Appendix A- （Curriculum for Civil Engineering ）

Note: CP-Credit Point，S-Semester，L-Lecture，P-Pracitice		Type	Chinese CP	ECTS CP	Workload		S1	S2	S3	S4	S5	S6	S7	S8
Course module	Module				Contact Hours	Self-Study Hours	CP	CP	CP	CP	CP	CP	CP	CP
Mathematics and Natural Sciences	Advanced Mathematics A(1)	L	4.5	4.5	72	63	4.5							
	Advanced Mathematics A(2)	L	6	6	96	84		6						
	Linear algebra	L	2	2	32	28		2						
	Probability and statistics	L	2	2	32	28			2					
	University Physics (1)	L	2.5	2.5	40	35		2.5						
	University Physics (2)	L	3	3	48	42			3					
	University Physics Experiments (1)	L&P	1	2	16	44		2						
	University Physics Experiments (2)	L&P	1	2	16	44			2					
	University Chemistry	L&P	2	3	32	58	3							
	Operations Research B	L	2	2	32	28				2				
Informatics courses	Basic computer courses in college	L&P	2.5	2.5	40	35	2.5							
	C language programming	L&P	4	5	60	90		5						
Engineering Fundamentals courses	Drawing geometry B	L	2	2	32	28		2						
	Introduction to civil engineering	L	1.5	1.5	24	21		1.5						
	Graphing of Engineering	L	1.5	1.5	24	21			1.5					
	CAD Technological base	L&P	1.5	2.5	24	51			2.5					
	Theoretical mechanics	L	2	2	32	28			2					
	Mechanics of materials	L	3	3	48	42			3					
	Civil engineering materials	L&P	2	3	32	58			3					
	Engineering Survey A	L&P	2	3	32	58				3				
	Structural Mechanics (1)	L	3.5	3.5	56	49				3.5				
	Structural Mechanics (2)	L	1.5	1.5	24	21					1.5			
	Engineering geology	L&P	1.5	2	24	36				2				
	Design principle of concrete structure	L&P	3.5	4	56	64				4				
	Soil mechanics and foundation	L&P	3	3	48	42				3				
	Design principle of steel structure	L	2	2	32	28				2				
	Construction technology and organization of civil engineering	L	3	3	48	42						3		
Engineering Applications	**Architectural engineering**													
	Building construction	L	3	3	48	42				3				
	Design of steel structure	L	2.5	2.5	40	35					2.5			
	Concrete and masonry structure design	L	3.5	3.5	56	49						3.5		
	Building aseismicity	L	1.5	1.5	24	21							1.5	
	High-rise buildings	L	2	2	32	28							2	
	Estimated budget for construction projects	L	2	2	32	28							2	
	Road and bridge engineering													
	Road survey and design	L	3	3	48	42				3				
	Roadbed and pavement engineering	L	3	3	48	42					3			
	Hydrology for bridge and culvert	L	1.5	1.5	24	21					1.5			
	Bridge Engineering (1)	L	2.5	2.5	40	35					2.5			
	Bridge Engineering (2)	L	2.5	2.5	40	35							2.5	
	Highway project budget estimate	L	2	2	32	28							2	
	Geotechnical and urban underground engineering													
	Rock mechanics	L&P	2	2	32	28				2				
	Geotechnical investigation and testing	L&P	2	2	32	28					2			
	Underground structures	L	3	3	48	42						3		
	Slope engineering and foundation treatment	L	2.5	2.5	40	35						2.5		
	Subway and tunnel engineering	L	3	3	48	42							3	
	Estimates for underground works	L	2	2	32	28							2	
	Major electives (4.5 credits required)													
	Overall design method of structural plane	L	1.5	1.5	24	21								
	Specialized English	L	1.5	1.5	24	21								
	BIM and structural design software	L	2	2	32	28								
	safety	L	1.5	1.5	24	21								
	Introduction to engineering supervision	L	1.5	1.5	24	21								
	Bridge Computer	L	1.5	1.5	24	21								
	Intelligent Construction (Bilingual Course)	L	1.5	1.5	24	21								
	Tunneling Project	L	1.5	1.5	24	21								
	Engineering structure test and inspection	L&P	1.5	1.5	24	21								
	Introduction to environment protection	L	1.5	1.5	24	21								
	correction	L	1.5	1.5	24	21								
	Improvement and reinforcement of rock and soil mass	L	1.5	1.5	24	21								
	Geological disasters prevention and cure	L	1.5	1.5	24	21								
	Prefabricated building	L	1.5	1.5	24	21								
	Hydromechanics	L	1.5	1.5	24	21								
	Engineering economics and project management	L	1.5	1.5	24	21								
	Laws of Civil Engineering	L	1	1	16	14								
Architectural engineering, road and bridge engineering	National defense education entrance education	P	1	2	44	16	2							
	Voluntary labour	P	1	2	22	38	2							
	Internet+Spread Xi's thoughts on socialism with Chinese characteristcs in the new era into thousands households	L&P	1	2	22	38							2	
	English application ability practice	L&P	1	2	22	38			2					
	Acquaintanceship Practice	P	1	3	22	68			3					

Appendix A- （Curriculum for Civil Engineering ）

Note: CP-Credit Point，S-Semester，L-Lecture，P-Pracitice		Type	Chinese CP	ECTS CP	Workload		S1	S2	S3	S4	S5	S6	S7	S8
Course module	Module				Contact Hours	Self-Study Hours	CP	CP	CP	CP	CP	CP	CP	CP
Practical Training	engineering, geotechnical and urban underground engineering — "C language programming" course design	L&P	1	2	22	38				2				
	Course design of engineering graphing	L&P	1	2	22	38				2				
	Social Survey (Summer)	P	4	4	88	32								
	Engineering measuring practice	L&P	2	5	44	106					5			
	Construction organization course design	L&P	1	2	22	38						2		
	Corporate Professional Practice (1)	P	4	8	88	152						8		
	Corporate Professional Practice (2)	P	4	8	88	152							8	
	Architectural engineering — Course Design of House Architecture	L&P	3	6	66	114					6			
	Foundation engineering course design A	L&P	1	2	22	38					2			
	Steel structure course design	L&P	2	4	44	76					4			
	Course design of concrete and masonry structure	L&P	3	6	66	114						6		
	Construction engineering budget course design	L&P	1	2	22	38							2	
	Road and bridge engineering — Course design of road survey	L&P	2	4	44	76				4				
	Concrete course design A	L&P	2	4	44	76					4			
	Roadbed and pavement course design	L&P	2	4	44	76					4			
	Foundation engineering course design A	L&P	1	2	22	38					2			
	Bridge engineering course design	L&P	2	4	44	76							4	
	Highway engineering budget course design	L&P	1	2	22	38							2	
	Geotechnical and urban underground engineering — Concrete course design B	L&P	1	2	22	38					2			
	design	L&P	1	2	22	38					2			
	Foundation engineering course design B	L&P	2	4	44	76					4			
	Course design of underground building structure	L&P	2	4	44	76						4		
	Course design of slope and foundation treatment	L&P	1	2	22	38						2		
	Subway and tunnel engineering course design	L&P	2	4	44	76							4	
	Underground engineering budget course design	L&P	1	2	22	38							2	
Foreign Language	College English (1)	L	3	3	48	42	3							
	College English (2)	L	2	2	32	28		2						
	College English (3)	L	3	3	48	42			3					
	College English (4)	L	3	3	48	42				3				
General Courses	Ideology, morality and rule of law	L	2.5	2.5	40	35	2.5							
	Basic principle of Marxism	L	3	3	48	42							3	
	Outline of Chinese Modern History	L	2.5	2.5	40	35				2.5				
	Introduction to MAO Zedong Thought and the theoretical system of socialism with Chinese characteristics	L	2	2	32	28			2					
	Introduction toXi Thought on socialism with Chinese characteristics in the new era	L	3	3	48	42					3			
	Situation and Policy (1)	L	1.5	1.5	24	21	0.5				0.5	0.5		
	Situation and Policy (2)	L	0.5	0.5	8	7							0.5	
	Writing)	L	2	2	32	28	2							
Quality Expansion Courses	Physical Education (1)	L&P	1	3	36	54	3							
	Physical Education (2)	L&P	1	3	36	54		3						
	Physical Education (3)	L&P	1	3	36	54			3					
	Physical Education (4)	L&P	1	3	36	54				3				
	Cultural quality education (Chinese culture, natural science, etc.)	L	1	1	16	14	1							
	Cultural Quality Education (Public Art)	L	2	2	32	28	2							
	Psychological and health education of college students	L&P	1	2	32	28	2							
	Military theory and national security education	L	2	2	36	24					2			
	Career Development and Guidance for College Students (1)	L&P	1	3	16	74						3		
	Career Development and Guidance for College Students (2)	L&P	1	3	16	74					3			
	Innovation and Entrepreneurship Education (1)	L&P	1	3	16	74						3		
	Innovation and Entrepreneurship Education (2)	L&P	1	3	16	74							3	
Bachelor Thesis	Bachelor Thesis	L&P	15	30	160	740								30
Total			170	240	2926	4274	30	31	31	31.0	29.5	29	28.5	30