

2012 Undergraduate Curriculum for Software Engineering (Experimental class:Embedded Systems) (I)

Course Number	Course Title	Assessment	Credits	Instruction Hour Allocation					Credits Distribution for Semesters																Responsible Unit
				Total Hrs	Lec	Lab	Practice	Recitation	1	I	2	II	3	III	4	IV	5	V	6	VI	7	VII	8		
									19 W	0 W	18 W	3 W	19 W	0 W	18 W	3 W	19 W	0 W	18 W	3 W	19 W	0 W	16 W		
0009053	Oral English-1	General Assessment	2	32	32				2														School of Software Engineering		
0004312	Modern Chinese History	Exam	2	32	32				2														School of Marxism		
0000011	Physical Education-1	General Assessment	1	32	32				1														Department of Physical Education		
0000008	College English (Band Two)	Exam	4	64	64				4														College of Foreign Languages		
0001908	Linear Algebra (Engineering)	Exam	3	54	48			6	3														College of Applied Sciences		
0003329	Calculus (Engineering)-1	Exam	5.5	99	64			35	5.5														College of Applied Sciences		
0002784	Fundamentals of National Defense	General Assessment	2	32	32						2												Students' Affairs Office		
0004311	Ethical Conduct and Fundamentals of Law	Exam	3	48	32		16			3													School of Marxism		
0006563	Oral English-2	General Assessment	2	32	32					2													School of Software Engineering		
0000012	Physical Education-2	General Assessment	1	32	32					1													Department of Physical Education		
0000009	College English (Band Three)	Exam	4	64	64					4													College of Foreign Languages		
0000009	College English (Band Four)	Exam	4	64	64					4													College of Foreign Languages		
0000072	University Physics I-1	Exam	4	64	64					4													College of Applied Sciences		
0003330	Calculus (Engineering)-2	Exam	5.5	99	64			35		5.5													College of Applied Sciences		
0000013	Physical Education-3	General Assessment	1	32	32						1												Department of Physical Education		
0000073	University Physics I-2	Exam	4	64	64					4													College of Applied Sciences		
0004361	Introduction to Philosophy	Exam	3	48	48					3													School of Marxism		
0000014	Physical Education-4	General Assessment	1	32	32								1										Department of Physical Education		
0003333	Probability and Statistics (Engineering)	Exam	3	54	50			4					3										College of Applied Sciences		
0006457	Fundamentals of Chinese Sociology	Exam	4	64	48		16						4										School of Marxism		
University Requirements		Sub-total	59	1042	930			32	80	17.5		23.5	2	8		8									
0006565	Introduction to Computer Science	General Assessment	2	32	32				2														School of Software Engineering		

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									19 W	0 W	18 W	3 W	19 W	0 W	18 W	3 W	19 W	0 W	18 W	3 W	19 W	0 W	16 W		
0007078	Freshmen Seminar Course	General Assessment	1	16	16				1														School of Software Engineering		
0009054	High Language Programming III	Exam	4	64	64				4														School of Software Engineering		
0003173	Discrete Mathematics II	Exam	3	48	48							3											School of Software Engineering		
0009063	Circuit and Electronic Technology	Exam	4	64	64							4											School of Software Engineering		
0002358	Digital Logic I	Exam	3	48	48							3											School of Software Engineering		
0006207	Data Structures and Algorithms I	Exam	4	64	44	20							4										School of Software Engineering		
0006567	Computer Organization	Exam	3	48	40	8							2.5										School of Software Engineering		
0007749	Computer Network	Exam	2	32	32								2										School of Software Engineering		
0009026	Principle of Operating System II	Exam	3	48	38	10									3								School of Software Engineering		
0002549	Database Systems Principles	Exam	2	32	32										2								School of Software Engineering		
0004575	Introduction to Software Engineering(Chinese/English)	General Assessment	2	32	16	16									2								School of Software Engineering		
0006651	Principle of Embedded System Design	Exam	2.5	40	28	12									2.5								School of Software Engineering		
Discipline Requirements		Sub-total	35.5	568	502	66			7			10		8.5		9.5									
0008301	Programming Design Course Project	General Assessment	2	60			60		2														School of Software Engineering		
0007155	Cognitive Practice	General Assessment	1	30			30		1														School of Software Engineering		
0004746	Machine Shop Training A	General Assessment	1	30			30				1												College of Mechanical Engineering & Applied Electronics Technology		
0004964	Physics Laboratory (Engineering)-1	General Assessment	1	24		24					1												College of Applied Sciences		
0007748	Object-Oriented C++ Programming Design	General Assessment	1	30			30				1												School of Software Engineering		
0004965	Physics Laboratory (Engineering)-2	General Assessment	1.5	36		36						1.5											College of Applied Sciences		
0003087	Practices of National Defense	General Assessment	1	30			30					1											Students' Affairs Office		
0008302	The Experiments of Digital Logic	General Assessment	0.5	12			12					0.5											School of Software Engineering		
0009064	The Circuit and Electronic Technology Experiment	General Assessment	2	48			48					2											School of Software Engineering		
0006566	Assembly Language Programming	General Assessment	1	24			24						1										School of Software Engineering		
0007069	Social Practices	Exam	2	48	16		32							2									School of Marxism		

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									19 W	0 W	18 W	3 W	19 W	0 W	18 W	3 W	19 W	0 W	18 W	3 W	19 W	0 W	16 W		
0006243	EDA Design and Tools	General Assessment	2	48			48								2								School of Software Engineering		
0006654	Course Project of Embedded System Design	General Assessment	0.5	12			12								0.5								School of Software Engineering		
0006280	Database Management and Design Course Project	General Assessment	2	48			48								2								School of Software Engineering		
0007747	FPGA-based Digital Circuit Design (Primary Course by Foreign Teacher)	General Assessment	1	30			30									1							School of Software Engineering		
0006656	SoC Embedded Operating System Design Practice (Primary Course by Foreign Teacher)	General Assessment	1	30			30									1							School of Software Engineering		
0007746	Innovation Project Practice	General Assessment	2	60			60										2						School of Software Engineering		
0006817	DSP Design and Implementation (Primary Course by Foreign Teacher)	General Assessment	1	30			30											1					School of Software Engineering		
0006818	Embedded System Hardware and Software Design (Primary Course by Foreign Teacher)	General Assessment	1	30			30											1					School of Software Engineering		
0007454	Professional Practice	General Assessment	8	240			240													8			School of Software Engineering		
0006456	Senior Project	General Assessment	16	480			480															16	School of Software Engineering		
Practical Requirements		Sub-total	48.5	1380	16	60	1304		3		3	1	4		3		6.5	0	2	2	8		16		
Discipline Electives			8	128	128												5		3						
Major Requirements			16	256	256												4		14.5						
Major Electives			6	96	96									2		0		4		4					
GEESEM:EM			6	96	96											2		2		2					
General Education Electives			8	192	192									2		2		4							
Electives		Sub-total	44	768	768									4		13		27.5		6					
Discipline Requirements			48.5	1380	16	60	1304		3		3	1	4		3		6.5	0	1	3	8		16		
Discipline Electives																									
Total for Practical Instruction			48.5	1380	16	60	1304		3		3	1	4		3		6.5	0	1	3	8		16		
Total for Theoretical Instruction			138.5	2378	2200	66	32	80	25		23.5	2	18		20.5		23		27.5		6				
Innovation Requirements			4	96													2		2						
Total			191	3854	2216	126	1336	80	27.5		26.5	3	22		23.5		31	0	30.5	3	14		16		

Notation: GEESEM:EM is the abbreviation for General Education Electives for Science and Engineering Majors: Economics and Management.

2012 Undergraduate Curriculum for Software Engineering (Experimental class:Embedded Systems) (II)

Course Number	Course Title	Assessment	Credits	Instruction Hour Allocation					Credits Distribution for Semesters																Responsible Unit
				Total Hrs	Lec	Lab	Practice	Recitation	1	I	2	II	3	III	4	IV	5	V	6	VI	7	VII	8		
									19 W	0 W	18 W	3 W	19 W	0 W	18 W	3 W	19 W	0 W	18 W	3 W	19 W	0 W	16 W		
0006569	Analysis and Design of Integrated Circuit	General Assessment	3	48	40	8							3										School of Software Engineering		
0006701	Computer Architecture	Exam	2.5	40	40										2.5								School of Software Engineering		
0007753	Digital Signal Processing	General Assessment	2.5	40	30	10									2.5								School of Software Engineering		
0002996	Principles of Compiling I	General Assessment	3.5	56	44	12											3.5						School of Software Engineering		
Discipline Electives		Sub-total	11.5	184	154	30							3		5		3.5								
0006652	Embedded Microprocessor Architecture and Application	General Assessment	2	32	27	5									2								School of Software Engineering		
0007754	Interface Technique of Microcomputer	General Assessment	2	32	24	8									2								School of Software Engineering		
0006819	DSP Design Technology	General Assessment	2	32	26	6											2						School of Software Engineering		
0004581	Software Process Quality Control	General Assessment	2	32	32												2						School of Software Engineering		
0006238	Embedded Operating System	General Assessment	2	32	24	8											2						School of Software Engineering		
0007030	Technology for Embedded Software Development	General Assessment	2	32	24	8											2						School of Software Engineering		
0002377	Software Architecture	General Assessment	2	32	20	12											2						School of Software Engineering		
0009028	Human Computer Interaction (HCI)	General Assessment	2	32	24	8											2						School of Software Engineering		
0003483	Introduction to Artificial Intelligence	General Assessment	2.5	40	40												2.5						School of Software Engineering		
Major Requirements		Sub-total	18.5	296	241	55									4		14.5								
0000978	Computer Graphics I	General Assessment	2	32	24	8							2										School of Software Engineering		
0007462	Multimedia Technology	General Assessment	2	32	32												2						School of Software Engineering		
0003677	The Original Painting Design	General Assessment	2	32	32												2						School of Software Engineering		
0007751	Cutting-edge Technology of IoT	General Assessment	2	32	32															2			School of Software Engineering		
0007752	Dedicated Short Range Communications (DSRC)	General Assessment	2	32	32															2			School of Software Engineering		
Major Electives		Sub-total	10	160	152	8							2				4			4					

Vice-Director:

Date:

Vice-President:

Date: