



Civil Engineering

Semester	Subject	Total hours of academic work with teacher support	Total hours of independent student work	Total hours of academic work	Credits	Prerequisites
1	Calculus (I)	102	85	187	7.5	
1	Physics (I)	85	68	153	6.1	
1	Physics Lab. (I)	51	51	102	4.1	
1	Introduction to Computer Science	85	68	153	6.1	
1	English (I)	68	51	119	4.8	
1	Chemistry	85	51	136	5.4	
1	Chemistry Lab	51	51	102	4.1	
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Total semester hours		527	425	952	38.1	
2	Calculus (II)	102	85	187	7.5	Calculus (I)
2	Physics (II)	85	68	153	6.1	Physics (I)
2	Physics Lab. (II)	51	51	102	4.1	Physics (I), Physics Lab. (I)
2	Programming Language	85	68	153	6.1	Introduction to Computer Science
2	English (II)	68	51	119	4.8	English (I)
2	Physics (III)-Statics	85	68	153	6.1	Physics (I), Calculus (I)
2	Engineering Drawing	68	51	119	4.8	
2	Introduction to Civil Engineering	34	17	51	2.0	
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2						
Total semester hours		578	459	1037	41.5	
3	Chinese (I)	68	51	119	4.8	
3	Statistics (I)	68	51	119	4.8	Calculus (I)
3	Guarani Language	68	51	119	4.8	
3	Physics (IV)-Dynamics	85	68	153	6.1	Calculus (I), Physics (III)-Statics
3	Surveying Practice	51	51	102	4.1	Introduction to Civil Engineering
3	Engineering Mathematics (I)	85	68	153	6.1	Calculus (II)
3	Engineering Materials	85	68	153	6.1	Chemistry
3	Surveying	51	51	102	4.1	Introduction to Civil Engineering
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Total semester hours		561	459	1020	40.9	
4	Statistics (II)	68	51	119	4.8	Statistics (I)
4	Chinese (II)	68	51	119	4.8	Chinese (I)
4	Engineering Mathematics (II)	85	68	153	6.1	Engineering Mathematics (I)
4	Engineering Economics	85	68	153	6.1	Introduction to Civil Engineering
4	Mechanics of Materials	102	85	187	7.5	Physics (III)-Statics
4	Engineering Geology	51	51	102	4.1	Introduction to Civil Engineering
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Total semester hours		459	374	833	33.4	



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5	Research Methodology	68	51	119	4.8	
5	Hydrology for Engineers	51	51	102	4.1	
5	Fluid Mechanics	85	68	153	6.1	Engineering Mathematics (I)
5	Structural Analysis	68	51	119	4.8	Physics (III)-Statics , Engineering Mathematics (II), Mechanics of Materials
5	Soil Mechanics	68	51	119	4.8	Mechanics of Materials
5	Environmental Engineering	68	51	119	4.8	Introduction to Civil Engineering
5	Foundation Engineering	68	51	119	4.8	Physics (III)-Statics , Engineering Mathematics (II), Mechanics of Materials
5	Transportation Engineering	68	51	119	4.8	Surveying
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Total semester hours		544	425	969	39	
6	Optative (1)	68	51	119	4.8	Have passed all subjects up to the third semester
6	Optative (2)	68	51	119	4.8	Have passed all subjects up to the third semester
6	Optative (3)	68	51	119	4.8	Have passed all subjects up to the third semester
6	Reinforced Concrete Structure Design	68	51	119	4.8	Structural Analysis
6	Steel Structure Design	68	51	119	4.8	Structural Analysis
6	Construction Management	51	51	102	4.1	Engineering Economics
6	Hydraulic Engineering	68	51	119	4.8	Hydrology for Engineers
6	Soil Test	51	51	102	4.1	Soil Mechanics
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6						
Total semester hours		510	408	918	37	
7	Optative (4)	68	51	119	4.8	Have passed all subjects up to the third semester
7	Optative (5)	68	51	119	4.8	Have passed all subjects up to the third semester
7	Optative (6)	68	51	119	4.8	Have passed all subjects up to the third semester
7	Civil Engineering Construction	51	51	102	4.1	Reinforced Concrete Structure Design, Steel Structure Design
7	Quality Control of Concrete	51	51	102	4.1	Reinforced Concrete Structure Design
7	Material and Structural Test	68	68	136	5.4	Steel Structure Design
7	Civil Engineering Design Practice (I)	0	300	300	12.0	Have passed all subjects up to the sixth semester
7	Local Regulation	68	68	136	5.4	Construction Management
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Total semester hours		442	691	1133	45.4	
8	Practice Work Training in Comppany	0	300	300	12.0	Have passed all subjects up to the sixth semester
8	Civil Engineering Design Practice (II)	0	300	300	12.0	Have passed all subjects up to the seventh semester
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Total semester hours		0	600	600	24	
TOTAL HOURS		3621	3841	7462		
TOTAL CREDITS					299.3	