Attached Table No.2 (Related to Article 5)

Specialized Courses - SE Field　　For the students who will remain enrolled therein after AY 2014 onwards

Classification of Courses(Categories)			Code	Courses	Academic Credits			SE Track Recommended Courses	The Standard Year of Completion for the Courses (Slots)								Prerequisites
									1st year		2nd Year		3rd Year		4th Year		
Category	Sub-category				Required Courses	Elective Courses	Optional Courses		1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	
Specialized Courses	Specialized Fundamental Courses	Mathematics(M)	M1	Linear Algebra I		2			1.5								
			M2	Linear Algebra II		2				1.5							
			M3	Calculus I		2			1.5								
			M4	Calculus II		2				1.5							
			M5	Fourier Analysis		2					1						M-1orM-2 | M-3orM-4
			M6	Complex Analysis		2						1					M-5
			M7	Probability and Statistics		2		○			1						M-3orM-4
			M8	Applied Algebra		2						1					M-1orM-2 | F-3
			M9	Mathematical Logic		2							1				
			M10	Introduction to Topology		2						1					
			M11	Applied Geometry and Topology		2							1				
			M12	Computational Geometry		2								1			
		Natural Science(NS)	NS1	Dynamics		2			2								
			NS2	Electromagnetism		2				2							
			NS3	Quantum Mechanics		2					2						NS-1orNS-2
			NS4	Semiconductor Devices		2						1					L-5
			NS5	Thermodynamics and Statistics Mechanics		2					1						NS-1orNS-2
			NS7	Introduction to Optoelectronics		2						1					NS-1orNS-2
		Computer Fundamentals(L)	L1	Literacy I		4			3								
			L2	Literacy II		3				2							
			L3	Introduction to Computer Science and Engineering		2			1								
			L4	Introduction to Computer Systems		2				1							
			L5	CSE Laboratories		3					2						NS-1orNS-2
			L6	Information Security		2		○				1					
			L7	Information & Industry			2								1		
			L8	Information Ethics		1			1								
			L9	Introduction to IT Engineers		2									1		L-1orL-2 | L-4
			L10	Introduction to Multimedia Systems		2							1				L-1orL-2
		Programming Languages(P)	P1	Introduction to Programming		4			3								
			P2	C Programming		4				3							
			P3	JAVA Programming I		4					3						P-1orP-2
			P4	C++ Programming		3		○				2					P-1orP-2
			P5	Computer Languages		3								2			
			P6	Java Programming II		3		○					2				P-3
		Foundations of Computer Science & Engineering(F)	F1	Algorithms and Data Structures		4					3						P-1orP-2
			F2	Information Theory		2						1					F-3
			F3	Discrete Systems		3					2						
			F4	Logic Circuit Design		4						3					
			F5	Computer Architecture		4							3				L-4 | F-4
			F6	Operating Systems		4						3					L-4
			F7	Database Systems		3		○					2				
			F8	Automata and Languages		3							2				
			F9	Advanced Algorithms		3									2		F-1
			F10	Language Processing Systems		3								2			F-8
			F11	Numerical Analysis		3								2			F-1
			F12	Data Compression		2										1	
	Specialized Courses	Computer Systems(S)	S1	Computer Organization and Design		3								2			F-5
			S2	Electronics		3							2				NS-4
			S3	Advanced Electronics		3								2			M-6 | S-2
			S4	Embedded Systems		3									2		F-5 | F-6
			S5	Parallel Computer Architecture		3										2	F-5 | F-6
			S6	VLSI Design		3								2			NS-4
			S7	Advanced Logic Circuit Design		3							2				F-4
			S8	VLSI Device Technology		3									2		
			S9	Computer System Engineering		2										1	
		Computer Network Systems(N)	N1	Communication Networking I		2						1					L-4
			N2	Communication Networking II		2							1				L-6 | N-1
			N3	Computer Network Organization & Design		3									2		N-1
			N4	Digital Communication Systems		2								1			N-1
			N5	Performance Evaluation		3										2	M-7 | N-1
		Applications(A)	A1	Artificial Intelligence		3								2			M-7 | F-8
			A2	Computer Graphics		3								2			
			A3	Image Processing		3									2		A-2 | A-8
			A4	Biomedical Information Technology		3									2		A-8 | F-11
			A5	Robotics and Automatic Control		3									2		L-5 | A-1 | A-7
			A6	HI and VR		3									2		A-2
			A7	Linear Systems		3								2			
			A8	Digital Signal Processing		2							1				M-5
		Software Engineering(SE)	SE1	Web Engineering		3		○								2	P-6
			SE2	Web Programming		3		○							2		
			SE3	Software Engineering I		3		○					2				P-3
			SE4	Software Engineering II		3								2			SE-3
			SE5	Software Studio		3		○							2		P-6
			SE6	Distributed Computing		3								2			
		Others(O)	O1	Basic Knowledge Course on Starting Up Ventures I, II		2 each			1								
			O2	Factories for Experiencing Starting Up Ventures ①～④		1 each					1						
			O3	SCCP			1 each		1								
			O4	Courses for the Information Technology Examination			1		1								
			O5	Career Design I			1				1						
			O6	Career Design II			1							1			
			O7	Graduate School Courses			*									*	
Graduation Theses					8												

Notes: Field-Tracks

CS-CF Computer Science-Computer Science Fundamentals
CS-CM Computer Science-Computational Modeling
SY-SD Computer Systems-Computer System Design
SY-VD Computer Systems-VLSI Design
CN-CN Computer Network Systems-Computer Network Systems
IT-VH Applied Information Technologies-Virtual Reality & Human Interface
IT-RC Applied Information Technologies-Robotics&Control
IT-BM Applied Information Technologies-Biomedical Information Technologies
SE-SE Software Engineering-Software Engineering

Shaded Courses shaded in the table are "strongly recommended courses."

＊ Academic Credits, etc. of "O7 Graduate School Courses" are set by the Graduate School Regulation on the Completion of University of Aizu Graduate School Studies.