Skill Area and Skill Proficiency
（12）Common items in level 1 and 2

Skill Proficiency
Job category：Common items in level 1 and 2

Common skill proficiency in level 1 and 2

Specialty Fields	Skill Items
Common skill items —	**Technology** ●**Basic Theory** Discrete Mathematics, Applied Mathematics, Information Related Theory, Communication Related Theory, Measurement / Control Related Theory ●**Algorithms and Programming** Data Structure, Algorithms, Programming, Programming Languages, Other Languages ●**Computer Components** Processors, Memory, Bus, Input and Output Devices、Input and Output Apparatus ●**System Components** System Configuration, System Evaluation Indexes ●**Software** Operating Systems, Middleware, File systems, Development Tools, Open Source Software ●**Hardware** Hardware ●**Human Interfaces** Human Interface Technology, Interface Design ●**Multimedia** Multimedia Technology, Multimedia Application ●**Databases** Database Methods, Database Design, Data Manipulation, Transaction Processing, Database Application ●**Networks** Network Methods, Data Transmission and Control, Communication Protocols, Network Management, Network Application ●**Security** Information Security, Information Security Management, Security Technology Evaluation, Information Security Measures, Security Implementation Technology ●**System Development Techniques** System Requirements Definitions, System Formula Design, Software Requirements Definitions, Software Fomula Design / Software Detailed Design, Software Code Creation and Testing, Software Integration/Software Qualification Testing, System Integration / System Qualification Testing, Software Installation, Software Acceptance, Software Maintenance ●**Software Development Management Techniques** Development Processes / Methods, Intellectual Property Application Management, Development Environment Management, Configuration Management / Change Control **Management** ●**Project Management** Project Integration Management, Project Scope Management, Project Time Management, Project Cost Management, Project Quality Management, Project Human Resource Management, Project Communications Management, Project Risk Management, Project Procurement Management ●**Service Management** Service Management, Operation Design / Tools, Service Support, Service Delivery, Service Management Development, Facility Management ●**System Audit** System Audit, Internal Control **Strategy** ●**System Strategy** Information System Strategy, Task Processes, Solution Business ●**System Planning** System Planning, Requirements Definition, Procurement Planning / Execution ●**Management Strategy** Business Strategy Methods, Marketing, Business Strategy and Objectives / Evaluation, Business Management Systems ●**Technology Strategy Management** Technology Development Strategy Planning, Technology Development Planning ●**Business Industry** Business Systems, Engineering Systems, e-Business, Consumer Electronics, Industrial Appliances ●**Corporate Activities** Business / Organization Theory, OR/IE, Accounting / Finance ●**Legal Affairs** Intellectual Property Rights, Security Related Laws and Regulations, Labor and Trading Related Laws/ Regulations, Other Laws, Guidelines, and Engineer Ethics, Standardization ●**Leadership** Leadership ●**Communication** 2way Communication, Transmission of Information, Organization, Analysis, and Retreaval of Informationl ●**Negotiation** Negotiation

Skill Proficiency・Knowledge Items

Job category: Common items in level 1 and 2

Specialty fields: -

Specialty field: ─	Common skill proficiency and knowledge items in level 1 and 2

Skill Items and Knowledge Items	Skill Proficiency	
【Skill items】 ●Basic Theory	【Knowledge items】 ─Discrete Mathematics ─Applied Mathematics ─Information Related Theory ─Communication Related Theory ─Measurement / Control Related Theory	Level 2	Have the basic knowledge of relevant skills and knowledge items, and able to perform task in the assigned area under the direction of higher level professionals as a team member.
●Algorithms and Programming	─Data Structure ─Algorithms ─Programming ─Programming Languages ─Other Languages	Level 1	Have the basic knowledge of relevant skills and knowledge items.
●Computer Components	─Processors ─Memory ─Bus ─Input and Output Devices ─Input and Output Apparatus		
●System Components	─System Configuration ─System Evaluation Indexes		
●Software	─Operating Systems ─Middleware ─File Systems ─Development Tools ─Open Source Softwares		
●Hardware	─Hardware		
●Human interface	─Human Interface Technology ─Interface Design		
●Multimedia	─Multimedia Technology ─Multimedia Application		

Specialty field：
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Common skill proficiency and knowledge items in level 1 and 2

Skill Items and Knowledge Items		Skill Proficiency	
【Skill items】	【Knowledge items】	Level 2	Have the basic knowledge of relevant skills and knowledge items, and able to perform work in the assigned area under the direction of higher level professionals as a team member.
●Databases	－Database Methods －Database Design －Data Manipulation －Transaction Processing －Database Application		
●Networks	－Network Methods －Data Transmission and Control －Communications Protocols －Network Management －Network Application	Level 1	Have the basic knowledge of relevant skills and knowledge items.
●Security	－Information Security －Information Security Management －Security Technology Evaluation －Information Security Measures －Security Implementation Technology		
●System Development Techniques	－System Requirements Definitions －System Formula Design －Software Requirements Definitions －Software Fomula Design / Software Detailed Design －Software Code Creation and Testing －Software Integration ,/ Software Qualification Testing －System Integration / System Qualification Testing －Software Installation －Software Acceptance －Software Maintenance		
●Software Development Management techniques	－Development Processes / Methods －Intellectual Property Application Management －Development Environment Management －Configuration Management / Change Control		

Specialty field： －	Common skill proficiency and knowledge items in level 1 and 2

Skill Items and Knowledge Items | Skill Proficiency

【Skill items】	【Knowledge items】		
●Project Management	－Project Integration Management －Project Scope Management －Project Time Management －Project Cost Management －Project Quality Management －Project Human Resource Management －Project Communication Management －Project Risk Management －Project Procurement Management	**Level 2**	Have the basic knowledge of relevant skills and knowledge items, and able to perform work in the assigned area under the direction of higher level professionals as a team member.
●Service Management	－Service Management －Operation Design / Tools －Service Support －Service Delivery －Service Management Development －Facility Management	**Level 1**	Have the basic knowledge of relevant skills and knowledge items.
●System Audit	－System Audit －Internal Control		
●System Strategy	－Information System Strategy －Business Processes －Solution Business		
●System Planning	－System Planning, －Requirement Definition －Procurement Planning / Execution		
●Management Strategy	－Business Strategy Method －Marketing －Business Strategy and Objectives / Evaluation －Business Management Systems		

Specialty field :
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Common skill proficiency and knowledge items in level 1 and 2

Skill Items and Knowledge Items

Skill Proficiency

【Skill items】	【Knowledge items】		
●Technology Strategy Management		Level 2	Have the basic knowledge of relevant skills and knowledge items, and able to perform task in the assigned area under the direction of higher level professionals as a team member.
	－Technology Development Strategy Planning －Technology Development Planning		
●Business Industry	－Business Systems －Engineering Systems －E-business －Consumer Electronics －Industrial Appliances		
		Level 1	Have the basic knowledge of relevant skills and knowledge items.
●Corporate Activities	－Business / Organization Theory －OR / IE －Accounting / Finance		
●Legal Affairs	－Intellectual Property Right －Security Related Laws and Regulations －Labor and Trading Related Laws / Regulations －Other Laws, Guidelines and Engineer Ethics －Standardization		

Specialty field :	
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Common skill proficiency and knowledge items in level 1 and 2

Skill Items and Knowledge Items	Skill Proficiency

【Skill items】	【Knowledge items】		
●Leadership	一Leadership	Level 2	Have the basic knowledge of relevant skills and knowledge items, and able to demonstrate basic quality such as teamwork, transmission of information, establishment of relationship and logical thinking, as a team member.
●Communication	一2way Communication 一Transmission of Information 一Organizaiton, Analysis and Retrieval of Information		
●Negotiation	一Negotiation	Level 1	Have the basic knowledge of relevant skills and knowledge items.