ITSS Model Curriculum

- To get level 1-

（Corresponding with ITSS V3）

IT Skill Standards Center

IT Human Resources Development Headquarters

Information-technology Promotion Agency（IPA）, Japan

IPA®

*Skill Standards for IT Professionals, ITSS, is the index which defines the ability to accomplish various kinds of IT related services clearly and systematically. Also it can provide useful and common framework for educating and training for IT service professionals.
ITSS V3, released in March 2008, integrated job categories of level 1 and level 2. Then it shows relationship to the new ITEE to enable assessment of human resource ability objectively for ITSS level 1-3.

Introduction

Information-technology Promotion Agency, Japan (IPA) has released "Training Road Map" to be a reference source of classes when companies and educational organization design and implement educational trainings corresponding with Skill Standards for IT Professionals, ITSS. For the purpose of Training Road Map's flexible usage which reflects current business trends and needs, it does not include detailed instruction about teaching contents or methods. Since then, we are requested from domestic and international users of ITSS to provide them with the reference which specifies the details to design and implement ITSS based training courses.

Supporting user's needs, we decide to provide the model curriculums for the people who want to get Level 1, corresponding with ITSS V3. Taking the advantages of this curriculum, students can acquire broader knowledge which would not be partial to any industries or fields and the personal skills required for level 1 of ITSS.

This model curriculum covers the range of questions to IT Passport Examination and makes relationship to knowledge items in each course. We recommend you to use this model curriculum with "IT Passport Examination (Level 1) Syllabus" for more efficiency and synergy effect.

In this model curriculum, one subject consists of 15 units x 90 minutes. However we have no restriction in regard to a learning term, organization or situation. We believe this model curriculum will be used widely by any educational organization and companies.

We hope this model curriculum will be exploited to develop human skill and promote systematic knowledge trainings.

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IT Skill Standards Center

IT Human Resources Development Headquarters

INFORMATION-TECHNOLOGY PROMOTION AGENCY, JAPAN

http://www.ipa.go.jp/english/humandev/forth.html

Table of Contents

Chapter 1   Curriculum Overview

1. Outline

This model curriculum is designed for the students or business workers who want to acquire Level 1 of ITSS. Based on Training Road Map, this model curriculum is the reference book that specifies training methods to implement a training curriculum. So as to we can acquire knowledge necessary to get Level 1 of ITSS V3.

2. Target

This model curriculum is designed for the people who want to acquire common basic IT knowledge.

Company: newly hired employee

Educational organization: All students

*Freshmen of IT major are recommended
to take this curriculum

3. Features

(1) Relationship to ITSS V3

a) To get knowledge that does not depend on any specific products or fields.

b) This model curriculum has consistency with "IT Passport Examination" and it is more effective by used together with "IT Passport Examination (Level 1) Syllabus". Also this curriculum gives good explanation for Knowledge Items in each course.

Japanese version of "IT Passport Examination (Level 1) Syllabus" is available from following URL.

URL http://www.jitec.jp/1_00topic/topic_20080626_syllabus_ip.pdf

(2) Can be used widely in both educational organizations and companies

a) This model curriculum shows some examples to be adaptable for any training situations and periods.

b) It is possible to combine this curriculum to other educational training in partially or fully. We expect this curriculum widely exploited in any countries.

4. Relationship to "Training Road Map"

Training Road Map was designed to match each job category. About the beginner's level, we integrated "Level 1" and "Level 2" of job categories. According to this change, we organize the model curriculum for Introduction level (getting Level 1)

Common Training Course Groups
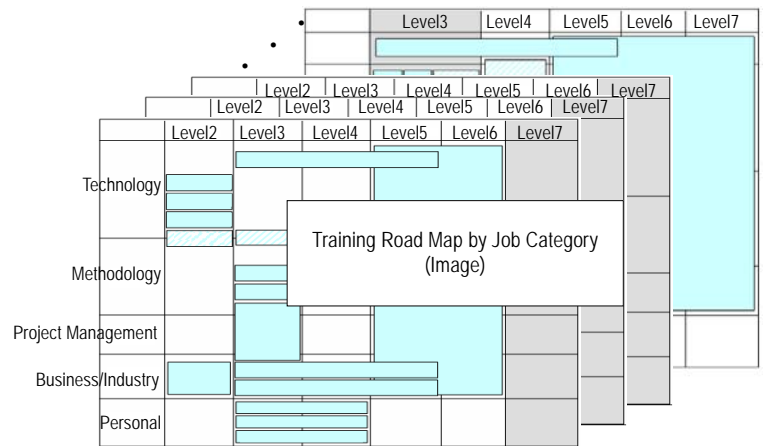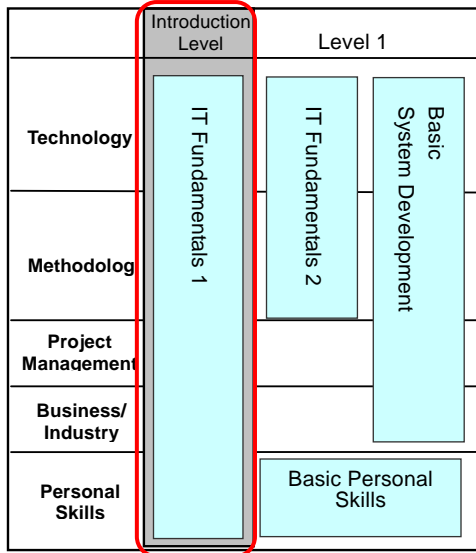
Relationship to Training Road Map

Training Road Map			Model Curriculum			Examination
Level	Course Group	Course Name	Subject Name	Total Hours	standard Term	
Introduction level （Getting Level 1)	IT Fundamentals 1	Introduction to IT	Introduction to IT 1	22.5 hours	15 units (3 days)	IT passport
			Introduction to IT 2	22.5 hours	15 units (3 days)	
		Introduction to Personal skills	Introduction to Personal skills	22.5 hours	15 units (3 days)	None

Each subject consists of 90 minutes x 15 units.

If your educational plan is long term, 1 unit will be implemented in a week so it takes half a year to finish 1 subject. If you want to implement them in short period, 5 units (about 8 hours) could be implemented in a day and it will take 3 days for finishing 1 subject.

5. Structure

This curriculum consists of these themes.

    1. Common Training Course Groups

    2. Subject Overview

    3. Subject Order

    4. Schedule Example

    5. Subject Structure

     1) Subject Details

      a) Subject Description: attendee, precondition, training outline, learning goal, education method, evaluation, knowledge item classification

      b) Knowledge items description : relationship to IT Passport Examination.

     2) Unit Details

      a) Unit title list: List of title of each unit and Learning Goal

      b) Unit Description: Learning Goal, contents, education method, corresponding knowledge items.

< Structure of IT Skill Standards Model Curriculum >
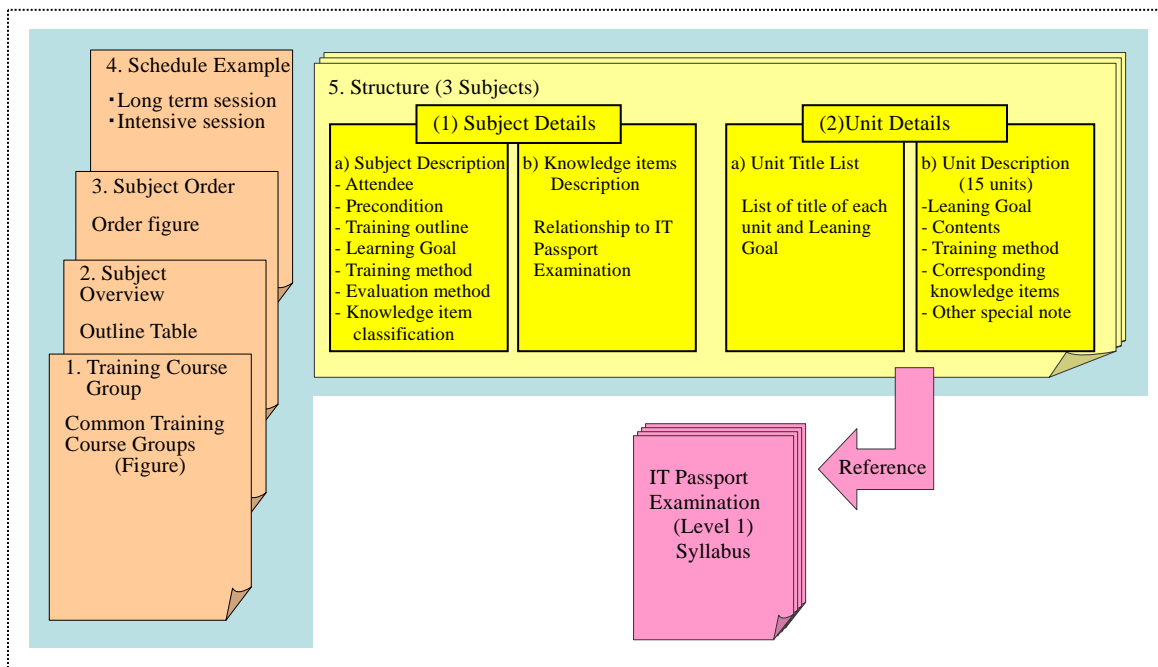
5.1 Common Training Course Groups

Below figure is the Common Training Course Groups of introduction Level and Level 1, corresponding with Skill Standards for IT Professionals (ITSS) V3.

This curriculum has designed for "IT Fundamentals 1", including "Introduction to IT" and "Introduction to Personal Skills" relationship to Introduction Level (Getting Level 1).

	Introduction Level (Getting Level 1)	Level 1	
Technology	IT Fundamentals 1	IT Fundamentals 2	Basic System Development
Methodology			
Project Management			
Business/ Industry			
Personal Skills		Basic Personal Skills	

5.2 Subject Overview

Level	Introduction Level (Getting level 1)		
Course Group	IT Fundamentals 1		
Course Name	Introduction to IT		Introduction to Personal Skills
Subject Code	A111	A112	A121
Subject Name	Introduction to IT 1	Introduction to IT 2	Introduction to Personal Skills
Outline	To acquire basic and general knowledge of strategy and management fields as one of IT Fundamentals 1: Relationships between corporate management strategy and the assigned business tasks for which you may be responsible, Life cycle of system development, Project management, Service management, System audit	To acquire basic and general knowledge of Technology field as one of IT Fundamentals 1: Digitization of information and Algorithm, Hardware and Software, Network, Database, Security	Acquiring personal skills that are the basic elements for business workers: Leadership, Basic communication（Writing, Speaking, Listening, Thinking）, Basic knowledge of presentation, Basic knowledge of problem solving method, Basic knowledge of business manner outline of personal skill for IT user
Attendee	Person who wants to get Level 1 of ITSS		
Precondition	There is no required subject prior to this subject. Applicants must have knowledge equivalent to college examinee. As for Japan, applicants who have knowledge equivalent to high school graduates.	Person who has already finished "Introduction to IT 1" Or applicants must have knowledge equivalent "Introduction to IT 1"	There is no required subject prior to this subject. Applicants must have knowledge equivalent to college examinee. As for Japan, applicants who have knowledge equivalent to high school graduates.
Construction	90 min. x 15	90 min. x 15	90 min. x 15
Total Hours	22.5h	22.5h	22.5h
Unit 1	Orientation History of Computerization and Typical Information System	Orientation Information Expression on Computer System	Orientation Personal Skills required as Business worker
Unit 2	Outline of Typical Computer Systems by Industries or Tasks	Roles of Programming	Introduction to Business Manner 1
Unit 3	Technical Term of Company Activity and Accounting	Types and Configurations of Computers	Introduction to Business Manner 2
Unit 4	Basic Terms that Needs to Formulate the Infomatization Strategy	Types and Functions of Software	Introduction to 2-way Communication 1
Unit 5	Purpose and Concept of Information System Strategy	System Processing Mode and Method	Introduction to 2-way Communication 2
Unit 6	Definition of Task Requirements and Solutions	First Half Wrap Up	Introduction to Communication (distribution of information)
Unit 7	Company Regulation and Legal Terms around You	Multimedia and Human Interfaces	Introduction to Communication (information distribution) Business Writing 1
Unit 8	First Half Wrap Up	Network Technology Utilization 1	Introduction to Communication (information distribution) Business Writing 2
Unit 9	Task Outline and Procedure of Software Development	Network Technology Utilization 2	Introduction to Communication (information distribution) Presentation 1
Unit 10	Overview of Typical Software Development Methods	Database Technology 1	Introduction to Communication (information distribution) Presentation 2
Unit 11	Types of Project on Computerization and the Procedures for Performance	Database Technology 2	Introduction to Communication Information arrangement, Analysis and Search 1
Unit 12	Basic Terms of System Operations	Measures for Information Security 1	Introduction to Communication Information arrangement, Analysis and Search 2
Unit 13	Types and the Necessity of System audit	Measures for Information Security 2	Fundamental of Leadership
Unit 14	Second Half Wrap Up	Second Half Wrap Up	Fundamental of Negotiation
Unit 15	Final Wrap Up	Final Wrap Up	Final Wrap Up

1st column		2nd column		3rd column		4th column	
Level		Course Group		Course Name		Subject	
Code	Level	Code	Course Group	Code	Course	Code	Subject
A	Introduction Getting Level 1	1	IT Fundamentals I	1	Introduction to IT	1	Introduction to IT 1
						2	Introduction to IT 2
				2	Introduction to Personal Skills	1	Introduction to Personal Skills

5.3 Subject Order

Below is training order of each subject.

Introduction to IT 1
[A111]

Introduction to IT 2
[A112]

Introduction to Personal
Skills
[A121]

(Note) [ ] is subject code
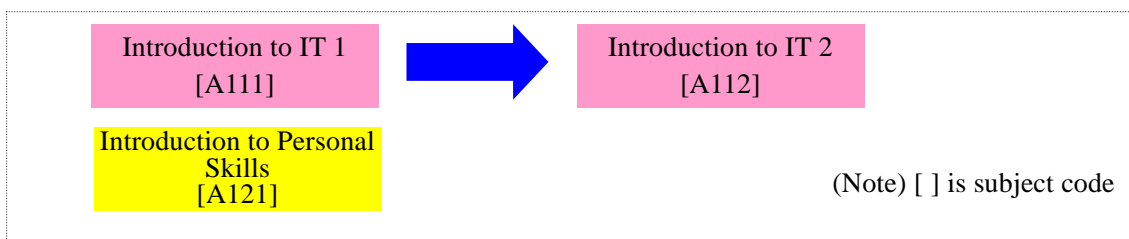
There is no precondition subject for "Introduction to IT 1" and "Introduction to Personal Skills".

Precondition subject of "Introduction to IT 2" is "Introduction to IT 1"

5.4 Schedule Example

1) Schedule for long term session.   *Typical for educational organizations.

In this model curriculum, 1 subject consists of 15 units. It takes half a year to finish it. It is possible to implement multi training courses at the same time, in this sample, taking the "Introduction to IT 2" and "Personal skill introduction" simultaneously.

Introduction to IT 1
[A111]

Introduction to IT 1
[A112]

Introduction to Personal
Skills
[A121]

1 year course

(Note) [ ] is subject code
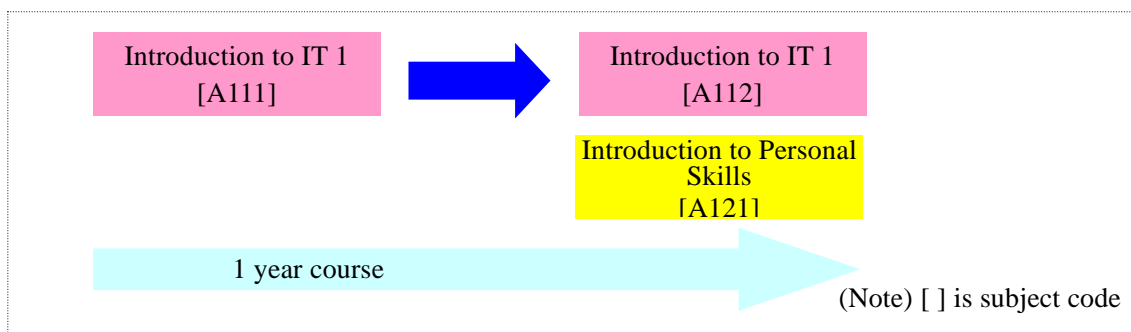
2) Schedule for intensive session.   *Typical for the company training.

Below is the course example for intensive session consists of 15 units in 3 days. In this sample,
5 units will be implemented in a day and it takes 9 days in total for finishing the course.

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9
Introduction to IT 1 [A111]			Introduction to IT 2 [A112]			Introduction to Personal Skills [A121]		

(Note) [ ] is subject code

5.5 Subject Structure

Below is a construction of each subject detail.

(1) Subject Details

    a)   Subject Description

        Subject Details is described in this format.

[Example]

Subject	Subject Name
Subject Code	Subject Code number
Job Category	Job category corresponding with ITSS. In this curriculum, all subjects belong to common job category.
Level Classification (Attendee)	Target level for curriculum In this curriculum, "Getting level 1"
Precondition	Precondition of the course
Training Road Map (Course Groups)	Courses name corresponding with Training Road Map. In this curriculum, " IT Fundamentals 1"
Training Road Map (Course Name)	Training Road Map course name corresponding with this curriculum.
Outline	Outline of the subject
Learning Goal	Learning Goal of the subject.
Training and Education Method	Learning method (Please refer to sample format of unit description for about definition of "exercise", "Hands-on Lab.".)
Evaluation	Description of how to evaluate the subject. For example, course report, Quantitative questionnaire, confirmation test, working attitude, etc.
Course Construction (Estimated Time)	Hours per unit, total number of units and total hours. 90 minutes per 1 unit x 15 units Total learning hours: 22.5 hours
Relationship to Major/Middle Category of Common Career and Skill Framework	

b) Table of Knowledge Items

Below is the "Table of knowledge items" showing the relation between subjects and "IT passport Examination"

There is no table of knowledge items for "Introduction to Personal Skills".

Common Career/Skill Framework					
Field	Major Category		Middle Category		
Strategy	1	CORPORATE AND LEGAL AFFAIRS	1	CORPORATE ACTIVITIES	
			2	LEGAL AFFAIRS	
	2	BUSINESS STRATEGY	3	BUSINESS STRATEGY MANAGEMENT	
			4	TECHNOLOGICAL STRATEGY MANAGEMENT	
			5	BUSINESS INDUSTRY	
	3	SYSTEM STRATEGY	6	SYSTEM STRATEGY	
			7	SYSTEM PLANNING	
Management	4	DEVELOPMENT TECHNOLOGY	8	SYSTEM DEVELOPMENT TECHNOLOGY	
			9	SOFTWARE DEVELOPMENT MANAGEMENT TECHNIQUES	
	5	PROJECT MANAGEMENT	10	PROJECT MANAGEMENT	
	6	SERVICE MANAGEMENT	11	SERVICE MANAGEMENT	
			12	SYSTEM AUDIT	
Technology	7	BASIC THEORY	13	BASIC THEORY	
			14	ALGORITHM AND PROGRAMMING	
	8	COMPUTER SYSTEM	15	COMPUTER COMPONENT	
			16	SYSTEM COMPONENT	
			17	SOFTWARE	
			18	HARDWARE	
	9	TECHNOLOGY ELEMENT	19	HUMAN INTERFACE	
			20	MULTIMEDIA	
			21	DATABASE	
			22	NETWORK	
			23	SECURITY	

** related to mainly

* related to secondly

(2) Unit Details

    a)   Unit Title list

        All the 15 unit titles and the learning goals are in a table.

    b）   Unit Description

        Unit information is described in a format as below.

 [Sample format]

The number of the unit (lecture x minutes - exercise x minutes *Fill hours of lecture or exercise here)	
Learning Goal	Learning Goal

Contents	Information of the unit
	1. xxxxx
	    1) xxx
	     i. - xxx
	    ii. - xxx
	    2) xxx
	2. xxxxx
	3. xxxxx

Training and Education Method (Estimated time)	Lecture time or exercise time by minutes. Lecture :a teacher's talk that is given to a group of people in a subject Hands-on Lab.: Activities using a PC Exercise: Activities do not use PC. Hands-on Lab. in group: Activities using a PC in group. Exercise in group: Activities do not use PC in group.
Correspondence to Major/Middle Category of Common Career and Skill Framework	
Other Special Note	Other notice or specific information

Chapter 2   Subject Details

1. Course Corresponding with "Introduction to IT"

1.1 Introduction to IT 1

1) Subject Details

a) Subject Description

Subject	Introduction to IT 1
Subject Code	A111
Job Category	Common job category.
Level Classification (Attendee)	Getting level 1
Precondition	There is no required subject prior to this subject. Applicants must have knowledge equivalent to college examinee. As for Japan, applicants who have knowledge equivalent to high school graduates.
Training Road Map (Course Groups)	IT Fundamentals 1
Training Road Map (Course Name)	Introduction to IT
Outline	To acquire basic and general knowledge of strategy and management fields as one of IT Fundamentals 1. ➢ Relationships between corporate management strategy and the assigned business tasks for which you may be responsible. ➢ Life cycle of system development ➢ Project management ➢ Service management ➢ System audit
Learning Goal	Utilizing IT Fundamentals knowledge, students can conduct task analysis, problem solving and systemization under supervisor as business workers.
Training and Education Method	Lecture/ Exercise
Evaluation	Report, quantitative questionnaire,, knowledge test or attitude toward exercise
Curriculum Construction	1 unit 90 minutes x 15　(Total Hours：22.5 hours)
Correspondence to Major/Middle Category of Common Career and Skill Framework	**Strategy** 　**1 Corporate and legal affairs**　1 Corporate activities 　　　　　　　　　　　　　　　2 Legal affairs 　**2 Business strategy**　　3 Business strategy management 　　　　　　　　　　　　4 Technological strategy management 　　　　　　　　　　　　5 Business industry 　**3 System strategy**　　6 System strategy 　　　　　　　　　　　　7 System planning **Management** 　**4 Development technology**　8 System development technology 　　　　　　　　　　　　9 Software development technology 　**5 Project management**　10 Project management 　**6 Service management**　11 Service management 　　　　　　　　　　　　12 System audit

b) Table of Knowledge Items

Common Career/Skill Framework					
Field	Major Category		Middle Category		
Strategy	1	CORPORATE AND LEGAL AFFAIRS	1	CORPORATE ACTIVITIES	**
			2	LEGAL AFFAIRS	**
	2	BUSINESS STRATEGY	3	BUSINESS STRATEGY MANAGEMENT	**
			4	TECHNOLOGICAL STRATEGY MANAGEMENT	**
			5	BUSINESS INDUSTRY	**
	3	SYSTEM STRATEGY	6	SYSTEM STRATEGY	**
			7	SYSTEM PLANNING	**
Management	4	DEVELOPMENT TECHNOLOGY	8	SYSTEM DEVELOPMENT TECHNOLOGY	**
			9	SOFTWARE DEVELOPMENT MANAGEMENT TECHNIQUES	**
	5	PROJECT MANAGEMENT	10	PROJECT MANAGEMENT	**
	6	SERVICE MANAGEMENT	11	SERVICE MANAGEMENT	**
			12	SYSTEM AUDIT	**
Technology	7	BASIC THEORY	13	BASIC THEORY	
			14	ALGORITHM AND PROGRAMMING	
	8	COMPUTER SYSTEM	15	COMPUTER COMPONENT	
			16	SYSTEM COMPONENT	
			17	SOFTWARE	
			18	HARDWARE	
	9	TECHNOLOGY ELEMENT	19	HUMAN INTERFACE	
			20	MULTIMEDIA	
			21	DATABASE	
			22	NETWORK	
			23	SECURITY	

** related to mainly

* related to secondly

2) Unit Details

a) Unit Title List

	Title	Learning Goal
Unit 1	Orientation History of Computerization and Typical Information Systems	Explain history of computerization and characteristics of typical information systems.
Unit 2	Outline of Typical Computer Systems by Industries or Tasks	Explain the construction of company and the outline of typical systems by industries and tasks
Unit 3	Technical Term of Company Activity and Accounting	Explain basic terms of accounting to evaluate the company outcome.
Unit 4	Basic Terms that Needs to Formulate the Infomatization Strategy	Explain basic terms and methods those need to formulate the infomatization strategy based on business objectives.
Unit 5	Purpose and Concept of Information System Strategy	Explain purpose of information system strategy and computerization planning according to business strategy of the company.
Unit 6	Definition of Task Requirements and Solutions	Analyze own organization issue and then explain typical term and method that define operational requirements according to information system strategy
Unit 7	Company Regulation and Legal Terms around You	Explain company law and legal terms around you
Unit 8	First Half Wrap Up	Summarize first half lectures about strategy field
Unit 9	Task Outline and Procedure of Software Development	Explain the process of system requirements definition of starting up of operation, (go live) and technical terms of work items based on the business requirement
Unit 10	Overview of Typical Software Development Methods	Explain the purpose and the outline of typical software development methods.
Unit 11	Types of Project on Computerization and the Procedures for Performance	Explain process and term: types of project on computerization , project planning, development management and the procedures for performance
Unit 12	Basic Terms of System Operations	Explain the significance and purpose of IT service management. Also explain the perspective of the service management and terms related to the system operations.
Unit 13	Types and the Necessity of System audit	Explain the necessity of system audit, types and terms which needs to promote and establish efficiency, security and reliability for IT system.
Unit 14	Second Half Wrap Up	Summarize second half lectures about management field.
Unit 15	Final Wrap Up	Final wrap up

b) Unit Description

Unit 1 Orientation History of Computerization and Typical Information Systems (Lecture 90 minutes)	
Learning Goal	Explain history of computerization and characteristics of typical information systems.
Contents	1. Orientation 2. History of computerization 3. Information system as social infrastructure 4. Information services of the government.
Training and Education Method (Estimated Time)	Lecture 90 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	Business strategy - Business industry
Other Special Note	

Unit 2	Outline of Typical Computer Systems by Industries or Tasks (Lecture 80 minutes + Exercise 10 minutes)
Learning Goal	Explain the construction of company and the outline of typical systems by industries and tasks

Contents	1. Environmental changes surrounding companies
	2. Main business activities of companies
	   1) Corporate activities and management resources
	   2) Business management
	   3) Management organization
	3. Sample Usage in engineering field
	   1) FA (Factory Automation)
	   2) CAD/CAM (Computer-Aided Design/
	      Computer-Aided Manufacturing)
	   3) CIM (Computer Integrated Manufacturing)
	   4) Production control system
	   5) Embedded system
	4. Sample usage in business field
	   1) POS(Point of Sales)system
	   2) IC card application system
	   3) ETC(Electronic Toll Collection System)
	   4) RFID application system (IC tag application)
	5. Exercise [The typical system review]

Training and Education Method (Estimated time)	Lecture 80 minutes Exercise 10 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	Corporate and legal affairs - Corporate activities Business strategy - Business industry
Other Special Note	

Unit 3	Technical Term of Company Activity and Accounting (Lecture 70 minutes + Exercise 20 minutes)
Learning Goal	Explain basic terms of accounting to evaluate the company outcome

Contents	1. Financial accounting
	
	  1) Balance sheet (B/S)
	
	  2) Profit and loss statement (P/L)
	
	  3) Exercise [interpretation of B/S, P/L]
	
	2. Management accounting
	
	  1) Profitability
	
	  2) Break-even point
	
	  3) Inventory control
	
	  4) Exercise [Break-even point]

Training and Education Method (Estimated time)	Lecture 70 minutes Exercise 20 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	Corporate and legal affairs - Corporate activities
Other Special Note	This unit will cover only concept of analyzing assigned job and problem solution including method and tool. .

Unit 4 Basic Terms that Needs to Formulate the Infomatization Strategy (Lecture 70 minutes + Exercise 20 minutes)	
Learning Goal	Explain basic terms and methods those need to formulate the infomatization strategy based on business objectives.

Contents	1. The main issue in a range from business objectives to business strategy development
	
	  1) Business objectives and strategy
	
	  2) Product portfolio management (PPM)
	
	  3) Customer satisfaction
	
	  4) Business management system (CRM, SCM)
	
	  5) Critical success factor (CSF extraction)
	
	  6) Exercise [SWOT analysis, CSF extraction]
	
	2. Significance and purpose of technology development strategies

Training and Education Method (Estimated Time)	Lecture 70 minutes Exercise 20 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	Business strategy - Business strategy management Business strategy - Technological strategy management
Other Special Note	- The data collection and the analysis are studied in the Unit 6 of Introduction to IT 1.

Unit 5	Purpose and Concept of Information System Strategy (Lecture 80 minutes + Exercise 10 minutes)
Learning Goal	Explain purpose of information system strategy and computerization planning according to business strategy of the company

Contents	1. Significance and purpose of system strategy development
	2. Confirm the target scope of computerization
	   (1) Modeling of business process (DFD, E-R diagram)
	   (2) Exercise [Types and relations of business process]
	3. Effective use of groupware and office tools for communications
	4. Operational efficiency using computer or network

Training and Education Method (Estimated Time)	Lecture 80 minutes Exercise 10minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	System strategy - System planning
Other Special Note	

Unit 6 Definition of Task Requirements and Solutions (Lecture 60 minutes + Exercise 30 minutes)	
Learning Goal	Analyze own organization issue and then explain typical term and method that define operational requirements according to information system strategy

Contents	1. Analyze the result of corporate activities
	    - Management cycle of corporate activities
	2. Procedure to analyze individual tasks
	    - Understand and analyze assigned job, and solve the problems
	3. Present job analysis
	  1) Modeling of present workflows
	  2) Exercise [Workflows]
	4. Problem analysis
	  1) 7 QC tools[1] analysis
	  2) Exercise [Cause and effect of the problem]
	5. Consideration of solutions
	  1) Definition o f operational requirements.
	  2) Knowledge concerning procurement
	    - Request for Information (RFI)
	    - Request for proposal (RFP)
	    - Estimate
	    - Evaluation of the proposals, selection of suppliers
	    - Flow of procurement

Training and Education Method (Estimated Time)	Lecture 60 minutes Exercise 30 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	Corporate and legal affairs - Corporate activities Business strategy - Business strategy management System strategy - System Planning
Other Special Note	

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[1] Also known as the seven basic tools of quality control: control chart, histogram, Pareto chart, check sheet, cause-and-effect diagram, graph, and scatter diagram.

Unit 7 Company Regulation and Legal Terms around You (Lecture 80 minutes + Exercise 10 minutes)	
Learning Goal	Explain company law and legal terms around you.
Contents	1. Laws on intellectual property rights 　1) Copyright Act 　2) Industrial property rights (patent, utility model, design, and trademark) 2. Act on Protection of Personal Information 3.. Laws on Labor 　1) Labor Standards Act 　2) Act for Securing the Proper Operation of Worker Dispatching Undertakings and Improved Working Conditions for Dispatched Workers 4. Laws on transaction and safety 　3) Unfair Competition Prevention Act 　4) Product Liability Act 5. Compliance 6. Concept of Software license 7. Corporate governance 8. Standardization 　- ISO etc..… 9. Exercise [CSR, Standardization]
Training and Education Method (Estimated Time)	Lecture 80 minutes Exercise 10 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	Corporate and legal affairs - Legal affairs
Other Special Note	Legal affair for the information security or network are learned in Introduction to IT 2.

Unit 8　First Half Wrap Up　(Lecture 30 minutes + Exercise 60 minutes)	
Learning Goal	Summarize first half lectures about strategy field.
Contents	1. Summary of lecture in the first half 2. Exercise [Exercise from unit 1 to unit 7] 3. Question and answer
Training and Education Method (Estimated Time)	Lecture 30 minutes Exercise 60 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	
Other Special Note	

Unit 9 Task Outline and Procedure of Software Development. (Lecture 80 minutes + Exercise 10 minutes)	
Learning Goal	Explain the process of system requirements definition of starting up of operation, (go live) and technical terms of work items based on the business requirement.

Contents	1. System development procedures
	
	   1) Requirement definition
	
	   2) System design
	
	   3) Programming
	
	   4) Test
	
	   5) Software acceptance
	
	   6) Software maintenance
	
	2. Exercise [Generation of test data]

Training and Education Method (Estimated Time)	Lecture 80 minutes Exercise 10 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	Development technology - System development technology
Other Special Note	To learn about the system requirements definition, design, review, development, and the test that related to software development process and system maintenance.

Unit 10	Overview of Typical Software Development Methods (Lecture 70 minutes + Exercise 20 minutes)
Learning Goal	Explain the purpose and the outline of typical software development methods.
Contents	1. System development methods 　1) Process models 　　- Water fall model 　　- Prototyping model 　　- Spiral model 　2) Development models 　　- Object-oriented design 　　- Structured design 2. Development tools, software packages and the usage 　1) Programming languages 　2) Software packages 　　- Software packages for each job role (accounting, business support and sales management) 　　- Software package for each industry (finance, medical services, production, transportation) 　　- ERP (Enterprise Resource Planning) package 3. Exercise
Training and Education Method (Estimated Time)	Lecture 70 minutes Exercise 20 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	Development technology - Software development management techniques
Other Special Note	

Unit 11 Types of Project on Computerization and the Procedures for Performance (Lecture 60 minutes + Exercise 30 minutes)	
Learning Goal	Explain process and term: types of project on computerization , project planning, development management and the procedures for performance

Contents	1. Project management
	
	   1) Significance and purpose of project management
	
	   2) Project management standards(PMBOK, P2M)
	
	 2. Process in project management
	
	 3. Project management methods
	
	   1) Scope definition (WBS)
	
	   2) Activity duration estimation (arrow diagram)
	
	   3) Management with result value to plan value (progress management)
	
	 4. Exercise [Project management technique.]

Training and Education Method (Estimated Time)	Lecture 60 minutes Exercise 30 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	Project management - Project management
Other Special Note	

Unit 12 Basic Terms of System Operations (Lecture 80 minutes + Exercise 10 minutes)	
Learning Goal	Explain the significance and purpose of IT service management. Also explain the perspective of the service management and terms related to the system operations.
Contents	1. IT Service management - Significance and purpose of IT Service management 2. Information Technology Infrastructure Library (ITIL) 3. Service desk (help desk) 4. Maintenance of system operation environment
Training and Education Method (Estimated Time)	Lecture 80 minutes Exercise 10 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	Service management - Service management
Other Special Note	

Unit 13 Types and the Necessity of System audit (Lecture 80 minutes + Exercise 10 minutes)	
Learning Goal	Explain the necessity of system audit, types and terms which needs to promote and establish efficiency, security and reliability for IT system.

Contents	1. Internal control basics
	    - Significance and purpose of internal control
	2. System audit basics.
	  1) Significance and purpose of system audit
	  2) Flow of plan, investigation, and report
	3. Exercise [Internal control and system audit]

Training and Education Method (Estimated Time)	Lecture 80 minutes Exercise 10 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	Service management - System audit
Other Special Note	

Unit 14 Second Half Wrap Up (Lecture 30 minutes + Exercise 60 minutes)	
Learning Goal	Summarize second half lectures about management field.
Contents	1. Summary the second half lecture 2. Exercise [Exercise from unit 9 to unit 13] 3. Question and answer
Training and Education Method (Estimated Time)	Lecture 30 minutes Exercise 60 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	
Other Special Note	

Unit 15 Final Wrap Up (Lecture 30 minutes + Exercise 60 minutes)	
Learning Goal	Final wrap up
Contents	1. Summary 2. Exercise-all through the subject 3. Question and answer
Training and Education Method (Estimated Time)	Lecture 30 minutes Exercise 60 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	
Other Special Note	

1.2 Introduction to IT 2

1) Subject Details

a) Subject Description

Subject	Introduction to IT 2
Subject Code	A112
Job Category	Common job category.
Level Classification (Attendee)	Getting level 1
Precondition	Person who has already finished "Introduction to IT 1" Or applicants must have knowledge equivalent "Introduction to IT 1"
Training Road Map (Course Groups)	IT Fundamentals 1
Training Road Map (Course name)	Introduction to IT
Outline	To acquire basic and general knowledge of Technology field as one of IT Fundamentals 1: ➢ Digitization of information and algorithm ➢ Hardware and software ➢ Network ➢ Database ➢ Security
Learning Goal	Utilizing IT fundamentals knowledge, students can conduct task analysis, problem solution and systemization under supervisor as business workers.
Training and Education Method (Estimated Time)	Lecture/ Exercise
Evaluation	Report, quantitative questionnaire, knowledge test or attitude toward exercise
Curriculum Construction	1 unit 90 minutes x 15 (Total Hours：22.5 hours)

Correspondence to Major/Middle Category of Common Career and Skill Framework	**Technology**
	  7 Basic theory　　13 Basic theory
	　　　　　　　　　　14 Algorithm and programming
	  8 Computer system
	　　　　　　　15 Computer component
	　　　　　　　16 System component
	　　　　　　　17 Software
	　　　　　　　18 Hardware
	  9 Technological element
	　　　　　　　19 Human interface
	　　　　　　　20 Multimedia
	　　　　　　　21 Database
	　　　　　　　22 Network
	　　　　　　　23 Security

b) Table of Knowledge Items

Common Career/Skill Framework					
Field	Major Category		Middle Category		
Strategy	1	CORPORATE AND LEGAL AFFAIRS	1	CORPORATE ACTIVITIES	
			2	LEGAL AFFAIRS	
	2	BUSINESS STRATEGY	3	BUSINESS STRATEGY MANAGEMENT	
			4	TECHNOLOGICAL STRATEGY MANAGEMENT	
			5	BUSINESS INDUSTRY	
	3	SYSTEM STRATEGY	6	SYSTEM STRATEGY	
			7	SYSTEM PLANNING	
Management	4	DEVELOPMENT TECHNOLOGY	8	SYSTEM DEVELOPMENT TECHNOLOGY	
			9	SOFTWARE DEVELOPMENT MANAGEMENT TECHNIQUES	
	5	PROJECT MANAGEMENT	10	PROJECT MANAGEMENT	
	6	SERVICE MANAGEMENT	11	SERVICE MANAGEMENT	
			12	SYSTEM AUDIT	
Technology	7	BASIC THEORY	13	BASIC THEORY	**
			14	ALGORITHM AND PROGRAMMING	**
	8	COMPUTER SYSTEM	15	COMPUTER COMPONENT	**
			16	SYSTEM COMPONENT	**
			17	SOFTWARE	**
			18	HARDWARE	**
	9	TECHNOLOGY ELEMENT	19	HUMAN INTERFACE	**
			20	MULTIMEDIA	**
			21	DATABASE	**
			22	NETWORK	**
			23	SECURITY	**

** related to mainly

* related to secondly

2) Unite Details

a) Unit Title List

	Title	Learning target
Unit 1	Orientation, Information Expression on Computer System	Explain the method and the term about numeric and character expression on the computer
Unit 2	Roles of Programming	Explain the relationships between algorithm and programming
Unit 3	Types and Configurations of Computers	Explain the configurations of computers and roles
Unit 4	Types and Functions of Software	Explain the types and functions of software
Unit 5	System Processing Mode and Method	Explain system processing mode and method
Unit 6	First Half Wrap Up	Summary of the first half
Unit 7	Multimedia and Human Interfaces	Explain types of multimedia and basic terms of human interface
Unit 8	Network Technology Utilization 1	Explain the internet mechanism and characteristics of the communication services
Unit 9	Network Technology Utilization 2	Explain the terms of network and communication protocol.
Unit 10	Database Technology 1	Explain the method of data modeling and database normalization
Unit 11	Database Technology 2	Explain the methods of table manipulation
Unit 12	Measures for Information Security 1	Explain basic terms of security measures
Unit 13	Measures for Information Security 2	Explain basic terms for security measures
Unit 14	Second Half Wrap Up	Summary of the second half
Unit 15	Final Wrap Up	Final wrap up

b) Unit Description

Unit 1 Orientation. Information Expression on Computer system (Lecture 80minutes + Exercise 10minutes)	
Learning Goal	Explain the method and the term about numeric and character expression on the computer
Contents	1. Orientation 2. Basic theory of information 　1) Expression of numerical value and character 　　- Binary number and decimal number 　　- Bit, byte, and information volume 　　- Character code 　2) Exercise [Expression method of numerical value data] 　3) Expression of the non-numerical data 　　- Sound expression : PCM, MIDI, MP3 　　- Image expression : JPEG, MPEG 　4) Expression of document 　　- PDF, HTML, XML 3. Information and logic 　1) Information and logic 　　- Sets and logical operations 　2) Applied Mathematics 　　- Probability and statistics 4. Data compression and entropy
Training and Education Method (Estimated Time)	Lecture 80 minutes Exercise 10 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	Basic theory - Basic theory Technology element - Multimedia
Other Special Note	

Unit 2 Roles of Programming (Lecture 70 minutes + Exercise 20 minutes)	
Learning Goal	Explain the relationships between algorithm and programming

Contents	1. Algorithm and programming
	
	  1) Purpose and theory of programming
	
	  2) Concept of algorithm
	    - Relationship between algorithm and flowchart
	    - Algorithm and data structures
	    - Selection of algorithm
	  3) Markup languages
	    - HTML
	    - XML

Training and Education Method (Estimated Time)	Lecture 70 minutes Exercise 20 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	Basic theory - algorithm and programming
Other Special Note	

Unit 3	Types and Configurations of Computers (Lecture 70 minutes + Exercise 20 minutes)
Learning Goal	Explain the configurations of computers and roles.

Contents	1. Types of computer
	
	2. Computer components
	
	3. Main memory(Memory)
	
	4. Central Processing Unit (CPU)
	    - Performance and mechanism of a processor
	
	5. Types and characteristics of input device
	
	6. Types and characteristics of output device
	
	7. Types and characteristics of Intelligent home appliances
	
	8. Types and characteristics of storage media
	
	9. Read/Write of Auxiliary memory devices
	  1) Magnetic disk device
	    - Record/Access method
	  2) Optical disk
	  3) Exercise [Record/Access method]
	
	10.I/O interface

Training and Education Method (Estimated Time)	Lecture 70 minutes Exercise 20 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	Computer system - Hardware Computer system - Computer component
Other Special Note	

Unit 4 Types and Functions of Software (Lecture 70 minutes + Exercise 20 minutes)	
Learning Goal	Explain the types and functions of software.
Contents	1. Types and Functions of Operating System (OS) 　1) Necessity of operating system (OS) 　2) Types and functions of operating system (OS) 2. Types of Software 　1) Control program 　2) Service program 　3) Language processor 　4) Software packages 　　- Word processing software 　　- Spreadsheet software 　　- Presentation software 　　- WWW browser 　5) Exercise [Types of Software] 3. Types and characteristics of file 　1) The concepts of file management 　2) Access method 　3) Search method
Training and Education Method (Estimated Time)	Lecture 70 minutes Exercise 20 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	Computer system - Software
Other Special Note	

Unit 5 System Processing Mode and Method (Lecture 70 minutes + Exercise 20 minutes)	
Learning Goal	Explain system processing mode and method

Contents	1. System component and configuration methods
	
	   1) Client/server system
	
	    - The characteristics of a client/server system
	    - Web system
	
	   2) System configuration methods
	
	    - Dual system
	    - Duplex system
	
	2. System evaluation
	
	   1) System performance
	
	    - Response time
	    - Benchmark
	
	   2) System reliability
	
	    - Availability (MTBF, MTTR)
	    - The design of reliability
	
	   3) Exercise[calculation of availability]
	
	3. System applications
	
	   1) Applications of network.
	
	   2) Applications of database.

Training and Education Method (Estimated Time)	Lecture 70 minutes Exercise 20 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	Computer system - System component
Other Special Note	

Unit 6　First Half Wrap Up　(Lecture 30 minutes + Exercise 60 minutes)	
Learning Goal	Summary of the first half
Contents	1. Summary lectures of the first half. 2. Exercise[Exercise from unit 1 to unit 5] 3. Question and answer
Training and Education Method (Estimated Time)	Lecture 30 minutes Exercise 60 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	
Other Special Note	

Unit 7 Multimedia and Human Interfaces (Lecture 70 minutes + Exercise 20 minutes)	
Learning Goal	Explain types of multimedia and basic terms of human interface.

Contents	1. Sample applications of multi media system
	
	   1) CG(Computer Graphics)
	
	   2) VR(Virtual Reality)
	
	2. Human interface
	
	   1) Concepts of User Interface
	
	   2) GUI(Graphical User Interface)
	
	3. Concept of interface design
	
	   1) Screen and form interface
	
	    - Menu method
	
	   2) Universal design
	
	   3) Web design
	
	4. Exercise [effective usage of Human interface]

Training and Education Method (Estimated Time)	Lecture 70 minutes Exercise 20 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	Technology elements - Human interface Technology elements - Multimedia
Other Special Note	JPEG, MPEG, and MP3 recording/compression are learned in the Unit 1 of Introduction to IT 2.

Unit 8　Network Technology Utilization 1 (Lecture 70 minutes + Exercise 20 minutes)	
Learning Goal	Explain the internet mechanism and characteristics of the communication services
Contents	1. Mechanism of the internet search 　1) Search in the Internet 　　- Search mechanism 　2) Exercise[Search mechanism] 2. Characteristics of Internet services 　1) Electronic commerce 　2) E-mail 　　- E-mail mechanism 　3) Internet application 　　- Types and characteristics of distance learning (e-Learning) 　　- IP telephony 　4) Exercise [Types of service] 3. Types and characteristics of communication services 　1) Types and characteristics 　2) Charging 　3) Transmission speed
Training and Education Method (Estimated Time)	Lecture　70 minutes Exercise　20 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	Technology element - Network
Other Special Note	

Unit 9 Network Technology Utilization 2 (Lecture 70 minutes + Exercise 20 minutes)	
Learning Goal	Explain the terms of network and communication protocol.
Contents	1. Types and characteristics of Network 　　1) LAN(TCP/IP, IP address) 　　2) WAN 　　3) Other communication services 　　4) Exercise [IP address] 　　5) Communications devices 　　　- Internetworking devices 　　　- Analog communication devices 　　　- Digital communication devices 2. Communication protocol 3. Exercise [Types and functions of communication devices]
Training and Education Method (Estimated Time)	Lecture 70 minutes Exercise 20 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	Technology element - Network
Other Special Note	

Unit 10　Database Technology 1　(Lecture 70 minutes + Exercise 20 minutes)	
Learning Goal	Explain the method of data modeling and database normalization
Contents	1. Database 　1) The concept of modeling 　2) The concept of analysis and design for data 　　- Database normalization 2. Exercise [Database normalization method]
Training and Education Method (Estimated Time)	Lecture 70 minutes Exercise 20 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	Technology element - Database
Other Special Note	

Unit 11　Database Technology 2　(Lecture 70 minutes + Exercise 20 minutes)	
Learning Goal	Explain the methods of table manipulation
Contents	1. Relational database manipulation 　1) The Purpose and functions of database management system (DBMS) 　2) Data extraction and Relational operation 　3) Exercise [Table manipulation] 　4) Database control function 　　- The exclusive control[2] 　　- The Recovery process (Rollback, Roll forward)
Training and Education Method (Estimated Time)	Lecture　70 minutes Exercise　20 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	Technology element - Database
Other Special Note	

[2]Also known as mutual exclusion.

Unit 12 Measures for Information Security 1 (Lecture 70 minutes + Exercise 20 minutes)	
Learning Goal	Explain basic terms of security measures
Contents	1. Information Security 　1) Information asset management 　2) Types of threat and related vulnerability 　3) Types of measure for information security 　4) Purpose and role of risk management 　5) Types of risk management 　6) Risk analysis 　7) Measure for the Risk 2. Exercise
Training and Education Method (Estimated Time)	Lecture 70 minutes Exercise 20 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	Technology element - Security
Other Special Note	

Unit 13 Measures for Information Security 2 (Lecture 70 minutes + Exercise 20 minutes)	
Learning Goal	Explain basic terms for security measures
Contents	1. Technical measures for information security 　1) Types and characteristics of the personal authentication technology 　　- ID, password 　　- Callback 　　- Digital signature 　　- Biometrics authentication technology 　2) Types and characteristics of encryption technology 　　- Mechanism of public key cryptography 　　- Mechanism of secret key cryptography 　3) Unauthorized computer access and measures against computer viruses 　　- Entrance access controls 　　- Access controls, confidentiality controls 　　- Firewall 　　- Types and measures of computer virus 　4) Exercise [Types and measures of computer security] 2. Other measures of computer security 　1) Leakage of personal information 　2) Information security policy 　3) Clarification of responsibility and authority 　4) Information security management system(ISMS)
Training and Education Method (Estimated Time)	Lecture　70 minutes Exercise　20 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	Technology element - Security
Other Special Note	

Unit 14 Second Half Wrap Up (Lecture 30 minutes + Exercise 60 minutes)	
Learning Goal	Summary of the second half
Contents	1. Summary of the second half lecture 2. Exercise[Exercise from unit 7 to unit 13] 3. Question and answer
Training and Education Method (Estimated Time)	Lecture 30 minutes Exercise 60 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	
Other Special Note	

Unit 15 Final Wrap Up (Lecture 30 minutes + Exercise 60 minutes)	
Learning Goal	Final wrap up
Contents	1. Summary 2. Exercise – all through the subject 3. Question and answer
Training and Education Method (Estimated Time)	Lecture 30 minutes Exercise 60 minutes
Relationship to Major/Middle Category of Common Career/Skill Framework	
Other Special Note	

2. Course Reference to" Introduction to Personal Skills"

2.1 Introduction to Personal Skills

1) Subject Details

a) Subject Description

Subject	Introduction to Personal Skills
Subject Code	A121
Job Category	Common job category.
Level Classification (Attendee)	Getting level 1
Precondition	There is no required subject prior to this subject. Applicants must have knowledge equivalent to college examinee. As for Japan, applicants who have knowledge equivalent to high school graduate.
Training Road Map (Course Groups)	IT Fundamentals 1
Training Road Map (Course name)	Introduction to Personal Skills
Outline	Acquiring personal skills that are the basic elements for business workers: leadership, basic communication skill （Writing, Speaking, Listening, Thinking）, basic knowledge of presentation, basic knowledge of problem solving and logical thinking., basic knowledge of business manner, basic knowledge to utilize personal skill for IT user
Learning Goal	Taking part in a project as a business worker utilizing personal skill under the direction of a leader
Training and Education Method (Estimated Time)	Lecture and Exercise in group
Evaluation	General Judgment Including; Report after finishing the lecture Quantitative questionnaire Informal Test Positive attitude
Curriculum Construction	1 unit 90 minutes x 15 (Total Hours: 22.5 hours)

2) Unit Details

a) Unit Title List

	Title	Learning Goal
Unit 1	Orientation Personal Skills required as Business worker	Comprehend the learning goal of this subject. Explain the outline of personal skill as business workers
Unit 2	Introduction to Business Manner 1	Act appropriately as business workers to get trust from clients.
Unit 3	Introduction to Business Manner 2	To Learn reporting, communicating and asking for an advice, correspond to customer and telephoning as business workers
Unit 4	Introduction to 2-way Communication 1	Interviewing and active listening utilizing knowledge of 2-way communication as business worker
Unit 5	Introduction to 2-way Communication 2	Build consensus of the team and report to supervisor utilizing 2-way communication as business worker
Unit 6	Introduction to Communication (distribution of information)	Utilize knowledge of basic distribution of information as business workers
Unit 7	Introduction to Communication (information distribution) Business Writing 1	Explain how to write basic business writings as business worker
Unit 8	Introduction to Communication (information distribution) Business Writing 2	Comprehend how to write good business documents and write correct and intelligible business documents
Unit 9	Introduction to Communication (information distribution) Presentation 1	Explain basic presentation method as a tool of information distribution
Unit 10	Introduction to Communication (information distribution) Presentation 2	Explain effective presentation method as business workers as information distribution
Unit 11	Introduction to Communication Information arrangement, Analysis and Search 1	Explain fundamental communication management at workplace
Unit 12	Introduction to Communication Information arrangement, Analysis and Search 2	Hold smooth meeting utilizing communication management knowledge as business workers
Unit 13	Fundamental of Leadership	Explain fundamental and principle of leadership required as business workers.
Unit 14	Fundamental of Negotiation	Explain fundamental and principal of the negotiation which are required as business workers.
Unit 15	Final Wrap Up	Summary of the subject

b) Unit Description

Unit 1 Orientation: Personal Skills required as Business worker (Lecture 90 minutes)	
Learning Goal	Comprehend the learning goal of this subject. Explain the outline of personal skill as business workers

Contents	1. Orientation
	
	2. Personal skills required for business workers.
	
	   1) Current situation of IT utilization for business workers.
	
	   2) The background for personal skills needs.
	
	   3) Personal skills required for business workers.
	
	   4) Business manners
	
	   5) Communications
	
	   6) Leaderships
	
	   7) Negotiations
	
	   8) When and where personal skills are utilized?
	
	   9) To become a professional who can utilize IT
	
	3. Outline of business manner.
	
	   1) What is business manner?
	
	   2) The importance of business manner
	
	   3) When and where business manner is utilized?
	
	4. Outline of Communication.
	
	   1) What is communication?
	
	   2) The importance of communication
	
	   3) When and where communication is utilized?
	
	5. Outline of leadership
	
	   1) What is leadership?
	
	   2) The importance of leadership
	
	   3) When and where leadership is utilized?
	
	6. Outline of negotiation
	
	   1) What is negotiation?
	
	   2) The importance of negotiation
	
	   3) When and where negotiation is utilized?

Training and Education Method (Estimated Time)	Lecture :90 minutes
Other Special Note	

Unit 2	Introduction to Business Manner 1 (Lecture 50 minutes + Exercise in group 40 minutes)
Learning Goal	Act appropriately as business workers to get trust from clients.
Contents	1. Company organization and IT utilization 　1) What are organizations? 　2) Types of organization form 　　- Professional ability classification 　　- Divisional classification 　　- Functional classification 　　- Matrix classification 　3) To get smooth communication in the organization 2. Appropriate attitude as business workers 　1) The difference between students and business workers 　2) Exercise in group 　　[Clarify the difference between students and business workers] 　　<Exercise form> Group 　　<Output> Presentation 　3) Mindset as professional workers 　　- The importance of building human relationships inside a company 　　- The importance of building human relationships outside a company 3. Basic of business manner 　1) Whom business manner for? 　2) The first impression to get trust from clients. 　3) Foundation of the manner for the communication 　　- Expression / posture / action 　　- The importance of greetings 　　- Manner of speaking 　　- Wording 4. Exercise in group [wording and honorific words.] 　　<Topic> Working report to supervisor in the company. 　　　　　　Business meeting with clients 　　<Exercise Formation> 3 people in a group 　　<Output> Role-play (Inside / outside the company)
Training and Education Method (Estimated Time)	Lecture 50 minutes Exercise in group 40 minutes
Other Special Note	

Unit 3 Introduction to Business Manner 2 (Lecture 30 minutes + Exercise in group 60 minutes)	
Learning Goal	To Learn reporting, communicating and asking for an advice, correspond to customer and telephoning as business workers.

Contents	1. Communication that manner is necessary in workplace.
	    1) Communication in business
	      - Telephone correspondence
	        reporting/contacting/Asking for an advice/
	        guest correspondence/visiting customers
	    2) Act responsibly as business workers
	2. Manner of telephone correspondence
	    1) Telephone correspondence at workplace
	      - Mind set of telephoning
	      - How to receiving a call
	    2) Exercise in group [receiving calls]
	      <Topic> Receiving a telephone call for leader
	      < Format> Pair
	      <Output> Role play
	    3) How to make a phone call
	    4) Exercise in group [The way to make a phone call]
	      <Topic> Confirming the meeting date and the time to clients.
	      <Exercise form> in pair exercise
	      <Output>Role-play
	    5) Leaving the phone slip.
	3. Report/contact/Asking for an advice
	    1) About report/contact/Asking for an advice in business
	    2) Tips for report/contact/Asking for an advice
	    3) The manner to guest correspondence
	      - Attend to customer at workplace / Attitude of attend to customer at workplace
	      - The manner of attend to customer/Preparation and corresponding /Cleanup
	    4) Exercise in group [The manner to greet customer]
	      <Topic> Attend to customer
	      <Exercising formation>Group
	      <Output>Role play
	    5) The manner to visit clients
	    6) Tips for visiting clients.
	4. Exercise in group [Exchanging business cards]
	      <Topic> Exchange business cards with customer as visitors.
	      < Exercise Formation > In pair
	      <Output> Role play

Training and Education Method (Estimated time)	Lecture: 30 minutes Exercise in group 60 minutes
Other Special Note	

Unit 4 Introduction to 2-way Communication 1 (Lecture 50 minutes + Exercise in group 40 minutes)	
Learning Goal	Interviewing and active listening utilizing knowledge of 2-way communication as business worker.

Contents	1. What is communication?
	
	  1) Structure of communication(Input / Concept / Output)
	
	  2) What is comprehension?
	
	  3) Communication process of understanding.
	
	  4) The communication technique in business
	
	2. Mechanism and process of communication
	
	  1) Process of communication
	
	  2) To conduct communication continually
	
	3. Listening Exercise in business.
	
	  1) What is active listening?
	
	  2) Listening method
	
	    - Have speaker to keep motivating while listening.
	
	  3) Exercise in group "Active listening"
	
	    <Topic> Ask about partner's hobby.
	    <exercise form> In Pair
	    <Output> Role-play
	
	  4) The method to get the information from others effectively
	
	  5) Questioning method
	
	    - Open question / Closed question
	    - Question for past issues / Question for future issues
	
	  6) What is interviewing?
	
	    - Procedure of interview
	    - Tips for interview
	
	4. Exercise in group [Hearing information from partner by using question technique]
	
	    <Topic> Get out the hobby of the partner
	    < Exercise Formation >In Pair
	    <Output> Role play

Training and Education Method (Estimated time)	Lecture 50 minutes Exercise in group 40 minutes
Other Special Note	

Unit 5 Introduction to 2-way Communication 2 (Lecture 40 minutes + Exercise in group 50 minutes)	
Learning Goal	Build consensus of the team and report to supervisor utilizing 2-way communication as business worker.
Contents	1. Exercise to "Talk" intelligibly in business. 　1) What is speaking coherently in business? 　　- Reporting 　　- Communicating 　　- Asking for an advice 　2) In an intelligible way 　3) Exercise in group [Working Report to a supervisor] 　　<Topic> Making a business report of a week. 　　<Format> in pair 　　<Output> Role play 2. Consensus building 　1) What is consensus building? 　2) The importance of consensus building 　3) Process of consensus building. 　4) Exercise in group [building a consensus] 　　<Topic> Finding benefits of consensus building and obtain consensus. 　　< Exercise Formation >in a Group 　　<Output> Role play 3. Communication method for IT utilization. 　1) To Exercise smooth communications
Training and Education Method (Estimated time)	Lecture 40 minutes Exercise in group 50 minutes
Other Special Note	

Unit 6 Introduction to Communication (distribution of information) (Lecture 40 minutes + Exercise in group 50 minutes)	
Learning Goal	Utilize knowledge of basic distribution of information as business workers.

Contents	1. The communication utilizing in business fields.
	
	  1) What is information distribution?
	
	  2) Importance of Information distribution in business fields
	
	  3) Information distribution method
	
	   - Business documents
	   - Presentations
	
	  4) Information distribution according to purpose.
	
	   - Purpose of reporting
	   - Purpose of contacting
	   - Purpose of discussing
	   - Purpose of proposal
	
	  5) Applying information distribution in business.
	
	  6) Exercise in group [Consider communicating method in business and it's media]
	
	   <Topic> Discuss communication methods according to business occasions and effective selection of media.
	   <Exercise Formation> Group
	   <Output> Presentation after discussing in a group.
	
	2. Process for smooth information distribution
	
	  1) Process of information distribution
	
	  2) Some notes for information distribution.
	
	   - Define objectives
	   - The importance of preparation and follow up of information distribution
	
	3. Exercise in group [finding out preparation and follow up for information distribution]
	
	   <Topic> Clarify preparation and processing necessity when distribute information.
	   < Exercise Formation > in Group
	   <Output> Presentation after Discussion.

Training and Education Method (Estimated time)	Lecture 40 minutes Exercise in group 50 minutes
Other Special Note	

Unit 7 Introduction to Communication (information distribution) Business Writing 1 (Lecture 40 minutes + Exercise in group 50 minutes)	
Learning Goal	Explain how to write basic business writings as business worker.

Contents	1. Business document for information distribution.
	
	   1) What is a business documents?
	
	   2) Quality that are required for business documents
	
	   3) The kinds of business documents
	     - Documents inside company
	     - Documents outside company
	   4) To create a reliable business documents
	2. How to write business documents?
	
	   1) Procedure to create business documents
	
	   2) Points to remember for business documents
	3. Configuration of business documents
	
	   1)Configuration elements and characteristics of business writing
	     - Report
	     - Minute
	     - Proposal
	4. Compose a business documents
	
	   1) Business documents compose method
	5. Exercise in group [Wright down a minute]
	     <Topic> wrote down minute for a meeting in the office
	     < Exercise Formation > in group
	     <Output> After discussing in a group, write down the minute,
	          and make a presentation.

Training and Education Method (Estimated time)	Lecture 40 minutes Exercise in group 50 minutes
Other Special Note	

Unite 8 Introduction to Communication (information distribution) Business Writing 2 (Lecture 40 minutes + Exercise in group 50 minutes)	
Learning Goal	Comprehend how to write good business documents and write correct and intelligible business documents.

Contents	1. To create high quality business documents
	
	 1) Element to improve quality of business documents
	   - Accuracy /Intelligibility
	 2) Tips for write accurate business document
	   - What is accuracy?
	   - Why is accuracy important for business document?
	   - Tips to create accurate business documents
	 3) Exercise in group [write down accurate business documents]
	   <Topic> Rewrite working report correctly.
	   < Exercise Formation > In Pair
	   <Output> After discussing in a pair, giving a presentation
	 4) Tips for intelligible business documents
	   - What is intelligible**?
	   - Why is intelligible business document required?
	   - Tips to intelligible business document
	 5) Exercise in group [write down intelligible business document]
	   <Topic> Rewrite working report intelligibly
	   < Exercise Formation > In Pair
	   <Output> After discussing in a pair, make a presentation
	 6) The importance of review
	   - what is a review ?- Point to review
	 7) Exercise in group [Rewrite working report]
	   <Topic> Rewrite a working report in a group
	   < Exercise Formation > In Group
	   <Output> After discussing with a group member, make a presentation.
	 8) Points to remember when creating document relating IT utilization
	 2. Write reliable business documents
	   1) The importance of business documents in business.
	   2) To write good business documents

Training and Education Method (Estimated time)	Lecture 40 minutes Exercise in group 50 minutes
Other Special Note	

Unit 9 Introduction to Communication (information distribution) Presentation 1 (Lecture 60 minutes + Exercise in group 30 minutes)	
Learning Goal	Explain basic presentation method as a tool of information distribution.

Contents	1. Presentation as information distribution
	
	   1) What is presentation?
	
	   2) Quality, required to presentations
	
	   3) The variety of presentation
	     - Information sharing
	     - Reporting
	     - Proposal
	   4) To make a reliable presentations.
	
	2. Flow of presentations
	
	   1) Procedure of presentations
	
	   2) Points to remember of the presentation
	
	3. Configuration of presentations
	
	   1) Configuration elements of a presentation
	     - Presence
	     - Scenario
	     - Delivery
	
	4. Compose a presentation
	     - Compose a presentation
	
	5. Exercise in group [make one minute presentation]
	     <Topic> Speaking about own hobbies.
	     <Exercise Formation > In a group
	     <Output> Make a presentation.

Training and Education Method (Estimated time)	Lecture 60 minutes Exercise in group 30 minutes
Other Special Note	

Unite 10 Introduction to Communication (information distribution) Presentation 2　(Lecture 90 minutes)	
Learning Goal	Explain effective presentation method as business workers as information distribution
Contents	1 To make an effective presentation 　1) What is an effective presentation? 　2) Preparation for presentation 　　- writing a scenario 　　- Presentation materials 　　- The importance of rehearsal 　3) Scenario writing 　　　　Tips to writing a scenario 　4) Intelligible Presentation materials 　　- Points to create intelligible presentation materials. 　5) The importance of rehearsal 　　- What is the rehearsal? 　　- Tips for rehearsal 2. Essential of presentations 　1) Intention. 　2) Effective way to convey main theme 　　- How to convey main theme into listener 　　- Effective way to convey main theme using tool 　3) Appropriate question responding 3. Make a persuasive presentation 　1) Importance of presentation in business 　2) Some Ideas to make persuasive presentations
Training and Education Method (Estimated time)	Lecture 90 minutes
Other Special Note	

Unit 11 Introduction to Communication Information arrangement, Analysis and Search 1 (Lecture 90 minutes)	
Learning Goal	Explain fundamental communication management at workplace.

Contents	1. Communication management
	
	   1) What is communication management?
	
	   2) The importance of communication management
	
	   3) Elements of communication management
	      - response capability to specific circumstances
	      - Capability to judge specific circumstances
	      - Meeting management
	   4) To become a trusted business person
	
	 2. Responses to specific circumstances
	
	   1) What is response to specific circumstances?
	
	   2) Essential points of situation response capability that utilizes
	       in business.
	
	3. Situation judgment capability to build consensus.
	
	   1) What is situation judgment capability?
	
	   2) Point of situation judgment capability that utilizes in business
	
	4. Conduct efficient meeting
	
	   1) Clarify purposes of various meetings
	     - debrief session
	     - Place to provide new value
	     - Problem solving meeting
	   2) Who is a facilitator to guide a meeting efficiently.
	
	   3) Facilitation technique
	     - `Manage the group process`
	     - Activate discussions
	     - Consensus building

Training and Education Method (Estimated time)	Lecture 90 minutes
Other Special Note	

Unit 12 Introduction to Communication Information arrangement, Analysis and Search 2 (Lecture 90 minutes)	
Learning Goal	Hold smooth meeting utilizing communication management knowledge as business workers.
Contents	1. Exercise in group [proceed smooth meeting] <Topic1> Clarify the difference between students and business workers. <Topic2> Examine the reason why students and business workers are different. <Topic3> Define the appropriate attitude of business workers <Topic4> Study the action required of business workers. <Topic5> Review the preparation to act as business workers < Exercise Formation >in Group (change facilitator alternately) <Output> After the meeting, make a presentation and then evaluate.
Training and Education Method (Estimated time)	Exercise in group 90 minutes
Other Special Note	

Unit 13 Fundamental of Leadership (Lecture 60 minutes + Exercise in group 30 minutes)	
Learning Goal	Explain fundamental and principle of leadership required as business workers.

Contents	1. Basic and principal of leadership required in business
	
	   1) Various problems that happened in workplace
	
	   2) The importance of leadership
	
	   3) What is leadership?
	     - Fundamental of the leadership
	     - Principle of the leadership
	   4) The difference between management and leadership
	
	   5) To become a trusted leader
	
	2. Exercise of leadership
	
	   1) The importance of leadership of the project
	
	   2) Exercise of leadership for the project
	     - Set project target
	     - Plan the project procedure.
	     - Promote the project
	     - Execute the project
	     - Manage the project
	
	3. The leadership preceding a project smoothly.
	
	   1) To achieve the goal of the project
	     - The importance of teamwork
	     - Communication with team members
	   2) Motivation management
	
	   3) Aiming for the final goal
	
	4. Exercise in group [Motivate team member to finish the project]
	     <Topic> Ask new duty to the member in workplace.
	     < Exercise Formation > 3 people
	     <Output> Role play

Training and Education Method (Estimated time)	Lecture 60 minutes Exercise in group 30 minutes
Other Special Note	

Unit 14　Fundamental of Negotiation (Lecture 60 minutes + Exercise in group 30 minutes)	
Learning Goal	Explain fundamental and principal of the negotiation which are required as business workers.
Contents	1. Fundamental and principal of the negotiation required in business 　1) Various problems that occurs in workplace 　2) Importance of the negotiation 　3) What is the negotiation? 　　- Fundamental of the negotiation 　　- Principles of the negotiation 　4) To become a trusted negotiator 2. Exercise of the negotiation 　1) What is the value of negotiation 　2) Process of negotiation 　　- Set the target 　　- Prepare to the negotiation 　　- Process of the negotiation 　3) Method of the negotiation 3. To proceed smooth negotiation 　1) Imagine the final goal of both parties 　2) Build strong human relationships 　3) Negotiate logically 　4) Utilization of the method of problem solving to lead consensus building 　　- Information rearrangement 　　- Share common perceptions 　　- Consensus building 　5) Toward the final goal 4. Exercise in group [negotiation Exercise] 　<Topic> Negotiate the price for the products you want to sell 　< Exercise Formation > 3 people 　 <Output> Role play
Training and Education Method (Estimated time)	Lecture　60 minutes Exercise in group 30 minutes
Other Special Note	

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Unit 15 Final Wrap Up (Lecture 30 minutes + Exercise in group 60 minutes)	
Learning Goal	Summary of the subject

Contents	1. Whole review
	   - The importance of the leadership
	   - The importance of the communication
	   - The importance of the negotiation
	2. Exercise in group [Review - the importance of personal skills]
	    \<Topic\> Summarize the importance of personal skills through lectures and Exercise in groups.
	    Also consider the future action.
	   \< Exercise Formation \> 3 people
	    \<Output\>Write down the findings on white board or paper report, then summarize actions that should be taken in the future

Training and Education Method (Estimated time)	Lecture 30 minutes Exercise in group 60 minutes
Other Special Note	