

Civil Engineering Curriculum

	Term	Course Name	Credit	Class Hour				Course Type	
				Lecture	Experiment	Computer	Practice		
1st Academic Year	1st Semester	Basic Law	2.5	40				Compulsory	
		Linear Algebra	3	48				Compulsory	
		Military Training	3				3 week	Compulsory	
		Physical Education	1	4			18	Compulsory	
		Advanced Mathematics(I)	4.5	72				Compulsory	
		Descriptive Geometry and Drawing B(I)	2	32				Compulsory	
		College Computer Science	2	24			12		
		Language(I)	3	48				Compulsory	
		Health Education	0.5	8					
		Total	21.5						
		2nd Semester	Chinese Modern History	1.5	24				Compulsory
	Physical Education(II)		1	4			18	Compulsory	
	Language(II)		3	48				Compulsory	
	C Language Program		3	32			24	Optional	
	Advanced Mathematics(II)		6.5	104				Compulsory	
	College Physics(I)		3.5	56				Compulsory	
	Descriptive Geometry and Drawing B(II)		3	40			12	Compulsory	
	Common Chemistry		2	32				Optional	
	Surveying.		3	32	24			Compulsory	
	Military Theory		0.5	8				Compulsory	
	Total		27						
	3rd Semester	Comprehensive Course	2	32				optional	
		Surveying Practice	2				2 week	Compulsory	
		Civil and Hydraulic Engineering Experiment	1		24			Compulsory	
		Total	5						
	2nd Academic Semester	1st Semester	Language(III)	3	48				Compulsory
			Physical Education(III)	1	4			18	Compulsory
Probability and Statistics			3	48				Compulsory	
College Physics(II)			3	48				Compulsory	
Politics			4	64				Compulsory	
Electrical Engineering and Technology			2	32				Optional	
Electrical Engineering and Technology Experiment(I)			0.5		12			Optional	
College Physics Experiment(I)			1	4	24			Compulsory	
Introduction of Civil and Hydraulic Engineering			2	32				Compulsory	

		Theory of Mechanics	4	64				Compulsory	
		Shadow and Perspective	2	32				Optional	
		Total	25.5						
	2nd Semester		Language(IV)	3	48				Compulsory
			Politics	2.5	40				Compulsory
			College Physical Experiment(II)	1		24			Compulsory
			Mechanics of Material	4	64	8			Compulsory
			Hydraulics(I)	3.5	56	8			Compulsory
			Engineering Geology(I)	2	24	12			Compulsory
			Transform Prognosticate	2	28	6			Optional
			Basis of Analytical Mechanics	1.5	24				Optional
			Electrical Engineering and Technology Experiment(II)	0.5		12			Optional
			Computer Graphics	2	32				Optional
			Physical Education	1	4			18	Compulsory
	Total	23							
3rd Semester		Cognition Practice	1.5				1.5 week	Compulsory	
		Comprehensive Course	2	32				Optional	
		Architectural Legislation	1	16				Optional	
		Total	4.5						
3rd Academic Semester	1st Semester	Structural Mechanics(I)	4	64				Compulsory	
		Soil Mechanics	4	56	12			Compulsory	
		Architectural Material	2.5	32	12			Compulsory	
		Reinforced Concrete Structure(I)	2.5	40				Compulsory	
		Road Surveying	2	28	6			Optional	
		Advanced Material Mechanics	1.5	24				Optional	
		Hydraulics(II)	1.5	24	4			Optional	
		Engineering Geology(II)	1	16				Optional	
		Design of Bridge Crossing	2	32				Optional	
		Hydrology of Bridge and Culvert	2	32				Optional	
		Geomechanics	2	32				Optional	
	Comprehensive Course	2	32				Optional		
		Total	Compulsory14+Optional Course						
	2nd Semester		Basis of Engineering	3	48				Compulsory
		Reinforced Concrete Structure(II)	2	32	4			Compulsory	
		Steel Structure	2	32				Compulsory	
		Special Subject of Structural Mechanics	2	32				Compulsory	
		Elastic Mechanics & Finite Element Programming	2.5	40				Compulsory	
		Load and Structure Design Method	2	32				Optional	
		Treatment of Soft Soil Foundation	2	32				Optional	

	Management of Construction Project	2	32				Optional
	Principle of Construction Monitoring	2	32				Optional
	Option of Bridge Structure	2	32				Optional
	Quota and Valuation of Engineering Construction	2	32				Optional
	Mechanical Analysis and Application of Engineering	2	32				Optional
	Engineering Structure Software	2	32				Optional
	Numerical Simulation of Geotechnical Engineering	2	32				Optional
	Road Engineering CAD	2	32				Optional
	Economy of Road Engineering	2	32				Optional
	Comprehensive Course	2	32				Optional
	Scientific Writing	2	32				Optional
	Engineering Economy and Management	2	32				Optional
	Total	Compulsory 11.5+Optional Course					
	3rd Semester	Production Practice	3				3 week
Reinforced Concrete Structure Design		1.5				1.5 week	Compulsory
Steel Structure Design		1.5				1.5 week	Compulsory
Total		6					
4th Academic Semester	1st Semester	Design Theory of Composite Structure	2	32			Optional
		Qualitative Structural Mechanics	1	16			Optional
		Earthquake-Resistant Structure	2	32			Optional
		Masonry Structure and Wood Structure	2	32			Optional
		Large-Span Steel Structure	2	32			Optional
		Prestressed Reinforced Concrete Construction	2	32			Optional
		Subgrade and Pavement Engineering	2	32			Optional
		Strengthening of Engineering Structure	2	32			Optional
		Architectural Instruments	2	32			Optional
		Option of Architectural Structure	2	32			Optional
		New Architectural Material	2	32			Optional
		Safety of Construction	2	32			Optional
		Building Architecture	3	48			Compulsory
		Design of High-level Building Structure	2	32			Compulsory
		Engineering Construction	3	48			Compulsory
		Engineering Structure Experiment	2	24	12		Compulsory
		Bridge Engineering	3	48			Compulsory

	Road and Bridge Construction	3	48				Compulsory
	Road Surveying Design	2	32				Compulsory
	Detection Technology and Experiment of Road and Bridge	3	32	24			Compulsory
	Steel Bridge	2	32				Optional
	Anti-seismic Bridge Construction	2	32				Optional
	Total	Compulsory 10+Optional Course					
2nd Semester	Graduation Project	14				14 week	Compulsory
	Course Design of Building Construction	1.5				1.5 week	Compulsory
	Course Design of Building Construction Organization	1.5				1.6 week	Compulsory
	Course Design of Bridge Engineering	1.5				1.7 week	Compulsory
	Course Design of Road Surveying	1.5				1.8 week	Compulsory
	Total	17					