The Team explained to the EDB that the dispatch of machinery will take at least three years. The EDB further requested the Team to expedite the dispatch of machinery preferably within the first two years of operation.

4 Training of Singapore Personnel in Japan

The Team indicated that the number of scholarships for counterpart training in Japan for this project over the 5-year period is based on the ratio of 2 scholarships to 1 expert (excluding the Chief Advisor and the Coordinator).

The EDB stressed that the training of local counterparts in Japan should be brought forward wherever possible. EDB strongly feels that more counterparts should receive training earlier as this will enable the Institute to quickly build up a strong pool of staff and enhance the success of the project. The EDB further requested the Government of Japan to consider the following schedules:

| <u>Fiscal Year</u> | <u>EDB proposed schedule for counterpart training</u> |
|--------------------|---|
| 1983 | 3 counterparts |
| 1984 | 6 " |
| 1985 | 3 " |
| 1986 | 3 " |
| | <hr/> |
| | 15 counterparts |
| | <hr/> |

5 Estimated Scale of the Project

Because of the annual budgetting system of Japan, the figures for experts, machinery and counterpart training in Japan that are indicated in 2, 3 and 4 above respectively are estimated on the assumption that the necessary budget for the Technical Cooperation will be acquired from the Government of Japan over the period of Technical Cooperation and that the Government of the Republic of Singapore will take necessary measures to implement the project.

6 Commencement Date of Courses

Both parties agreed that the first batch of trainees will commence training in November 1983.

7 Number of trainees for First Intake

Both parties agreed that the number of trainees for the first intake shall be decided after the experts assigned to the Institute arrive. The Team requested the EDB to consider the experts' recommendation and advice. The EDB indicated that 95 trainees could be recruited for the first intake.

8. Local Purchase of Equipment

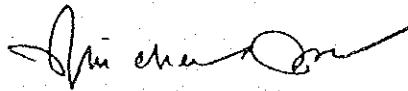
The EDB requested the Team to consider the purchase of some equipment locally so as to obtain better aftersales service, guarantee, etc.

9 Recorded as a correct interpretation of our understanding.

Singapore, June 16, 1983

小粥義朗

(YOSHIRO OKAI)
LEADER
IMPLEMENTATION SURVEY TEAM
JAPAN INTERNATIONAL
COOPERATION AGENCY,
JAPAN



(LIN CHENG TON)
FOR CHAIRMAN
ECONOMIC DEVELOPMENT BOARD,
REPUBLIC OF SINGAPORE

6. 昭和60年度集合研修コース及びセミナー一覧
GROUP TRAINING COURSES AND SEMINARS FOR 1984 BY THE GOVERNMENT OF JAPAN

APRIL 1, 1984
JAPAN INTERNATIONAL COOPERATION AGENCY

| No. | Subjects of Courses [Course Code] | Number of Participants | Duration (Days) | Starting and Terminating Dates | | | | | | | | | | | | Facilities and Institutions | Remarks | | |
|-----|--|------------------------|-----------------|--------------------------------|----|----|---|----|----|----|----|----|----|----|----|-----------------------------|---------|--|------------------------------|
| | | | | 84 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 85 | 1 | 2 | | | 3 | 4 |
| | DEVELOPMENT PLAN | | | | | | | | | | | | | | | | | | |
| 1 | <General> 開発計画一般・101010 > Economic Developments (Seminar) 経済開発セミナー (A0013) | 13 | 1.5 (43) | | 17 | 28 | | | | | | | | | | | | Economic Planning Agency (経済企画庁) | |
| 2 | Development Economics (General) 開発エコノミクス(一般) (A0171) | 5 | 5.5 (164) | | | | | | 18 | | | | | | | | | The International Development Center of Japan (IDCJ) (通・財)国際開発センター) | |
| 3 | Development Economics (Industrial Project) 開発エコノミクス(工業) (A0203) | 15 | 3 (79) | | 31 | | | 17 | | | | | | | | | | The International Development Center of Japan (IDCJ) (通・財)国際開発センター) | |
| | ADMINISTRATION (行政) | | | | | | | | | | | | | | | | | | |
| 4 | <General> 行政一般・102010 > Prevention of Narcotic Offences (Seminar) 麻薬犯罪取締セミナー (A0015) | 18 | 1.5 (38) | | | | | | | | | | | 21 | 28 | | | National Police Agency (警察庁保安部) | |
| 5 | Treatment of Offenders (矯正保護) 犯罪防止(矯正保護) (A0029) | 15 | 3.5 (96) | | 5 | | | 9 | | | | | | | | | | United Nations Asia and Far East Institute for the Prevention of Crime and the Treatment of Offenders (UNAFEI) (法・アジア極東犯罪防止研修所) | |
| 6 | Local Government 地方行政 (A0059) | 12 | 3 (83) | | 5 | | | 26 | | | | | | | | | | Local Autonomy College, Ministry of Home Affairs (自・自治大学校) | |
| 7 | National Government Administration 国家行政 (A0091) | 14 | 3 (87) | | | | | | | 6 | | | | | 1 | | | Institute of Public Administration, National Personnel Authority (人・公務員研修所) | |
| 8 | Traffic Police Administration (Seminar) 交通警察行政セミナー (A0079) | 15 | 1 (31) | | | | | | | 12 | 13 | | | | | | | National Police Agency (警察庁交通局) | Every other year 隔年・隔年繰返へ |
| 9 | Crime Prevention and Treatment of Offenders (Senior Seminar) 犯罪防止(上級) (A0092) | 20 | 2 (47) | | | | | | | | | | | | 31 | | | United Nations Asia and Far East Institute for the Prevention of Crime and the Treatment of Offenders (UNAFEI) (法・アジア極東犯罪防止研修所) | 単年繰返へ |

| No. | Subjects of Courses [Course Code] | Number of Participants | Duration (Days) | Starting and Terminating Dates | | | | | | | | | | | | Facilities and Institutions | Remarks | | | | | | | | |
|-----|---|------------------------|-----------------|--------------------------------|---|---|---|---|---|----|----|----|----|---|----|-----------------------------|---------|---|---|--|--|--|--|--|---------------------|
| | | | | 84 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 85 | 2 | 3 | | | 4 | | | | | | | |
| 10 | Criminal Justice Administration [A0110] 犯罪防止(刑罰司法) | 15 | 3.5 (96) | | | | | | | | | | | | 30 | | | | 3 | | | | | United Nations Asia and Far East Institute for the Prevention of Crime and the Treatment of Offenders (UNAFEI) (法・アジア犯罪防止研修所) | |
| 11 | Fire Service Administration [A0124] 消防行政 | 10 | 2.5 (62) | | | | | | | | | | | | 7 | | | | | | | | | Fire Defence Agency, Ministry of Home Affairs (自・消防庁) | |
| 12 | Government Auditing (Seminar) [A0257] 政府会計検査セミナー <Finances・財政金融・102020 > | 12 | 1.5 (36) | | | | | | | | | | | | 21 | | | | | | | | | Board of Audit (会計検査院) | |
| 13 | Taxation (Senior Tax Programme) (Seminar) [A0115] 上級租税セミナー | 10 | 1 (20) | | | | | | | | | | | | 1 | | | | | | | | | National Tax Administration (大・国税庁) | 準高級扱い |
| 14 | Customs Technique [A0123] 税関行政 | 15 | 2 (60) | | | | | | | | | | | | 6 | | | | | | | | | Customs and Tariff Bureau, Ministry of Finance (大蔵省関税局) | |
| 15 | Taxation (General Tax Programme) (Seminar) [A0217] 一般租税セミナー | 25 | 4 (107) | | | | | | | | | | | | 30 | | | | | | | | | National Tax Administration (大・国税庁) | |
| 16 | Loan Procedures (Seminar) [A0231] 借款手続セミナー <Environment・環境問題・102030 > | 15 | 1 (25) | | | | | | | | | | | | 11 | | | | | | | | | The Overseas Economic Cooperation Fund (経・海外経済協力基金) | 準高級扱い |
| 17 | Environmental Administration [A0177] 環境行政 | 10 | 2 (54) | | | | | | | | | | | | | | | | | | | | | International Affairs Division, Environment Agency (環境庁長官官房環境課) | 準高級扱い |
| 18 | Environmental Engineering (Water Pollution Control) [A0202] 環境技術(水質保全) | 10 | 2 (46) | | | | | | | | | | | | 27 | | | | | | | | | International Affairs Division, Environment Agency (環境庁長官官房環境課) | |
| 19 | Marine Protection [A0289] 海洋保全 <Statistics・統計・102040 > | 5 | 57 | | | | | | | | | | | | 13 | | | | | | | | | Marine Safety Agency (海・海上保安庁) | New Course 特設→新設 |
| 20 | Statistics I (General) [A0060] 一般統計 | 30 | 6.5 (191) | | | | | | | | | | | | 20 | | | | | | | | | Statistical Institute for Asia and the Pacific (行・アジア太平洋統計研修所) | |

| No. | Subjects of Courses (Course Code) | Number of Participants | Duration (Days) | Starting and Terminating Dates | | | | | | | | | | | | Facilities and Institutions | Remarks | | | |
|-----|--|------------------------|-----------------|--------------------------------|---|----|---|---|---|----|----|----|----|-----|---|-----------------------------|---------|---|---|---|
| | | | | '84 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | '85 | 1 | | | 2 | 3 | 4 |
| 21 | Statistics II (ADP) ADP (自動車処理) (A0254) | 10 | 3.5 (98) | | | | | | | | | | | | | | | | Statistical Institute for Asia and the Pacific (行・アジア太平洋統計研発所) | |
| 22 | PUBLIC UTILITY WORKS (公益事業) <Waterworks・上水道・201020 > Water Works Engineering (A0100) 上水道施設 | 15 | 3.5 (93) | | | 14 | | | | 14 | | | | | | | | | Japan Water Works Association (厚・(社)日本水道協会) | |
| 23 | <Sewage Works・下水道・201030 > Sewage Works Engineering (A0167) 下水道施設 | 12 | 3.5 (96) | | | | | | | 6 | | | | | | | | | City Bureau, Ministry of Construction (建設省都市局) | |
| 24 | <Urban Hygiene・都市衛生・201040 > Solid Waste Management and Night Soil Treatment (A0111) 廃棄物処理 | 10 | 2.5 (68) | | | 24 | | | | | | | | | | | | | Japan Environmental Sanitation Centre (厚・(財)日本環境衛生センター) | |
| 25 | TRANSPORTATION AND TRAFFIC <General・運輸交通一般・202010 > Aids to Navigation (A0148) 航路標識 | 10 | 2.5 (66) | | | | | | | 23 | | | | | | | | | Maritime Safety Agency (運・海上保安庁) | |

| No. | (Field Code) Subjects of Courses [Course Code] | Number of Partic- ipants | Duration (Days) | Starting and Terminating Dates | | | | | | | | | | | | Facilities and Institutions | Remarks | | |
|-----|---|--------------------------------|--------------------|--------------------------------|---|---|---|---|---|----|----|----|-----|---|---|-----------------------------|---------|--|---|
| | | | | '84 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | '85 | 1 | 2 | | | 3 | 4 |
| 26 | <Railway・鉄道・202040 > Railway Rolling Stock Engineering (A0037) 鉄道車両 | 10 | 3 (85) | | | | | | | | | | | | | | | Japanese National Railways (JNR) (運・日本国有鉄道) | |
| 27 | Railway Signal Engineering (A0077) 鉄道信号 | 8 | 4 (109) | | | | | | | | | | | | | | | Japanese National Railways (JNR) (運・日本国有鉄道) | |
| 28 | Maintenance and Improvement Engineering of Permanent Ways (A0087) 鉄道線路保守改良 | 8 | 3.5 (95) | | | | | | | | | | | | | | | Japanese National Railways (JNR) (運・日本国有鉄道) | |
| 29 | Railway Electrification (A0131) 鉄道電化 | 8 | 2.5 (65) | | | | | | | | | | | | | | | Japanese National Railways (JNR) (運・日本国有鉄道) | |
| 30 | <Port and Shipping・港湾海運・202050 > Ports and Harbours (Seminar) (A0014) 港湾セミナー | 20 | 2 (60) | | | | | | | | | | | | | | | Bureau of Ports and Harbours, Ministry of Transport (運輸省港湾局) | |
| 31 | Port and Harbour Engineering (A0035) 港湾工学 | 18 | 4.5 (132) | | | | | | | | | | | | | | | Bureau of Ports and Harbours, Ministry of Transport (運輸省港湾局) | |
| 32 | Shipping Business (A0130) 海運経営業務 | 12 | 2.5 (64) | | | | | | | | | | | | | | | Shipping Bureau, Ministry of Transport (運輸省海運局) | |
| 33 | Administration for Seamen's Education (A0132) 船員教育行政 | 8 | 1.5 (44) | | | | | | | | | | | | | | | Seafarers Bureau, Ministry of Transport (運輸省船員局) | |
| 34 | Shipbuilding Management (Seminar) (A0249) 造船経営管理セミナー | 8 | 2.5 (63) | | | | | | | | | | | | | | | Ship Bureau, Ministry of Transport (Overseas Shipbuilding Cooperation Centre) (運・海外造船協力センター) | |
| 35 | Marine Technique (Navigator, Engineer) 航海技術(航海士・機関士) (A0271) | 10 | 12.5 (365) | | | | | | | | | | | | | | | Japan Seamen Education Service (運・(財)日本船舶教育振興会) | |

| No. | Subjects of Courses [Course Code] (Field Code) | Number of Participants | Duration (Days) | Starting and Terminating Dates | | | | | | | | | | | | Facilities and Institutions | Remarks | | |
|-----|--|------------------------|-----------------|--------------------------------|---|---|---|---|---|----|----|----|----|---|----|-----------------------------|---------|--|--|
| | | | | 84 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 85 | 2 | 3 | | | 4 | |
| 36 | <Aviation and Airport-航空空港・202060> Aerodrome (Seminar) 空港セミナー [A0191] | 10 | 2 (46) | | | | | | | 23 | 7 | | | | | | | Civil Aviation Bureau, Ministry of Transport (運輸省航空局) | |
| 37 | <Urban Transportation-都市交通・202070> Urban Transport (Railways) (Seminar) 都市交通セミナー(鉄道) [A0222] | 10 | 2 (58) | | | | | | | 14 | 10 | | | | | | | International Affairs Division, Ministry of Transport (運輸大臣官房国際課) | |
| 38 | Comprehensive Urban Transportation Planning 総合都市交通施設計画 [A0245] | 9 | 2 (59) | | | | | | | | | | | | 11 | 8 | | City Bureau, Ministry of Construction (建設省都市局) | |
| 39 | <Weather and Earthquake-気象地震・202080> Seismology and Earthquake Engineering 地震工学 [A0012] | 20 | 12 (355) | | | | | | | | | | | | 6 | 8/25 | | Building Research Institute, Ministry of Construction (建・建築研究所) | |
| 40 | Meteorology 気象学 [A0187] | 6 | 4.5 (124) | | | | | | | | | | | | 27 | 28 | | Japan Meteorological Agency (運・気象庁) | |
| 41 | [INFRASTRUCTURE] (社会基盤) <General-社会基盤一般・203010> Bridge Engineering 橋梁工学 [A0071] | 15 | 3 (79) | | | | | | | | | | | | 16 | 2 | | Road Bureau, Ministry of Construction (建設省道路局) | |
| 42 | Highway Construction (Seminar) ハイウェイセミナー [A0103] | 15 | 2 (53) | | | | | | | | | | | | 27 | 18 | | Road Bureau, Ministry of Construction (建設省道路局) | |

| No. | (Field Code) Subjects of Courses [Course Code] | Number of Partici- pants | Duration (Days) () | Starting and Terminating Dates | | | | | | | | | | | | Facilities and Institutions | Remarks | | | | | | | |
|-----|---|--------------------------------|---------------------------|--------------------------------|---|---|---|---|---|---|----|----|----|-----|----|-----------------------------|---------|---|---|---|--|----|--|--|
| | | | | '84 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | '85 | 1 | | | 2 | 3 | 4 | | | | |
| 43 | Construction Engineering (Civil Works) [A0209] 建設施工 | 10 | 4 (115) | | | | | | | | | | | | 30 | | | | | | | 22 | Kinki Regional Construction Bureau, Ministry of Construction (建設近畿地方建設局) | |
| 44 | Technology for Disaster Prevention (Seminar) [A0211] 防災技術セミナー | 10 | 3 (80) | | | | | | | | | | | | 27 | | | | | | | 15 | National Research Center for Disaster Prevention (料・国立防災科学技術センター) | |
| 45 | Soil Engineering and Foundation [A0232] 土質及び基礎工学 | 9 | 2.5 (62) | | | | | | | | | | | | 18 | | | | | | | 18 | International Affairs Division, Planning Bureau, Ministry of Construction (建設省計画局国際課) | |
| 46 | Regional Development Planning (Seminar) [A0258] 国土開発セミナー | 9 | 2 (49) | | | | | | | | | | | | 11 | | | | | | | 28 | National Land Agency (国土庁) | |
| 47 | <River and Erosion Control・河川防砂-203020> River Engineering [A0169] 河川工学 | 10 | 4.5 (127) | | | | | | | | | | | | 19 | | | | | | | 22 | River Bureau, Ministry of Construction (建設省河川局) | |
| 48 | <City Planning・都市計画・203030> City Planning [A0027] 都市計画 | 11 | 2.5 (73) | | | | | | | | | | | | 9 | | | | | | | 20 | City Bureau, Ministry of Construction (建設省都市部都市計画課) | |
| 49 | <Building and Housing・建築住宅・203040> Housing [A0230] 住宅建設 | 15 | 2 (54) | | | | | | | | | | | | 25 | | | | | | | 17 | Housing Bureau, Ministry of Construction (建設省住宅局) | |
| 50 | Building Engineering [A0270] 建築技術 | 15 | 2.5 (57) | | | | | | | | | | | | | | | | | | | 13 | Building Guidance Division, Housing Bureau, Ministry of Construction (建設省住宅局建築指導課) | |

| No. | Subjects of Courses [Course Code] | Number of Participants | Duration (Days) | Starting and Terminating Dates | | | | | | | | | | | | Facilities and Institutions | Remarks | | | | |
|-----|--|------------------------|-----------------|--------------------------------|---|---|---|---|---|----|----|----|----|---|----|-----------------------------|---------|---|--|---|-------|
| | | | | 84 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 85 | 2 | 3 | | | 4 | | | |
| | <Surveying and Mapping・測量地図・203080> | | | | | | | | | | | | | | | | | | | | |
| 51 | Surveying and Mapping 測量技術 [A0048] | 10 | 8 (234) | 26 | | | | | | | | | | | 14 | | | | | Geographical Surveying Institute, Ministry of Construction (建・国土地理院) | |
| 52 | Hydrographic Survey 水測測量 [A0127] | 10 | 6.5 (189) | 3 | | | | | | | | | | | 7 | | | | | Hydrographic Department, Maritime Safety Agency (海・海上保安庁水路部) | |
| 53 | Physical Oceanographic Survey 海洋物理調査 [A0154] | 8 | 5 (137) | | | | | | | | | | | | 1 | | | | | Hydrographic Department, Maritime Safety Agency (海・海上保安庁水路部) | |
| | POST SERVICE, COMMUNICATION AND BROADCASTING (通信・放送) | | | | | | | | | | | | | | | | | | | | |
| 54 | <General・通信放送一般・204010> Radio Frequency Monitoring 電波監視 [A0180] | 9 | 2 (57) | | | | | | | | | | | | 20 | | | | | International Cooperation Division, Ministry of Posts and Telecommunications (郵政大臣官務国際協力課) | |
| 55 | <Postal Service・郵便・204020> Postal Executives' Seminar 郵政幹部セミナー [A0098] | 13 | 1 (16) | | | | | | | | | | | | | | | | | Postal Bureau, Ministry of Posts and Telecommunications (郵政省郵務局) | 電高鉄道局 |
| 56 | <Telecommunication・電気通信・204030> International Telex Communication Engineering 国際テレックス通信技術 [A0022] | 12 | 3 (82) | | | | | | | | | | | | | | | | | Kokusai Denshin Denwa Co., Ltd. (KDD) (郵・国際電信電話株式会社) | |
| 57 | International Telegraph and Telephone Services (Traffic and Commercial) 国際電信電話業務 [A0024] | 12 | 2.5 (76) | 26 | | | | | | | | | | | 9 | | | | | Kokusai Denshin Denwa Co., Ltd. (KDD) (郵・国際電信電話株式会社) | |

| No. | Subjects of Courses: (Course Code) | Number of Participants | Duration (Days) | Starting and Terminating Dates | | | | | | | | | | | | Facilities and Institutions | Remarks | | | |
|-----|---|------------------------|-----------------|--------------------------------|---|----|----|----|----|----|----|----|----|-----|----|-----------------------------|---------|----|---|------|
| | | | | '84 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | '85 | 1 | | | 2 | 3 | 4 |
| 58 | Telephone Switching Engineering (I) 電話交換技術(I) (A0025) | 15 | 3.5 (102) | 5 | | 15 | | | | | | | | | | | | | Nippon Telegraph and Telephone Public Corporation (NTT) (郵・日本電信電話公社) | |
| 59 | Microwave Communication Engineering マイクロウェーブ通信技術 (A0039) | 15 | 3.5 (102) | | | | 12 | | | 21 | | | | | | | | | Nippon Telegraph and Telephone Public Corporation (NTT) (郵・日本電信電話公社) | |
| 60 | Carrier Telephony Engineering 搬送電話技術 (A0057) | 15 | 3.5 (103) | 26 | | | | 5 | | | | | | | | | | | Nippon Telegraph and Telephone Public Corporation (NTT) (郵・日本電信電話公社) | |
| 61 | Telephone Outside Plant Engineering 電話線路技術 (A0058) | 15 | 3.5 (102) | | | 14 | | | 23 | | | | | | | | | | Nippon Telegraph and Telephone Public Corporation (NTT) (郵・日本電信電話公社) | |
| 62 | Telecommunication Management (Seminar) 電気通信幹部セミナー (A0064) | 11 | 0.5 (16) | | | | | | | | 25 | 9 | | | | | | | International Cooperation Division, Ministry of Posts and Telecommunications (郵政大臣官房国際協力課) | 郵政関係 |
| 63 | Satellite Communication Engineering (Regular) 衛星通信技術(普通) (A0099) | 12 | 3.5 (97) | 26 | | | | 30 | | | | | | | | | | | Kokusai Den shin Denwa Co., Ltd. (KDD) (郵・国際電信電話株) | |
| 64 | Satellite Communication Engineering (Advanced) 衛星通信技術(上級) (A0149) | 12 | 2.5 (75) | | | | | 23 | | | | 5 | | | | | | | Kokusai Den shin Denwa Co., Ltd. (KDD) (郵・国際電信電話株) | |
| 65 | Telephone Network Planning and Designing 電話網計画設計 (A0173) | 15 | 4 (109) | | | | | | | | | | 11 | | 27 | | | | Nippon Telegraph and Telephone Public Corporation (NTT) (郵・日本電信電話公社) | |
| 66 | International Telephone Switching Engineering 国際電話交換技術 (A0212) | 12 | 3 (82) | | | | | | | | | | | | | | 10 | 31 | Kokusai Den shin Denwa Co., Ltd. (KDD) (郵・国際電信電話株) | |
| 67 | Telephone Switching Engineering (II) 電話交換技術(II) (A0216) | 15 | 3.5 (102) | | | | | | | 2 | | | | | 11 | | | | Nippon Telegraph and Telephone Public Corporation (NTT) (郵・日本電信電話公社) | |
| 68 | International Data Communications Engineering 国際データ通信技術 (A0267) | 10 | 2.5 (76) | | | | | | | | | | | | | | 10 | 25 | Kokusai Den shin Denwa Co., Ltd. (KDD) (郵・国際電信電話株) | |

| No. | Subjects of Courses [Course Code] | Number of Participants | Duration (Days) | Starting and Terminating Dates | | | | | | | | | | | | Facilities and Institutions | Remarks | | | | |
|-----|---|------------------------|-----------------|--------------------------------|---|---|---|----|----|----|----|----|----|----|---|-----------------------------|---------|----|---|------------------|--|
| | | | | '84 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 85 | 1 | | | 2 | 3 | 4 | |
| 69 | Radio Communication Engineering (A0272) 無線通信技術 | 15 | 3.5 (132) | | | | | | 23 | | | 12 | | | | | | | Nippon Telegraph and Telephone Public Corporation (NTT) (郵・日本電信電話公社) | | |
| 70 | Data Communication Engineering (A0288) データ通信技術 | 10 | 3.5 (102) | | | | | | | | | | 1 | | | 10 | | | Nippon Telegraph and Telephone Public Corporation (NTT) (郵・日本電信電話公社) | | |
| | < Broadcasting - 放送 - 204040 > | | | | | | | | | | | | | | | | | | | | |
| 71 | Color Television Engineering (I) (A0040) テレビジョン放送技術(I) | 12 | 3 (82) | | | | | 19 | | | 8 | | | | | | | | Nippon Hoso Kyokai, Japan Broadcasting Corporation (NHK) (郵・日本放送協会) | | |
| 72 | Educational Television Programme (A0042) 教育テレビジョン番組(I) | 10 | 2.5 (68) | | | | | 2 | | | 8 | | | | | | | | Nippon Hoso Kyokai, Japan Broadcasting Corporation (NHK) (郵・日本放送協会) | | |
| 73 | Television Broadcasting Management (A0075) テレビジョン放送管理 | 10 | 1.5 (44) | | | | | 3 | | 15 | | | | | | | | | International Cooperation Division, Ministry of Posts and Telecommunications (郵政大臣官房国際協力課) | | |
| 74 | Broadcasting Management (Seminar) (A0139) 放送管理セミナー | 9 | 0.5 (15) | | | | | | | | 14 | 28 | | | | | | | International Cooperation Division, Ministry of Posts and Telecommunications (郵政大臣官房国際協力課) | 森高純夫 | |
| 75 | Radio Broadcasting Engineering (A0158) ラジオ放送技術 | 8 | 2.5 (61) | | | | | 19 | | | 17 | | | | | | | | Nippon Hoso Kyokai, Japan Broadcasting Corporation (NHK) (郵・日本放送協会) | | |
| 76 | Color Television Engineering (II) (A0263) テレビジョン放送技術(II) | 10 | 2 (55) | | | | | | | | | | | | | 17 | | 11 | Nippon Hoso Kyokai, Japan Broadcasting Corporation (NHK) (郵・日本放送協会) | New Course 新設 | |
| 77 | Educational Television Programme (II) (A0290) 教育テレビジョン番組(II) | 8 | 2 (54) | | | | | | | | | | | | | 17 | | 11 | Nippon Hoso Kyokai, Japan Broadcasting Corporation (NHK) (郵・日本放送協会) | New Course 新設 | |

| No. | Subjects of Courses [Course Code] | Number of Participants | Duration (Ums) | Starting and Terminating Dates | | | | | | | | | | | | Facilities and Institutions | Remarks | |
|-----|---|------------------------|----------------|--------------------------------|---|---|---|---|---|----|----|----|-----|---|---|-----------------------------|---------|---------------------|
| | | | | '84 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | '85 | 1 | 2 | | | 3 |
| | AGRICULTURE (農業) | | | | | | | | | | | | | | | | | |
| | <General・農業一般・301010 > | | | | | | | | | | | | | | | | | |
| 78 | Agricultural Cooperation [A0007] 農業協同組合 | 20 | 2 (60) | | | | | | | | | | | | | | | |
| 79 | Agricultural Extension Service [A0008] 農業普及 | 15 | 3.5 (96) | | | | | | | | | | | | | | | |
| 80 | Rice Cultivation (General) [A0010] 稲作(一般) | 12 | 7.5 (219) | | | | | | | | | | | | | | | |
| 81 | Home-Life Improvement Extension [A0031] 生活改善普及 | 8 | 3 (78) | | | | | | | | | | | | | | | |
| 82 | Agriculture Statistics [A0082] 農林統計 | 15 | 3 (89) | | | | | | | | | | | | | | | |
| 83 | Vegetable Crops Production [A0120] 野菜生産 | 12 | 10 (298) | | | | | | | | | | | | | | | |
| 84 | Control of Rice Diseases and Insect Pests [A0157] 稲病害虫防除 | 12 | 7 (195) | | | | | | | | | | | | | | | |
| 85 | Pesticide Utilization for Plant Protection [A0237] 農薬利用 | 6 | 5 (149) | | | | | | | | | | | | | | | |
| 86 | Plant Genetic Resources [A0275] 植物遺伝資源 | 10 | 2.5 (73) | | | | | | | | | | | | | | | |
| 87 | Rice Cultivation(Advanced) [A0291] 稲作(専修) | 9 | (268) | | | | | | | | | | | | | | | New Course 新設→新設 |

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| No. | (Field Code) Subjects of Courses [Course Code] | Number of Participants | Duration (Days) | Starting and Terminating Dates | | | | | | | | | | | | Facilities and Institutions | Remarks | | | |
|-----|--|------------------------|-----------------|--------------------------------|---|---|---|---|---|---|----|----|----|-----|---|-----------------------------|---------|---|---|---|
| | | | | '84 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | '85 | 1 | | | 2 | 3 | 4 |
| 96 | Artificial Insemination for Cattle [A0129] 家畜人工受精 | 6 | 7 (205) | | | | | | | | | | | | | | | | Fukushima National Livestock Breeding Station, Ministry of Agriculture and Fisheries (農・福島県畜産牧場) | |
| 97 | <Livestock Hygiene 家畜衛生・302020> Animal Health Research [A0019] 家畜衛生研究 | 10 | 6.5 (183) | | | | | | | | | | | | | | | | National Institute of Animal Health (NIAH) (農・家畜衛生試験場) | |
| 98 | FORESTRY (林業) <Forestry・林業・303010> Reforestation Techniques and Forest Management [A0198] 森林造成技術者 | 15 | 3.5 (92) | | | | | | | | | | | | | | | | Forestry Agency, Ministry of Agriculture, Forestry and Fisheries (農・林野庁) | |
| 99 | <Forestry Processing・林産加工・303020> Wood Industrial Machinery [A0140] 木材工業機械 | 10 | 5.5 (157) | | | | | | | | | | | | | | | | Chubu Woodworking Machinery Manufacturers Association (通・中部木工機械工業会) | |
| 100 | Forestry and Forest Products Research [A0146] 林業林産研究 | 10 | 3.5 (92) | | | | | | | | | | | | | | | | Forestry and Forest Products Research Institute (農・林業試験場) | |
| 101 | FISHERIES (水産) <Fishery・水産・304010> Fisheries Cooperative [A0181] 漁業協同組合 | 10 | 6 (170) | | | | | | | | | | | | | | | | Kanagawa International Fisheries Training Center, JICA (JICA・神奈川県水産研修センター) | |

| No. | Subjects of Courses [Course Code] (Field Code) | Number of Participants | Duration (Days) | Starting and Terminating Dates | | | | | | | | | | | | Facilities and Institutions | Remarks | | |
|---------------------------------|---|------------------------|-----------------|--------------------------------|----|---|---|---|---|----|----|----|-----|----|---|-----------------------------|---------|---|------------------|
| | | | | '84 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | '85 | 1 | 2 | | | 3 | 4 |
| 102 | Coastal Fisheries Extension I (Practice) (A0214) 沿岸漁業普及 I (実技) | 16 | 6 (170) | | 28 | | | | | | 14 | | | | | | | Kanagawa International Fisheries Training Center, JICA (JICA・神奈川県国際水産研修センター) | |
| 103 | Coastal Fisheries Extension II (Theory) (A0215) 沿岸漁業普及 II (理論) | 10 | 5.5 (154) | | | | | | | | | | | 10 | | | | Kanagawa International Fisheries Training Center, JICA (JICA・神奈川県国際水産研修センター) | |
| 104 | General Aquaculture (A0236) 養殖一般 | 7 | 5.5 (154) | | | | | | | | | | | 10 | | | | Kanagawa International Fisheries Training Center, JICA (JICA・神奈川県国際水産研修センター) | |
| 105 | Hull and Engine Maintenance of Small Fishing Boat (A0277) 小規模船の船体・機関保守 | 6 | 5.5 (154) | | | | | | | | | | | 10 | | | | Kanagawa International Fisheries Training Center, JICA (JICA・神奈川県国際水産研修センター) | |
| 106 | Prawn Propagation Technique (A0293) エビ増殖技術 | 6 | 9.5 (282) | | | | | | | 23 | | | | | | | | Ube Junior College (JICA・宇部短期大学) | New Course 新設 |
| 107 | <Fishery Processing・水産加工・304020> Marine Food Processing and Technology (A0238) 水産食品加工 | 8 | 5 (150) | | | | | | | | | | | 10 | | | | National Food Research Institute, National Institute of Hygienic Science and Others (JICA・(財)日本食品衛生協会) | |
| MINING AND MINERALS | | | | | | | | | | | | | | | | | | | |
| <Mining and Minerals・鉱業・401010> | | | | | | | | | | | | | | | | | | | |
| 108 | Groundwater Resources Development (A0084) 地下水資源開発 | 10 | 4.5 (122) | | | | | | | | | | | 16 | | | | Geological Survey of Japan, Ministry of International Trade and Industry (通・工業技術院地質調査所) | |
| 109 | Offshore Prospecting (A0085) 沿岸資源調査 | 10 | 7.5 (217) | | | | | | | | | | | 10 | | | | Geological Survey of Japan, Ministry of International Trade and Industry (通・工業技術院地質調査所) | |

| No. | Subjects of Courses [Course Code] | Number of Participants | Duration (Days) | Starting and Terminating Dates | | | | | | | | | | | | Facilities and Institutions | Remarks | |
|-----------------------|---|------------------------|-----------------|--------------------------------|---|---|----|----|---|----|----|----|---|----|----|-----------------------------|--|------------------|
| | | | | 84 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 1 | 2 | 3 | | | 4 |
| 110 | Mining Engineering [A0117] 鉱山 | 12 | 3 (83) | | | | | 16 | | 6 | | | | | | | Japan Mining Industry Association (通・日本鉱業協会) | |
| 111 | Mine Safety [A0269] 鉱山保安 | 10 | 3-5 (94) | | | | | | | | | | | 28 | | 5/31 | National Research Institute for Pollution and Resources (通・工業技術院公害資源研究所) | |
| 112 | Mineral Processing and Metallurgy [A0294] 選鉱製錬 | 6 | 387 | | | | | 26 | | | | | | | | 8/16 | Research Institute of Mineral Dressing and Metallurgy (SENKEN), Tohoku University (文・東北大学選鉱製錬研究所) | New Course 新設 |
| INDUSTRY (工業) | | | | | | | | | | | | | | | | | | |
| <General・工業一般・402010> | | | | | | | | | | | | | | | | | | |
| 113 | Smaller Enterprise Development (Seminar) 中小企業開発セミナー | 15 | 2 (55) | | | | 25 | 18 | | | | | | | | | Central Japan Industries Association (通・(社)中部産業連盟) | |
| 114 | Industrial Standardization and Quality Control 工業標準化 | 15 | 2.5 (74) | | | | 24 | 5 | | | | | | | | | Agency of Industrial Science and Technology, Japanese Standards Association (通・(財)日本規格協会) | |
| 115 | Measures for Smaller Industry [A0108] 中小企業対策 | 10 | 3 (82) | | | | | | | | | 10 | | | 31 | | Osaka Prefectural Government, the Osaka Prefectural Institute for Industrial Management (通・大阪府立商工経済研究所) | |
| 116 | Metrology and Measurement Stan- dards 計量標準 | 15 | 6.5 (183) | | | | 7 | | | | | | | 6 | | | National Research Laboratory of Metrology (NRLM) (通・工業技術院計量研究所) | |
| 117 | Business Feasibility Study and Management Practice 工業調査計画実務 | 14 | 6 (180) | | | | | | | | | | | 29 | | | Central Japan Industries Association (通・(社)中部産業連盟) | |
| 118 | Certification System [A0235] 認証検査制度 | 10 | 2.5 (61) | | | | | | | | | | | | 10 | | Agency of Industrial Science and Technology, Japanese Standards Association (通・(財)日本規格協会) | |
| 119 | Industrial Property System [A0242] 工業所有権制度 | 12 | 2 (50) | | | | | | | | | | | | 18 | | Japan Institute of Invention and Innovation (通・発明協会) | |

| No. | Subjects of Courses [Course Code] (Field Code) | Number of Participants | Duration (Days) | Starting and Terminating Dates | | | | | | | | | | | | Facilities and Institutions | Remarks | | |
|-----|---|------------------------|-----------------|--------------------------------|---|---|---|---|----|----|----|----|----|----|----|-----------------------------|---------|--|------|
| | | | | 84 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 85 | 2 | 3 | | | 4 | |
| 120 | Industrial Property System (Seminar) 工業所有権セミナー (A0261) | 8 | 1 (17) | | | | | | | 3 | 19 | | | | | | | Japan Institute of Invention and Innovation (通・発明協会) | 専高専攻 |
| 121 | Consultancy Service for the Promotion of Small Industries 中小企業実務指導講習会 (A0274) | 14 | 6.5 (189) | | | | | | 23 | | | | | | | | | Central Japan Industries Association (通・社) 中部産業連盟 | |
| 122 | Ceramic Engineering 窯業技術 (A0053) | 8 | 9 (269) | | | | | | | | | | | 27 | | | | Government Industrial Research Institute, Nagoya (通・名古屋工業技術試験所) | |
| 123 | Glass Technology ガラス工学 (A0104) | 9 | 3 (80) | | | | | | | | | | | | 10 | | | Government Industrial Research Institute, Osaka (通・大阪工業技術試験所) | |
| 124 | Plastics プラスチック (A0118) | 7 | 3.5 (96) | | | | | | | 13 | | | | | | | | Osaka Municipal Technical Research Institute (OMTRI) (通・大阪市立工業研究所) | |
| 125 | Refractory Manufacturing Technology 耐火物製造技術 (A0165) | 8 | 6.5 (189) | | | | | | | 23 | | | | | | | | Mino Yogyo Co., Ltd. (通・美濃窯業株) | |
| 126 | Ceramic Glaze and Decoration 釉・窯彩技術 (A0182) | 7 | 6 (180) | | | | | | | 29 | | | | | | | | Tajimi-city Ceramic Design Research Centre (通・多治見市陶磁器デザイン研究所) | |
| 127 | Tile Manufacturing Technology (A0196) | 8 | 8 (227) | | | | | | | 16 | | | | | | | | Ina Seitoh Co., Ltd. (通・伊奈製陶株) | |
| 128 | Petrochemical Industry for Middle East Countries 石油化学工業 (A0244) | 11 | 1.5 (46) | | | | | | | | | | 24 | | | | | Association of Petrochemical Industry (通・石油化学工業協会) | 専高専攻 |
| 129 | Enzyme Technology 酵素工学 (A0248) | 5 | 6.5 (184) | | | | | | | | | | | | | | | Osaka Municipal Technical Research Institute (OMTRI) (通・大阪市立工業研究所) | |
| 130 | Research on Chemical Technology (A0285) | 9 | 12.5 (365) | | | | | | | 6 | | | | | | | | National Chemical Laboratory for Industry (通・工業技術院化学技術研究所) | |

| No. | Subjects of Courses [Course Code] (Field Code) | Number of Participants | Duration (Days) | Starting and Terminating Dates | | | | | | | | | | | | Facilities and Institutions | Remarks | | | |
|-----|--|------------------------|-----------------|--------------------------------|----|----|----|----|----|----|----|----|----|----|--|-----------------------------|---------|-------|---|--|
| | | | | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | | | | | | |
| 131 | <Steel and Nonferrous Metals. 鉄鋼非鉄金属・402030> Foundry Engineering [A0021] 鋳造技術 | 10 | 8 (226) | | | | | 16 | | | | | 29 | | | | | | Government Industrial Research Institute, Nagoya (通・名古屋工業技術試験所) | |
| 132 | Metal Finishing Engineering [A0066] 金属表面処理技術 | 8 | 6 (180) | | | | | | 29 | | | | | | | | | | Industrial Research Institute, Aichi Prefectural Government (通・愛知県工業技術センター) | |
| 133 | Metal Works and Engineering [A0175] 金属加工技術 | 10 | 9.5 (283) | | | | | | | 27 | | | | | | | 7/1 | | Government Industrial Research Institute, Nagoya (通・名古屋工業技術試験所) | |
| 134 | Welding Technology [A0188] 溶接技術 | 10 | 9 (269) | | | | | | | 27 | | | | | | | | | Japan Welding Society, Tokai Branch, Nagoya University (通・文・沿岸学会東海支部, 名古屋大学) | |
| 135 | Electrical Steel Making [A0204] 電気製鋼技術 | 9 | 4.5 (149) | | | | | | | | | | | 10 | | | 6/6 | | Daido Steel Co., Aichi Steel Works Ltd. (通・大同特殊鋼㈱, 愛知県津村) | |
| 136 | Properties and Testing of Steel Products [A0256] 鉄鋼材料機械検査技術 | 10 | 3.5 (101) | | | | | | | 11 | | | | | | | | | Nippon Steel Corporation (通・新日本製鉄㈱) | |
| 137 | Heat Treatment Technology [A0260] 熱処理技術 | 8 | 6 (179) | | | | | | | | | | | 10 | | | 7/6 | | Nagoya Municipality Industrial Research Institute (通・名古屋市工業研究所) | |
| 138 | Tooling and Production Facility Practical Engineering [A0266] 工具生産技術 | 10 | 6.5 (189) | | | | | | | 23 | | | | | | | | 29 | Central Japan Industries Association (通・(社)中部産業連盟) | |
| 139 | <Machine Industry・機械工業・402040> Shipbuilding [A0119] 船艇技術 | 15 | 12 (354) | | | | | | | | | | | 6 | | | | 12/24 | Overseas Shipbuilding Cooperation Centre (通・海外造船協働センター) | |

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| No. | Subjects of Courses [Course Code] | Number of Participants | Duration (Days) | Starting and Terminating Dates | | | | | | | | | | | | Facilities and Institutions | Remarks | | |
|-----|--|------------------------|-----------------|--------------------------------|---|---|----|---|---|----|----|----|----|-----|---|-----------------------------|---------|--|------------------------|
| | | | | '84 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | '85 | 1 | | | 2 | 3 |
| 140 | Maintenance of Construction Machinery 建設機械整備 (A0162) | 10 | 3 (89) | | | 3 | 30 | | | | | | | | | | | Japan Construction Mechanization Association (社・日本建設機械化協会) | |
| 141 | Mechanique Automobile Vehicles Diesel (Autobus, Camions Poids-Lourd) バス・トラック整備技術 (A0234) | 10 | 2.5 (73) | | | | | | | | | | 17 | 29 | | | | Hino Motors, Ltd. (JICA・日野自動車工業(株)) | |
| 142 | Plant Maintenance Engineering プラント・メンテナンス (A0286) | 9 | 3 (77) | | | | | | | 27 | 12 | | | | | | | Nippon Steel Corporation (通・新日本製鉄(株)) | |
| 143 | <Textile Industry・繊維工業・402050> Textile Machinery Industries (Seminar) 繊維機械工業セミナー (A0020) | 9 | 1.5 (41) | | | | | | | 23 | 2 | | | | | | | Aichi Prefectural Textile Research Centers (通・愛知県三河繊維技術センター他) | Every other year 隔年 |
| 144 | Cotton Weaving Engineering 綿織布技術 (A0076) | 10 | 6 (180) | | | 3 | | | | 29 | | | | | | | | Aichi Prefectural Textile Research Centers (通・愛知県三河繊維技術センター他) | |
| 145 | Textile Technology 繊維工学 (A0268) | 10 | 3 (92) | | | | | | | 9 | 8 | | | | | | | Research Institute for Polymers and Textiles, Ministry of International Trade and Industry (通・工業技術院繊維高分子研究所) | |
| 146 | <Others・その他工業・402099> Coin and Decoration Manufacture, Metal Analysis and Precious Metal Refining 貨幣製造及び分析製練 (A0101) | 5 | 6 (179) | | | 5 | | | | 30 | | | | | | | | Mint Bureau, Ministry of Finance (大蔵省造幣局) | |
| 147 | Industrial Design インダストリアルデザイン (A0186) | 6 | 2.5 (75) | | | | | | | 16 | 29 | | | | | | | Japan Industrial Design Promotion Organization (通・(財)日本産業デザイン振興会) | |
| 148 | Packaging Engineering 包装技術 (A0239) | 13 | 2.5 (61) | | | | | | | | | | 17 | 18 | | | | Japan Packaging Institute (通・(社)日本包装技術協会) | |

| No. | Subjects of Courses [Course Code] (Field Code) | Number of Participants | Duration (Days) | Starting and Terminating Dates | | | | | | | | | | | | Facilities and Institutions | Remarks | | |
|-----|---|------------------------|-----------------|--------------------------------|----|----|---|----|----|----|----|----|----|----|--|-----------------------------|---------|---|--|
| | | | | 84 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | | | | | |
| 149 | <u>ENERGY</u> (エネルギー) <Electric Power・電力・501020> Hydro-Electric Power Engineering 水力発電 [A0055] | 9 | 3 (77) | | 3 | 19 | | | | | | | | | | | | The Overseas Electrical Industry Survey Institute Inc. (通・海外電力調査会) | |
| 150 | Thermal-Electric Power Engineering 火力発電 [A0056] | 8 | 3 (77) | | 3 | 19 | | | | | | | | | | | | The Overseas Electrical Industry Survey Institute Inc. (通・海外電力調査会) | |
| 151 | Electric Power Management 電気事業経営 [A0153] | 9 | 2 (58) | | | | | 23 | 19 | | | | | | | | | The Overseas Electrical Industry Survey Institute Inc. (通・海外電力調査会) | |
| 152 | Electric Power Distribution Engineering 配電技術 [A0160] | 6 | 3 (79) | | | | | 6 | 23 | | | | | | | | | The Overseas Electrical Industry Survey Institute Inc. (通・海外電力調査会) | |
| 153 | Electric Power Engineering for Middle East Countries 中近東電力 [A0228] | 7 | 2 (48) | | | | | 20 | 16 | | | | | | | | | The Overseas Electrical Industry Survey Institute, Inc. (通・海外電力調査会) | |
| 154 | <Others・その他エネルギー・501099> Geothermal Energy 地熱エネルギー [A0134] | 12 | 3 (82) | | | | | 30 | 18 | | | | | | | | | Kyushu University (文・九州大学) | |
| 155 | <u>COMMERCE AND TRADE</u> (商業貿易) <Trade・貿易・601020> Trade Promotion A (Seminar) 貿易振興セミナー(A) [A0080] | 14 | 2 (59) | | 10 | 7 | | | | | | | | | | | | World Trade Centre of Japan (通・世界貿易センター) | |

| No. | Subjects of Courses [Course Code] | Number of Participants | Duration (Days) | Starting and Terminating Dates | | | | | | | | | | | | Facilities and Institutions | Remarks | | |
|-----|--|------------------------|-----------------|--------------------------------|---|---|---|---|---|----|----|----|----|----|---|-----------------------------|---------|--|---|
| | | | | 84 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 85 | 1 | | | 2 | 3 |
| 156 | Trade Promotion B (Seminar) 貿易振興セミナー(B) [A0147] | 12 | 2 (59) | | | | | | | 29 | 26 | | | | | | | World Trade Centre of Japan (通・世界貿易センター) | |
| 157 | Foreign Trade Practice for Leaders 貿易実務指導者 | 12 | 4 (111) | | | | | | | 23 | 11 | | | | | | | Kobe International Association (通・神戸国際交流協会) | |
| 158 | TOURISM (観光) <General・観光一般・602010> Tourism Promotion (Seminar) 観光振興セミナー [A0070] | 18 | 2.5 (63) | | | | | | | 4 | 5 | | | | | | | Japan National Tourist Organization (通・国際観光振興会) | |
| 159 | HUMAN RESOURCES (人的資源) <Vocational Training・職業訓練・701030> Supervisory Training 監督者訓練セミナー [A0016] | 15 | 2 (58) | | | | | | | 3 | 29 | | | | | | | Vocational Training Bureau, Ministry of Labour (労働省職業訓練局) | |
| 160 | Vocational Training (Seminar) 職業訓練セミナー(I) [A0043] | 15 | 2.5 (58) | | | | | | | 23 | 19 | | | | | | | Vocational Training Bureau, Ministry of Labour (労働省職業訓練局) | |
| 161 | Vocational Training Instructors 職業訓練指導員養成 [A0046] | 50 | 12 (352) | | | | | | | | | | | | | | | Institute of Vocational Training (労・職業訓練大学校) | |
| 162 | Highly Skilled Machanist 上級技能者訓練 [A0090] | 10 | 12 (349) | | | | | | | | | | | | | | | Higashi-Yodogawa Advanced Vocational Training Centre, Osaka Prefectural Government (労・大阪府立東淀川高等職業訓練校) | |
| 163 | Vocational Training Administration (Seminar) 職業訓練セミナー(甲) [A0218] | 15 | 1.5 (43) | | | | | | | | | | | | | | | Vocational Training Bureau, Ministry of Labour (労働省職業訓練局) | |

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| No. | Subjects of Courses [Course Code] (Field Code) | Number of Participants | Duration (Days) | Starting and Terminating Dates | | | | | | | | | | | | Facilities and Institutions | Remarks | | |
|-----|---|------------------------|-----------------|--------------------------------|---|---|---|---|---|----|----|----|---------|----|---|-----------------------------|---------|--|------------------|
| | | | | 84 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 85 1 | 2 | 3 | | | 4 | |
| 164 | Die Mold Making Technology [A0220] 金型工/技術 | 6 | 12 (349) | | | | | | | | | | | | | | | Kyoto Skill Development Centre, Employment Promotion Projects Corporation (科・財) 京都国際技術開発センター | New Course 新規 |
| 165 | Audio Visual Engineering [A0295] 視聴覚技術 | 10 | 7.5 (212) | | | | | | | | | | | | | | | Okinawa International Centre (JICA・沖縄国際センター) | |
| | SCIENCE AND CULTURE (科学・文化) | | | | | | | | | | | | | | | | | | |
| 166 | Remote Sensing Technology [A0219] リモート・センシング | 10 | 2.5 (66) | | | | | | | | | | | | | | | Remote Sensing Technology Centre of Japan (科・財) リモート・センシング技術センター | |
| 167 | Medical and Biological Application of Radiation and Radioisotopes [A0262] 放射線医学・生物利用 | 12 | 2 (47) | | | | | | | 30 | | | | 15 | | | | National Institute of Radiological Sciences (科・財) 放射線医学総合研究所 | |
| | MEDICAL TREATMENT (医療医療) | | | | | | | | | | | | | | | | | | |
| | <Medical Treatment・保健医療・801010> | | | | | | | | | | | | | | | | | | |
| 168 | Tuberculosis Control [A0030] 結核対策 | 20 | 4.5 (131) | | | | | | | | | | | | | | | The Research Institute of Tuberculosis Japan Antituberculosis Association (JATA) (厚・財) 結核予防会結核研究所 | |
| 169 | Clinical Oncology [A0068] がん対策 | 10 | 4.5 (124) | | | | | | | | | | | | | | | National Cancer Center (科・財) 国立がんセンター | |
| 170 | Microbial Diseases Study [A0125] 微生物病研究 | 6 | 12 (349) | | | | | | | | | | | | | | | Research Institute for Microbial Diseases, Osaka University (文・大阪大学微生物病研究所) | |
| 171 | Early Gastric Cancer Detection and Related Gastrointestinal Tract Diseases [A0144] 早期胃癌診断 | 15 | 2.5 (59) | | | | | | | | | | | | | | | Medical Association for Early Gastric Cancer Detection (JICA・財) 早期胃癌検診協会 | |

| No. | Subjects of Courses (Course Code) | Number of Participants | Duration (Days) | Starting and Terminating Dates | | | | | | | | | | | | Facilities and Institutions | Remarks | | | | |
|-----|---|------------------------|-----------------|--------------------------------|---|---|---|---|---|----|----|----|----|---|---|-----------------------------|---------|----|------|--|------------------------|
| | | | | 84 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 85 | 1 | 2 | | | 3 | 4 | | |
| 172 | Medical Radiography (A0172) 医療放射線技術 | 7 | 7.5 (208) | | | | | | | | | | | 6 | | | | | 6/30 | College of Biomedical Technology, Osaka University (文・大阪大学長教養期科大学部) | |
| 173 | Tuberculosis Control (Advanced) (A0197) 結核対策(上級) | 10 | 1.5 (40) | | 1 | | | | | | | | | | | | | | | The Research Institute of Tuberculosis Japan Antituberculosis Association (JATA) (厚・(財)結核予防会結核研究所) | |
| 174 | Laboratory Works for Tuberculosis Control (A0199) 結核対策(基礎)技術研修者 | 5 | 4.5 (145) | | | | | | | 27 | | | | | | | | 18 | | The Research Institute of Tuberculosis Japan Antituberculosis Association (JATA) (厚・(財)結核予防会結核研究所) | |
| 175 | National Health Administration (Seminar) (A0213) 衛生行政セミナー | 15 | 1.5 (30) | | | | | | | | | | | | | | | | | International Medical Foundation of Japan (厚・(財)日本国際医療財団) | 非英語版 |
| 176 | Import and Export Food Inspection (A0226) 輸出入食品検査技術 | 6 | 3 (90) | | | | | | | | 11 | | | | | | | | | National Institute of Hygienic Sciences (厚・(財)国立衛生試験所) | |
| 177 | Countermeasures against Renal Failure (A0229) 腎不全対策 | 10 | 2 (47) | | | | | | | | | 20 | | | | | | | | The Foundation of Kidney, Japan (厚・(財)腎研究会) | |
| 178 | Parasite Control Administration for Senior Officers (Seminar) (A0241) 衛生長官予備指導者セミナー | 8 | 1 (24) | | | | | | | | | | | | | | | | | Japan Association of Parasite Control (厚・(財)日本寄生虫学会) | |
| 179 | Nursing Administration (A0255) 看護管理 | 9 | 6.5 (184) | | | | | | | | | | | | 7 | | | | | The International Nursing Foundation of Japan (INFJ) (厚・(財)国際看護交流協会) | Every other Year 隔年 |
| 180 | Cardiovascular Diseases (A0273) 循環器病対策 | 8 | 3.5 (103) | | | | | | | | | | | | | 6 | | | | The National Cardiovascular Center (厚・国立循環器病センター) | |
| 181 | Gastro Intestinal Pathology (A0287) 消化器病理学 | 10 | 3 (86) | | | | | | | | | | | | | | 30 | | | Tsukuba University (文・筑波大学) | |
| 182 | Public Health Technologist (A0296) 公衆衛生技術者 | 5 | 270 | | | | | | | | | | | | | | | | | Okinawa Prefectural Institute of Public Health (JICA・沖縄県公衆衛生研究所) | New Course 新設 |

| No. | Subjects of Courses [Course Code] (Field Code) | Number of Participants | Duration (Days) | Starting and Terminating Dates | | | | | | | | | | | | Facilities and Institutions | Remarks | |
|-----|---|------------------------|-----------------|--------------------------------|----|---|---|---|---|----|----|----|----------|----|---|-----------------------------|---|------|
| | | | | '84 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | '85 1 | 2 | 3 | | | 4 |
| 183 | <Family Planning・人口学族計画・801020> Family Planning Administration for Senior Officers (Seminar) 家族計画研修者セミナー (A0137) | 13 | 1 (25) | | | | | | | 16 | 11 | | | | | | Japanese Organization for International Corporation in Family Planning Inc. (JOICFP) (厚・(財)家族計画国際協力財団) | 専務部長 |
| 184 | Community-Based Family Planning Strategy (Seminar) 家族計画組織活動セミナー (A0190) | 16 | 1.5 (37) | | 28 | | | 3 | | | | | | | | | Japanese Organization for International Corporation in Family Planning Inc. (JOICFP) (厚・(財)家族計画国際協力財団) | |
| 185 | Health Aspects in Family Planning 家族計画医学保健セミナー (A0192) | 16 | 1 (30) | | 5 | | | 5 | | | | | | | | | Japanese Organization for International Corporation in Family Planning Inc. (JOICFP) (厚・(財)家族計画国際協力財団) | |
| | WELFARE (社会福祉) | | | | | | | | | | | | | | | | | |
| 186 | <Welfare・社会福祉・901010> Mental Retardation 精神遅滞福祉 (A0251) | 8 | 6.5 (195) | | | | | | | 23 | | | | | | 5 | Japan League for the Mentally Retarded (厚・(社)日本精神遅滞者福祉連盟) | |
| 187 | <Labour・労働・901020> Public Administration Officers on Women's Problems (Seminar) 婦人関係行政セミナー (A0114) | 10 | 2 (46) | | | | | | | | | | 11 | 25 | | | Women's and Young Workers' Bureau, Ministry of Labour (労働省婦人少寄局) | |
| 188 | Industrial Safety and Health (Seminar) 労働安全衛生行政セミナー (A0200) | 15 | 1.5 (44) | | | | | | | | | | 27 | 9 | | | Labour Standards Bureau, Ministry of Labour (労働省労働基準局) | |
| 189 | Industrial Relations (Seminar) 労働関係行政セミナー (A0210) | 10 | 2 (49) | | | | | | | | | | 25 | 12 | | | Labour Policy Bureau, Ministry of Labour (労働省労政局) | |
| 190 | Labour Statistics (Seminar) 労働統計セミナー (A0224) | 10 | 1.5 (45) | | | | | | | | | | 5 | 18 | | | Statistics and Information Department, Ministry of Labour (労働大臣官房統計情報課) | |
| 191 | Employment Promotion (Seminar) 雇用開発セミナー (A0225) | 10 | 1.5 (44) | | | | | | | | | | 6 | 19 | | | Employment Security Bureau, Ministry of Labour (労働省就業安定局) | |

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