



## **Appendix B-1: The Number of Hours and Credits for Each Module in Civil Engineering**



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Module	curriculum	credit	total class hours	Contact hours	Self-study hours	remarks
Mathematical physics	Advanced Mathematics A (1)	4.5	135	72	63	
	Advanced Mathematics A (2)	5	150	80	70	
	Linear Algebra A	2	60	32	28	
	Probability Theory and mathematical Statistics A	2.5	75	40	35	
	University Physics (1)	3	90	48	42	
	University Physics (2)	3	90	48	42	
	General Chemistry A	2.5	75	40	35	
	Mathematical Modeling	1.5	45	24	21	
	University physics Experiment	2	60	48	12	
Information technology	College students Computer Foundation	1.5	45	32	13	
	Computer Language	2.5	75	48	27	
Engineering foundation	Descriptive geometry	3	90	48	42	
	Civil Engineering Drawing (including CAD)	1.5	45	24	21	
	Rational Mechanics	4	120	64	56	
	Mechanics of Materials	3.5	105	56	49	
	Structural Mechanics (1)	3	90	48	42	
	Structural Mechanics (2)	2.5	75	40	35	
	Soil Mechanics	2.5	75	40	35	
	Hydrodynamics	2	60	32	28	
	Civil Engineering Materials	2.5	75	40	35	
	Engineering Survey B	3	90	56	34	
	Engineering Geology	2	60	32	28	
	Electrical and Electronic Training A	2	60	32	28	
	Engineering Geology Internship	2	60	32	28	
	Measurement Internship	3	90	64	26	
Goldsmithing Practice A	2	60	32	28		
Professional foundation	Foundation Work	2	60	32	28	
	Principles of Concrete Structure Design	4	120	64	56	
	Engineering Economy and Building Regulations	2	60	32	28	
	Introduction to Civil Engineering	1.5	45	24	21	
	Basic Principles of Steel Structure	2.5	75	40	35	
	Introduction to Seismic Engineering	1	30	16	14	



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	Intensive Study	2.5	75	32	43	
Professional applications	Project Management	1	30	16	14	
	Construction Principles and Methods	3.5	105	56	49	
	Engineering Structure Load and Reliability Theory	1.5	45	24	21	
	High-rise Building Structure	2	60	32	28	Construction
	Building Construction	2.5	75	40	35	
	Design of Steel Structure	3	90	48	42	
	Masonry Structure	2	60	32	28	
	Concrete Structure Design	3.5	105	56	49	
	Modular Construction	1.5	45	24	21	
	Construction Project Estimate and Budget	1.5	45	24	21	
	Construction of Building Works	2	60	32	28	
	Hydrology of Bridge and Culvert	1.5	45	24	21	
	Road Survey and Design	2.5	75	40	35	
	Roadbed Pavement Works	3	90	48	42	
	Bridge Engineering (I)	3.5	105	56	49	
	Bridge Engineering (II)	2.5	75	40	35	
	Road and Bridge Construction Technology	2	60	32	28	
	Road Bridge Project Estimate and Budget	1.5	45	24	21	
	Traffic Engineering	1.5	45	24	21	
	Urban rail Transit Network Planning and Line Design	3	90	48	42	urban rail
	Orbital Engineering	3	90	48	42	
	Tunnels and Underground Works	3	90	48	42	
	Railroad Bridge	2	60	32	28	
Urban Rail Transit Station	1.5	45	24	21		
Railroad Bed	2	60	32	28		
Urban Rail Project Estimate and Budget	1.5	45	24	21		
Road and Railway Engineering Construction Technology	2	60	32	28		
Course Design of Architectural Engineering	2	60	32	28	Construction	
Ribbed Beam Floor Course Design (including masonry)	2	60	32	28		
Single Layer Industrial Plant Course Design	2	60	32	28		
Steel Structure Course Design	2	60	32	28		



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	Road survey and Design Course Design	2	60	32	28	Road bridge
	Roadbed Pavement Engineering Course Design	2	60	32	28	
	Trench Wall Course Design	2	60	32	28	
	Bridge Engineering Course Design	2	60	32	28	
	urban rail	Urban rail Transit Line Course Design	2	60	32	28
		Orbital Engineering Course Design	2	60	32	28
		Railway Bridge Course Design	2	60	32	28
		Course Design of Tunnel and Underground Engineering	2	60	32	28
	Experiments of Mechanics of Material	1	30	12	18	
	Building Materials test	1	30	16	14	
	Soil mechanics Experiment	1	30	12	18	
	Course Design of Concrete Structure Design Principle	2	60	32	28	
	Basic Engineering Course Design	2	60	32	28	
	Overview of Budgeting Course Design	2	60	32	28	
	Construction Organization Curriculum Design	2	60	32	28	
	Graduating Education	2	60	32	28	
Professional development category	Foundation of Innovation and Entrepreneurship	1.5	45	32	13	
	Literature Search and Research Methods	1	30	8	22	
	BIM Foundation	1	30	24	6	
	New Technology in Civil Engineering	1	30	16	14	
	Civil Engineering Structure Test Technology	1.5	45	32	13	
	Civil engineering Structure Testing Technology	1.5	45	32	13	
Comprehensive Application	Construction Internship	10	300	120	180	
	graduation Field work	4	120	50	70	
	Graduation comprehensive training	28	840	420	420	
Foreign Languages	College English (1)	3	90	48	42	
	College English (2)	3	90	48	42	
	College English Extension Series (1)	1.5	45	24	21	
	College English Extension Series (2)	1.5	45	24	21	
	College English Practice (1)	1.5	45	32	13	



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	College English Practice (2)	1.5	45	32	13	
	special English	2	60	32	28	
Humanities and social sciences	Ideological Morality and Rule of Law	3	90	48	42	
	Essentials of Chinese Modern History	3	90	48	42	
	Basic principles of Marxism	3	90	48	42	
	An overview of MAO Zedong Thought and the Theoretical System of Socialism With Chinese Characteristics	5	150	80	70	
	Situation and Policy	2	60	32	28	
	Mental Health Education for College Students	1.5	45	32	13	
	Career development and Employment Guidance for College Students (1)	1	30	20	10	
	Career development and Employment Guidance for College Students (2)	1	30	18	12	
	Military theory for college students	2	60	36	24	
	University Physical Education and Health (1)	1.5	45	32	13	
	University Physical Education and Health (2)	1.5	45	32	13	
	University Physical Education and Health (3)	1	30	16	14	
	University Physical Education and Health (4)	1	30	16	14	
	Introduction to Life Sciences	1	30	16	14	
	Introduction to Environmental Science	1	30	16	14	
	Enrollment education and Military Training	4	120	96	24	
	Social practice and Volunteer Service	2	60	32	28	
	An overview of Xi Jinpings Thought on Socialism with Chinese Characteristics for a New Era	3	90	40	50	
	Voluntary Work	2	60	60	0	