



**2010**

**IT Skill Standards Center  
IT Human Resources Development Headquarters  
INFORMATION-TECHNOLOGY PROMOTION AGENCY (IPA), JAPAN**

**Ministry of Economy, Trade and Industry**

# Contents

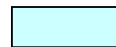
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## Customer Service (Hardware) Training Course Group

	Inexperienced (aim at level 1)	Level 1 (aim at level 2)	Level 2 (aim at level 3)	Level 3 (aim at level 4)	Level 4 (aim at level 5)	Level 5 (aim at level 6)	Level 6 (aim at level 7)	Level 7			
Technology	IT Fundamentals 1	IT Fundamentals 2	System Development Fundamentals	Technology Standards in Hardware Industry	Latest Technology Trends		Community Activities				
				Hardware Product Knowledge	Latest Hardware Product Trends						
				Hardware Component Technology	Hardware System Configuration Verification						
				Hardware System Installation	Hardware System Installation - Advanced Level -						
Methodology					Hardware System Maintenance / Fault Diagnosis and Recovery	Hardware System Maintenance / Fault Diagnosis and Recovery - Advanced Level -			Management of Hardware System Maintenance Service Quality Assurance		
Project Management						Project Management Fundamentals					
Business/ Industry					Industry Standards						
Personal				Personal Skill Fundamentals		Leadership Skills Required in Project Management					
					Communication Skills Required in Project Management						
		Negotiation Skills Required in Project Management									



: Common to those who aim at levels 1-2



: Common to a job category



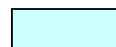
: Specific to each specialty field

## Customer Service (Software) Training Course Group

	Inexperienced (aim at level 1)	Level 1 (aim at level 2)	Level 2 (aim at level 3)	Level 3 (aim at level 4)	Level 4 (aim at level 5)	Level 5 (aim at level 6)	Level 6 (aim at level 7)	Level 7
Technology	IT Fundamentals 1	IT Fundamentals 2	System Development Fundamentals	Software Component Technology	Latest Technology Trends		Community Activities	
				Software Product Knowledge	Latest Software Product Trends			
				Software System Development	Software System Development - Advanced Level -			
		Software System Maintenance / Fault Diagnosis and Recovery		Software System Maintenance / Fault Diagnosis and Recovery - Advanced Level -				
Methodology						Management of Software System Quality Assurance		
Project Management				Project Management Fundamentals				
Business/ Industry			Industry Standards					
Personal		Personal Skill Fundamentals		Leadership Skills Required in Project Management				
			Communication Skills Required in Project Management					
			Negotiation Skills Required in Project Management					



: Common to those who aim at levels 1-2

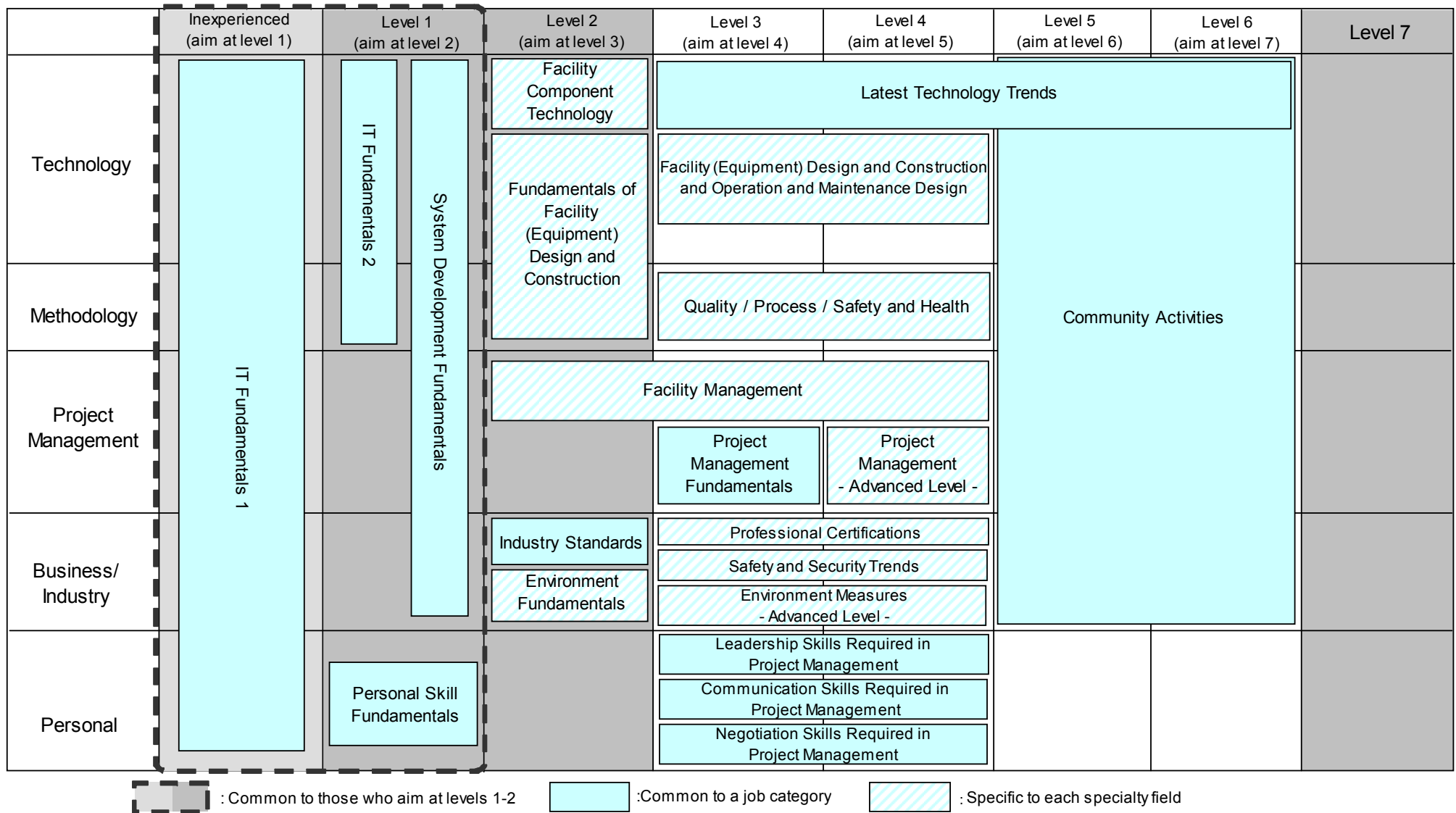


: Common to a job category



: Specific to each specialty field

## Customer Service (Facility Management) Training Course Group



# Customer Service (Hardware) Course List

Training Course Level		Training Course Group Name	Training Course Name	Method			Standard Duration		Page
				E-Learning	Lecture	Workshop	(Total hours)	Class (Total days)	
Common to Job Category	Basic Course	Industry Standards	Industry Standards	*			18		11
		Project Management Fundamentals	Project Management Fundamentals	*			30		14
	Advanced Course	Leadership Skills Required in Customer Service	Leadership Skills Required in Customer Service			*		3	17
		Communication Skills Required in Customer Service	Communication Skills Required in Customer Service			*		3	20
		Negotiation Skills Required in Customer Service	Negotiation Skills Required in Customer Service			*		3	23
	Special Course	Latest Technology Trends	Latest Technology Trends		*			1	26
		Community Activities	Community Activities	-	-	-	-	-	29
Specific to Each Specialty Field <Selective Courses>	Basic Course	Hardware Product Knowledge	Hardware Product Knowledge		*	*		5	32
		Technology Standards in Hardware Industry	Technology Standards in Hardware Industry	*	*	*	12	3	35
		Hardware Component Technology	Hardware Component Technology Fundamentals	*	*	*	12	3	38
		Hardware System Installation	Hardware System Installation		*	*		5	41
		Hardware System Maintenance / Fault Diagnosis and Recovery	Hardware System Maintenance / Fault Diagnosis and Recovery		*	*		5	44
	Advanced Course	Hardware System Configuration Verification	Hardware System Configuration Verification			*		2	74
		Hardware System Installation - Advanced Level -	Hardware System Installation - Advanced Level -		*	*		5	77
		Hardware System Maintenance / Fault Diagnosis and Recovery - Advanced Level -	Hardware System Maintenance / Fault Diagnosis and Recovery - Advanced Level -		*	*		5	80
		Management of Hardware System Maintenance Service Quality Assurance	Management of Hardware System Maintenance Service Quality Assurance		*	*		5	83
	Special Course	Latest Hardware Product Trends	Latest Hardware Product Trends	-	*	-	-	-	119

# Customer Service (Software) Course List

Training Course Level		Training Course Group Name	Training Course Name	Method			Standard Duration		Page
				E-Learning	Lecture	Workshop	E-Learning (Total hours)	Class (Total days)	
Common to Job Category	Basic Course	Industry Standards	Industry Standards	*			18		11
		Project Management Fundamentals	Project Management Fundamentals	*			30		14
	Advanced Course	Leadership Skills Required in Customer Service	Leadership Skills Required in Customer Service			*		3	17
		Communication Skills Required in Customer Service	Communication Skills Required in Customer Service			*		3	20
		Negotiation Skills Required in Customer Service	Negotiation Skills Required in Customer Service			*		3	23
	Special Course	Latest Technology Trends	Latest Technology Trends		*			1	26
		Community Activities	Community Activities	-	-	-	-	-	29
Specific to Each Specialty Field <Selective Courses>	Basic Course	Software Product Knowledge	Software Product Knowledge	*	*		12	5	47
		Software Component Technology	Software Component Technology	*			12		50
		Software System Development	Practice of Software System Development	*		*	12	5	53
		Software System Maintenance / Fault Diagnosis and Recovery	Software System Maintenance / Fault Diagnosis and Recovery	*		*	12	5	56
	Advanced Course	Software System Development - Advanced Level -	Software System Development - Advanced Level -		*	*		5	86
		Software System Maintenance / Fault Diagnosis and Recovery - Advanced Level -	Software System Maintenance / Fault Diagnosis and Recovery - Advanced Level -		*	*		5	89
		Management of Software System Quality Assurance	Management of Software System Quality Assurance		*	*		5	92
	Special Course	Latest Software Product Trends	Latest Software Product Trends	-	*	-	-	-	122

# Customer Service (Facility Management) Course List

Training Course Level		Training Course Group Name	Training Course Name	Method			Standard Duration		Page
				E-Learning	Lecture	Workshop	E-Learning (Total hours)	Class (Total days)	
Comm on to Job Categor y	Basic Course	Industry Standards	Industry Standards	*			18		11
		Project Management Fundamentals	Project Management Fundamentals	*			30		14
	Advanced Course	Leadership Skills Required in Customer Service	Leadership Skills Required in Customer Service			*		3	17
		Communication Skills Required in Customer Service	Communication Skills Required in Customer Service			*		3	20
		Negotiation Skills Required in Customer Service	Negotiation Skills Required in Customer Service			*		3	23
	Special Course	Latest Technology Trends	Latest Technology Trends		*			1	26
		Community Activities	Community Activities	-	-	-	-	-	29
Specific to Each Specialty Field <Selective Courses>	Basic Course	Facility Component Technology	Fundamental Knowledge and Techniques of Facility Management		*			5	60
			Fundamental Knowledge of Architecture and Architectural drawing (CAD)	*	*	*	12	5	63
		Fundamentals of Facility (Equipment) Design and Construction	Facility (Equipment) Fundamentals		*	*		5	66
			Communication Network Planning and Construction Fundamentals	*	*	*	12	5	68
		Environment Fundamentals	Environment Relevant Laws and Standards	*			12		71
	Advanced Course	Facility (Equipment) Design and Construction and Operations Maintenance Design	Facility (Equipment) Design	*	*	*	12	2	95
			Facility (Equipment) Construction	*	*	*	12	2	97
			Facility (Equipment) Operations and Maintenance Design	*	*	*	12	2	99



Training Course Level		Training Course Group Name	Training Course Name	Method			Standard Duration		Page
				E-Learning	Lecture	Workshop	E-Learning (Total hours)	Class (Total days)	
Specific to Each Specialty Field <Selective Courses>	Advanced Course	Quality / Process / Safety and Health	Quality Management System	*	*	*	12	2	102
			Process Management	*	*	*	12	2	104
			Safety and Health Management	*	*	*	12	2	106
		Facility Management	Facility Management	*	*	*	12	2	109
		Project Management - Advanced Level -	Facility Administration Techniques	*	*	*	12	2	115
	Special Course	Professional Certifications	Professional Certifications	-	-	-	-	-	125
		Safety and Security Trends	Safety and Security Trends	-	-	-	-	-	128
		Environment Measures - Advanced Level -	Environment Measures - Advanced Level -	-	-	-	-	-	131

# Customer Service

## Training Course Description

<Common to Customer Service>

## Industry Standards (1 course)

- International Standards

Course Name Content	Industry Standards
<b>Training Course Level</b>	<input type="checkbox"/> Introductory Course <input checked="" type="checkbox"/> Basic Course <input type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
<b>Training Area (Common or Specialty Field)</b>	<input checked="" type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input type="checkbox"/> Software <input type="checkbox"/> Facility Management
<b>Outline</b>	<p>Aim: Attendees engaged in customer service acquire knowledge of industry standards.</p> <ul style="list-style-type: none"> <li>○The attendees select and acquire knowledge of industry standards (e.g., ISO standards and relevant JIS standards) important for customer service.</li> <li>○Training contents are provided via e-learning type methods, and the attendees select and acquire fundamental knowledge depending on business fields of their customers.</li> </ul>
<b>Attendee</b>	Those who are in activities for customer service as its team members (those who aim to acquire the knowledge of Customer Service level 2)
<b>Precondition</b>	Have completed IT Fundamentals 1 course group and IT Fundamentals 2 course group, or possess equivalent knowledge.
<b>Training Method</b>	E-learning
<b>Duration</b>	Standard term: 18 hours (6 hours/day x 3 days)
<b>Learning Goal</b>	Can provide customer service under supervision of a superior as a member of a customer service team by utilizing fundamental knowledge of industry standards.

Skill Items	Knowledge Items
Hardware Technology	-Hardware related International Standards and Relevant Regulations Quality Control, International Standards for Assessment of Equipment and System Security Function, Hardware Interface Specification, Relevant JIS Specification
Software Technology	-Software-Related International Standards and Relevant Standards Quality Control, Quality Characteristics of Software Products, International Standards of Software Life Cycle Process, OSI Layer Standards, Relevant JIS Standards
Facility Management	Quality Management System Process Quality Control, Policy of Project Management Quality and Relevant JIS Specification

## Project Management Fundamentals (1 course)

- Project Management Fundamentals

<div>Course Name</div> <div>Content</div>	Project Management Fundamentals
<b>Training Course Level</b>	<input type="checkbox"/> Introductory Course <input checked="" type="checkbox"/> Basic Course <input type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
<b>Training Area (Common or Specialty Field)</b>	<input checked="" type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input type="checkbox"/> Software <input type="checkbox"/> Facility Management
<b>Outline</b>	<p>Aim: Attendees acquire fundamental knowledge of project management.</p> <p>○The attendees learn, based on “PMBOK”, a general concept of project management that covers all aspect of basic project management knowledge (e.g., project definitions, organization, plan formulation, schedule planning, project implementation, project management, and project completion) and that is not biased by to characteristics of industries or fields.</p>
<b>Attendee</b>	Those who have participated in customer service as members of customer service teams (those who aim to acquire the knowledge of Customer Service level 4)
<b>Precondition</b>	Possess fundamental knowledge of IT and customer service and have participated in customer service projects.
<b>Training Method</b>	E-learning
<b>Duration</b>	Standard team: 30 hours (6 hours/day x 5 days)
<b>Learning Goal</b>	Can participate in a customer service project as a leader of a customer service team by utilizing fundamental knowledge of project management.

Skill Items	Knowledge Items
Project Management	<p>-Project Integration Management Develop Project Charter, Develop Preliminary Project Scope Statement, Develop Project Management Plan, Direct and Manage Project Execution, Monitor and Control Project Work, Integrated Change Control, Close Project</p> <p>-Project Scope Management Scope Planning, Scope Definition, Create WBS, Scope Verification, Scope Control</p> <p>-Project Time Management Activity Definition, Activity Sequencing, Activity Resource Estimating, Activity Duration Estimating, Schedule Development, Schedule Control</p> <p>-Project Cost Management Cost Estimating, Cost Budgeting, Cost Control</p> <p>-Project Quality Management Quality Planning, Perform Quality Assurance, Perform Quality Control</p> <p>Project Human Resource Management Human Resource Planning, Acquire Project Team, Develop Project Team, Manage Project Team</p> <p>-Project Communication Management Communications Planning, Information Distribution, Performance Reporting, Manage Stakeholders</p> <p>-Project Risk Management Risk Management Planning, Risk Identification, Qualitative Risk Analysis, Quantitative Risk Analysis, Risk Response Planning, Risk Monitoring and Control</p> <p>-Project Procurement Management Plan Purchases and Acquisitions, Plan Contracting, Request Seller Responses, Select Sellers, Contract Administration, Contract Closure</p>



## Leadership Skills Required in Customer Service (1 course)

- Leadership Skills Required in Customer Service

Course Name Content	Leadership Skills Required in Customer Service
<b>Training Course Level</b>	<input type="checkbox"/> Introductory Course <input type="checkbox"/> Basic Course <input checked="" type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
<b>Training Area (Common or Specialty Field)</b>	<input checked="" type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input type="checkbox"/> Software <input type="checkbox"/> Facility Management
<b>Outline</b>	<p>Aim: Attendees acquire practical leadership knowledge required of persons responsible for customer service.</p> <ul style="list-style-type: none"> <li>○The attendees learn leadership knowledge important to response difficult circumstances as leaders of or persons responsible for the following. <ul style="list-style-type: none"> <li>-Establishment, operations, and maintenance of medium-sized, large-sized, or complex facilities, such as data centers or network systems</li> <li>-Maintenance and operations of medium-sized, large-sized, or complex hardware or software</li> </ul> </li> <li>○The attendees learn in small groups in workshops including role-play utilizing simulated difficult circumstances in medium-sized, larger-sized, or complex data centers and network systems as case studies.</li> </ul>
<b>Attendee</b>	Those who have participated in customer service as its team leaders (those who aim to acquire the knowledge of Customer Service level 5)
<b>Precondition</b>	Have completed Personal Skill Fundamentals course group, or possess equivalent knowledge.
<b>Training Method</b>	Workshop
<b>Duration</b>	Standard team: 3 days (classroom)
<b>Learning Goal</b>	Can provide customer service as a person responsible for a customer service team by utilizing leadership knowledge relevant to customer service.

Skill Items	Knowledge Items
Leadership	-Leadership Fundamentals and Principles of Leadership, Teamwork and Communication, Project Objective Setting, Project Promotion, Project Execution, Project Management, Collaboration Between Team Members, Motivating Team Members and Provision for Feelings of Accomplishment

## Communication Skills Required in Customer Service (1 course)

- Communication Skills Required in Customer Service

Course Name Content	Communication Skills Required in Customer Service
<b>Training Course Level</b>	<input type="checkbox"/> Introductory Course <input type="checkbox"/> Basic Course <input checked="" type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
<b>Training Area (Common or Specialty Field)</b>	<input checked="" type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input type="checkbox"/> Software <input type="checkbox"/> Facility Management
<b>Outline</b>	<p>Aim: Attendees acquire practical communication knowledge required of persons responsible for customer service.</p> <ul style="list-style-type: none"> <li>○The attendees learn communication knowledge important for maintenance and operations of medium-sized, large-sized, or complex data centers, network relevant hardware, network relevant software, and establishment, operations, and maintenance of facilities. This course puts emphasis on roles in difficult circumstances of leaders of and persons responsible for the data centers, hardware, software, or facilities.</li> <li>○The attendees learn in small groups in workshops including role-play utilizing simulated difficult circumstances in medium-sized, larger-sized, or complex data centers and network systems as case studies.</li> </ul>
<b>Attendee</b>	Those who have participated in customer service as its team leaders (those who aim to acquire the knowledge of Customer Service level 5)
<b>Precondition</b>	Have completed Personal Skill Fundamentals course group, or possess equivalent knowledge.
<b>Training Method</b>	Workshop
<b>Duration</b>	Standard team: 3 days (classroom)
<b>Learning Goal</b>	Can provide customer service as a person responsible for a customer service team by utilizing communication knowledge.

Skill Items	Knowledge Items
Communication	<p>-2-Way Communication Dialogue and Interview, Information Transfer, Communication Technique, Effective Speaking and Listening</p> <p>-Transmission of Information Presentation Technique, Creation of Official and Nonofficial Documents, Technical Writing, Media Selection, Persuasion Technique</p> <p>-Organization, Analysis and Retrieval of Information Development and Practice of Status Response Capabilities to Understand Situations, Capabilities to Understand Situations, Meeting Management Techniques</p>

## Negotiation Skills Required in Customer Service (1 course)

- Negotiation Skills Required of Customer Service

Course Name Content	Negotiation Skills Required in Customer Service
<b>Training Course Level</b>	<input type="checkbox"/> Introductory Course <input type="checkbox"/> Basic Course <input checked="" type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
<b>Training Area (Common or Specialty Field)</b>	<input checked="" type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input type="checkbox"/> Software <input type="checkbox"/> Facility Management
<b>Outline</b>	<p>Aim: Attendees acquire practical negotiation knowledge required of persons responsible for customer service.</p> <ul style="list-style-type: none"> <li>○The attendees learn negotiation knowledge important for maintenance and operations of medium-sized, large-sized, or complex data centers, network relevant hardware, and network relevant software, and establishment, operations, and maintenance of facilities. This course puts emphasis on roles in difficult circumstances of leaders and persons responsible for the data centers, hardware, software, or facilities.</li> <li>○The attendees learn in small groups in workshops including role-play utilizing simulated difficult circumstances in medium-sized, larger-sized, or complex data centers and network systems as case studies.</li> </ul>
<b>Attendee</b>	Those who have participated in customer service as its team leaders (those who aim to acquire the knowledge of Customer Service level 5)
<b>Precondition</b>	Have completed Personal Skill Fundamentals course group, or possess equivalent knowledge.
<b>Training Method</b>	Workshop
<b>Duration</b>	Standard team: 3 days (classroom)
<b>Learning Goal</b>	Can provide customer service as a person responsible for a customer service team by utilizing negotiation knowledge.



Skill Items	Knowledge Items
Negotiation	-Negotiation Negotiation Process, Effective Negotiation Techniques, Establishment of Trust Relationship, Objective Setting, Common Interest, Logical Thinking, Problem Solving Techniques

## Latest Technology Trends (1 course)

- Latest Technology Trends

Course Name Content	Latest Technology Trends
<b>Training Course Level</b>	<input type="checkbox"/> Introductory Course <input type="checkbox"/> Basic Course <input type="checkbox"/> Advanced Course <input checked="" type="checkbox"/> Special Course
<b>Training Area (Common or Specialty Field)</b>	<input checked="" type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input type="checkbox"/> Software <input type="checkbox"/> Facility Management
<b>Outline</b>	<p>Aim:</p> <p>Attendees learn the latest technology trends surrounding IT services changing from day to day and acquire knowledge of how to apply the latest technology trends to actual business.</p> <p>○The attendees learn sizes and trends of IT markets in a domestic country and abroad, present and future IT, component technology trends of the following (platforms, system management infrastructure, databases, network systems, distributed computing systems, security), application technology trends, business model patent technology trends, next-generation e-business, its future growth, and the latest technology trends of facilities that support those IT relevant systems.</p> <p>○Training contents are provided on given themes according to need, and the attendees select a theme to take part in a lecture for maintaining or improving their skills at regular intervals or when needed.</p>
<b>Attendee</b>	Those who have participated in customer service as its team leaders (those who aim to acquire the knowledge of Customer Service level 5)
<b>Precondition</b>	Possess fundamental knowledge of IT and one of the specialty fields in Customer Service and have been involved in customer service.
<b>Training Method</b>	Lecture
<b>Duration</b>	Standard team: 1 day (classroom)
<b>Learning Goal</b>	Can provide customer service as a person responsible for a customer service team by utilizing knowledge of the latest technology.

Skill Items	Knowledge Items
Technology	<p>-Latest Trends in IT Market Understanding of IT Market Scale and Trends Domestic and Abroad, Understanding and Utilization of Technology Trends Related to Applications, Understanding and Utilization of Technology Trends Related to Business Model Patents, Understanding and Utilization of Next-generation E-business and its Future Growth</p> <p>-Latest Trends in IT Market Trends Understanding of IT Market Scale and Trends Domestic and Abroad, Understanding (and Utilization) of Technology Trends Related to Application, Understanding (and Utilization) of Technology Trends Related to Business Model Patents, Understanding (and Utilization) of Next-generation E-business and Its Future Growth</p>

## Community Activities (1 course)

- Community Activities

Course Name Content	Community Activities
Training Course Level	<input type="checkbox"/> Introductory Course <input type="checkbox"/> Basic Course <input type="checkbox"/> Advanced Course <input checked="" type="checkbox"/> Special Course
Training Area (Common or Specialty Field)	<input checked="" type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input type="checkbox"/> Software <input type="checkbox"/> Facility Management
Outline	<p>Aim:</p> <p>Community activities, unlike trainings, give IT professionals opportunities to learn from one other and contribute to development of subordinates. Community activities are all sorts of activities within or outside companies regardless of any types of organizations.</p> <p>Community activities outside companies are activities in academic conferences or various associations (including voluntary ones), and community activities within companies are, for instance, activities by those certified by certification system in their companies. Basically, a community is made up of one job category.</p> <ul style="list-style-type: none"> <li>○Individuals with high-level skills are considered out of learning through trainings, and they are expected to improve their skills by exchanging information and discussing with other individuals in community activities.</li> <li>○The individuals contribute to development of subordinates through writing a paper or giving lectures based on their high-level knowledge and skills. Especially in community activities within companies, they lead activities for design, institution, and implementation of personnel system, education system, and training system. They make contribution as IT professionals in business fields to pursuit of human resource development strategies related to business strategies as well.</li> </ul>
Attendee	--
Precondition	--
Training Method	--
Duration	--
Learning Goal	--

# Customer Service

## Training Course Description

<Specific to Each Specialty Field (Selective Courses)>

## Hardware Product Knowledge (1 course)

[ ] is a corresponding specialty field

- Hardware Product Knowledge [Hardware]



<div>Course Name</div> <div>Content</div>	Hardware Product Knowledge
Training Course Level	<input type="checkbox"/> Introductory Course <input checked="" type="checkbox"/> Basic Course <input type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
Training Area (Common or Specialty Field)	<input type="checkbox"/> Common to Customer Service <input checked="" type="checkbox"/> Hardware <input type="checkbox"/> Software <input type="checkbox"/> Facility Management
Outline	<p>Aim:</p> <p>Attendees whose specialty field is Hardware acquire knowledge of hardware products.</p> <ul style="list-style-type: none"> <li>○The attendees learn fundamental knowledge of basic components of IT hardware products. The basic components are MPU, memory, storage, and I/O devices such as printers, buses, power supply units, network devices, and physical network systems. The concepts and design of buses, which interconnect basic components each other, will be provided. The attendees acquire practical skills to be able to utilize the fundament knowledge in workshops. Themes of the workshops can be selected by the attendees depending on the hardware that they have specialized in (e.g., to assemble a computer all from start to finish and to disassemble and reassemble a hardware product).</li> <li>○Considering various data center devices and remote service devices such as ATMs, the attendees acquire fundamental knowledge of devices important for installation, setup, operations, and maintenance of the various data center devices and remote service devices.</li> <li>○In the first half, the attendees learn in lectures fundamental knowledge of basic components of hardware products and hardware model groups for the attendees' specialties. In the second half, the attendees acquire in the case studies of typical configuration of data centers in workshops.</li> </ul>
Attendee	Those who have participated in customer service as its team members (those who aim to acquire the knowledge of Customer Service level 2 or 3)
Precondition	Have completed IT Fundamentals 1 course group and IT Fundamentals 2 course group, or possess equivalent knowledge.
Training Method	Lecture, Workshop
Duration	Standard team: 5 days (classroom)
Learning Goal	Can provide customer service under supervision of a superior or independently as a member of a customer service team by utilizing fundamental knowledge of hardware products.

Skill Items	Knowledge Items
Technology	<p>-Latest Technology Trends  Understanding of Latest Hardware, Technology Trends, Understanding of Latest Middleware Technology Trends, Understanding of Latest Platform Technology Trends, Understanding of Latest Network Technology Trends, Understanding of Latest Database, Technology Trends, Understanding of Latest Security Technology Trends, Understanding of Latest System, Management Technology Trends</p>
Hardware Technology	<p>-IT Architecture (Hardware)  Understanding of Hardware Architecture, Understanding of Hardware Platform, Understanding of Hardware Configuration, Understanding and Utilization for Reliability, Availability and Serviceability of Hardware System</p> <p>-Installation of Hardware Products  Understanding and Practice of Installation Planning Techniques, Utilization and Practice of Installation Process, Understanding and Utilization of Specifications and Installation Manuals, Practice of Hardware Products Installation, Practice of Procedure for Installation Completion and Report, Design and Installation of Mutual Backup System with Remote Center, Design and Installation of Critical Data Integrity System, Design and Installation of Mission Critical System</p>

## Technology Standards in Hardware Industry (1 course)

[ ] is a corresponding specialty field

- Hardware Industry Technology Standards [Hardware]

Course Name Content	Technology Standards in Hardware Industry
<b>Training Course Level</b>	<input type="checkbox"/> Introductory Course <input checked="" type="checkbox"/> Basic Course <input type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
<b>Training Area (Common or Specialty Field)</b>	<input type="checkbox"/> Common to Customer Service <input checked="" type="checkbox"/> Hardware <input type="checkbox"/> Software <input type="checkbox"/> Facility Management
<b>Outline</b>	<p>Aim:</p> <p>This course helps attendees whose specialty field is Hardware acquire fundamental knowledge of technology standards in the hardware industry.</p> <ul style="list-style-type: none"> <li>○The attendees select one of hardware technology standards important for customer service as needed. The hardware technology standards are such as personal computer relevant technology standards, network system relevant technology standards, storage relevant technology standards, and server relevant technology standards.</li> <li>○In the first half, attendees learn fundamental knowledge of technology standards in the hardware industry via e-learning type methods. In the second half, attendees learn in lectures and workshops how to use the fundamental knowledge by reviewing actual examples of systems combining the technology standards.</li> </ul>
<b>Attendee</b>	Those who have participated in customer service as its team members (those who aim to acquire the knowledge of Customer Service level 2 or 3)
<b>Precondition</b>	Have completed IT Fundamentals 1 course group, IT Fundamentals 2 course group, and Hardware Product Knowledge course group, or possess equivalent knowledge.
<b>Training Method</b>	E-learning, Lecture, Workshop
<b>Duration</b>	<p>[First Half] Standard term: 12 hours (e-learning 6 hours/day x 2 days)</p> <p>[Second Half] Standard term: 3 days (classroom)</p>
<b>Learning Goal</b>	Can provide customer service under supervision of a superior or independently as a member of a customer service team by utilizing fundamental knowledge of technology standards in the hardware industry.

Skill Items	Knowledge Items
Technology	<p>Latest Technology Trends</p> <p>Understanding of Latest Hardware, Technology Trends, Understanding of Latest Middleware Technology Trends, Understanding of Latest Platform Technology Trends, Understanding of Latest Network Technology Trends, Understanding of Latest Database, Technology Trends, Understanding of Latest Security Technology Trends, Understanding of Latest System, Management Technology Trends</p>
Hardware Technology	<p>-IT Architecture (Hardware)</p> <p>Understanding of Hardware Architecture, Understanding of Hardware Platform, Understanding of Hardware Configuration, Understanding and Utilization for Reliability, Availability and Serviceability of Hardware System</p> <p>-Hardware Basic Technology</p> <p>Utilization of Basic Knowledge for Electricity and Electron and Machine and Optical Engineering</p>

## Hardware Component Technologies (1 course)

[ ] is a corresponding specialty field

- Hardware Component Technology Fundamentals [Hardware]

Course Name Content	Hardware Component Technology Fundamentals
<b>Training Course Level</b>	<input type="checkbox"/> Introductory Course <input checked="" type="checkbox"/> Basic Course <input type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
<b>Training Area (Common or Specialty Field)</b>	<input type="checkbox"/> Common to Customer Service <input checked="" type="checkbox"/> Hardware <input type="checkbox"/> Software <input type="checkbox"/> Facility Management
<b>Outline</b>	<p>Aim:</p> <p>Attendees whose specialty field is Hardware acquire fundamental knowledge of hardware component technology.</p> <ul style="list-style-type: none"> <li>○The attendees learn knowledge important for customer service, such as principles, mechanisms, configuration, advantages, disadvantages, usage, design, development, and characteristics of maintenance in component technology (e.g., technology of electricity engineering, electron engineering, and optical engineering) utilized in hardware.</li> <li>○In the first half, the attendees acquire important skills of component technology. In lectures and workshops in the second half, the attendees learn practical knowledge of how to utilize IT devices in which the component technology is implemented.</li> </ul>
<b>Attendee</b>	Those who have participated in customer service (those who aim to acquire the knowledge of Customer Service level 2 or 3)
<b>Precondition</b>	Have completed IT Fundamentals 1 course group, IT Fundamentals 2 course group, and Hardware Product Knowledge, or possess equivalent knowledge.
<b>Training Method</b>	E-learning, Lecture, Workshop
<b>Duration</b>	<p>[First Half] Standard term: 12 hours (e-learning 6 hours/day x 2 days)</p> <p>[Second Half] Standard term: 3 days (classroom)</p>
<b>Learning Goal</b>	Can provide customer service under supervision of a superior or independently as a member of a customer service team by utilizing fundamental knowledge of hardware component technology.

Skill Items	Knowledge Items
Technology	-Latest Technology Trends Understanding of Latest Hardware, Technology Trends, Understanding of Latest Middleware Technology Trends, Understanding of Latest Platform Technology Trends, Understanding of Latest Network Technology Trends, Understanding of Latest Database, Technology Trends, Understanding of Latest Security Technology Trends, Understanding of Latest System, Management Technology Trends
Hardware Technology	-IT Architecture (Hardware) Understanding of Hardware Architecture, Understanding of Hardware Platform, Understanding of Hardware Configuration, Understanding and Utilization for Reliability, Availability and Serviceability of Hardware System  -Hardware Basic Technology Utilization of Basic Knowledge for Electricity and Electron and Machine and Optical Engineering



## Hardware System Installation (1 course)

[ ] is a corresponding specialty field

- Hardware System Installation [Hardware]

Course Name Content	Hardware System Installation
Training Course Level	<input type="checkbox"/> Introductory Course <input checked="" type="checkbox"/> Basic Course <input type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
Training Area (Common or Specialty Field)	<input type="checkbox"/> Common to Customer Service <input checked="" type="checkbox"/> Hardware <input type="checkbox"/> Software <input type="checkbox"/> Facility Management
Outline	<p>Aim:</p> <p>Attendees whose specialty field is Hardware acquire fundamental knowledge of hardware system installation.</p> <ul style="list-style-type: none"> <li>○The attendees learn knowledge important for setup of hardware equipment, interconnection of the hardware equipment with one another, installation of hardware systems according to a construction plan. The construction plan consists of installation, set-up, and testing for hardware equipment that composes information systems that achieve customers' requirements.</li> <li>○In the first half, attendees learn knowledge of how to install hardware products in mainly lectures. In the second half, based on the knowledge acquired in the first half, attendees perform exercises in hardware product installation, installation closing procedures, and installation completion reports in workshop. The attendees acquire practical knowledge through workshop exercises for equipment installation requirements in data centers and creation of installation plans based on user's requests in a case method.</li> </ul>
Attendee	Those who have participated in customer service as its team members (those who aim to acquire the knowledge of Customer Service level 3)
Precondition	Have completed IT Fundamentals 1 course group, IT Fundamentals 2 course group, and Customer Service Fundamentals course group, or possess equivalent knowledge.
Training Method	Lecture, Workshop
Duration	Standard term: 5 days (classroom)
Learning Goal	Can provide customer service independently as a member of a customer service team by utilizing fundamental knowledge of hardware system installation.

Skill Items	Knowledge Items
Hardware Technology	-Installation of Hardware Products Understanding and Practice of Installation Planning Techniques, Utilization and Practice of Installation Process, Understanding and Utilization of Specifications and Installation Manuals, Practice of Hardware Products Installation, Practice of Procedure for Installation Completion and Report, Design and Installation of Mutual Backup System with Remote Center, Design and Installation of Critical Data Integrity System, Design and Installation of Mission Critical System

## Hardware System Maintenance / Fault Diagnosis and Recovery (1 course)

[ ] is a corresponding specialty field

- Hardware System Maintenance / Fault Diagnosis and Recovery [Hardware]

<div>Course Name</div> <div>Content</div>	Hardware System Maintenance / Fault Diagnosis and Recovery
Training Course Level	<input type="checkbox"/> Introductory Course <input checked="" type="checkbox"/> Basic Course <input type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
Training Area (Common or Specialty Field)	<input type="checkbox"/> Common to Customer Service <input checked="" type="checkbox"/> Hardware <input type="checkbox"/> Software <input type="checkbox"/> Facility Management
Outline	<p>Aim:</p> <p>Attendees whose specialty field is Hardware acquire fundamental knowledge of fault diagnosis and recovery of hardware system devices, change control of technology of the hardware devices, and maintenance service planning of the hardware devices.</p> <ul style="list-style-type: none"> <li>○The attendees learn the following such as actions to be taken to hardware fault diagnosis, techniques for the hardware fault diagnosis, and reports of the hardware fault diagnosis, all of which are important for IT professionals whose specialty field is Hardware. The attendees also learn knowledge to change and maintain design and technology of installed hardware devices to improve availability and serviceability, and knowledge to create maintenance service plans including preventive measures that provide good maintenance service.</li> <li>○In lectures in the first half, the attendees learn knowledge of the actions to be taken when hardware device fault occurs, diagnosis, recovery, and reports of the fault diagnosis, the change control of the technology of the hardware devices, and the hardware maintenance service plans. In the second half, the attendees perform exercises in the fault diagnosis, the fault recovery, the fault reports, the technology change control in the hardware devices, and the hardware maintenance service plans in order to acquire practical knowledge.</li> </ul>
Attendee	Those who have participated in customer service as its team members (those who aim to acquire the knowledge of Customer Service level 2 or 3)
Precondition	Have completed IT Fundamentals 1 course group, IT Fundamentals 2 course group, and Hardware Product Knowledge course group, or possess equivalent knowledge.
Training Method	Lecture, Workshop
Duration	Standard term: 5 days (knowledge of fault diagnosis of and recovery of a hardware model group, classroom) The number of days vary from hardware model group to hardware model group
Learning Goal	Can provide customer service under super vision of a superior or independently as a member of a customer service team by utilizing fundamental knowledge of hardware fault diagnosis and recovery.

Skill Items	Knowledge Items
Technology	<p>-Latest Technology Trends  Understanding of Latest Hardware, Technology Trends, Understanding of Latest Middleware Technology Trends, Understanding of Latest Platform Technology Trends, Understanding of Latest Network Technology Trends, Understanding of Latest Database, Technology Trends, Understanding of Latest Security Technology Trends, Understanding of Latest System, Management Technology Trends</p>
Hardware Technology	<p>-IT Architecture (Hardware)  Understanding of Hardware Architecture, Understanding of Hardware Platform, Understanding of Hardware Configuration, Understanding and Utilization for Reliability, Availability and Serviceability of Hardware System</p> <p>-Hardware Basic Technology  Utilization of Basic Knowledge for Electricity and Electron and Machine and Optical Engineering</p> <p>-Installation of Hardware Products  Understanding and Practice of Installation Planning Techniques, Utilization and Practice of Installation Process, Understanding and Utilization of Specifications and Installation Manuals, Practice of Hardware Products Installation, Practice of Procedure for Installation Completion and Report, Design and Installation of Mutual Backup System with Remote Center, Design and Installation of Critical Data Integrity System, Design and Installation of Mission Critical System</p> <p>-Maintenance of Hardware Products  Maintenance Planning, Utilization and Practice of Maintenance Process, Understanding and Utilization of Maintenance Manual, Practice of Hardware Products Maintenance, Utilization of Measuring Instruments and Test Tools, Practice of Procedure for Maintenance Completion and Report, Preventive Maintenance</p>

## Software Product Knowledge (1 course)

[ ] is a corresponding specialty field

- Software Product Knowledge [Software]

Course Name Content	Software Product Knowledge
<b>Training Course Level</b>	<input type="checkbox"/> Introductory Course <input checked="" type="checkbox"/> Basic Course <input type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
<b>Training Area (Common or Specialty Field)</b>	<input type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input checked="" type="checkbox"/> Software <input type="checkbox"/> Facility Management
<b>Outline</b>	<p>Aim:</p> <p>Attendees whose specialty field is Software acquire fundamental knowledge of software products.</p> <ul style="list-style-type: none"> <li>○The attendees learn fundamental knowledge of software products that are key elements of system software products (e.g., operating systems and system management software), middleware products, and database products.</li> <li>○The attendees select depending on business fields that they are engaged in and learn fundamental knowledge of software products (e.g., distribution functions, job management, remote control functions, access management, user management, security technology for risk management, and database security), network relevant software products, products relevant to client/server architecture, and products relevant to Web applications.</li> <li>○Training contents are provided by software product via e-learning type methods or in lectures according to characteristics of the software product.</li> </ul>
<b>Attendee</b>	Those who have participated in customer service as its team members (those who aim to acquire the knowledge of Customer Service level 2 or 3)
<b>Precondition</b>	Have completed IT Fundamentals 1 course group and IT Fundamentals 2 course group, or possess equivalent knowledge.
<b>Training Method</b>	E-learning (system software products, middleware products, database products, network products), Lecture (system management products, distributed processing relevant products, Web relevant products)
<b>Duration</b>	<p>[First Half] Standard term: 12 hours (e-learning 6 hours/day x 2 days)</p> <p>[Second Half] Standard term: 5 days (classroom)</p>
<b>Learning Goal</b>	Can provide customer service under supervision of a superior or independently as a member of a customer service team by utilizing fundamental knowledge of software products.



Skill Items	Knowledge Items
Technology	<p>-Latest Technology Trends  Understanding of Latest Hardware, Technology Trends, Understanding of Latest Middleware Technology Trends, Understanding of Latest Platform Technology Trends, Understanding of Latest Network Technology Trends, Understanding of Latest Database, Technology Trends, Understanding of Latest Security Technology Trends, Understanding of Latest System, Management Technology Trends</p>
Software Technology	<p>-Application service  Web Application Service, ERP, E-Commerce, Client/Server Method, Web Server Techniques and Session Management Method, Server Load Distribution System, Cipher System for Authentication and Communication Data, Techniques and Products for Linkage of Large Scale Application</p> <p>-System Software Products and their Runtime Environments  Hardware Architecture and Latest Devices such as Multi-Processor and Large Amounts of Storage, Caching and Communication Control and Transaction Processing and Distributed Processing and Parallel Processing and Virtualization and Abstraction of System Resource</p> <p>-System Management Products  Monitoring Techniques for System Resource and Process of Server and Network Watch List, Interface Technology for Management Function of System Software and Middleware, Performance Measurement Techniques of Application, Configuration Management Function of Hardware and Software and Distribution Function of Software, Job Management and Remote Control Function and Access Control and User Management and Risk Management and Storage Management</p> <p>-Understanding and Utilization of Network Technology  Protocol and Transmission Control, Encoding and Transmission, Network Related Regulations, Network Security, Internet, Communication Equipment, Line-related Technology (ATM, Frame Relay, LAN, WAN, etc)</p> <p>-Database Related Technology  Data Security, Data Warehouse, On-line Analysis Processing, Data Mining, Object- Oriented and Database, Object Relational Database</p>

## Software Component Technology (1 course)

[ ] is a corresponding specialty field

- Software Component Technology [Software]

Course Name Content	Software Component Technology
Training Course Level	<input type="checkbox"/> Introductory Course <input checked="" type="checkbox"/> Basic Course <input type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
Training Area (Common or Specialty Field)	<input type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input checked="" type="checkbox"/> Software <input type="checkbox"/> Facility Management
Outline	<p>Aim: Attendees whose specialty field is Software acquire fundamental knowledge of software component technology.</p> <p>○The attendees learn various component technology utilized in software. The attendees also learn concepts, principles, mechanisms, configuration, advantages, disadvantages usage, design, architecture, and operations characteristics of software utilized in various information systems, all of which are important for those whose specialty field is Software in Customer Service.</p>
Attendee	Those who have participated in customer service as its team members (those who aim to acquire the knowledge of Customer Service level 2 or 3)
Precondition	Have completed IT Fundamentals 1 course group and IT Fundamentals 2 course group, or possess equivalent knowledge.
Training Method	E-learning
Duration	Standard term: 12 hours (6 hours/day x 2 days)
Learning Goal	Can provide customer service under supervision of a superior or independently as a member of a customer service team by utilizing fundamental knowledge of software component technology.

Skill Items	Knowledge Items
Software Technology	-IT Architecture (Software) Understanding of Software Architecture, Understanding of Software Platform, Understanding of Software Configuration, Understanding of Operating System Techniques, Remote Operation, Storage Mutual Backup System, SAN Support System, Synchronous Processing Between Remote Centers, Distributed Transaction Processing, Understanding and Utilization of Reliability and Availability and Serviceability of Software System

## Software System Development (1 course)

[ ] is a corresponding specialty field

- Practice of Software System Development [Software]

Course Name Content	Practice of Software System Development
Training Course Level	<input type="checkbox"/> Introductory Course <input checked="" type="checkbox"/> Basic Course <input type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
Training Area (Common or Specialty Field)	<input type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input checked="" type="checkbox"/> Software <input type="checkbox"/> Facility Management
Outline	<p>Aim: Attendees whose specialty field is Software acquire practical knowledge of software system development.</p> <ul style="list-style-type: none"> <li>○The attendees learn knowledge important for processes of development, operations, and maintenance of software. The attendees learn how to utilize the knowledge to combine necessary software products, to develop software systems that achieve customers' requirements, and to install and operate the software systems by product that they are engaged in.</li> <li>○In the first half, training contents are provided via e-learning type methods. In the second half, training contents are provided in workshops, and the attendees perform exercises in installation of major software products in simulated data center systems to acquire practical knowledge.</li> </ul>
Attendee	Those who have participated in customer service as its team members (those who aim to acquire the knowledge of Customer Service level 2 or 3)
Precondition	Have completed IT Fundamentals 1 course group and IT Fundamentals 2 course group, or possess equivalent knowledge.
Training Method	E-learning, Workshop
Duration	<p>[First Half] Standard term: 12 hours (e-learning 6 hours/day x 2 days)</p> <p>[Second Half] Standard term: 5 days (classroom)</p>
Learning Goal	Can provide customer service under supervision of a superior or independently as a member of a customer service team by utilizing fundamental knowledge of software system development.

Skill Items	Knowledge Items
Software Technology	-Installation of Software Products Understanding and Practice of Installation Planning Techniques, Utilization and Practice of Installation Process, Understanding and Utilization of Specifications and Installation Manuals, Practice of Software Products Installation, Practice of Procedure for Installation Completion and Report

## Software System Maintenance / Fault Diagnosis and Recovery (1 course)

[ ] is a corresponding specialty field

- Software System Maintenance / Fault Diagnosis and Recover [Software]



<div>Course Name</div> <div>Content</div>	Software System Maintenance / Fault Diagnosis and Recovery
Training Course Level	<input type="checkbox"/> Introductory Course <input checked="" type="checkbox"/> Basic Course <input type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
Training Area (Common or Specialty Field)	<input type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input checked="" type="checkbox"/> Software <input type="checkbox"/> Facility Management
Outline	<p>Aim:</p> <p>Attendees whose specialty field is Software acquire fundamental knowledge of software fault diagnosis, software recovery techniques, software security, and update and change control of software.</p> <ul style="list-style-type: none"> <li>○The attendees learn knowledge and skills important for diagnosis of software system faults (problem identification and cause determination).</li> <li>○The attendees learn the following knowledge necessary after the fault diagnosis and cause determination, such as making recovery requests to vendors or developers of software products with fault records, procurement and usage of recovery software, and recovery of software systems.</li> <li>○The attendees learn, regarding software products, knowledge of information system security (e.g., measures against computer viruses, protection of critical data by encryption, database protection, and privacy protection). The attendees also learn knowledge important for adequate change control and update management for reliability, availability, capacity, and performance, all of which are important for achievement of customers' requirements.</li> <li>○In the first half, training contents are provided via e-learning type methods to acquire the knowledge above. In the second half, training contents are provided in workshops to perform exercises in utilization of the knowledge acquired in the first half to obtain practical knowledge.</li> </ul>
Attendee	Those who have participated in customer service as its team members (those who aim to acquire the knowledge of Customer Service level 2 or 3)
Precondition	Have completed IT Fundamentals 1 course group, IT Fundamentals 2 course group, and Software Product Knowledge course group and Software Component Technology course group, or possess equivalent knowledge.

Course Name Content	Software System Maintenance / Fault Diagnosis and Recovery
Training Course Level	<input type="checkbox"/> Introductory Course <input checked="" type="checkbox"/> Basic Course <input type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
Training Area (Common or Specialty Field)	<input type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input checked="" type="checkbox"/> Software <input type="checkbox"/> Facility Management
Training Method	E-learning, Workshop
Duration	[First Half] Standard term: 12 hours (e-learning 6 hours/day x 2 days) [Second Half] Standard term: 5 days (classroom)
Learning Goal	Can provide customer service under supervision of a superior or independently as a member of a customer service team by utilizing fundamental knowledge of fault diagnosis and recovery of software systems.

Skill Items	Knowledge Items
System Maintenance Management	<p>-Remote Maintenance Utilization and Practice of Remote Maintenance Technique, Tools and Process</p> <p>-Social Engineering Leakage Countermeasures for Confidential Information (Measurement for Phone Impersonation, Password Theft, Trashing, etc)</p>
Technology	<p>-Latest Technology Trends Understanding of Latest Hardware, Technology Trends, Understanding of Latest Middleware Technology Trends, Understanding of Latest Platform Technology Trends, Understanding of Latest Network Technology Trends, Understanding of Latest Database, Technology Trends, Understanding of Latest Security Technology Trends, Understanding of Latest System, Management Technology Trends</p>
Software Engineering	<p>-Implementation and Inspection of Security Systems Selection and Installation of Security Products and Tools, Security System Development, Security Techniques Implementation</p> <p>-Security and Privacy Security Measures (Secret Preservation, Measures for Prevention of Falsification, Intrusion Prevention, Computer Virus, Integrity Measures, Availability Measures, Safety Measures, Social Engineering), Privacy Protection, Risk Management, Guidelines and Relevant Regulations</p>
Software Technology	<p>-Installation of Software Products Understanding and Practice of Installation Planning Techniques, Utilization and Practice of Installation Process, Understanding and Utilization of Specifications and Installation Manuals, Practice of Software Products Installation, Practice of Procedure for Installation Completion and Report</p> <p>-Maintenance of Software Products Maintenance Planning, Utilization and Practice of Maintenance Process, Understanding and Utilization of Maintenance Manuals, Practice of Software Products Maintenance, Utilization of Test Tools, Practice of Procedure for Maintenance Completion and Report</p> <p>-Security Technology Trends Understanding and Utilization of Single Sign-on Techniques Trend, Understanding and Utilization of KI Techniques Trend, Understanding and Utilization of Security Administration Techniques Trend, Understanding and Utilization of Intrusion Prevention Techniques Trend, Understanding and Utilization of Encryption Techniques, Understanding and Utilization of Electronic Signature Techniques, Understanding and Utilization of Firewall Techniques</p>

## Facility Component Technologies (2 courses)

[ ] is a corresponding specialty field

- Fundamental Knowledge and Techniques of Facility Management  
[Facility Management]
- Fundamental Knowledge of Architecture and Architectural Drawing (CAD)  
[Facility Management]

Course Name Content	Fundamental Knowledge and Techniques of Facility Management
<b>Training Course Level</b>	<input type="checkbox"/> Introductory Course <input checked="" type="checkbox"/> Basic Course <input type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
<b>Training Area (Common or Specialty Field)</b>	<input type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input type="checkbox"/> Software <input checked="" type="checkbox"/> Facility Management
<b>Outline</b>	<p>Aim:</p> <p>Attendees whose specialty field is Facility Management acquire fundamental knowledge of and techniques for facility management.</p> <p>○The attendees learn knowledge important for planning, design, construction, and operations management of data center facilities (computer centers), facilities (e.g., offices, factories, and commercial facilities where IT devices to be installed), and equipment (e.g., electrical equipment, telecommunication equipment, LAN/WAN, air-conditioning equipment,, interior decorating, fire equipment, and security equipment).</p>
<b>Attendee</b>	Those who have been involved in software or hardware customer service (those who aim to acquire the knowledge of Facility Management level 3)
<b>Precondition</b>	Have completed IT Fundamentals 1 course group and IT Fundamentals 2 course group, or possess equivalent knowledge and have been involved in customer service.
<b>Training Method</b>	Lecture
<b>Duration</b>	Standard term: 5 days (classroom)
<b>Learning Goal</b>	Can provide customer service as a member of a customer service team by utilizing fundamental knowledge of facility management and its techniques.

Skill Items	Knowledge Items
Facility Management	<p>-Latest Trends of Facility and Network Product Technology Understanding and Utilization of Latest Facility and Network Product Technology Trends</p> <p>-Design, Facilities, Maintenance, and Operation of Physical Network (Communications Network) Fundamentals of Communication Technology (Transmission Media, Transmission Techniques, Distribution Methods, Communication), Understanding and Utilization of Fundamentals and Standards for Telecommunications Facilities (Network) Plan, Design and Construction, Design, Construction, Maintenance and Operation of Communication Network Backup Systems for Disaster Recovery</p> <p>-Design, Construction, Maintenance, and Operation of Data Center Facilities Design and Construction, Plan and Design and Construction of Electrical Equipment, Fundamentals for Plan, Design and Construction of Air-Conditioning Facilities, Formulation for Installation Plan of Environment Facilities, Formulation of Environmental Facilities Design and Installation Requirement, Design and Construction and Management of Environmental Facilities and Utilization and Practice of Maintenance and Operation Tools, Failure Measurement, Installation and Management for Earthquake-proof or Aseismatic Device of IT Equipment Construction and Management, Building Construction Management such as Space and Confortability of Personnel, Design, Construction, Maintenance and Operation of Mutual Backup System with Remote Center, Design, Construction, Maintenance and Operation of Critical Data Integrity System, Maintenance and Improvement of Mission Critical System, Capacity Management Methods, Utilization of Capacity Management Tools</p> <p>-Installation, Moving, Upgrade, and Migration of Computer System</p> <p>-Design, Construction, Maintenance, and Operation of Disaster and Crime Prevention Facilities Formulation for Installation Plan of Disaster and Crime Prevention Facilities, Requirement Formulation for Design and Installation of Disaster and Crime Prevention Facilities, Design and Construction Management of Disaster and Crime Prevention Facilities, Maintenance and Operation of Disaster and Crime Prevention Facilities, Utilization and Practice of Tools for Design, Construction and Maintenance and Operation, Utilization and Practice for Design and Construction Management Techniques of Disaster Control Facilities, Fundamentals for Disaster Control of Facilities, and Fundamentals for Plan and Design and Construction of Fire Fighting Facilities, Risk Management of Disaster and Crime Prevention Security, Plan and Design and Construction of Security Equipment</p> <p>-Cost Accumulation Down Cost Estimating, Implementation of Bottom-Up, Cost Estimating, Utilization and Practice of Estimating Tools, Utilization and Practice of Cost Estimating Methodology</p> <p>-Cost Management Implementation of Cost Change Management, Understanding and Practice of Progress Assessment Standards, Utilization and Practice of EVM (Earned value management), Utilization and Practice of Cost Management Tools</p>

Skill Items	Knowledge Items
	<ul style="list-style-type: none"> <li>-Reliability, Availability, and Serviceability of Facilities</li> <li>Reliability, Availability and Serviceability of Facilities and Physical Network (Communication Network)</li> <li>-Basic Knowledge of Facilities Management Related regulations and Standards</li> <li>Basic Knowledge of Safety and Health Management, Basic Knowledge of Environment Related Laws</li> </ul>

Course Name Content	Fundamental Knowledge of Architecture and Architectural Drawing (CAD)
Training Course Level	<input type="checkbox"/> Introductory Course <input checked="" type="checkbox"/> Basic Course <input type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
Training Area (Common or Specialty Field)	<input type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input type="checkbox"/> Software <input checked="" type="checkbox"/> Facility Management
Outline	<p>Aim:</p> <p>Attendees whose specialty field is Facility Management acquire fundamental knowledge of architecture and architectural drawing (CAD).</p> <ul style="list-style-type: none"> <li>○The attendees learn fundamental knowledge of building, architecture, and architectural drawing (CAD) necessary for design, construction, operations, and maintenance of building and facilities.</li> <li>○In lectures in the first half, the attendees learn fundamental building knowledge. Via e-learning type methods in the second half, the attendees learn fundamental knowledge of architecture and architectural drawing (CAD). After learning via the e-learning type methods, the attendees use CAD systems and perform exercises in design work for simulated data center development in workshops.</li> </ul>
Attendee	Those who have been involved in software or hardware customer service (those who aim to acquire the knowledge of Facility Management level 3)
Precondition	Have completed IT Fundamentals 1 course group and IT Fundamentals 2 course group, or possess equivalent knowledge and have been involved in customer service.
Training Method	Lecture, E-learning, Workshop
Duration	<p>[First Half] Standard term: 5 days (classroom)</p> <p>[Second Half] Standard term: 12 hours (e-learning 6 hours/day x 2 days) and 5 days (classroom)</p>
Learning Goal	Can utilize fundamental knowledge of architecture and architectural drawing (CAD) to provide customer service as a member of a customer service team.



Skill Items	Knowledge Items
Facility Management	<p>-Design, Facilities, Maintenance, and Operation of Physical Network (Communications Network)  Fundamentals of Communication Technology (Transmission Media, Transmission Techniques, Distribution Methods, Communication),  Understanding and Utilization of Fundamentals and Standards for Telecommunications Facilities (Network) Plan, Design and Construction,  Design, Construction, Maintenance and Operation of Communication Network Backup Systems for Disaster Recovery</p> <p>-Design, Construction, Maintenance, and Operation of Data Center Facilities  Design and Construction, Plan and Design and Construction of Electrical Equipment, Fundamentals for Plan, Design and Construction of  Air-Conditioning Facilities, Formulation for Installation Plan of Environment Facilities, Formulation of Environmental Facilities Design and  Installation Requirement, Design and Construction and Management of Environmental Facilities and Utilization and Practice of Maintenance  and Operation Tools, Failure Measurement, Installation and Management for Earthquake-proof or Aseismatic Device of IT Equipment  Construction and Management, Building Construction Management such as Space and Confortability of Personnel, Design, Construction,  Maintenance and Operation of Mutual Backup System with Remote Center, Design, Construction, Maintenance and Operation of Critical Data  Integrity System, Maintenance and Improvement of Mission Critical System, Capacity Management Methods, Utilization of Capacity  Management Tools</p> <p>-Problem Solving Methods for Facilities Management Technology  Utilization and Practice of Various Space Design Methodology, Utilization and Practice of Knowledge for Building Intensity, Utilization and  Practice of Knowledge for Piping Design, Knowledge and Utilization of for Electric Wiring</p> <p>-Basic Knowledge of Architecture and Architectural drawing (CAD)  Basic Knowledge of Construction, Knowledge and Operation Techniques of Architectural Drawing, CAD</p>

## Fundamentals of Facility (Equipment) Design and Construction (2 courses)

[ ] is a corresponding specialty field

- Facility (Equipment) Fundamentals [Facility Management]
- Communication Network Planning and Construction Fundamentals

Course Name Content	Facility (Equipment) Fundamentals
Training Course Level	<input type="checkbox"/> Introductory Course <input checked="" type="checkbox"/> Basic Course <input type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
Training Area (Common or Specialty Field)	<input type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input type="checkbox"/> Software <input checked="" type="checkbox"/> Facility Management
Outline	<p>Aim: Attendees whose specialty field is Facility Management acquire fundamental knowledge of facilities (equipment).</p> <ul style="list-style-type: none"> <li>○The attendees learn fundamental knowledge important for design, construction, operations, and maintenance of data center facilities (equipment) and facilities (equipment) such as offices, factories, and commercial facilities where IT devices to be installed.</li> <li>○Training contents are provided by combining lectures and workshops depending on characteristics of the fundamental knowledge. After learning the fundamental knowledge in the lectures, the attendees perform exercises in design, construction, maintenance, and operations of data center facilities (equipment) in simulated projects in workshops to acquire practical knowledge.</li> </ul>
Attendee	Those who have been involved in software or hardware customer service (those who aim to acquire the knowledge of Facility Management level 3)
Precondition	Have completed IT Fundamentals 1 course group and IT Fundamentals 2 course group, or possess equivalent knowledge and have been involved in customer service.
Training Method	Lecture, Workshop
Duration	Standard term: 5 days (classroom)
Learning Goal	Can provide customer service as a member of a customer service team by utilizing fundamental knowledge of facilities (equipment).

Skill Items	Knowledge Items
Facility Management	<p>-Design, Construction, Maintenance, and Operation of Data Center Facilities</p> <p>Design and Construction, Plan and Design and Construction of Electrical Equipment, Fundamentals for Plan, Design and Construction of Air-Conditioning Facilities, Formulation for Installation Plan of Environment Facilities, Formulation of Environmental Facilities Design and Installation Requirement, Design and Construction and Management of Environmental Facilities and Utilization and Practice of Maintenance and Operation Tools, Failure Measurement, Installation and Management for Earthquake-proof or Aseismatic Device of IT Equipment Construction and Management, Building Construction Management such as Space and Confortability of Personnel, Design, Construction, Maintenance and Operation of Mutual Backup System with Remote Center, Design, Construction, Maintenance and Operation of Critical Data Integrity System, Maintenance and Improvement of Mission Critical System, Capacity Management Methods, Utilization of Capacity Management Tools</p>

Course Name Content	Communication Network Planning and Construction Fundamentals
Training Course Level	<input type="checkbox"/> Introductory Course <input checked="" type="checkbox"/> Basic Course <input type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
Training Area (Common or Specialty Field)	<input type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input type="checkbox"/> Software <input checked="" type="checkbox"/> Facility Management
Outline	<p>Aim:</p> <p>Attendees whose specialty field is Facility Management acquire fundamental knowledge of communication network planning and communication network construction.</p> <ul style="list-style-type: none"> <li>○The attendees learn fundamental knowledge of communication network facilities such as communication capacity, communication reliability, communication availability, communication maintainability, and communication cost. The attendees also learn fundamental knowledge important for planning, design, construction, and maintenance of communication network systems that achieve customers' requirements by utilizing the fundamental knowledge of the communication network facilities.</li> <li>○Via e-learning type methods in the first half, the attendees acquire fundamental knowledge of physical networks. In the second half, in addition to lectures, the attendees acquire in workshops practical knowledge important for network design and network construction work by utilizing physical network devices and physical network cables.</li> </ul>
Attendee	Those who have been involved in software or hardware customer service (those who aim to acquire the knowledge of Facility Management level 3)
Precondition	Have completed IT Fundamentals 1 course group and IT Fundamentals 2 course group, or possess equivalent knowledge and have been involved in customer service.
Training Method	E-learning, Lecture, Workshop
Duration	[First Half] Standard term: 5 days (classroom) [Second Half] Standard term: 12 hours (e-learning 6 hours/day x 2 days) and 5 days (classroom)
Learning Goal	Can provide customer service as a member of a customer service team by utilizing fundamental knowledge of physical network planning and physical network construction.

Skill Items	Knowledge Items
Facility Management	<p>-Latest Trends of Facility and Network Product Technology Understanding and Utilization of Latest Facility and Network Product Technology Trends</p> <p>-Design, Facilities, Maintenance, and Operation of Physical Network (Communications Network) Fundamentals of Communication Technology (Transmission Media, Transmission Techniques, Distribution Methods, Communication), Understanding and Utilization of Fundamentals and Standards for Telecommunications Facilities (Network) Plan, Design and Construction, Design, Construction, Maintenance and Operation of Communication Network Backup Systems for Disaster Recovery</p>

## Environment Fundamentals (1 course)

[ ] is a corresponding specialty field

- Environment Relevant Laws and Standards [Facility Management]

Course Name Content	Environment Relevant Laws and Standards
<b>Training Course Level</b>	<input type="checkbox"/> Introductory Course <input checked="" type="checkbox"/> Basic Course <input type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
<b>Training Area (Common or Specialty Field)</b>	<input type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input type="checkbox"/> Software <input checked="" type="checkbox"/> Facility Management
<b>Outline</b>	<p>Aim:</p> <p>Attendees whose specialty field is Facility Management acquire fundamental knowledge of laws and standards relevant to environment.</p> <p>○The attendees learn knowledge important for compliance of laws relevant to environment and environment standards surrounding customers.</p>
<b>Attendee</b>	Those who have been involved in software or hardware customer service (those who aim to acquire the knowledge of Facility Management level 3)
<b>Precondition</b>	Have completed IT Fundamentals 1 course group and IT Fundamentals 2 course group, or possess equivalent knowledge and have been involved in customer service.
<b>Training Method</b>	E-learning
<b>Duration</b>	Standard term: 12 hours (e-learning 6 hours/day x 2 days)
<b>Learning Goal</b>	Can provide customer service as a member of a customer service team by utilizing fundamental knowledge of laws and standards relevant to environment.



Skill Items	Knowledge Items
Facility Management	-Environmental Measures Design and Construction of Energy Conservation and Environmental Facilities (Equipment), Understanding and Utilization of Environment related Regulations (Building Material Recycling Law, Law for Promotion of Effective Utilization of Resources, Waste Disposal and Public Cleaning Law, etc.) , Compliance with Environmental Quality Standards (Reduction and Recycle of Construction By-Product, Formulation and Utilization of Environment Measures Management Methods, Utilization of Environment Measures Relevant Facility, Green Purchase

## Hardware System Configuration Verification (1 course)

[ ] is a corresponding specialty field

- Hardware System Configuration Verification [Hardware]

Content \ Course Name	Hardware System Configuration Verification
<b>Training Course Level</b>	<input type="checkbox"/> Introductory Course <input type="checkbox"/> Basic Course <input checked="" type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
<b>Training Area (Common or Specialty Field)</b>	<input type="checkbox"/> Common to Customer Service <input checked="" type="checkbox"/> Hardware <input type="checkbox"/> Software <input type="checkbox"/> Facility Management
<b>Outline</b>	<p>Aim:</p> <p>This course helps attendees whose specialty field is Hardware acquire knowledge of hardware system configuration verification.</p> <ul style="list-style-type: none"> <li>○The attendees learn knowledge important for verification of configuration of hardware devices to be installed whether or not the hardware devices achieve customers' requirements (performance, maintainability, and service levels).</li> <li>○Bases on a case study of simulated complex and large-sized hardware device configuration, attendees perform exercises in verification of configuration of hardware devices whether or not the hardware devices achieves customers requirements in workshops to acquire practical knowledge.</li> </ul>
<b>Attendee</b>	Those who have been involved in hardware customer service (those who aim to acquire the knowledge of Hardware level 4 or 5)
<b>Precondition</b>	Have completed basic-level courses common to the job category Customer Service and basic-level courses specific to specialty field Hardware, or possess equivalent knowledge and have been involved in installation and maintenance of hardware systems.
<b>Training Method</b>	Workshop
<b>Duration</b>	<p>Standard term: 2 days (classroom)</p> <p>The number of days vary from hardware system to hardware system</p>
<b>Learning Goal</b>	Can provide customer service as a person responsible for or a leader of a customer service team by utilizing knowledge of hardware system architecture verification.

Skill Items	Knowledge Items
Hardware Technology	-IT Architecture (Hardware) Understanding of Hardware Architecture, Understanding of Hardware Platform, Understanding of Hardware Configuration, Understanding and Utilization for Reliability, Availability and Serviceability of Hardware System

## Hardware System Installation - Advanced Level - (1 course)

[ ] is a corresponding specialty field

- Hardware System Installation - Advanced Level - [Hardware]

<div>Course Name</div> <div>Content</div>	Hardware System Installation - Advanced Level -
Training Course Level	<input type="checkbox"/> Introductory Course <input type="checkbox"/> Basic Course <input checked="" type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
Training Area (Common or Specialty Field)	<input type="checkbox"/> Common to Customer Service <input checked="" type="checkbox"/> Hardware <input type="checkbox"/> Software <input type="checkbox"/> Facility Management
Outline	<p>Aim:</p> <p>Attendees whose specialty field is Hardware acquire practical knowledge of hardware system installation.</p> <ul style="list-style-type: none"> <li>○The attendees learn knowledge important for formulation of installation plans of complex and large-sized systems of hardware devices to provide customers with systems that are well-balanced of both performance and budget that the customers request and have. The attendees also learn knowledge important for smooth implementation of the installation plans.</li> <li>○In lectures in the first half, the attendees learn the knowledge important for the formulation of the installation plans of the complex and large-sized systems of hardware devices and the implementation of the installation plans. In workshops in the second half, the attendees learn practical knowledge through workshop exercises in the installation plans formulation and in the implementation for hardware systems in the large-sized data centers.</li> </ul>
Attendee	Those who have been involved in hardware customer service (those who aim to acquire the knowledge of Hardware level 4 or 5)
Precondition	Have completed basic-level courses common to the job category Customer Service, basic-level courses specific to specialty field Hardware, and Project Management Fundamentals course group, or possess equivalent knowledge and have been involved in installation and maintenance of hardware systems.
Training Method	Lecture, Workshop
Duration	Standard term: 5 days (classroom)
Learning Goal	Can provide customer service as a person responsible for or a leader of a customer service team by utilizing advanced knowledge of hardware system installation planning.

Skill Items	Knowledge Items
Hardware Technology	<p>-Installation of Hardware Products</p> <p>Understanding and Practice of Installation Planning Techniques, Utilization and Practice of Installation Process, Understanding and Utilization of Specifications and Installation Manuals, Practice of Hardware Products Installation, Practice of Procedure for Installation Completion and Report, Design and Installation of Mutual Backup System with Remote Center, Design and Installation of Critical Data Integrity System, Design and Installation of Mission Critical System</p>

## Hardware System Maintenance / Fault Diagnosis and Recovery - Advanced Level - (1 course)

[ ] is a corresponding specialty field

- Hardware System Maintenance / Fault Diagnosis and Recovery - Advanced Level -  
[Hardware]



Course Name Content	Hardware System Maintenance / Fault Diagnosis and Recovery
<b>Training Course Level</b>	<input type="checkbox"/> Introductory Course <input type="checkbox"/> Basic Course <input checked="" type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
<b>Training Area (Common or Specialty Field)</b>	<input type="checkbox"/> Common to Customer Service <input checked="" type="checkbox"/> Hardware <input type="checkbox"/> Software <input type="checkbox"/> Facility Management
<b>Outline</b>	<p>Aim:</p> <p>Attendees whose specialty field is Hardware acquire practical knowledge of maintenance, fault diagnosis, recovery, and maintenance service planning of hardware systems.</p> <ul style="list-style-type: none"> <li>○The attendees learn knowledge important for leading of customer service teams, adequate fault diagnosis specific to fault of large-sized systems, elimination of root causes of problems identified, fault recovery, satisfactory reports after the fault recovery. The attendees also learn knowledge important for preparation of drafts of and creation of plans of hardware system maintenance services to provide good maintenance services.</li> <li>○Training contents are provided by combining lectures and workshops based on case studies simulated fault of complex and large-sized hardware systems in order to acquire practical knowledge. The attendees also do modeling of complex and large-sized hardware systems and perform exercises in creation of the plans of the hardware system maintenance service to acquire practical knowledge.</li> </ul>
<b>Attendee</b>	Those who have been involved in hardware customer service (those who aim to acquire the knowledge of Hardware level 4 or 5)
<b>Precondition</b>	Have completed basic-level courses common to the job category Customer Service, basic-level courses specific to specialty field Hardware, and Project Management Fundamentals course group, or possess equivalent knowledge and have been involved in installation and maintenance of hardware systems.
<b>Training Method</b>	Lecture, Workshop
<b>Duration</b>	Standard term: 5 days (classroom)
<b>Learning Goal</b>	Can provide customer service as a person responsible for of a leader of a customer service team by utilizing advanced knowledge of hardware system maintenance and fault diagnosis and recovery.

Skill Items	Knowledge Items
Technology	<p>-Latest Technology Trends  Understanding of Latest Hardware, Technology Trends, Understanding of Latest Middleware Technology Trends, Understanding of Latest Platform Technology Trends, Understanding of Latest Network Technology Trends, Understanding of Latest Database, Technology Trends, Understanding of Latest Security Technology Trends, Understanding of Latest System, Management Technology Trends</p>
System Operation Management (Hardware)	<p>-Maintenance for 24 hours / 365 days System Operations  Maintenance and Operations of Mutual Backup Structure with Remote Center, Maintenance and Operations of Critical Data Integrity Systems, Maintenance and Improvement of 24 hours / 365 days Systems</p>
Hardware Technology	<p>-IT Architecture (Hardware)  Understanding of Hardware Architecture, Understanding of Hardware Platform, Understanding of Hardware Configuration, Understanding and Utilization for Reliability, Availability and Serviceability of Hardware System</p> <p>-Hardware Basic Technology  Utilization of Basic Knowledge for Electricity and Electron and Machine and Optical Engineering</p> <p>-Maintenance of Hardware Products  Maintenance Planning, Utilization and Practice of Maintenance Process, Understanding and Utilization of Maintenance Manual, Practice of Hardware Products Maintenance, Utilization of Measuring Instruments and Test Tools, Practice of Procedure for Maintenance Completion and Report, Preventive Maintenance</p> <p>-Network Maintenance  Analysis of Error Code, Log Analysis, Memory Dump Analysis, Understanding and Utilization of Trace Tools, Problem Determination and Troubleshooting</p> <p>-Hardware Product Repair Technology  Understanding and Utilization of Hardware Built-in Diagnostic Program, Understanding and Utilization of Fault Diagnostic Program</p>

## Management of Hardware System Maintenance Service Quality Assurance (1 course)

[ ] is a corresponding specialty field

- Management of Hardware System Maintenance Service Quality Assurance  
[Hardware]

Course Name Content	Management of Hardware System Maintenance Service Quality Assurance
Training Course Level	<input type="checkbox"/> Introductory Course <input type="checkbox"/> Basic Course <input checked="" type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
Training Area (Common or Specialty Field)	<input type="checkbox"/> Common to Customer Service <input checked="" type="checkbox"/> Hardware <input type="checkbox"/> Software <input type="checkbox"/> Facility Management
Outline	<p>Aim:</p> <p>This course helps attendees whose specialty field is Hardware acquire knowledge of management of assurance of hardware system maintenance service quality.</p> <ul style="list-style-type: none"> <li>○The attendees learn knowledge important for management of assurance of service quality that customers request in complex and large-sized hardware systems.</li> <li>○Training contents are provided by combining lectures and workshop, and attendees perform exercises in management of assurance of hardware system service quality in simulated complex and large-sized hardware systems.</li> </ul>
Attendee	Those who have been involved in hardware customer service (those who aim to acquire the knowledge of Customer Service level 4 or 5)
Precondition	Have completed basic-level courses common to the job category Customer Service, basic-level courses specific to specialty field Hardware, and Project Management Fundamentals course group, or possess equivalent knowledge and have been involved in installation and maintenance of hardware systems.
Training Method	Lecture, Workshop
Duration	Standard term: 5 days (classroom)
Learning Goal	Can provide customer service as a person responsible for or a leader of a customer service team by utilizing knowledge of assurance and management of hardware system service quality.

Skill Items	Knowledge Items
Technology	<p>-Latest Technology Trends  Understanding of Latest Hardware, Technology Trends, Understanding of Latest Middleware Technology Trends, Understanding of Latest Platform Technology Trends, Understanding of Latest Network Technology Trends, Understanding of Latest Database, Technology Trends, Understanding of Latest Security Technology Trends, Understanding of Latest System, Management Technology Trends</p>
Hardware Technology	<p>-IT Architecture (Hardware)  Understanding of Hardware Architecture, Understanding of Hardware Platform, Understanding of Hardware Configuration, Understanding and Utilization for Reliability, Availability and Serviceability of Hardware System</p> <p>-Hardware Basic Technology  Utilization of Basic Knowledge for Electricity and Electron and Machine and Optical Engineering</p> <p>-Installation of Hardware Products  Understanding and Practice of Installation Planning Techniques, Utilization and Practice of Installation Process, Understanding and Utilization of Specifications and Installation Manuals, Practice of Hardware Products Installation, Practice of Procedure for Installation Completion and Report, Design and Installation of Mutual Backup System with Remote Center, Design and Installation of Critical Data Integrity System, Design and Installation of Mission Critical System</p> <p>-Maintenance of Hardware Products  Maintenance Planning, Utilization and Practice of Maintenance Process, Understanding and Utilization of Maintenance Manual, Practice of Hardware Products Maintenance, Utilization of Measuring Instruments and Test Tools, Practice of Procedure for Maintenance Completion and Report, Preventive Maintenance</p>

## Software System Development - Advanced Level - (1 course)

[ ] is a corresponding specialty field

- Software System Development - Advanced Level - [Software]

<div>Course Name</div> <div>Content</div>	Software System Development - Advanced Level -
<b>Training Course Level</b>	<input type="checkbox"/> Introductory Course <input type="checkbox"/> Basic Course <input checked="" type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
<b>Training Area (Common or Specialty Field)</b>	<input type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input checked="" type="checkbox"/> Software <input type="checkbox"/> Facility Management
<b>Outline</b>	<p>Aim:</p> <p>This course helps attendees whose special field is Software acquire advanced knowledge of software system development.</p> <ul style="list-style-type: none"> <li>○The attendees learn knowledge important for selection and installation of adequate software products, creation of test plans, and development and operations of complex and large-sized software systems.</li> <li>○In the first half, attendee learn in lectures knowledge important for software system development. In the second half, attendees learn in workshops how to use the knowledge acquired in the first half by utilizing simulated complex software systems.</li> </ul>
<b>Attendee</b>	Those who have been involved in software customer service (those who aim to acquire the knowledge of Customer Service level 4 or 5)
<b>Precondition</b>	Have completed basic-level courses common to the job category Customer Service, basic-level courses specific to specialty field Software, and Project Management Fundamentals course group, or possess equivalent knowledge and have been involved in installation and maintenance of software systems.
<b>Training Method</b>	[First Half] Lecture [Second Half] Workshop
<b>Duration</b>	[First Half] Standard term: 5 days (lecture) [Second Half] Standard term: 5 days (workshop)
<b>Learning Goal</b>	Can provide customer service as a person responsible for or a leader of a customer service team by utilizing advanced knowledge of software system development.

Skill Items	Knowledge Items
Software Technology	<p>-IT Architecture (Software)  Understanding of Software Architecture, Understanding of Software Platform, Understanding of Software Configuration, Understanding of Operating System Techniques, Remote Operation, Storage Mutual Backup System, SAN Support System, Synchronous Processing Between Remote Centers, Distributed Transaction Processing, Understanding and Utilization of Reliability and Availability and Serviceability of Software System</p> <p>-Installation of Software Products  Understanding and Practice of Installation Planning Techniques, Utilization and Practice of Installation Process, Understanding and Utilization of Specifications and Installation Manuals, Practice of Software Products Installation, Practice of Procedure for Installation Completion and Report</p>



## Software System Maintenance / Fault Diagnosis and Recovery - Advanced Level - (1 course)

[ ] is a corresponding specialty field

- Software System Maintenance/Fault Diagnosis and Recovery - Advanced Level -  
[Software]

<div>Course Name</div> <div>Content</div>	Software System Maintenance / Fault Diagnosis and Recovery - Advanced Level -
Training Course Level	<input type="checkbox"/> Introductory Course <input type="checkbox"/> Basic Course <input checked="" type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
Training Area (Common or Specialty Field)	<input type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input checked="" type="checkbox"/> Software <input type="checkbox"/> Facility Management
Outline	<p>Aim:</p> <p>This course helps attendees whose specialty field is Software acquire advanced knowledge of software system maintenance and fault diagnosis and recovery.</p> <ul style="list-style-type: none"> <li>○The attendees learn knowledge required of persons responsible for customer service software, The knowledge consists of understanding and analysis of customers' requirements, maintenance and management of software products installed, planning and implementation of software updates considering trends of transaction load of customer's systems. The attendees also learn relevant knowledge such as compatibility consideration for fundamental software version up in multi-platform environment, fault diagnosis and recovery for complex- and large-sized software systems.</li> <li>○In the first half, attendees learn f in lectures fault diagnosis and recovery in complex and large-sized systems (e.g., bank accounting systems and large-sized Web systems). In second half, attendees learn in workshops how to lead fault diagnosis and recovery as persons responsible for or leaders of software teams by utilizing simulated complex and large-sized systems to acquire practical knowledge.</li> </ul>
Attendee	Those who have been involved in software customer service (those who aim to acquire the knowledge of Customer Service level 4 or 5)
Precondition	Have completed basic-level courses common to the job category Customer Service and basic-level courses specific to specialty field Software, or possess equivalent knowledge and have been involved in installation and maintenance of software systems.
Training Method	Lecture, Workshop
Duration	Standard term: 5 days (classroom)
Learning Goal	Can provide customer service as a person responsible for or a leader of a customer service team by utilizing advanced knowledge of software system maintenance and fault diagnosis and recovery.

Skill Items	Knowledge Items
Software Technology	-Maintenance of Software Products Maintenance Planning, Utilization and Practice of Maintenance Process, Understanding and Utilization of Maintenance Manuals, Practice of Software Products Maintenance, Utilization of Test Tools, Practice of Procedure for Maintenance Completion and Report

## Management of Software System Quality Assurance (1 course)

[ ] is a corresponding specialty field

- Management of Software System Quality Assurance [Software]

Course Name Content	Management of Software System Quality Assurance
<b>Training Course Level</b>	<input type="checkbox"/> Introductory Course <input type="checkbox"/> Basic Course <input checked="" type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
<b>Training Area (Common or Specialty Field)</b>	<input type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input checked="" type="checkbox"/> Software <input type="checkbox"/> Facility Management
<b>Outline</b>	<p>Aim:</p> <p>This course helps attendee whose specialty field Software acquire knowledge of risk management and quality assurance management of software systems.</p> <ul style="list-style-type: none"> <li>○In a whole process from installation of software systems to their operations, attendees learn knowledge of risk management and quality assurance management (e.g., measures against fault, data maintenance and recovery processing in large-sized databases, software level upgrade and change, and problem management processes) important for achievement of quality service level that customers request.</li> <li>○In the first half, attendees learn the knowledge above in lectures. In the second half, attendees learn how to manage software system quality in simulated large-sized software systems by using the knowledge acquired in the first half in workshops.</li> </ul>
<b>Attendee</b>	Those who have been involved in software customer service (those who aim to acquire the knowledge of Customer Service level 4 or 5)
<b>Precondition</b>	Have completed basic-level courses common to the job category Customer Service, basic-level courses specific to specialty field Software, and Project Management Fundamentals course, or possess equivalent knowledge and have been involved in installation and maintenance of software systems.
<b>Training Method</b>	Lecture, Workshop
<b>Duration</b>	Standard term: 5 days (classroom)
<b>Learning Goal</b>	Can provide customer service as a person responsible for or a leader of a customer service team by utilizing knowledge of risk management and quality assurance management of software systems.

Skill Items	Knowledge Items
System Operation Management (Software)	Mutual Backup Structure with Remote Center Transaction Load Leveling, Mutual Backup for Critical Data, Processing in Remote Center when Problems Arise
Software Technology	-IT Architecture (Software) Understanding of Software Architecture, Understanding of Software Platform, Understanding of Software Configuration, Understanding of Operating System Techniques, Remote Operation, Storage Mutual Backup System, SAN Support System, Synchronous Processing Between Remote Centers, Distributed Transaction Processing, Understanding and Utilization of Reliability and Availability and Serviceability of Software System

## Facility (Equipment) Design and Construction and Operation and Maintenance Design (3 courses)

[ ] is a corresponding specialty field

- Facility (Equipment) Design [Facility Management]
- Facility (Equipment) Construction [Facility Management]
- Facility (Equipment) Operations and Maintenance Design [Facility Management]

Course Name Content	Facility (Equipment) Design
<b>Training Course Level</b>	<input type="checkbox"/> Introductory Course <input type="checkbox"/> Basic Course <input checked="" type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
<b>Training Area (Common or Specialty Field)</b>	<input type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input type="checkbox"/> Software <input checked="" type="checkbox"/> Facility Management
<b>Outline</b>	<p>Aim: Attendees whose specialty field is Facility Management acquire knowledge of design of data center facilities (equipment).</p> <p>○The attendees learn knowledge important for investigation, planning, basic design, implementation design, monitoring of data center facilities (equipment) and facilities (equipment) such as offices, factories, and commercial facilities where IT devices to be installed, both of which achieve customers' requirements.</p> <p>○Via e-learning type methods in the first half, the attendees learn knowledge important for design of data center facilities (equipment) and facilities (equipment) such as offices, factories, and commercial facilities where IT devices to be installed). In the second half, in addition to lectures, the attendees perform exercises in workshops in the simulated data center facilities as a case study, which have been utilized in the previous training course, by using the knowledge acquired in the first half.</p>
<b>Attendee</b>	Those who have been involved in facility management customer service (those who aim to acquire the knowledge of Customer Service level 4 or 5)
<b>Precondition</b>	Have completed basic-level courses common to the job category Customer Service and basic-level courses specific to specialty field Facility Management, or possess equivalent knowledge and have been involved in design, establishment, management, and maintenance of IT relevant facilities.
<b>Training Method</b>	E-learning, Lecture, Workshop
<b>Duration</b>	[First Half] Standard term: 12 hours (e-learning 6 hours/day x 2 days) [Second Half] Standard term: 2 days (classroom)
<b>Learning Goal</b>	Can provide customer service as a person responsible for or a leader of a customer service team by utilizing knowledge of facility (equipment).



Skill Items	Knowledge Items
Facility Management	<p>-Latest Trends of Facility and Network Product Technology Understanding and Utilization of Latest Facility and Network Product Technology Trends</p> <p>-Design, Facilities, Maintenance, and Operation of Physical Network (Communications Network) Fundamentals of Communication Technology (Transmission Media, Transmission Techniques, Distribution Methods, Communication), Understanding and Utilization of Fundamentals and Standards for Telecommunications Facilities (Network) Plan, Design and Construction, Design, Construction, Maintenance and Operation of Communication Network Backup Systems for Disaster Recovery</p> <p>-Design, Construction, Maintenance, and Operation of Data Center Facilities Design and Construction, Plan and Design and Construction of Electrical Equipment, Fundamentals for Plan, Design and Construction of Air-Conditioning Facilities, Formulation for Installation Plan of Environment Facilities, Formulation of Environmental Facilities Design and Installation Requirement, Design and Construction and Management of Environmental Facilities and Utilization and Practice of Maintenance and Operation Tools, Failure Measurement, Installation and Management for Earthquake-proof or Aseismatic Device of IT Equipment Construction and Management, Building Construction Management such as Space and Confortability of Personnel, Design, Construction, Maintenance and Operation of Mutual Backup System with Remote Center, Design, Construction, Maintenance and Operation of Critical Data Integrity System, Maintenance and Improvement of Mission Critical System, Capacity Management Methods, Utilization of Capacity Management Tools</p> <p>-Installation, Moving, Upgrade, and Migration of Computer System</p> <p>-Design, Construction, Maintenance, and Operation of Disaster and Crime Prevention Facilities Formulation for Installation Plan of Disaster and Crime Prevention Facilities, Requirement Formulation for Design and Installation of Disaster and Crime Prevention Facilities, Design and Construction Management of Disaster and Crime Prevention Facilities, Maintenance and Operation of Disaster and Crime Prevention Facilities, Utilization and Practice of Tools for Design, Construction and Maintenance and Operation, Utilization and Practice for Design and Construction Management Techniques of Disaster Control Facilities, Fundamentals for Disaster Control of Facilities, and Fundamentals for Plan and Design and Construction of Fire Fighting Facilities, Risk Management of Disaster and Crime Prevention Security, Plan and Design and Construction of Security Equipment</p> <p>-Cost Accumulation Implementation of Top-Down Cost Estimating, Implementation of Bottom-Up, Cost Estimating, Utilization and Practice of Estimating Tools, Utilization and Practice of Cost Estimating Methodology</p> <p>-Cost Management Implementation of Cost Change Management, Understanding and Practice of Progress Assessment Standards, Utilization and Practice of EVM (Earned value management), Utilization and Practice of Cost Management Tools</p>

Course Name Content	Facility (Equipment) Construction
<b>Training Course Level</b>	<input type="checkbox"/> Introductory Course <input type="checkbox"/> Basic Course <input checked="" type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
<b>Training Area (Common or Specialty Field)</b>	<input checked="" type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input type="checkbox"/> Software <input checked="" type="checkbox"/> Facility Management
<b>Outline</b>	<p>Aim:</p> <p>Attendees whose specialty field is Facility Management acquire knowledge of construction of data center facilities (equipment).</p> <ul style="list-style-type: none"> <li>○The attendees learn knowledge important for successful completion of construction plans of data center facilities (equipment), and facilities (equipment) such as offices, factories, and commercial facilities where IT devices to be installed, both of which achieve customers' requirements.</li> <li>○Via e-learning type methods in the first half, the attendees learn knowledge important for construction of data center facilities (equipment) and facilities (equipment) such as offices, factories, and commercial facilities where IT devices to be installed). In the second half, in addition to lectures, the attendees perform exercises in workshops in the simulated data center facilities as a case study, which have been utilized in the previous training course, by using the knowledge acquired in the first half.</li> </ul>
<b>Attendee</b>	Those who have been involved in facility management customer service (those who aim to acquire the knowledge of Customer Service level 4 or 5)
<b>Precondition</b>	Have completed basic-level courses common to the job category Customer Service and basic-level courses specific to specialty field Facility Management, or possess equivalent knowledge and have been involved in design, establishment, management, and maintenance of IT relevant facilities.
<b>Training Method</b>	E-learning, Lecture, Workshop
<b>Duration</b>	[First Half] Standard term: 12 hours (e-learning 6 hours/day x 2 days) [Second Half] Standard term: 2 days (classroom)
<b>Learning Goal</b>	Can provide customer service as a person responsible for or a leader of a customer service team by utilizing knowledge of facility (equipment) construction.

Skill Items	Knowledge Items
Facility Management	<p>-Latest Trends of Facility and Network Product Technology Understanding and Utilization of Latest Facility and Network Product Technology Trends</p> <p>-Design, Facilities, Maintenance, and Operation of Physical Network (Communications Network) Fundamentals of Communication Technology (Transmission Media, Transmission Techniques, Distribution Methods, Communication), Understanding and Utilization of Fundamentals and Standards for Telecommunications Facilities (Network) Plan, Design and Construction, Design, Construction, Maintenance and Operation of Communication Network Backup Systems for Disaster Recovery</p> <p>-Design, Construction, Maintenance, and Operation of Data Center Facilities Design and Construction, Plan and Design and Construction of Electrical Equipment, Fundamentals for Plan, Design and Construction of Air-Conditioning Facilities, Formulation for Installation Plan of Environment Facilities, Formulation of Environmental Facilities Design and Installation Requirement, Design and Construction and Management of Environmental Facilities and Utilization and Practice of Maintenance and Operation Tools, Failure Measurement, Installation and Management for Earthquake-proof or Aseismatic Device of IT Equipment Construction and Management, Building Construction Management such as Space and Confortability of Personnel, Design, Construction, Maintenance and Operation of Mutual Backup System with Remote Center, Design, Construction, Maintenance and Operation of Critical Data Integrity System, Maintenance and Improvement of Mission Critical System, Capacity Management Methods, Utilization of Capacity Management Tools</p> <p>-Installation, Moving, Upgrade, and Migration of Computer System</p> <p>-Design, Construction, Maintenance, and Operation of Disaster and Crime Prevention Facilities Formulation for Installation Plan of Disaster and Crime Prevention Facilities, Requirement Formulation for Design and Installation of Disaster and Crime Prevention Facilities, Design and Construction Management of Disaster and Crime Prevention Facilities, Maintenance and Operation of Disaster and Crime Prevention Facilities, Utilization and Practice of Tools for Design, Construction and Maintenance and Operation, Utilization and Practice for Design and Construction Management Techniques of Disaster Control Facilities, Fundamentals for Disaster Control of Facilities, and Fundamentals for Plan and Design and Construction of Fire Fighting Facilities, Risk Management of Disaster and Crime Prevention Security, Plan and Design and Construction of Security Equipment</p> <p>-Cost Accumulation Implementation of Top-Down Cost Estimating, Implementation of Bottom-Up, Cost Estimating, Utilization and Practice of Estimating Tools, Utilization and Practice of Cost Estimating Methodology</p> <p>-Cost Management Implementation of Cost Change Management, Understanding and Practice of Progress Assessment Standards, Utilization and Practice of EVM (Earned value management), Utilization and Practice of Cost Management Tools</p> <p>-Problem Solving Methods for Facilities Management Technology Utilization and Practice of Various Space Design Methodology, Utilization and Practice of Knowledge for Building Intensity, Utilization and Practice of Knowledge for Piping Design, Knowledge and Utilization of for Electric Wiring</p>

Course Name Content	Facility (Equipment) Operations and Maintenance Design
Training Course Level	<input type="checkbox"/> Introductory Course <input type="checkbox"/> Basic Course <input checked="" type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
Training Area (Common or Specialty Field)	<input type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input type="checkbox"/> Software <input checked="" type="checkbox"/> Facility Management
Outline	<p>Aim:</p> <p>Attendees whose specialty field is Facility Management acquire knowledge of operations and maintenance design of data center facilities (equipment).</p> <ul style="list-style-type: none"> <li>○The attendees learn knowledge important for satisfactory operations and maintenance design of data center facilities (equipment) and facilities (equipment) such as offices, factories, and commercial facilities where IT devices to be installed, both of which achieve customers' requirements.</li> <li>○Via e-learning type methods in the first half, the attendees learn knowledge important for operations and maintenance design of data center facilities (equipment) and facilities (equipment) such as offices, factories, and commercial facilities where IT devices to be installed. In the second half, in addition to lectures, the attendees perform exercises in workshops in the simulated data center facilities as a case study, which have been utilized in the previous training course, by using the knowledge acquired in the first half.</li> </ul>
Attendee	Those who have been involved in customer service for facility management (those who aim to acquire the knowledge of Customer Service level 5 or 6)
Precondition	Have completed basic-level courses common to the job category Customer Service and basic-level courses specific to specialty field Facility Management, or possess equivalent knowledge and have been involved in design, establishment, management, and maintenance of IT relevant facilities.
Training Method	E-learning, Lecture, Workshop
Duration	<p>[First Half] Standard term: 12 hours (e-learning 6 hours/day x 2 days)</p> <p>[Second Half] Standard term: 2 days (classroom)</p>
Learning Goal	Can provide customer service as a person responsible for or a leader of a customer service team by utilizing knowledge of operations and maintenance design of facilities (equipment).

Skill Items	Knowledge Items
System Operation Management (Facility)	-Facility Operation Management Policy Facility Operation Requirements Analysis, Support for Formulation of Operation Management Policy to each Facility Component, Facility Operation Standards Check

## Quality / Process / Safety and Health (3 courses)

[ ] is a corresponding specialty field

- Quality Management System [Facility Management]
- Process Management [Facility Management]
- Safety and Health Management [Facility Management]

<div>Course Name</div> <div>Content</div>	Quality Management System
Training Course Level	<input type="checkbox"/> Introductory Course <input type="checkbox"/> Basic Course <input checked="" type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
Training Area (Common or Specialty Field)	<input type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input type="checkbox"/> Software <input checked="" type="checkbox"/> Facility Management
Outline	<p>Aim:</p> <p>Attendees whose specialty field is Facility Management acquire knowledge of facility quality management system.</p> <ul style="list-style-type: none"> <li>○The attendees learn knowledge important for realization of quality that achieves customers' quality requirements in design and construction of data center facilities (equipment) and facilities (equipment) such as offices, factories, and commercial facilities where IT devices to be installed.</li> <li>○Via e-learning type methods in the first half, the attendees learn knowledge important for quality management system of data center facilities (equipment) and facilities (equipment) such as offices, factories, and commercial facilities where IT devices to be installed. In the second half, in addition to lectures, the attendees perform exercises in workshops in the simulated data center facilities as a case study, which have been utilized in the previous training course, by using the knowledge acquired in the first half.</li> </ul>
Attendee	Those who have been involved in customer service for facility management (those who aim to acquire the knowledge of Customer Service level 4 or 5)
Precondition	Have completed basic-level courses common to the job category Customer Service and basic-level courses specific to specialty field Facility Management, or possess equivalent knowledge and have been involved in design, establishment, management, and maintenance of IT relevant facilities.
Training Method	E-learning, Lecture, Workshop
Duration	[First Half] Standard term: 12 hours (e-learning 6 hours/day x 2 days) [Second Half] Standard term: 2 days (classroom)
Learning Goal	Can provide customer service as a person responsible for or a leader of a customer service team by utilizing knowledge of facility quality management system.

Skill Items	Knowledge Items
Facility Management	<p>-Reliability, Availability, and Serviceability of Facilities  Fundamentals for Reliability, Availability and Serviceability of Facilities and Physical Network (Communication Network)</p> <p>-Knowledge of Quality Management  International Standards of Quality Management System, TQM (Total Quality Management), Ensuring Quality Target, Quality Management System in Recovery Management, Quality Management System in Availability Management, Quality Management System in Capacity Management, Quality Management System in Reequipping Management, Practice of Quality Management System in Disaster Prevention and Security Measurement, Utilization of Statistical Quality Management System Techniques, Quality Management System of Communication Equipment Techniques (Transmission Media, Transmission Techniques, Distribution Methods, Communications)</p>



Course Name Content	Process Management
Training Course Level	<input type="checkbox"/> Introductory Course <input type="checkbox"/> Basic Course <input checked="" type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
Training Area (Common or Specialty Field)	<input type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input type="checkbox"/> Software <input checked="" type="checkbox"/> Facility Management
Outline	<p>Aim: Attendees whose specialty field is Facility Management acquire knowledge of process management of facility establishment.</p> <p>○Considering construction of data center facilities (equipment) and facilities (equipment) such as offices, factories, and commercial facilities where IT devices to be installed, both of which achieve customers' requirements, the attendees learn knowledge important for arrangement of resources, facilities, and devices to be used in each work process, work procedures in construction fields, creation of process plans including man-hour, and management of progress of each work process whether it is bases on process plans.</p> <p>○Via e-learning type methods in the first half, the attendees learn knowledge important for process management of data center facilities (equipment) and facilities (equipment) such as offices, factories, and commercial facilities where IT devices to be installed. In the second half, in addition to lectures, the attendees perform exercises in workshops in the simulated data center facilities as a case study, which have been utilized in the previous training course, by using the knowledge acquired in the first half.</p>
Attendee	Those who have been involved in facility management customer service (those who aim to acquire the knowledge of Customer Service level 4 or 5)
Precondition	Have completed basic-level courses common to the job category Customer Service and basic-level courses specific to specialty field Facility Management, or possess equivalent knowledge and have been involved in design, establishment, management, and maintenance of IT reverent facilities.
Training Method	E-learning, Lecture, Workshop
Duration	<p>[First Half] Standard term: 12 hours (e-learning 6 hours/day x 2 days)</p> <p>[Second Half] Standard term: 2 days (classroom)</p>
Learning Goal	Can provide customer service as a person responsible for or a leader of a customer service team by utilizing knowledge of process management.

Skill Items	Knowledge Items
Project Management	<p>-Project Integration Management Develop Project Charter, Develop Preliminary Project Scope Statement, Develop Project Management Plan, Direct and Manage Project Execution, Monitor and Control Project Work, Integrated Change Control, Close Project</p> <p>-Project Scope Management Scope Planning, Scope Definition, Create WBS, Scope Verification, Scope Control</p> <p>-Project Time Management Activity Definition, Activity Sequencing, Activity Resource Estimating, Activity Duration Estimating, Schedule Development, Schedule Control</p> <p>-Project Cost Management Quality Planning, Perform Quality Assurance, Perform Quality Control</p> <p>-Project Quality Management Quality Planning, Perform Quality Assurance, Perform Quality Control</p> <p>-Project Human Resource Management Human Resource Planning, Acquire Project Team, Develop Project Team, Manage Project Team</p> <p>-Project Communication Management Communications Planning, Information Distribution, Performance Reporting, Manage Stakeholders</p> <p>-Project Risk Management Risk Management Planning, Risk Identification, Qualitative Risk Analysis, Quantitative Risk Analysis, Risk Response Planning, Risk Monitoring and Control</p> <p>-Project Procurement Management Plan Purchases and Acquisitions, Plan Contracting, Request Seller Responses, Select Sellers, Contract Administration, Contract Closure</p>

Course Name Content	Safety and Health Management
<b>Training Course Level</b>	<input type="checkbox"/> Introductory Course <input type="checkbox"/> Basic Course <input checked="" type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
<b>Training Area (Common or Specialty Field)</b>	<input type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input type="checkbox"/> Software <input checked="" type="checkbox"/> Facility Management
<b>Outline</b>	<p>Aim: Attendees whose specialty field is Facility Management acquire knowledge of safety and health management relevant to facilities.</p> <p>○Considering construction of data center facilities (equipment) and facilities (equipment) such as offices, factories, and commercial facilities where IT devices to be installed, both of which achieves customers' requirements, the attendees learn knowledge important for preventive measures for workers' job-related injury and illness, job-related injury and illness of third persons, and job-related physical damage.</p> <p>○Via e-learning type methods in the first half, the attendees learn knowledge important for safety and health management of data center facilities (equipment) and facilities (equipment) such as offices, factories, and commercial facilities where IT devices to be installed. In the second half, in addition to lectures, the attendees perform exercises in workshops in the simulated data center facilities as a case study, which have been utilized in the previous training course, by using the knowledge acquired in the first half.</p>
<b>Attendee</b>	Those who have been involved in customer service for facility management (those who aim to acquire the knowledge of Customer Service level 4 or 5)
<b>Precondition</b>	Have completed basic-level courses common to the job category Customer Service and basic-level courses specific to specialty field Facility Management, or possess equivalent knowledge and have been involved in design, establishment, management, and maintenance of IT relevant facilities.
<b>Training Method</b>	E-learning, Lecture, Workshop
<b>Duration</b>	[First Half] Standard term: 12 hours (e-learning 6 hours/day x 2 days) [Second Half] Standard term: 2 days (classroom)
<b>Learning Goal</b>	Can provide customer service as a person responsible for or a leader or a customer service team by utilizing knowledge of safety and health management.

Skill Items	Knowledge Items
Facility Management	<p>-Practice of Safety Management for Construction of Physical Network (Communication s Network) Facilities (Equipment) Confirmation of Earthing Cable Wires, Confirmation of Earthing Equipment, Confirmation of Separation between Original Power Source and Secondary Source</p> <p>-Knowledge of Safety Management, such as Crime and Disaster Prevention Measures in Data Center Construction Safety, Electrical Safety, Ensuring Safety and Health, Occupational Safety and Health related Laws, Plan and Implementation of Safety and Health Management System and Integrated Safety and Health Management</p> <p>-Fundamentals for Safety and Health Related Regulations Laws relating to Handling and Storage and Treatment of Hazardous Materials, Building Safety and Health Management Laws, Occupational Safety and Health Laws</p>

## Facility Management (2 courses)

[ ] is a corresponding specialty field

- Facility Management [Facility Management]

Course Name Content	Facility Management
Training Course Level	<input type="checkbox"/> Introductory Course <input type="checkbox"/> Basic Course <input checked="" type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
Training Area (Common or Specialty Field)	<input type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input type="checkbox"/> Software <input checked="" type="checkbox"/> Facility Management
Outline	<p>Aim:</p> <p>Attendees whose specialty field is Facility Management acquire knowledge of facility management.</p> <ul style="list-style-type: none"> <li>○The attendees learn knowledge important for establishment, renovation, and relocation of large-sized and critical data center facilities (equipment) and facilities (equipment) such as offices, factories, and commercial facilities where social-critical IT devices to be installed, without interruption of IT services in construction, maintenance, and renovation of the data center facilities, and the offices, factories, and commercial facilities.</li> <li>○Via e-learning type methods in the first half, the attendees learn knowledge important for facility management of the large-sized data center facilities (equipment) and facilities (equipment) such as offices, factories, and commercial facilities where the IT devices to be installed. In the second half, in addition to lectures, the attendees perform exercises in workshops in the simulated data center facilities as a case study, which have been utilized in the previous training course, by utilizing the knowledge acquired in the first half.</li> <li>○After taking this course, the attendees continue improving their knowledge of facility management through seminars and documents available to the public (e.g., the Internet) on regular basis.</li> </ul>
Attendee	Those who have been involved in facility management customer service (those who aim to acquire the knowledge of Customer Service level 3, 4, or 5)
Precondition	Have completed basic-level courses common to the job category Customer Service and basic-level courses specific to specialty field Facility Management, or possess equivalent knowledge and have been involved in design, establishment, management, and maintenance of IT relevant facilities.
Training Method	E-learning, Lecture, Workshop

Course Name Content	Facility Management
Training Course Level	<input type="checkbox"/> Introductory Course <input type="checkbox"/> Basic Course <input checked="" type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
Training Area (Common or Specialty Field)	<input type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input type="checkbox"/> Software <input checked="" type="checkbox"/> Facility Management
Duration	[First Half] Standard term: 12 hours (e-learning 6 hours/day x 2 days) [Second Half] Standard term: 3 days (classroom)
Learning Goal	Can provide customer service as a person responsible for, a member of, or leader of a customer service team by utilizing knowledge of facility management.

Skill Items	Knowledge Items
System Operation Management (Facility)	-Facility Operation Management Policy Facility Operation Requirements Analysis, Support for Formulation of Operation Management Policy to each Facility Component, Facility Operation Standards Check



Skill Items	Knowledge Items
Facility Management	<p>-Latest Trends of Facility and Network Product Technology Understanding and Utilization of Latest Facility and Network Product Technology Trends</p> <p>-Design, Facilities, Maintenance, and Operation of Physical Network (Communications Network) Fundamentals of Communication Technology (Transmission Media, Transmission Techniques, Distribution Methods, Communication), Understanding and Utilization of Fundamentals and Standards for Telecommunications Facilities (Network) Plan, Design and Construction, Design, Construction, Maintenance and Operation of Communication Network Backup Systems for Disaster Recovery</p> <p>-Design, Construction, Maintenance, and Operation of Data Center Facilities Design and Construction, Plan and Design and Construction of Electrical Equipment, Fundamentals for Plan, Design and Construction of Air</p> <p>-Conditioning Facilities, Formulation for Installation Plan of Environment Facilities, Formulation of Environmental Facilities Design and Installation Requirement, Design and Construction and Management of Environmental Facilities and Utilization and Practice of Maintenance and Operation Tools, Failure Measurement, Installation and Management for Earthquake-proof or Aseismatic Device of IT Equipment Construction and Management, Building Construction Management such as Space and Confortability of Personnel, Design, Construction, Maintenance and Operation of Mutual Backup System with Remote Center, Design, Construction, Maintenance and Operation of Critical Data Integrity System, Maintenance and Improvement of Mission Critical System, Capacity Management Methods, Utilization of Capacity Management Tools</p> <p>-Installation, Moving, Upgrade, and Migration of Computer System Formulation for Installation Plan of Disaster and Crime Prevention Facilities, Requirement Formulation for Design and Installation of Disaster and Crime Prevention Facilities, Design and Construction Management of Disaster and Crime Prevention Facilities, Maintenance and Operation of Disaster and Crime Prevention Facilities, Utilization and Practice of Tools for Design, Construction and Maintenance and Operation, Utilization and Practice for Design and Construction Management Techniques of Disaster Control Facilities, Fundamentals for Disaster Control of Facilities, and Fundamentals for Plan and Design and Construction of Fire Fighting Facilities, Risk Management of Disaster and Crime Prevention Security, Plan and Design and Construction of Security Equipment</p> <p>-Cost Accumulation Implementation of Top-Down Cost Estimating, Implementation of Bottom-Up, Cost Estimating, Utilization and Practice of Estimating Tools, Utilization and Practice of Cost Estimating Methodology</p> <p>Cost Management Implementation of Cost Change Management, Understanding and Practice of Progress Assessment Standards, Utilization and Practice of EVM (Earned value management), Utilization and Practice of Cost Management Tools</p>

Skill Items	Knowledge Items
	-Reliability, Availability, and Serviceability of Facilities Fundamentals for Reliability, Availability and Serviceability of Facilities and Physical Network (Communication Network)  Ensuring Earthquake Proof Safety Floor Intensity, Fall Prevention of Office Furniture, Falling Objects Prevention, Fall Prevention of Equipment

## Project Management - Advanced Level - (1 course)

[ ] is a corresponding specialty field

- Facility Administration Techniques [Facility Management]

Course Name Content	Facility Administration Techniques
<b>Training Course Level</b>	<input type="checkbox"/> Introductory Course <input type="checkbox"/> Basic Course <input checked="" type="checkbox"/> Advanced Course <input type="checkbox"/> Special Course
<b>Training Area (Common or Specialty Field)</b>	<input type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input type="checkbox"/> Software <input checked="" type="checkbox"/> Facility Management
<b>Outline</b>	<p>Aim:</p> <p>This course helps attendees whose specialty field is Facility Management acquire knowledge of administration techniques.</p> <ul style="list-style-type: none"> <li>○The attendees learn knowledge required of persons responsible for management of whole processes of establishment projects of large-sized and critical data center facilities (equipment) and facilities (equipment) such as complex and large-sized offices, factories, and commercial facilities where a few hundred of mission-crucial IT devices or more to be installed, without interruption in IT service at development, maintenance, and renovation of the data center facilities, and the offices, factories, and commercial facilities.</li> <li>○In the first half, attendees learn knowledge required of persons responsible for data center facilities (equipment) and facilities (equipment) such as offices, factories, and commercial facilities where IT devices to be installed via e-learning type methods. In the second half, in addition to lectures, attendees perform in workshops exercises in the simulated data center facilities as a case study, which have been utilized in the previous training course, by using the knowledge acquired in the first half.</li> </ul>
<b>Attendee</b>	Those who have been involved in facility management customer service (those who aim to acquire the knowledge of Customer Service level 5)
<b>Precondition</b>	Have completed basic-level courses common to the job category Customer Service, basic-level courses specific to specialty field Facility Management, and Project Management Fundamentals course group, or possess equivalent knowledge and have been involved in design, establishment, management, and maintenance of IT relevant facilities.
<b>Training Method</b>	E-learning, Lecture, Workshop
<b>Duration</b>	<p>[First Half] Standard term: 12 hours (e-learning 6 hours/day x 2 days)</p> <p>[Second Half] Standard term: 3 days (classroom)</p>
<b>Learning Goal</b>	Can provide customer service as a person responsible for a customer service team by utilizing knowledge of facility administration techniques.

Skill Items	Knowledge Items
Facility Management	<p>-Latest Trends of Facility and Network Product Technology Understanding and Utilization of Latest Facility and Network Product Technology Trends</p> <p>-Design, Facilities, Maintenance, and Operation of Physical Network (Communications Network) Fundamentals of Communication Technology (Transmission Media, Transmission Techniques, Distribution Methods, Communication), Understanding and Utilization of Fundamentals and Standards for Telecommunications Facilities (Network) Plan, Design and Construction, Design, Construction, Maintenance and Operation of Communication Network Backup Systems for Disaster Recovery</p> <p>-Design, Construction, Maintenance, and Operation of Data Center Facilities Fundamentals of Building Design and Construction, Plan and Design and Construction of Electrical Equipment, Fundamentals for Plan, Design and Construction of Air-Conditioning Facilities, Formulation for Installation Plan of Environment Facilities, Formulation of Environmental Facilities Design and Installation Requirement, Design and Construction and Management of Environmental Facilities and Utilization and Practice of Maintenance and Operation Tools, Failure Measurement, Installation and Management for Earthquake-proof or Aseismic Device of IT Equipment Construction and Management, Building Construction Management such as Space and Comfortability of Personnel, Design, Construction, Maintenance and Operation of Mutual Backup System with Remote Center, Design, Construction, Maintenance and Operation of Critical Data Integrity System, Maintenance and Improvement of Mission Critical System, Capacity Management Methods, Utilization of Capacity Management Tools</p> <p>-Installation, Moving, Upgrade, and Migration of Computer System</p> <p>-Design, Construction, Maintenance, and Operation of Disaster and Crime Prevention Facilities Formulation for Installation Plan of Disaster and Crime Prevention Facilities, Requirement Formulation for Design and Installation of Disaster and Crime Prevention Facilities, Design and Construction Management of Disaster and Crime Prevention Facilities, Maintenance and Operation of Disaster and Crime Prevention Facilities, Utilization and Practice of Tools for Design, Construction and Maintenance and Operation, Utilization and Practice for Design and Construction Management Techniques of Disaster Control Facilities, Fundamentals for Disaster Control of Facilities, and Fundamentals for Plan and Design and Construction of Fire Fighting Facilities, Risk Management of Disaster and Crime Prevention Security, Plan and Design and Construction of Security Equipment</p> <p>-Cost Accumulation Implementation of Top-Down Cost Estimating, Implementation of Bottom-Up, Cost Estimating, Utilization and Practice of Estimating Tools, Utilization and Practice of Cost Estimating Methodology</p>

Skill Items	Knowledge Items
	<p>-Cost Accumulation Implementation of Top-Down Cost Estimating, Implementation of Bottom-Up, Cost Estimating, Utilization and Practice of Estimating Tools, Utilization and Practice of Cost Estimating Methodology</p> <p>-Cost Management Implementation of Cost Change Management, Understanding and Practice of Progress Assessment Standards, Utilization and Practice of EVM (Earned value management), Utilization and Practice of Cost Management Tools</p> <p>-Reliability, Availability, and Serviceability of Facilities Fundamentals for Reliability, Availability and Serviceability of Facilities and Physical Network (Communication Network)</p> <p>-Fundamentals for Safety and Health Related Regulations Laws relating to Handling and Storage and Treatment of Hazardous Materials, Building Safety and Health Management Laws, Occupational Safety and Health Laws</p>

## Latest Hardware Product Trends (1 course)

[ ] is a corresponding specialty field

- Latest Hardware Product Trends [Hardware]

<div>Course Name</div> <div>Content</div>	Latest Hardware Product Trends
Training Course Level	<input type="checkbox"/> Introductory Course <input type="checkbox"/> Basic Course <input type="checkbox"/> Advanced Course <input checked="" type="checkbox"/> Special Course
Training Area (Common or Specialty Field)	<input type="checkbox"/> Common to Customer Service <input checked="" type="checkbox"/> Hardware <input type="checkbox"/> Software <input type="checkbox"/> Facility Management
Outline	<p>Aim:</p> <p>This course aims that attendees understand the latest hardware product trends required for customer service.</p> <ul style="list-style-type: none"> <li>○The attendees learn knowledge of the latest hardware product trends (e.g., server devices, storage devices, network relevant devices, I/P devices, O/P devices, client PCs, and workstations) to use the knowledge for customer service as responsible persons for hardware.</li> <li>○Training contents are provided on given latest hardware product themes according to need, and the attendees select a theme to take part in a lecture for maintaining or improving their skills at regular intervals or when needed.</li> </ul>
Attendee	Those who have been involved in hardware customer service (those who aim to acquire the knowledge of Customer Service level 4 or 5)
Precondition	Have completed basic-level courses common to the job category Customer Service and basic-level courses specific to specialty field Hardware, or possess equivalent knowledge and have been involved in installation and maintenance of hardware systems.
Training Method	Lecture
Duration	Standard team: 1 day (classroom)
Learning Goal	Can provide customer service as a parson responsible for or a leader of a customer service team by utilizing knowledge of the latest hardware product trends.



Skill Items	Knowledge Items
Technology	-Latest Technology Trends Understanding of Latest Hardware, Technology Trends, Understanding of Latest Middleware Technology Trends, Understanding of Latest Platform Technology Trends, Understanding of Latest Network Technology Trends, Understanding of Latest Database, Technology Trends, Understanding of Latest Security Technology Trends, Understanding of Latest System, Management Technology Trends

## Latest Software Product Trends (1 course)

[ ] is a corresponding specialty field

- Latest Software Product Trends [Software]

Course Name Content	Latest Software Product Trends
<b>Training Course Level</b>	<input type="checkbox"/> Introductory Course <input type="checkbox"/> Basic Course <input type="checkbox"/> Advanced Course <input checked="" type="checkbox"/> Special Course
<b>Training Area (Common or Specialty Field)</b>	<input type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input checked="" type="checkbox"/> Software <input type="checkbox"/> Facility Management
<b>Outline</b>	<p>Aim:</p> <p>This course aims that attendees understand the latest software product trends required for customer service.</p> <ul style="list-style-type: none"> <li>○Considering software products used or to be used in software systems, attendees participate in seminars of or look towards information of market trends and technology trends available to the public (e.g., the Internet), select software products to achieve customers' requirements, and gather important information for smooth business operations.</li> <li>○Training contents are provided on given software product themes according to need, and the attendees select a theme to take part in a lecture for maintaining or improving their skills at regular intervals or when needed.</li> </ul>
<b>Attendee</b>	Those who have been involved in software customer service (those who aim to acquire knowledge of Customer Service level 4 or 5)
<b>Precondition</b>	Have completed basic-level courses common to the job category Customer Service and basic-level courses specific to specialty field Software, or possess equivalent knowledge and have been involved in installation and maintenance of software systems.
<b>Training Method</b>	Lecture
<b>Duration</b>	Standard team: 1 day (classroom)
<b>Learning Goal</b>	Can provide customer service as a person responsible for or a leader of a customer service team by utilizing knowledge of the latest software product trends.

Skill Items	Knowledge Items
Technology	<p>-Latest Trends in IT Market  Understanding of IT Market Scale and Trends Domestic and Abroad, Understanding and Utilization of Technology Trends Related to Applications, Understanding and Utilization of Technology Trends Related to Business Model Patents, Understanding and Utilization of Next-generation E-business and its Future Growth</p> <p>-Technology Trends  Understanding of Latest Hardware, Technology Trends, Understanding of Latest Middleware Technology Trends, Understanding of Latest Platform Technology Trends, Understanding of Latest Network Technology Trends, Understanding of Latest Database, Technology Trends, Understanding of Latest Security Technology Trends, Understanding of Latest System, Management Technology Trends</p>

## Professional Certifications (1 course)

[ ] is a corresponding specialty field

- Professional Certifications [Facility Management]

Course Name Content	Professional Certifications
<b>Training Course Level</b>	<input type="checkbox"/> Introductory Course <input type="checkbox"/> Basic Course <input type="checkbox"/> Advanced Course <input checked="" type="checkbox"/> Special Course
<b>Training Area (Common or Specialty Field)</b>	<input type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input type="checkbox"/> Software <input checked="" type="checkbox"/> Facility Management
<b>Outline</b>	<p>Aim:</p> <p>This course aims that attendees obtain official certifications required of those whose specialty field is Facility Management in Customer Service.</p> <p>○The attendees obtain official certifications required by law for design, construction, operations, and maintenance of facilities (equipment).</p>
<b>Attendee</b>	Those who have been involved in facility management customer service (those who aim to acquire the knowledge of Customer Service level 4 or 5)
<b>Precondition</b>	Based on preconditions of participants of existing public courses for official certifications
<b>Training Method</b>	Utilization of existing courses for a required certification
<b>Duration</b>	Duration of selected courses
<b>Learning Goal</b>	Can provide customer service as a person responsible for or a leader of a customer service team by utilizing professional certifications required for business operations and business operations management of design, construction, operations, and maintenance of facilities.

Skill Items	Knowledge Items
Facility Management	-Facilities (Equipment) - related accredit Qualification Acquisition of official Qualification in Specific Area such as Construction, Electricity, Machine, and Communication Network, etc.

## Safety and Security Trends (1 course)

[ ] is a corresponding specialty field

- Safety and Security Trends [Facility Management]



Course Name Content	Safety and Security Trends
<b>Training Course Level</b>	<input type="checkbox"/> Introductory Course <input type="checkbox"/> Basic Course <input type="checkbox"/> Advanced Course <input checked="" type="checkbox"/> Special Course
<b>Training Area (Common or Specialty Field)</b>	<input type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input type="checkbox"/> Software <input checked="" type="checkbox"/> Facility Management
<b>Outline</b>	<p>This course helps attendees acquire knowledge of safety and security trends, both of which are important for those whose specialty field is Facility Management.</p> <ul style="list-style-type: none"> <li>○Regarding safety and security important for facility management operations, attendees look towards facility relevant technology progress, IT progress, spread of facility relevant technology and IT, and crime trends through the Internet, seminars, professional publications, etc. when needed.</li> <li>○Training contents are provided on given latest safety and security themes according to need, and the attendees select a theme to take part in a lecture for maintaining or improving their skills at regular intervals or when needed.</li> </ul>
<b>Attendee</b>	Those who have been involved in facility management customer service (those who aim to acquire the knowledge of Customer Service level 4 or 5)
<b>Precondition</b>	Have completed basic-level courses common to the job category Customer Service and basic-level courses specific to specialty field Facility Management, or possess equivalent knowledge and have been involved in design, establishment, management, and maintenance of IT relevant facilities.
<b>Training Method</b>	Lecture
<b>Duration</b>	Standard team: 1 day (classroom)
<b>Learning Goal</b>	Can provide customer service as a person responsible for or a leader of a customer service team by utilizing knowledge of safety and security trends.

Skill Items	Knowledge Items
System Maintenance Management	-Remote Maintenance Utilization and Practice of Remote Maintenance Technique, Tools and Process  -Social Engineering Leakage Countermeasures for Confidential Information (Measurement for Phone Impersonation, Password Theft, Trashing, etc)
Software Engineering	-Security and Privacy Security Measures (Secret Preservation, Measures for Prevention of Falsification, Intrusion Prevention, Computer Virus, Integrity Measures, Availability Measures, Safety Measures, Social Engineering), Privacy Protection, Risk Management, Guidelines and Relevant Regulations
Facility Management	-Design, Construction, Maintenance, and Operation of Disaster and Crime Prevention Facilities Formulation for Installation Plan of Disaster and Crime Prevention Facilities, Requirement Formulation for Design and Installation of Disaster and Crime Prevention Facilities, Design and Construction Management of Disaster and Crime Prevention Facilities, Maintenance and Operation of Disaster and Crime Prevention Facilities, Utilization and Practice of Tools for Design, Construction and Maintenance and Operation, Utilization and Practice for Design and Construction Management Techniques of Disaster Control Facilities, Fundamentals for Disaster Control of Facilities, and Fundamentals for Plan and Design and Construction of Fire Fighting Facilities, Risk Management of Disaster and Crime Prevention Security, Plan and Design and Construction of Security Equipment

## Environmental Measures - Advanced Level - (1 course)

[ ] is a corresponding specialty field

- Environmental Measures - Advanced Level - [Facility Management]

Course Name Content	Environment Measures - Advanced Level -
<b>Training Course Level</b>	<input type="checkbox"/> Introductory Course <input type="checkbox"/> Basic Course <input type="checkbox"/> Advanced Course <input checked="" type="checkbox"/> Special Course
<b>Training Area (Common or Specialty Field)</b>	<input type="checkbox"/> Common to Customer Service <input type="checkbox"/> Hardware <input type="checkbox"/> Software <input checked="" type="checkbox"/> Facility Management
<b>Outline</b>	<p>Aim:</p> <p>This course helps attendees acquire knowledge required of superior management (e.g., creation of standards of environmental measures), which is important for those whose specialty field is Facility Management</p> <ul style="list-style-type: none"> <li>○The attendees learn knowledge important for planning and creation of environment-conscious standards in accordance with customers' environmental business policies and environment relevant laws.</li> <li>○Training contents are provided on given latest environmental measures trends themes according to need, and the attendees select a theme to take part in a lecture for maintaining or improving their skills at regular intervals or when needed.</li> </ul>
<b>Attendee</b>	Those who have been involved in facility management customer service (those who aim to acquire the knowledge of Customer Service level 4 or 5)
<b>Precondition</b>	Have completed basic-level courses common to the job category Customer Service and basic-level courses specific to specialty field Facility Management, or possess equivalent knowledge and have been involved in design, establishment, management, and maintenance of IT relevant facilities.
<b>Training Method</b>	Lecture
<b>Duration</b>	Standard team: 1 day (classroom)
<b>Learning Goal</b>	Can provide customer service as a person responsible for or a leader of a customer service team by utilizing advanced knowledge of environmental measures.

Skill Items	Knowledge Items
Facility Management	-Environmental Measures Design and Construction of Energy Conservation and Environmental Facilities (Equipment), Understanding and Utilization of Environment related Regulations (Building Material Recycling Law, Law for Promotion of Effective Utilization of Resources, Waste Disposal and Public Cleaning Law, etc.) , Compliance with Environmental Quality Standards (Reduction and Recycle of Construction By-Product, Formulation and Utilization of Environment Measures Management Methods, Utilization of Environment Measures Relevant Facility, Green Purchase