Undergraduate teaching program of Information and Computing Science

1、 Education objective

The objective of this Specialty is to equip students with good knowledge of math as well as science and technology theory foundation, modern advanced information technology and calculation methods, the method of design and development of the mobile platform application system. Students who graduate f will be good at algorithm design, analysis, and programming. They can do data mining job in various fields such as business, science and technology, information industry and economy department and become applied talents in smartphones and tablets and other mobile platform application software design and development.

2、 Standard Schooling Years

Four years of undergraduate course

3、 Degree Conferred

Bachelor of Science

4、 Credit requirement

Students should take 156 credits (excluding extracurricular credits. Among the total 156 credits, 48 credits should be required courses, 9 credits should be general electives courses, 41 credits should be discipline basic course, 11 credits should be professional compulsory courses, 11 credits should be professional limit courses, while the other 11 credits should be the integrated use of class. At the same time, students must also obtain 10 diathesis developing extracurricular credits, and should study the "college student health education".

5、 Teaching plan for students from Hong Kong, Macao and Taiwan

In accordance with relevant provisions of the education department, students from Hong Kong, Macao and Taiwan do not need to study "national defense education" and "ideological and political theory course" courses. Meanwhile, they should take the rest of the courses, study class hours and get credits, which are required in major teaching plan.

6、 Teaching plan for foreign students

According to the regulations of the Education Ministry, foreign students do not need to study "the national defense education" courses; foreign students whose major are Political philosophy, politics and economics class should study Political theory course as compulsory course, while foreign students whose major are not those mentioned above do not need to take Political Theory Course. Foreign students should study "Chinese" and "the general situation of China" as a compulsory course to accept degree education. The rest of the course should be strictly in accordance with the term prescribed by the teaching plan, class hours and credits required to study.

7. Teaching schedule

Table 1: Curriculum Credits for each semester

Course Category	Course Character	Graduation Credit Required	Credit Required for each semester								Total
			1	2	3	4	5	6	7	8	
Elective	Compulsory	60. 0	15. 5	16. 0	10. 0	7. 0	7. 0	4. 5	0. 0	0. 0	60. 0
	Elective	9. 0	0. 0	1. 0	1. 0	1. 0	2. 0	2. 0	2. 0	0. 0	9. 0
Disciplinary Basic Courses	Compulsory	41. 0	12. 0	9. 0	9. 0	4. 0	7. 0	0. 0	0. 0	0. 0	41. 0
Specialty Courses	Compulsory	36. 0	1. 0	0. 0	6. 0	4. 0	8. 0	10. 0	7. 0	0. 0	36. 0
	Elective	11. 0	0. 0	0. 0	0. 0	0. 0	3. 0	3. 0	5. 0	0. 0	11. 0

Comprehensive application courses	Compulsory	11. 0	0. 0	1. 0	0. 0	1. 0	0. 0	2. 0	0. 0	7. 0	11. 0
Total		168. 0	28. 5	27. 0	26. 0	17. 0	27. 0	21. 5	14. 0	7. 0	168. 0

Table 2: Teaching Schedule

Course Category	Course Nature	Course Type	Course Identifier	Course Name	Course Category	Weeks for Studying	Total Credit	Allocation of Hours			Allocation of Each Term by Weeks								Way of Assessment
								Lecturing	Experiment	Practice	1	2	3	4	5	6	7	8	
Public Courses	☆	EOND	140471	Military Theory (military training included)				15	0	0	1								☆
	Compulsory	TOIAP	140193	Fundamental Principles of Marxism	3	15	45	30	0	15	3								★
			140464	Moral Integrity and Fundamentals of Law	4	16	64	48	0	16		4							★
			140222	An Outline of Chinese Modern History	2	16	32	32	0	0			2						★
			140473	Introduction to Mao Zedong Thoughts and Socialist Theoretical System With Chinese Characteristics I	3	16	48	32	0	16				3					★
			140483	Introduction to Mao Zedong Thoughts and Socialist Theoretical System With Chinese Characteristics II	3	16	48	32	0	16					3				★
	☆		140242	Situation ad Policy	2	16	32	32	0	0						2			☆
		Language and Skills I	121542	College Chinese	2	16	32	32	0	0		2							★
			121552	Applied Writing	2	16	32	32	0	0				2					★
		Language and Skills II	90834	College English(3a)	4	15	60	60	0	0	4								★
			90864	College English(2b)	4	15	60	60	0	0	4								★
			90844	College English(4a)	4	16	64	64	0	0		4							★
			90874	College English(3b)	4	16	64	64	0	0		4							★

			Code	Course	Credits	Weeks	Total	Lecture			1	2	3	4	5	6	7	8	
	★		90884	College English(4b)	4	16	64	64	0	0		4							★
	★		180264	C-E/E-C Translation	4	16	64	64	0	0		4							★
	★		180412	Academic English	2	16	32	32	0	0			2						★
	☆	Education of Health	400015	Career Development and Planning for College Students	0.5	8	8	8	0	0	1								☆
	☆		340031	Education of Psychological Health for College Students	1	15	15	15	0	0	1								☆
	☆		130452	PE I	2	15	30	30	0	0	2								☆
	☆		130462	PE II	2	16	32	32	0	0		2							☆
	☆		130472	PE III	2	16	32	32	0	0				2					☆
	☆		400002	Foundation of Entrepreneurship	2	16	32	32	0	0				2					☆
	☆		130482	PE IV	2	16	32	32	0	0					2				☆
	☆		400025	Careers Guidance	0.5	8	8	8	0	0					1				☆
Sub Total					48		757	694		63	12	12	6	7	7	5			
limit	☆	Natural Science Series	990032	Pass time course I	1	16	16	16	0	0		1							☆
	☆		990062	Pass time course II	1	16	16	16	0	0			1						☆
	☆		990072	Pass time course III	1	16	16	16	0	0				1					☆
	☆		000001	The humanities courses	2	16	32	32	0	0					2				☆
	☆		990042	Social science courses	2	16	32	32	0	0						2			☆
	☆		990052	Art courses	2	16	32	32	0	0							2		☆
Sub Total					9		144	144				1	1	1	2	2	2		

Category	Type	Module	Code	Course	Credits	Weeks	Total	Lecture	Exp		S1	S2	S3	S4	S5	S6	S7	S8	Mark
Disciplinary Basic Courses	Compulsory	Disciplinary Basic Courses	101053	space analytic geometry	3	15	45	45	0	0	3								★
			100505	mathematical analysis Ⅰ	5	15	75	75	0	0	5								★
			106044	advanced mathematics Ⅰ	4	15	60	60	0	0	4								★
			100526	mathematical analysis Ⅱ	6	16	96	96	0	0		6							★
			106053	advanced mathematicsⅡ	3	16	48	48	0	0		3							★
			100515	mathematical analysis Ⅲ	5	16	80	80	0	0			5						★
			100484	High-Level Language Programming Ⅰ	4	16	64	40	24	0			4						★
			109114	Probability and Statistics	4	16	64	64	0	0				4					★
			101064	Ordinary Differential Equations	4	16	64	64	0	0					4				★
			105023	mathematical statistics	3	16	48	48	0	0					3				★
		subtotal			41		644	620	24		12	9	9	4	7				
Specialty Courses	Compulsory	Basic Courses	102441	Introduction to the Specialty	1	8	16	16	0	0	2								☆
			061083	microeconomics	3	16	48	48	0	0		3							★
			109533	Discrete mathematics and its applications	3	16	48	48	0	0		3							★
			102174	High-Level Language Programming II	4	16	64	40	24	0			4						★
			109544	Business data analysis	4	16	64	40	24	0				4					★
			102184	data structures and algorithm	4	16	64	40	24	0				4					★
			109513	numerical calculation	3	16	48	38	10	0					3				★
			101103	database	3	16	48	36	12	0					3				★
			109554	mobile application development	4	16	64	40	24	0					4				★

			Code	Course	Credit	Weeks	Total	Lecture	Lab	Other	S1	S2	S3	S4	S5	S6	S7	S8	Mark
	★		109564	enterprise application development	4	16	64	40	24	0						4			★
	★		100093	Operational Research	3	16	48	30	18	0						3			★
subtotal				subtotal	36		576	416	160		2		6	4	8	**10**	7		
Limited-lective	☆	Specialty-related Courses	109022	mathematics experiment	2	16	32	12	20	0					2				☆
	☆		100461	Special English for Information and Computing science	1	8	16	16	0	0						2			☆
	☆		103113	development tools	3	16	48	30	18	0						3			☆
	☆		109573	Information theory	3	16	48	48	0	0						3			☆
	☆		103133	Data mining	3	16	48	48	0	0							3		☆
	☆		105053	complex variable functions	3	16	48	48	0	0							3		☆
	☆		101113	Mathematical modeling	3	16	48	32	16	0							3		☆
	☆		61093	macroeconomics	3	16	48	48	0	0							3		☆
	☆		109593	Business data prediction	3	16	48	48	0	0							3		☆
	☆		102193	optimization method	3	16	48	48	0	0							3		☆
	☆		102213	Selected Readings of Mathematical analysis	3	16	48	48	0	0							3		☆
	☆		100183	Selected Readings of Advanced Mathematics Ⅰ	3	16	48	48	0	0							3		☆
	☆		109612	data warehouse	2	16	32	32	0	0							2		☆
	☆		109622	Business Mathematics Modeling	2	16	32	32	0	0							2		☆
	☆		109632	Commercial data mining and	2	16	32	16	16	0							2		☆

Category	Compulsory	Sel	Type	Code	Course	Credit	Hrs/wk	Total	Lecture	Exp	Prac						Star
					analysis tools												
		☆		109642	software engineering introduction	2	16	32	32	0	0					2	☆
		☆		102223	Selected Readings of Advanced Algebra	3	16	48	48	0	0					3	☆
		☆		100193	Selected Readings of Advanced Mathematics Ⅱ	3	16	48	48	0	0					3	☆
		☆		103173	Big Data Analysis	3	16	48	48	0	0					3	☆
		☆		103183	multivariate statistical analysis and R language modeling	3	16	48	36	12	0					3	☆
subtotal						11		176	130	46				3	3	5	
compre hensive applicat ion course	Com puls ory	☆	Application course	109251	Social survey I	1.0	3	0	0	0	0		0				☆
		☆		109261	Social survey II	1.0	3	0	0	0	0			0			☆
		☆		109051	Annual paper	1.0	3	0	0	0	0				0		☆
		☆		109141	Relevant industry research	1.0	2	0	0	0	0				0		☆
		☆		107034	Graduation practice	4.0	10	0	0	0	0					0	☆
		☆		109053	Graduation Thesis	3.0	5	0	0	0	0					0	☆
subtotal						11											

Manager of the Specialty ： Chen Jianchao   Vice-dean in charge：Huang Hui

Dean：Hu Guiwu