LEARNING UNIT IN SKILLS

SkillSet

Skill

13.1

Procedural/event driven programming

SubSkill LearningUnit

.0		ation Technology Skills
	1.1 S	oftware Development
	1.1.1	Programming-principles, objects, algorithms, modules, testing
	3	Problem Solving, Small IS
	13	IS Personal Level Systems
	13.1	Procedural/event driven programming
	13.11	Implementing simple algorithms
	13.12	Implementing a simple database design
	13.13	Implementing and event driven applications
	13.14	IS Development with Prototyping
	18	IS Development and Management
	19	Personal, Cognitive Process
	42	Information Measurements/Data/Events
	43	Data: Characters, Records, Files, Multi-Media
	44	ADTs, Classes, Objects
	45	Problem Solving, Formal Problems and IS
	46	Object Representation of a System
	47	Problem Solving, Algorithm Development
	48	Problem Solving, Top Down Implementation
	49	Problem Solving, Object Implementation
	50	Problem Solving, Modules/Cohesion/Coupling
	51	Verification and Validation, A Systems View
	52	Problem Solving, Environments and Tools
	53	ADTs: Data and Files Structures
	54	ADTs: Arrays, Lists, Trees, Records
	55	ADTs: Indexed Files, Keys
	56	Problem Solving, IS Applications, Sub-Structures
	57	Problem Solving, Data and File Applications
	58	Problem Solving, with Files and Database
	59	Problem Solving, File/DB Editors/Reports
	60	Problem Solving, Design, Test, Debug
	61	Programming: Language Comparison
	68	OS Environments and Resources
	78	IS Continuous Improvement and IS
	80	Interpersonal, Group Dynamics
	81	IS Database Applications Development
	82	Problem Solving, Complexity Metrics
	83	IS Software Quality Metrics
	84	Systems and Quality Metrics/Assessment
	86	Interpersonal, Synergistic Solutions
	87	Interpersonal, Agreements and Commitment
	90	IS Database and IS Implementation
	91	IS Database Application Structuring
	92	IS Database Application Implementation
	94	IS Development and Project Management
	95	IS Database Conceptual/Logical Models
	96	IS Functional Specifications
	98	IS Development and Conversion
	99	IS Requirements/Work-Flow Planning
	100	IS Application with Programming Language
	101	IS Implementation with Objects, Event Driven
	104	IS Applications, Programming Environment
	110	IS Applications, Production Systems
	111	IS Requirements and Database
	1.1.2	Application Development-requirements, specs, developing
	3	Problem Solving, Small IS
	13	IS Personal Level Systems
	13.1	Procedural/event driven programming

SkillSet Skill SubSkill LearningUnit 13.11 Implementing simple algorithms 13.12 Implementing a simple database design Implementing and event driven applications 13.13 13.14 IS Development with Prototyping 18 IS Development and Management 19 Personal, Cognitive Process 42 Information Measurements/Data/Events 43 Data: Characters, Records, Files, Multi-Media 44 ADTs, Classes, Objects Problem Solving, Formal Problems and IS 45 46 Object Representation of a System Problem Solving, Algorithm Development 47 Problem Solving, Top Down Implementation 48 49 Problem Solving, Object Implementation Problem Solving, Modules/Cohesion/Coupling 50 51 Verification and Validation, A Systems View Problem Solving, Environments and Tools 52 53 ADTs: Data and Files Structures 54 ADTs: Arrays, Lists, Trees, Records 55 ADTs: Indexed Files, Keys 56 Problem Solving, IS Applications, Sub-Structures Problem Solving, Data and File Applications 57 Problem Solving, with Files and Database 58 59 Problem Solving, File/DB Editors/Reports 60 Problem Solving, Design, Test, Debug Programming: Language Comparison 61 68 OS Environments and Resources 78 IS Continuous Improvement and IS 80 Interpersonal, Group Dynamics 81 IS Database Applications Development 82 Problem Solving, Complexity Metrics 83 IS Software Quality Metrics 84 Systems and Quality Metrics/Assessment 86 Interpersonal, Synergistic Solutions 87 Interpersonal, Agreements and Commitment 90 IS Database and IS Implementation 91 IS Database Application Structuring 92 IS Database Application Implementation 94 IS Development and Project Management 95 IS Database Conceptual/Logical Models 96 IS Functional Specifications 98 IS Development and Conversion 99 IS Requirements/Work-Flow Planning 100 IS Application with Programming Language 101 IS Implementation with Objects, Event Driven 104 IS Applications, Programming Environment 110 IS Applications, Production Systems 111 IS Requirements and Database 1.1.3 Algorithmic Design, Data, Object and File Structures Problem Solving, Small IS 13 IS Personal Level Systems 13.1 Procedural/event driven programming 13.11 Implementing simple algorithms 13.12 Implementing a simple database design Implementing and event driven applications 13.13 13.14 IS Development with Prototyping 18 IS Development and Management 19 Personal, Cognitive Process

42

43

Information Measurements/Data/Events

Data: Characters, Records, Files, Multi-Media

SkillSet Skill SubSkill LearningUnit 44 ADTs, Classes, Objects 45 Problem Solving, Formal Problems and IS Object Representation of a System 46 47 Problem Solving, Algorithm Development 48 Problem Solving, Top Down Implementation 49 Problem Solving, Object Implementation 50 Problem Solving, Modules/Cohesion/Coupling Verification and Validation, A Systems View 51 52 Problem Solving, Environments and Tools ADTs: Data and Files Structures 53 54 ADTs: Arrays, Lists, Trees, Records 55 ADTs: Indexed Files, Keys 56 Problem Solving, IS Applications, Sub-Structures 57 Problem Solving, Data and File Applications Problem Solving, with Files and Database 58 59 Problem Solving, File/DB Editors/Reports 60 Problem Solving, Design, Test, Debug 61 Programming: Language Comparison OS Environments and Resources 68 78 IS Continuous Improvement and IS 80 Interpersonal, Group Dynamics IS Database Applications Development 81 Problem Solving, Complexity Metrics 82 IS Software Quality Metrics 83 84 Systems and Quality Metrics/Assessment Interpersonal, Synergistic Solutions 86 Interpersonal, Agreements and Commitment 87 90 IS Database and IS Implementation 91 IS Database Application Structuring 92 IS Database Application Implementation 94 IS Development and Project Management 95 IS Database Conceptual/Logical Models IS Functional Specifications 96 98 IS Development and Conversion 99 IS Requirements/Work-Flow Planning 100 IS Application with Programming Language IS Implementation with Objects, Event Driven 101 104 IS Applications, Programming Environment 110 IS Applications, Production Systems 111 IS Requirements and Database Problem Solving-identify problems, systems concepts, creativity 1.1.4 Problem Solving, Small IS 13 IS Personal Level Systems 13.1 Procedural/event driven programming 13.11 Implementing simple algorithms 13.12 Implementing a simple database design Implementing and event driven applications 13.13 IS Development with Prototyping 13.14 18 IS Development and Management 19 Personal, Cognitive Process 42 Information Measurements/Data/Events 43 Data: Characters, Records, Files, Multi-Media 44 ADTs, Classes, Objects 45 Problem Solving, Formal Problems and IS Object Representation of a System 46 47 Problem Solving, Algorithm Development Problem Solving, Top Down Implementation 48 Problem Solving, Object Implementation 49 Problem Solving, Modules/Cohesion/Coupling 50 51 Verification and Validation, A Systems View

SkillSet	
Skill	SubSkill LearningUnit
52	Problem Solving, Environments and Tools
53	ADTs: Data and Files Structures
54	ADTs: Arrays, Lists, Trees, Records
55	ADTs: Indexed Files, Keys
56	Problem Solving, IS Applications, Sub-Structures
57	Problem Solving, Data and File Applications
58	Problem Solving, with Files and Database
59	Problem Solving, File/DB Editors/Reports
60	Problem Solving, Design, Test, Debug
61	Programming: Language Comparison
68	OS Environments and Resources
78 80	IS Continuous Improvement and IS
81	Interpersonal, Group Dynamics IS Database Applications Development
82	Problem Solving, Complexity Metrics
83	IS Software Quality Metrics
84	Systems and Quality Metrics/Assessment
86	Interpersonal, Synergistic Solutions
87	Interpersonal, Agreements and Commitment
90	IS Database and IS Implementation
91	IS Database Application Structuring
92	IS Database Application Implementation
94	IS Development and Project Management
95	IS Database Conceptual/Logical Models
96	IS Functional Specifications
98	IS Development and Conversion
99	IS Requirements/Work-Flow Planning
100 101	IS Application with Programming Language
101	IS Implementation with Objects, Event Driven IS Applications, Programming Environment
110	IS Applications, Production Systems
111	IS Requirements and Database
1.1.5	Client Server Software Development
3	Problem Solving, Small IS
13	IS Personal Level Systems
13.1	Procedural/event driven programming
13.11 13.12	r · · · · · · · · · · · · · · · · · · ·
13.12	
13.14	r · · · · · · · · · · · · · · · · · · ·
18	IS Development and Management
19	Personal, Cognitive Process
42	Information Measurements/Data/Events
43	Data: Characters, Records, Files, Multi-Media
44	ADTs, Classes, Objects
45	Problem Solving, Formal Problems and IS
46	Object Representation of a System
47	Problem Solving, Algorithm Development
48	Problem Solving, Top Down Implementation
49	Problem Solving, Object Implementation
50	Problem Solving, Modules/Cohesion/Coupling
51	Verification and Validation, A Systems View
52 53	Problem Solving, Environments and Tools
53 54	ADTs: Data and Files Structures
55 55	ADTs: Arrays, Lists, Trees, Records ADTs: Indexed Files, Keys
56	Problem Solving, IS Applications, Sub-Structures
57	Problem Solving, Data and File Applications
58	Problem Solving, with Files and Database
59	Problem Solving, File/DB Editors/Reports

SkillSet Skill SubSkill LearningUnit 60 Problem Solving, Design, Test, Debug Programming: Language Comparison 61 68 OS Environments and Resources 78 IS Continuous Improvement and IS 80 Interpersonal, Group Dynamics 81 IS Database Applications Development 82 Problem Solving, Complexity Metrics IS Software Quality Metrics 83 Systems and Quality Metrics/Assessment 84 Interpersonal, Synergistic Solutions 86 87 Interpersonal, Agreements and Commitment IS Database and IS Implementation 90 91 IS Database Application Structuring 92 IS Database Application Implementation IS Development and Project Management 94 95 IS Database Conceptual/Logical Models IS Functional Specifications 96 98 IS Development and Conversion 99 IS Requirements/Work-Flow Planning 100 IS Application with Programming Language 101 IS Implementation with Objects, Event Driven IS Applications, Programming Environment 104 110 IS Applications, Production Systems 111 IS Requirements and Database Web Development 1.2.1 Web page Development-HTML, page editors, tools 13 IS Personal Level Systems 13.15 IS Technology Evolution 18 IS Development and Management 19 Personal, Cognitive Process 24 Systems, Work-Flow, Organizational Systems Problem Solving, Environments and Tools 52 Problem Solving, IS Applications, Sub-Structures 56 58 Problem Solving, with Files and Database 59 Problem Solving, File/DB Editors/Reports Programming: Language Comparison 61 OS Environments and Resources 68 78 IS Continuous Improvement and IS 81 IS Database Applications Development 82 Problem Solving, Complexity Metrics 86 Interpersonal, Synergistic Solutions 90 IS Database and IS Implementation 91 IS Database Application Structuring 92 IS Database Application Implementation 93 IS Application Development/Code Generation 94 IS Development and Project Management 95 IS Database Conceptual/Logical Models 96 IS Functional Specifications 98 IS Development and Conversion 99 IS Requirements/Work-Flow Planning IS Application with Programming Language 100 101 IS Implementation with Objects, Event Driven 104 IS Applications, Programming Environment 110 IS Applications, Production Systems 111 IS Requirements and Database 1.2.2 Web programming-thin client, asp, ODBC, CGI, E-commerce IS Personal Level Systems 13 13.15 IS Technology Evolution IS Development and Management 18 19 Personal, Cognitive Process

Skill SubSkill LearningUnit 24 Systems, Work-Flow, Organizational Systems 52 Problem Solving, Environments and Tools 56 Problem Solving, IS Applications, Sub-Structures 58 Problem Solving, with Files and Database 59 Problem Solving, File/DB Editors/Reports 61 Programming: Language Comparison OS Environments and Resources 68 78 IS Continuous Improvement and IS IS Database Applications Development 81 82 Problem Solving, Complexity Metrics 86 Interpersonal, Synergistic Solutions 90 IS Database and IS Implementation 91 IS Database Application Structuring 92 IS Database Application Implementation IS Application Development/Code Generation 93 94 IS Development and Project Management 95 IS Database Conceptual/Logical Models 96 IS Functional Specifications 98 IS Development and Conversion 99 IS Requirements/Work-Flow Planning 100 IS Application with Programming Language IS Implementation with Objects, Event Driven 101 104 IS Applications, Programming Environment IS Applications, Production Systems 110 111 IS Requirements and Database Database 1.3.1 Modeling and design, construction, schema tools, DB Systems 13 IS Personal Level Systems 13.12 Implementing a simple database design Information Use Strategies 15 24 Systems, Work-Flow, Organizational Systems IS Development Standards 28 42 Information Measurements/Data/Events 43 Data: Characters, Records, Files, Multi-Media 55 ADTs: Indexed Files, Keys 58 Problem Solving, with Files and Database IS Database Applications Development 81 88 IS Data Modeling 89 ADTs: Database Models and Functions 90 IS Database and IS Implementation 91 IS Database Application Structuring 92 IS Database Application Implementation 96 IS Functional Specifications 97 IS Conversion Planning 98 IS Development and Conversion IS Application with Programming Language 100 101 IS Implementation with Objects, Event Driven 103 IS Development Testing 122 IS Policies and Standards 123 IS Management of IS Function 125 IS Implementation and Outsourcing 1.3.2 Triggers, Stored Procedures, Audit Controls: Design/Development 13 IS Personal Level Systems 13.12 Implementing a simple database design 15 Information Use Strategies 24 Systems, Work-Flow, Organizational Systems 28 IS Development Standards 42 Information Measurements/Data/Events 43 Data: Characters, Records, Files, Multi-Media 55 ADTs: Indexed Files, Keys

SkillSet

SkillSet Skill SubSkill LearningUnit 58 Problem Solving, with Files and Database 81 IS Database Applications Development IS Data Modeling 88 89 ADTs: Database Models and Functions 90 IS Database and IS Implementation 91 IS Database Application Structuring 92 IS Database Application Implementation IS Functional Specifications 96 97 IS Conversion Planning IS Development and Conversion 98 100 IS Application with Programming Language 101 IS Implementation with Objects, Event Driven 103 IS Development Testing 122 IS Policies and Standards 123 IS Management of IS Function 125 IS Implementation and Outsourcing Administration: security, safety, backup, repairs, replicating 1.3.3 IS Personal Level Systems 13 13.12 Implementing a simple database design 15 Information Use Strategies Systems, Work-Flow, Organizational Systems 24 28 IS Development Standards 42 Information Measurements/Data/Events 43 Data: Characters, Records, Files, Multi-Media ADTs: Indexed Files, Keys 55 58 Problem Solving, with Files and Database 81 IS Database Applications Development 88 IS Data Modeling 89 ADTs: Database Models and Functions 90 IS Database and IS Implementation 91 IS Database Application Structuring IS Database Application Implementation 92 96 **IS Functional Specifications** IS Conversion Planning 97 98 IS Development and Conversion 100 IS Application with Programming Language 101 IS Implementation with Objects, Event Driven IS Development Testing 103 122 IS Policies and Standards 123 IS Management of IS Function 125 IS Implementation and Outsourcing Systems Integration 1.4.1 Computer Systems Hardware Knowledge Work Software 2 7 IT Hardware and Software 29 IS Implementation, Outsourcing 32 Telecom, Devices, Media, Systems Telecom, Organizational Support By 33 34 Telecom, Economics, Design Issues 35 Telecom, Standards, Standard Organizations 36 Telecom, Central/Distributed Systems 37 Telecom, Architectures, Topologies, Protocols Telecom, Hardware and Software 38 39 Telecom, Services, Reliability, Security... Telecom, Installation, Implementation 40 41 Telecom, LAN, Installation, Configuration Telecom, Systems View HW/SW 62 IT Peripheral Devices 63 64 IT Hardware Architectures 65 IT Systems Software Components, Interactions

SkillSet Skill SubSkill LearningUnit 67 OS Functions 68 OS Environments and Resources 69 OS, Installation, Configuration for Multi-Media 70 OS, Interoperability and Systems Integration 71 OS, Installation, Configuration of Multi-User Systems IS Development and Conversion 98 110 IS Applications, Production Systems IS Life Cycles and Projects 116 IS Policies and Standards 122 124 IS Management of Emerging Technologies 125 IS Implementation and Outsourcing 1.4.2 Networking (Lan/Wan) and Telecommunications Knowledge Work Software 2 7 IT Hardware and Software 29 IS Implementation, Outsourcing 32 Telecom, Devices, Media, Systems Telecom, Organizational Support By 33 34 Telecom, Economics, Design Issues Telecom, Standards, Standard Organizations 35 36 Telecom, Central/Distributed Systems Telecom, Architectures, Topologies, Protocols 37 38 Telecom. Hardware and Software 39 Telecom, Services, Reliability, Security... 40 Telecom, Installation, Implementation Telecom, LAN, Installation, Configuration 41 62 Telecom, Systems View HW/SW IT Peripheral Devices 63 64 IT Hardware Architectures 65 IT Systems Software Components, Interactions OS Functions 67 68 OS Environments and Resources 69 OS, Installation, Configuration for Multi-Media 70 OS, Interoperability and Systems Integration OS, Installation, Configuration of Multi-User Systems 71 98 IS Development and Conversion 110 IS Applications, Production Systems 116 IS Life Cycles and Projects IS Policies and Standards 122 124 IS Management of Emerging Technologies 125 IS Implementation and Outsourcing 1.4.3 Operating Systems Management-multi platforms/protocols, NT/Unix Knowledge Work Software 7 IT Hardware and Software 29 IS Implementation, Outsourcing Telecom, Devices, Media, Systems 32 33 Telecom, Organizational Support By 34 Telecom, Economics, Design Issues 35 Telecom, Standards, Standard Organizations Telecom, Central/Distributed Systems 36 37 Telecom, Architectures, Topologies, Protocols Telecom, Hardware and Software 38 Telecom, Services, Reliability, Security... 39 40 Telecom, Installation, Implementation Telecom, LAN, Installation, Configuration 41 62 Telecom, Systems View HW/SW 63 IT Peripheral Devices 64 IT Hardware Architectures IT Systems Software Components, Interactions 65 67 OS Functions 68 OS Environments and Resources

SkillSet Skill SubSkill LearningUnit 69 OS, Installation, Configuration for Multi-Media OS. Interoperability and Systems Integration 70 OS, Installation, Configuration of Multi-User Systems 71 98 IS Development and Conversion 110 IS Applications, Production Systems IS Life Cycles and Projects 116 122 IS Policies and Standards 124 IS Management of Emerging Technologies 125 IS Implementation and Outsourcing Computer Systems Software-OS fundamentals, resource mgt concepts 1.4.4 Knowledge Work Software 2 IT Hardware and Software 7 29 IS Implementation, Outsourcing Telecom, Devices, Media, Systems 32 33 Telecom, Organizational Support By Telecom, Economics, Design Issues 34 Telecom, Standards, Standard Organizations 35 Telecom, Central/Distributed Systems 36 Telecom, Architectures, Topologies, Protocols 37 38 Telecom, Hardware and Software 39 Telecom, Services, Reliability, Security... 40 Telecom, Installation, Implementation Telecom, LAN, Installation, Configuration 41 Telecom, Systems View HW/SW 62 IT Peripheral Devices 63 64 IT Hardware Architectures 65 IT Systems Software Components, Interactions 67 OS Functions 68 OS Environments and Resources OS, Installation, Configuration for Multi-Media 69 OS, Interoperability and Systems Integration 70 OS, Installation, Configuration of Multi-User Systems 71 98 IS Development and Conversion IS Applications, Production Systems 110 116 IS Life Cycles and Projects 122 IS Policies and Standards 124 IS Management of Emerging Technologies IS Implementation and Outsourcing 125 1.4.5 LAN/WAN Design and Management Knowledge Work Software 2 7 IT Hardware and Software 29 IS Implementation, Outsourcing 32 Telecom, Devices, Media, Systems 33 Telecom, Organizational Support By Telecom, Economics, Design Issues 34 35 Telecom, Standards, Standard Organizations 36 Telecom, Central/Distributed Systems 37 Telecom, Architectures, Topologies, Protocols Telecom, Hardware and Software 38 39 Telecom, Services, Reliability, Security... Telecom, Installation, Implementation 40 Telecom, LAN, Installation, Configuration 41 62 Telecom, Systems View HW/SW IT Peripheral Devices 63 64 IT Hardware Architectures 65 IT Systems Software Components, Interactions 67 **OS** Functions OS Environments and Resources 68 69 OS, Installation, Configuration for Multi-Media OS, Interoperability and Systems Integration 70

SkillSet Skill SubSkill LearningUnit 71 OS, Installation, Configuration of Multi-User Systems 98 IS Development and Conversion IS Applications, Production Systems 110 116 IS Life Cycles and Projects IS Policies and Standards 122 124 IS Management of Emerging Technologies 125 IS Implementation and Outsourcing Systems Configuration, Operation, Administration 1.4.6 Knowledge Work Software 7 IT Hardware and Software 29 IS Implementation, Outsourcing 32 Telecom, Devices, Media, Systems 33 Telecom, Organizational Support By 34 Telecom, Economics, Design Issues 35 Telecom, Standards, Standard Organizations Telecom, Central/Distributed Systems 36 Telecom, Architectures, Topologies, Protocols 37 38 Telecom, Hardware and Software 39 Telecom, Services, Reliability, Security... 40 Telecom, Installation, Implementation 41 Telecom, LAN, Installation, Configuration 62 Telecom. Systems View HW/SW IT Peripheral Devices 63 64 IT Hardware Architectures IT Systems Software Components, Interactions 65 67 **OS** Functions 68 OS Environments and Resources 69 OS, Installation, Configuration for Multi-Media 70 OS, Interoperability and Systems Integration 71 OS, Installation, Configuration of Multi-User Systems IS Development and Conversion 98 IS Applications, Production Systems 110 116 IS Life Cycles and Projects IS Policies and Standards 122 124 IS Management of Emerging Technologies 125 IS Implementation and Outsourcing 2.0 Organizational and Professional Skills Individual and Team Interpersonal Skill 2.2.1 Learning to learn Characteristics of an IS Professional 10 12 Ethics and the IS Professional 20 Personal, Goals and Decisions 31 IS Society and Ethics 79 Interpersonal, Consensus Development 85 IS Professional Code of Ethics 86 Interpersonal, Synergistic Solutions IS Development and Project Management 94 99 IS Requirements/Work-Flow Planning 106 IS Development, Project Management 107 IS Development, Project Management 112 Personal, Proactivity, Principled Action 113 Interpersonal, Empathetic Listening 114 Interpersonal, Goals, Mission, Alignment 117 Personal, Presentation 118 Personal, Life-Long Learning 119 Ethics and Legal Issues IS Management and IS Department Organization 120 Personal, Leadership and IS 121 123 IS Management of IS Function IS Management of Emerging Technologies 124

SubSkill LearningUnit 126 Personal, Time and Relationship Management Professionalism-self directed, leadership, time mgt 2.2.2 10 Characteristics of an IS Professional 12 Ethics and the IS Professional 20 Personal, Goals and Decisions 31 IS Society and Ethics 79 Interpersonal, Consensus Development 85 IS Professional Code of Ethics 86 Interpersonal, Synergistic Solutions 94 IS Development and Project Management 99 IS Requirements/Work-Flow Planning 106 IS Development, Project Management 107 IS Development, Project Management Personal, Proactivity, Principled Action 112 113 Interpersonal, Empathetic Listening Interpersonal, Goals, Mission, Alignment 114 Personal, Presentation 117 118 Personal, Life-Long Learning Ethics and Legal Issues 119 120 IS Management and IS Department Organization Personal, Leadership and IS 121 123 IS Management of IS Function 124 IS Management of Emerging Technologies Personal, Time and Relationship Management 126 Personal Skills-encouraging, listening, being organized 2.2.3 Characteristics of an IS Professional 10 12 Ethics and the IS Professional 20 Personal, Goals and Decisions 31 IS Society and Ethics 79 Interpersonal, Consensus Development 85 IS Professional Code of Ethics Interpersonal, Synergistic Solutions 86 94 IS Development and Project Management 99 IS Requirements/Work-Flow Planning 106 IS Development, Project Management 107 IS Development, Project Management Personal, Proactivity, Principled Action 112 113 Interpersonal, Empathetic Listening Interpersonal, Goals, Mission, Alignment 114 Personal, Presentation 117 Personal, Life-Long Learning 118 119 Ethics and Legal Issues 120 IS Management and IS Department Organization Personal, Leadership and IS 121 IS Management of IS Function 123 124 IS Management of Emerging Technologies Personal, Time and Relationship Management 126 Professionalism-committing to and completing work 2.2.4 10 Characteristics of an IS Professional 12 Ethics and the IS Professional 20 Personal, Goals and Decisions 31 IS Society and Ethics 79 Interpersonal, Consensus Development IS Professional Code of Ethics 85 Interpersonal, Synergistic Solutions 86 94 IS Development and Project Management 99 IS Requirements/Work-Flow Planning 106 IS Development, Project Management IS Development, Project Management 107 112 Personal, Proactivity, Principled Action

SkillSet Skill

SkillSet Skill SubSkill LearningUnit 113 Interpersonal, Empathetic Listening 114 Interpersonal, Goals, Mission, Alignment Personal, Presentation 117 118 Personal, Life-Long Learning 119 Ethics and Legal Issues 120 IS Management and IS Department Organization 121 Personal, Leadership and IS IS Management of IS Function 123 IS Management of Emerging Technologies 124 Personal, Time and Relationship Management 126 2.2.5 Feams-team building, vision/mission development, synergy Characteristics of an IS Professional 10 12 Ethics and the IS Professional 20 Personal, Goals and Decisions 31 IS Society and Ethics 79 Interpersonal, Consensus Development IS Professional Code of Ethics 85 86 Interpersonal, Synergistic Solutions IS Development and Project Management 94 99 IS Requirements/Work-Flow Planning IS Development, Project Management 106 107 IS Development, Project Management Personal, Proactivity, Principled Action 112 113 Interpersonal, Empathetic Listening 114 Interpersonal, Goals, Mission, Alignment 117 Personal, Presentation 118 Personal, Life-Long Learning 119 Ethics and Legal Issues 120 IS Management and IS Department Organization Personal, Leadership and IS 121 IS Management of IS Function 123 124 IS Management of Emerging Technologies 126 Personal, Time and Relationship Management Communication-oral, written, multimedia, empathetic listening 2.2.6 10 Characteristics of an IS Professional 12 Ethics and the IS Professional 20 Personal. Goals and Decisions 31 IS Society and Ethics 79 Interpersonal, Consensus Development IS Professional Code of Ethics 85 Interpersonal, Synergistic Solutions 86 IS Development and Project Management 94 99 IS Requirements/Work-Flow Planning IS Development, Project Management 106 107 IS Development, Project Management 112 Personal, Proactivity, Principled Action 113 Interpersonal, Empathetic Listening 114 Interpersonal, Goals, Mission, Alignment Personal, Presentation 117 118 Personal, Life-Long Learning Ethics and Legal Issues 119 IS Management and IS Department Organization 120 121 Personal, Leadership and IS IS Management of IS Function 123 124 IS Management of Emerging Technologies 126 Personal, Time and Relationship Management Ethics-theory/concepts, setting an ethical example 2.2.7 10 Characteristics of an IS Professional 12 Ethics and the IS Professional 20

Personal, Goals and Decisions

SkillSet Skill	
Skill	SubSkill LearningUnit
31	IS Society and Ethics
79	Interpersonal, Consensus Development
85	IS Professional Code of Ethics
86	Interpersonal, Synergistic Solutions
94	IS Development and Project Management
99	IS Requirements/Work-Flow Planning
106	IS Development, Project Management
107	IS Development, Project Management
112	Personal, Proactivity, Principled Action
113	Interpersonal, Empathetic Listening
114	Interpersonal, Goals, Mission, Alignment
117	Personal, Presentation
118	Personal, Life-Long Learning
119 120	Ethics and Legal Issues IS Management and IS Department Opposition
120	IS Management and IS Department Organization Personal, Leadership and IS
123	IS Management of IS Function
124	IS Management of Emerging Technologies
126	Personal, Time and Relationship Management
2.1	Business Fundamentals
2.1.1	Learning Business Process and Enviroment
13	IS Personal Level Systems
13.15	
13.16	
23	Systems, Role of Management, Users, Designers
27	IS Types
29	IS Implementation, Outsourcing
56	Problem Solving, IS Applications, Sub-Structures
79	Interpersonal, Consensus Development
95	IS Database Conceptual/Logical Models
96	IS Functional Specifications
100	IS Application with Programming Language
105	IS Development, Project Planning
115 116	IS Responsibility to Sell Designs to Management IS Life Cycles and Projects
122	IS Policies and Standards
123	IS Policies and Standards IS Management of IS Function
125	IS Implementation and Outsourcing
2.1.2	Accounting, Distribution, Finance, HR, Marketing, Production
13	IS Personal Level Systems
13.15	
13.16	
23	Systems, Role of Management, Users, Designers
27	IS Types
29	IS Implementation, Outsourcing
56	Problem Solving, IS Applications, Sub-Structures
79	Interpersonal, Consensus Development
95	IS Database Conceptual/Logical Models
96	IS Functional Specifications
100	IS Application with Programming Language
105	IS Development, Project Planning IS Possessibility to Sall Devices to Management
115 116	IS Responsibility to Sell Designs to Management
122	IS Life Cycles and Projects IS Policies and Standards
123	IS Management of IS Function
125	IS Implementation and Outsourcing
2.1.3	Business Problems and Appropriate Technical Solutions
13	IS Personal Level Systems
13.15	IS Technology Evolution
13.16	Implementing a personal is application

SkillSet Skill SubSkill LearningUnit 23 Systems, Role of Management, Users, Designers 27 IS Types 29 IS Implementation, Outsourcing 56 Problem Solving, IS Applications, Sub-Structures 79 Interpersonal, Consensus Development 95 IS Database Conceptual/Logical Models 96 IS Functional Specifications 100 IS Application with Programming Language IS Development, Project Planning 105 IS Responsibility to Sell Designs to Management 115 116 IS Life Cycles and Projects IS Policies and Standards 122 123 IS Management of IS Function 125 IS Implementation and Outsourcing 3.0 Strategic Organizational Systems Development with IS **Organizational Systems Development** Strategic Utilization of Information Technology 3.1.1 Systems and IT Concepts 1 2 Knowledge Work Software 4 IT and Society 5 Systems and Quality 6 Information and Quality 8 IT Systems Specification 9 IT and Attaining Objectives 13 IS Personal Level Systems Procedural/event driven programming 13.1 13.15 IS Technology Evolution 16 IS Theory IS as a Strategic Component 17 18 IS Development and Management Decision Making, Simon Model 21 22 Systems and Quality, and IS 23 Systems, Role of Management, Users, Designers 24 Systems, Work-Flow, Organizational Systems 25 Models, Organizational Relationship to IS **IS Planning** 26 27 IS Types 28 IS Development Standards 29 IS Implementation, Outsourcing 30 Personal, Performance Evaluation 31 IS Society and Ethics 45 Problem Solving, Formal Problems and IS 46 Object Representation of a System 72 IS Analysis and Design Tasks 74 IS Requirements and Specifications IS Design and Implementation 75 76 IS Rapid Prototyping 77 IS Development Risks/Feasibility 78 IS Continuous Improvement and IS Interpersonal, Group Dynamics 80 IS Database Applications Development 81 Problem Solving, Complexity Metrics 82 85 IS Professional Code of Ethics 87 Interpersonal, Agreements and Commitment 95 IS Database Conceptual/Logical Models 97 IS Conversion Planning 99 IS Requirements/Work-Flow Planning 100 IS Application with Programming Language IS Development, Project Planning 105 106 IS Development, Project Management

SkillSet Skill SubSkill LearningUnit 110 IS Applications, Production Systems 111 IS Requirements and Database 115 IS Responsibility to Sell Designs to Management 116 IS Life Cycles and Projects 122 IS Policies and Standards 124 IS Management of Emerging Technologies 125 IS Implementation and Outsourcing 3.1.2 IS Planning Systems and IT Concepts 1 2 Knowledge Work Software 4 IT and Society Systems and Quality 5 6 Information and Quality IT Systems Specification 8 9 IT and Attaining Objectives IS Personal Level Systems 13 Procedural/event driven programming 13.1 13.15 IS Technology Evolution 16 IS Theory 17 IS as a Strategic Component 18 IS Development and Management 21 Decision Making, Simon Model 22 Systems and Quality, and IS 23 Systems, Role of Management, Users, Designers 24 Systems, Work-Flow, Organizational Systems 25 Models, Organizational Relationship to IS 26 **IS Planning** 27 IS Types 28 IS Development Standards 29 IS Implementation, Outsourcing Personal, Performance Evaluation 30 IS Society and Ethics 31 45 Problem Solving, Formal Problems and IS Object Representation of a System 46 72 IS Analysis and Design Tasks 74 IS Requirements and Specifications 75 IS Design and Implementation 76 IS Rapid Prototyping 77 IS Development Risks/Feasibility 78 IS Continuous Improvement and IS 80 Interpersonal, Group Dynamics 81 IS Database Applications Development 82 Problem Solving, Complexity Metrics 85 IS Professional Code of Ethics Interpersonal, Agreements and Commitment 87 95 IS Database Conceptual/Logical Models 97 IS Conversion Planning 99 IS Requirements/Work-Flow Planning 100 IS Application with Programming Language IS Development, Project Planning 105 IS Development, Project Management 106 110 IS Applications, Production Systems 111 IS Requirements and Database 115 IS Responsibility to Sell Designs to Management IS Life Cycles and Projects 116 122 IS Policies and Standards 124 IS Management of Emerging Technologies 125 IS Implementation and Outsourcing IT and Organizational Systems 3.1.3 Systems and IT Concepts

SkillSet Skill SubSkill LearningUnit 2 Knowledge Work Software 4 IT and Society 5 Systems and Quality 6 Information and Quality 8 IT Systems Specification 9 IT and Attaining Objectives 13 IS Personal Level Systems Procedural/event driven programming 13.1 13.15 IS Technology Evolution 16 IS Theory 17 IS as a Strategic Component 18 IS Development and Management 21 Decision Making, Simon Model 22 Systems and Quality, and IS 23 Systems, Role of Management, Users, Designers 24 Systems, Work-Flow, Organizational Systems Models, Organizational Relationship to IS 25 26 IS Planning 27 IS Types 28 IS Development Standards 29 IS Implementation, Outsourcing Personal, Performance Evaluation 30 IS Society and Ethics 31 Problem Solving, Formal Problems and IS 45 46 Object Representation of a System 72 IS Analysis and Design Tasks IS Requirements and Specifications 74 75 IS Design and Implementation IS Rapid Prototyping 76 77 IS Development Risks/Feasibility 78 IS Continuous Improvement and IS 80 Interpersonal, Group Dynamics 81 IS Database Applications Development 82 Problem Solving, Complexity Metrics 85 IS Professional Code of Ethics 87 Interpersonal, Agreements and Commitment 95 IS Database Conceptual/Logical Models 97 IS Conversion Planning 99 IS Requirements/Work-Flow Planning IS Application with Programming Language 100 105 IS Development, Project Planning IS Development, Project Management 106 110 IS Applications, Production Systems IS Requirements and Database 111 115 IS Responsibility to Sell Designs to Management 116 IS Life Cycles and Projects 122 IS Policies and Standards 124 IS Management of Emerging Technologies 125 IS Implementation and Outsourcing 3.1.4 Information Systems Analysis and Design Systems and IT Concepts 1 2 Knowledge Work Software 4 IT and Society 5 Systems and Quality 6 Information and Quality 8 IT Systems Specification 9 IT and Attaining Objectives 13 IS Personal Level Systems Procedural/event driven programming 13.1 13.15 IS Technology Evolution

SkillSet Skill SubSkill LearningUnit 16 IS Theory 17 IS as a Strategic Component 18 IS Development and Management 21 Decision Making, Simon Model 22 Systems and Quality, and IS 23 Systems, Role of Management, Users, Designers 24 Systems, Work-Flow, Organizational Systems 25 Models, Organizational Relationship to IS 26 IS Planning IS Types 27 28 IS Development Standards 29 IS Implementation, Outsourcing 30 Personal, Performance Evaluation 31 IS Society and Ethics 45 Problem Solving, Formal Problems and IS Object Representation of a System 46 72 IS Analysis and Design Tasks 74 IS Requirements and Specifications 75 IS Design and Implementation 76 IS Rapid Prototyping 77 IS Development Risks/Feasibility IS Continuous Improvement and IS 78 80 Interpersonal, Group Dynamics IS Database Applications Development 81 82 Problem Solving, Complexity Metrics 85 IS Professional Code of Ethics 87 Interpersonal, Agreements and Commitment 95 IS Database Conceptual/Logical Models 97 IS Conversion Planning 99 IS Requirements/Work-Flow Planning IS Application with Programming Language 100 105 IS Development, Project Planning IS Development, Project Management 106 110 IS Applications, Production Systems 111 IS Requirements and Database IS Responsibility to Sell Designs to Management 115 116 IS Life Cycles and Projects 122 IS Policies and Standards 124 IS Management of Emerging Technologies 125 IS Implementation and Outsourcing 3.1.5 Decision Making Systems and IT Concepts 1 2 Knowledge Work Software 4 IT and Society 5 Systems and Quality 6 Information and Quality 8 IT Systems Specification 9 IT and Attaining Objectives 13 IS Personal Level Systems 13.1 Procedural/event driven programming 13.15 IS Technology Evolution IS Theory 16 17 IS as a Strategic Component 18 IS Development and Management 21 Decision Making, Simon Model 22 Systems and Quality, and IS 23 Systems, Role of Management, Users, Designers 24 Systems, Work-Flow, Organizational Systems 25 Models, Organizational Relationship to IS 26 IS Planning

SkillSet Skill SubSkill LearningUnit 27 IS Types IS Development Standards 28 29 IS Implementation, Outsourcing 30 Personal, Performance Evaluation 31 IS Society and Ethics 45 Problem Solving, Formal Problems and IS 46 Object Representation of a System 72 IS Analysis and Design Tasks 74 IS Requirements and Specifications IS Design and Implementation 75 76 IS Rapid Prototyping IS Development Risks/Feasibility 77 78 IS Continuous Improvement and IS 80 Interpersonal, Group Dynamics IS Database Applications Development 81 82 Problem Solving, Complexity Metrics IS Professional Code of Ethics 85 87 Interpersonal, Agreements and Commitment 95 IS Database Conceptual/Logical Models 97 IS Conversion Planning 99 IS Requirements/Work-Flow Planning IS Application with Programming Language 100 IS Development, Project Planning 105 IS Development, Project Management 106 110 IS Applications, Production Systems IS Requirements and Database 111 IS Responsibility to Sell Designs to Management 115 116 IS Life Cycles and Projects 122 IS Policies and Standards 124 IS Management of Emerging Technologies 125 IS Implementation and Outsourcing 3.1.6 Systems Concepts, Use of IT, Customer Service Systems and IT Concepts 1 2 Knowledge Work Software 4 IT and Society 5 Systems and Quality 6 Information and Quality 8 IT Systems Specification 9 IT and Attaining Objectives 13 IS Personal Level Systems 13.1 Procedural/event driven programming 13.15 IS Technology Evolution 16 IS Theory 17 IS as a Strategic Component IS Development and Management 18 21 Decision Making, Simon Model 22 Systems and Quality, and IS 23 Systems, Role of Management, Users, Designers 24 Systems, Work-Flow, Organizational Systems 25 Models, Organizational Relationship to IS IS Planning 26 27 IS Types 28 IS Development Standards 29 IS Implementation, Outsourcing 30 Personal, Performance Evaluation 31 IS Society and Ethics Problem Solving, Formal Problems and IS 45 Object Representation of a System 46 IS Analysis and Design Tasks 72 74 IS Requirements and Specifications

SkillSet Skill SubSkill LearningUnit 75 IS Design and Implementation 76 IS Rapid Prototyping IS Development Risks/Feasibility 77 78 IS Continuous Improvement and IS 80 Interpersonal, Group Dynamics IS Database Applications Development 81 82 Problem Solving, Complexity Metrics 85 IS Professional Code of Ethics 87 Interpersonal, Agreements and Commitment 95 IS Database Conceptual/Logical Models 97 IS Conversion Planning 99 IS Requirements/Work-Flow Planning 100 IS Application with Programming Language 105 IS Development, Project Planning IS Development, Project Management 106 110 IS Applications, Production Systems IS Requirements and Database 111 115 IS Responsibility to Sell Designs to Management 116 IS Life Cycles and Projects 122 IS Policies and Standards 124 IS Management of Emerging Technologies 125 IS Implementation and Outsourcing Systems Theory and Quality Concepts 3.1.7 Systems and IT Concepts 2 Knowledge Work Software 4 IT and Society 5 Systems and Quality 6 Information and Quality 8 IT Systems Specification 9 IT and Attaining Objectives IS Personal Level Systems 13 Procedural/event driven programming 13.1 13.15 IS Technology Evolution IS Theory 16 17 IS as a Strategic Component 18 IS Development and Management 21 Decision Making, Simon Model 22 Systems and Quality, and IS 23 Systems, Role of Management, Users, Designers 24 Systems, Work-Flow, Organizational Systems 25 Models, Organizational Relationship to IS 26 **IS Planning** 27 IS Types 28 IS Development Standards 29 IS Implementation, Outsourcing 30 Personal, Performance Evaluation 31 IS Society and Ethics 45 Problem Solving, Formal Problems and IS 46 Object Representation of a System 72 IS Analysis and Design Tasks IS Requirements and Specifications 74 75 IS Design and Implementation 76 IS Rapid Prototyping 77 IS Development Risks/Feasibility IS Continuous Improvement and IS 78 80 Interpersonal, Group Dynamics IS Database Applications Development 81 82 Problem Solving, Complexity Metrics 85 IS Professional Code of Ethics 87 Interpersonal, Agreements and Commitment

SkillSet Skill SubSkill LearningUnit 95 IS Database Conceptual/Logical Models 97 IS Conversion Planning 99 IS Requirements/Work-Flow Planning 100 IS Application with Programming Language 105 IS Development, Project Planning IS Development, Project Management 106 110 IS Applications, Production Systems IS Requirements and Database 111 IS Responsibility to Sell Designs to Management 115 116 IS Life Cycles and Projects 122 IS Policies and Standards 124 IS Management of Emerging Technologies 125 IS Implementation and Outsourcing 3.2 Project Management 3.2.1 Team Leading, Proyect Goal Setting Personal, Performance Evaluation 30 72 IS Analysis and Design Tasks 79 Interpersonal, Consensus Development 80 Interpersonal, Group Dynamics 82 Problem Solving, Complexity Metrics 83 IS Software Quality Metrics 84 Systems and Quality Metrics/Assessment 86 Interpersonal, Synergistic Solutions 87 Interpersonal, Agreements and Commitment 94 IS Development and Project Management 96 IS Functional Specifications 98 IS Development and Conversion 105 IS Development, Project Planning IS Development, Project Management 106 IS Development, Project Management 107 108 IS Development, Project Management Tools IS Development, Project Close Down 109 IS Applications, Production Systems 110 112 Personal, Proactivity, Principled Action 113 Interpersonal, Empathetic Listening 114 Interpersonal, Goals, Mission, Alignment IS Life Cycles and Projects 116 117 Personal. Presentation IS Management and IS Department Organization 120 121 Personal, Leadership and IS 126 Personal, Time and Relationship Management 127 Quality and Performance Management 3.2.2 Monitor and Direct Resources and Activities Personal, Performance Evaluation 30 72 IS Analysis and Design Tasks 79 Interpersonal, Consensus Development 80 Interpersonal, Group Dynamics Problem Solving, Complexity Metrics 82 83 IS Software Quality Metrics 84 Systems and Quality Metrics/Assessment 86 Interpersonal, Synergistic Solutions 87 Interpersonal, Agreements and Commitment 94 IS Development and Project Management 96 IS Functional Specifications 98 IS Development and Conversion 105 IS Development, Project Planning 106 IS Development, Project Management 107 IS Development, Project Management IS Development, Project Management Tools 108 109 IS Development, Project Close Down

Skill SubSkill LearningUnit 110 IS Applications, Production Systems 112 Personal, Proactivity, Principled Action 113 Interpersonal, Empathetic Listening 114 Interpersonal, Goals, Mission, Alignment 116 IS Life Cycles and Projects 117 Personal, Presentation 120 IS Management and IS Department Organization 121 Personal, Leadership and IS 126 Personal, Time and Relationship Management 127 Quality and Performance Management 3.2.3 Coordinate Life Cycle Scheduling and Planning 30 Personal, Performance Evaluation 72 IS Analysis and Design Tasks 79 Interpersonal, Consensus Development 80 Interpersonal, Group Dynamics Problem Solving, Complexity Metrics 82 IS Software Quality Metrics 83 84 Systems and Quality Metrics/Assessment Interpersonal, Synergistic Solutions 86 87 Interpersonal, Agreements and Commitment 94 IS Development and Project Management 96 IS Functional Specifications 98 IS Development and Conversion IS Development, Project Planning 105 IS Development, Project Management 106 107 IS Development, Project Management 108 IS Development, Project Management Tools IS Development, Project Close Down 109 110 IS Applications, Production Systems Personal, Proactivity, Principled Action 112 Interpersonal, Empathetic Listening 113 114 Interpersonal, Goals, Mission, Alignment 116 IS Life Cycles and Projects Personal, Presentation 117 120 IS Management and IS Department Organization 121 Personal, Leadership and IS 126 Personal, Time and Relationship Management 127 Quality and Performance Management 3.2.4 Apply concepts of continuous improvement 30 Personal, Performance Evaluation 72 IS Analysis and Design Tasks 79 Interpersonal, Consensus Development 80 Interpersonal, Group Dynamics 82 Problem Solving, Complexity Metrics 83 IS Software Quality Metrics 84 Systems and Quality Metrics/Assessment 86 Interpersonal, Synergistic Solutions 87 Interpersonal, Agreements and Commitment IS Development and Project Management 94 96 IS Functional Specifications IS Development and Conversion 98 IS Development, Project Planning 105 106 IS Development, Project Management IS Development, Project Management 107 108 IS Development, Project Management Tools 109 IS Development, Project Close Down 110 IS Applications, Production Systems Personal, Proactivity, Principled Action 112 113 Interpersonal, Empathetic Listening Interpersonal, Goals, Mission, Alignment 114

SkillSet

SkillSet Skill SubSkill LearningUnit 116 IS Life Cycles and Projects 117 Personal. Presentation 120 IS Management and IS Department Organization Personal, Leadership and IS 121 126 Personal, Time and Relationship Management 127 Quality and Performance Management 3.2.5 Project Scheduling and Tracking 30 Personal, Performance Evaluation 72 IS Analysis and Design Tasks 79 Interpersonal, Consensus Development 80 Interpersonal, Group Dynamics Problem Solving, Complexity Metrics 82 83 IS Software Quality Metrics Systems and Quality Metrics/Assessment 84 Interpersonal, Synergistic Solutions 86 87 Interpersonal, Agreements and Commitment 94 IS Development and Project Management 96 IS Functional Specifications IS Development and Conversion 98 105 IS Development, Project Planning 106 IS Development, Project Management 107 IS Development, Project Management 108 IS Development, Project Management Tools IS Development, Project Close Down 109 110 IS Applications, Production Systems Personal, Proactivity, Principled Action 112 113 Interpersonal, Empathetic Listening 114 Interpersonal, Goals, Mission, Alignment 116 IS Life Cycles and Projects Personal, Presentation 117 120 IS Management and IS Department Organization 121 Personal, Leadership and IS 126 Personal, Time and Relationship Management 127 Quality and Performance Management