2012 Undergraduate Curriculum for Information and Computing Science（Ⅰ）

Course Number	Course Title	Assessment	Credits	Total Hrs	Lec	Lab	Practice	Recitation	1 (19W)	I (0W)	2 (18W)	II (3W)	3 (19W)	III (0W)	4 (18W)	IV (3W)	5 (19W)	V (0W)	6 (18W)	VI (3W)	7 (19W)	VII (0W)	8 (16W)	Responsible Unit
0004311	Ethical Conduct and Fundamentals of Law	Exam	3	48	32		16						3											School of Marxism
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
0000007	College English (Band One)	Exam	4	64	64				4															College of Foreign Languages
0000043	Mathematical Analysis-1	Exam	6	96	70			26	6															College of Applied Sciences
0006457	Fundamentals of Chinese Sociology	Exam	4	64	48		16								4									School of Marxism
0000012	Physical Education-2	General Assessment	1	32	32						1													Department of Physical Education
0000008	College English (Band Two)	Exam	4	64	64						4													College of Foreign Languages
0000009	College English (Band Three)	Exam	4	64	64								4											College of Foreign Languages
0000010	College English (Band Four)	Exam	4	64	64										4									College of Foreign Languages
0000044	Mathematical Analysis-2	Exam	6	96	70			26			6													College of Applied Sciences
0000072	University Physics I-1	Exam	4	64	64						4													College of Applied Sciences
0004361	Introduction to Philosophy	Exam	3	48	48										3									School of Marxism
0000013	Physical Education-3	General Assessment	1	32	32								1											Department of Physical Education
0000045	Mathematical Analysis-3	Exam	6	96	96								6											College of Applied Sciences
0000073	University Physics I-2	Exam	4	64	64										4									College of Applied Sciences
0000014	Physical Education-4	General Assessment	1	32	32										1									Department of Physical Education
0002784	Fundamentals of National Defense	General Assessment	2	32	32		0						2											Students' Affairs Office
University Requirements		**Sub-total**	**60**	**1024**	**940**		**32**	**52**	**13**	**0**	**18**	**2**	**19**	**0**	**8**									
0004479	Advanced Algebra-1	Exam	4.5	72	72				4.5															College of Applied Sciences
0004588	Analytic Geometry II	Exam	3.5	56	56				3.5															College of Applied Sciences
0004480	Advanced Algebra-2	Exam	4.5	72	72						4.5													College of Applied Sciences

Course Number	Course Title	Assessment	Credits	Total Hrs	Lec	Lab	Practice	Recitation	1 (19W)	I (0W)	2 (18W)	II (3W)	3 (19W)	III (0W)	4 (18W)	IV (3W)	5 (19W)	V (0W)	6 (18W)	VI (3W)	7 (19W)	VII (0W)	8 (16W)	Responsible Unit
0009005	Data Structure Ⅴ	General Assessment	3	48	48										3									College of Applied Sciences
0005789	Functions of Real Variables Ⅲ	Exam	3.5	56	56												3.5							College of Applied Sciences
0005677	Discrete Mathematics Ⅱ	General Assessment	3	48	48								3											College of Applied Sciences
0003634	C/C++ Programming	General Assessment	4	64	64										4									College of Applied Sciences
0000095	Ordinary Differential Equation	Exam	4	64	64										4									College of Applied Sciences
0000097	Probability Theory	Exam	4	64	64										4									College of Applied Sciences
0003635	Numerical Analysis Ⅰ	Exam	3	48	48										3									College of Applied Sciences
0000096	Functions of the Complex Variables I	Exam	3.5	56	56												3.5							College of Applied Sciences
0000101	Applied of Mathematical Statistics	Exam	4	64	64												4							College of Applied Sciences
0007076	Freshmen Seminar Course	General Assessment	1	16	16				1															College of Applied Sciences
Discipline Requirements		**Sub-total**	**45.5**	**728**	**728**				9	0	7.5	0	4	0	14	0	11							
0004746	Machine Shop Training A	General Assessment	1	30			30		1															College of Mechanical Engineering and Applied Electronics Technology
0004964	Physics Laboratory (Engineering)-1	General Assessment	1	24	2	22					1													College of Applied Sciences
0007069	Social Practices	General Assessment	2	48			48									2								School of Marxism
0003087	Practices of National Defense	General Assessment	1	30			30							1										Students' Affairs Office
0003668	C/C++ Programming Course Design	General Assessment	2	60			60								2									College of Applied Sciences
0004965	Physics Laboratory (Engineering)-2	General Assessment	1.5	36		36									1.5									College of Applied Sciences
0003707	Numerical Analysis Course Design	General Assessment	1.5	45			45								1.5									College of Applied Sciences
0005807	Data Structure Programming	General Assessment	1	30			30								1									College of Applied Sciences
0005806	Mathematical Experiments and Application Software	General Assessment	2	60			60										2							College of Applied Sciences
0009004	Senior Project	General Assessment	16	480			480																16	College of Applied Sciences
0007668	Cognitive Practice	General Assessment	1	30			30							1										College of Applied Sciences
0007669	Professional Practice	General Assessment	4	120			120													4				College of Applied Sciences
Practical Requirements		**Sub-total**	**34**	**993**	**2**	**58**	**933**	**0**	1	0	1	2	3.5		2.5	2	2	0	0	4	0	0	16	

Course Number	Course Title	Assessment	Credits	Instruction Hour Allocation					Credits Distribution for Semesters																Responsible Unit
				Total Hrs	Lec	Lab	Practice	Recita-tion	1 (19W)	I (0W)	2 (18W)	II (3W)	3 (19W)	III (0W)	4 (18W)	IV (3W)	5 (19W)	V (0W)	6 (18W)	VI (3W)	7 (19W)	VII (0W)	8 (16W)	
	Discipline Electives																							
	Major Electives		8	128	128														2		6			College of Applied Sciences
	Major Requirements		20	320	320												6		8		6			College of Applied Sciences
	GEESEM:EM		8	128	128												4		2		2			
	General Education Electives		8	128	128														4		4			
	Electives	**Sub-total**	**44**	**704**	**704**												10		16		18			
	Total for Theoretical Instruction		149.5	2456	2372		32	52	22		25.5	2	23		22		21		16		18			
	Total for Practical Instruction		34	993	2	58	933	0	1		1	2	3.5		2.5	2	2		0	4			16	
	Innovation Requirements		**4**	96			96												2		2			
	Total		**187.5**	**3545**	**2374**	**58**	**1061**	**52**	**23**	**0**	**26.5**	**4**	**26.5**	**0**	**24.5**	**2**	**23**	**0**	**18**	**4**	**20**	**0**	**16**	

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

2012 Undergraduate Curriculum for Information and Computing Science (Ⅱ)

Course Number	Course Title	Assessment	Credits	Instruction Hour Allocation					Credits Distribution for Semesters															Responsible Unit
				Total Hrs	Lec	Lab	Practice	Recita-tion	1 19W	I 0W	2 18W	II 3W	3 19W	III 0W	4 18W	IV 3W	5 19W	V 0W	6 18W	VI 3W	7 19W	VII 0W	8 16W	
0007245	Programming for Windows	General Assessment	3	48	24	24															3			College of Applied Sciences
0000530	Graph Theory and Networks	Exam	3	48	48														3					College of Applied Sciences
0004571	Partial Differential Equations II	Exam	3.5	56	56												3.5							College of Applied Sciences
0009007	Java Language Ⅱ	Exam	3	48	32	16													3					College of Applied Sciences
0007246	Algorithm Analysis and Design	Exam	4	64	48	16											4							College of Applied Sciences
0005794	Computer Network and Communication	General Assessment	4	64	32	32															4			College of Applied Sciences
0001503	Regression Analysis and Experiment Design	General Assessment	4	64	48	16													4					College of Applied Sciences
0004483	Topology	Exam	4	64	64												4							College of Applied Sciences
0004486	Mathematical Programming	General Assessment	4	64	48	16													4					College of Applied Sciences
0005793	Database Technology and Applications Ⅳ	General Assessment	4	64	32	32											4							College of Applied Sciences
0005791	Numerical Methods for Partial Differential Equations III	General Assessment	5	80	56	24													5					College of Applied Sciences
0004482	Modern Algebra	Exam	4	64	64												4							College of Applied Sciences
0000528	Mathematical Model	General Assessment	3	48	48																3			College of Applied Sciences
0005790	Functional Analysis	Exam	3	48	48														3					College of Applied Sciences
0004485	Differential Geometry	Exam	4	64	64																4			College of Applied Sciences
0007004	Multivariate Statistical Analysis	General Assessment	3	48	48																3			College of Applied Sciences
0007005	Applied Stochastic Processes	General Assessment	3	48	48														3					College of Applied Sciences
0007247	Numerical Linear Algebra	General Assessment	3	48	48																3			College of Applied Sciences
0007248	Stochastic Operation Research	General Assessment	3	48	48																3			College of Applied Sciences
0007249	Artificial Intelligence	General Assessment	3	48	48														3					College of Applied Sciences
	Major Requirements	**Sub-total**	**70.5**	**1128**	**952**	**176**											**19.5**		**28**		**23**			
0005796	Wavelet Analysis (Chinese/English)	General Assessment	2	32	32																2			College of Applied Sciences

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	
0007250	Some Topics in Partial Differential Equations (Chinese/English)	General Assessment	2	32	32														2					College of Applied Sciences
0005802	Modeling with R Software (Self-learning)	General Assessment	2	32	32														2					College of Applied Sciences
0005804	Modern Software Technologies (Self-learning)	General Assessment	2	32	32														2					College of Applied Sciences
0005805	Scientific Computing and Application to Engineering (Self-learning)	General Assessment	2	32	32																2			College of Applied Sciences
0005803	Statistical Computing (Self-learning)	General Assessment	2	32	32																2			College of Applied Sciences
0007251	Pattern Recognition and Intelligent Computing	General Assessment	3	48	48																3			College of Applied Sciences
0007252	Approximation Algorithms	General Assessment	2	32	32																2			College of Applied Sciences
0009006	Software Engineering Ⅱ	General Assessment	2	32	32																2			College of Applied Sciences
0005801	Information Security	General Assessment	3	48	48																3			College of Applied Sciences
0005797	Combinatorics	General Assessment	3	48	48														3					College of Applied Sciences
0005798	Code Theory	General Assessment	3	48	48														3					College of Applied Sciences
0007006	Survey Sampling	General Assessment	2	32	32																2			College of Applied Sciences
0007007	Time Series Analysis	General Assessment	3	48	48														3					College of Applied Sciences
Major Electives		**Sub-total**	**33**	**528**	**528**														**15**		**18**			

Vice-Director: **Vice-President:**

Date: **Date:**