Department of Civil Engineering
Semester Wise Distribution of Courses

1st Year 1st Semester

Course code	Course Title	Contact hours/Week	Credits	Remarks
CE 1101	Surveying	4.00	4.00	
MATH 1101	Differential and Integral Calculus, Matrices	3.00	3.00	
PHY 1101	Physical Optics, Heat, Waves, Oscillation and Thermodynamics	3.00	3.00	
CHEM 1101	Chemistry -1	3.00	3.00	
HUM 1101	English	2.00	2.00	
HUM1103	Bengali Language and Literature	3.00	3.00	
CE 1100	Civil Engineering Drawing-I	3.00	1.50	
PHY 1102	Physics Sessional	3.00	1.50	
HUM 1102	Developing English Language Skills	3/2	0.75	
	Total =	25.50	21.75	

Theory: 18
Sessional: 3.75

1st Year 2nd Semester

Course code	Course Title	Contact hours/Week	Credits	Remarks
CE 1201	Engineering Mechanics	4.00	4.00	
MATH 1201	Differential Equations and Statistics	3.00	3.00	
PHY 1201	Structure of Matter, Electricity and Magnetism and Modern Physics	3.00	3.00	Select any one
CHEM 1201	Chemistry-II	3.00	3.00	
HUM 1207	Bangladesh Studies (History of Independence)	3.00	3.00	
EEE 1211	Basic Electrical Technology	3.00	3.00	
CE 1200	Civil Engineering Drawing-II	3.00	1.50	
CE 1202	Surveying Field Work	3.00*	1.50	
CHEM 1202	Inorganic Quantitative Analysis	3/2	0.75	
MES 1202	Mechanical Engineering Shops	3.00	1.50	
	Total =	**26.50**	**21.25**	

*CE 1202 Surveying Field Work may be conducted at a suitable time within the first year period depending upon the weather condition.
Theory: 16

Sessional: 5.25

2nd Year 1st Semester

Course code	Course Title	Contact hours/week	Credits	Remarks
CE 2101	Numerical Methods for Engineering	2.00	2.00	
CE 2103	Engineering Materials	3.00	3.00	
CE 2111	Mechanics of Solids-I	3.00	3.00	
HUM 2101	Sociology	2.00	2.00	Select any one
HUM 2103	Government	2.00	2.00	
HUM 2105	Moral Philosophy	2.00	2.00	
MATH 2101	Laplace Transform and Vector Analysis	3.00	3.00	
CE 2104	Engineering Materials Sessional	3.00	1.50	
CE 2106	Details of Constructions	3.00	1.50	
CE 2108	GIS and Remote Sensing	3.00	1.50	
CE 2110	Architectural, Engineering and Planning Appreciation	3/2	0.75	
	Total =	**23.50**	**18.25**	

Theory: 13
Sessional: 5.25

2nd Year 2nd Semester

Course code	Course Title	Contact hours/week	Credits	Remarks
CE 2203	Engineering Geology and Geomorphology	2.00	2.00	
CE 2213 Prereq. CE 2111	Mechanics of Solids-II	3.00	3.00	
CE 2261	Fluid Mechanics	3.00	3.00	
MATH 2201	Applied Mathematics for Engineers	3.00	3.00	
HUM 2201	Engineering Economics and accounting	4.00	4.00	
CE 2206	Engineering Computations Sessional	3.00	1.50	
CE 2208	Quantity Surveying	3.00	1.50	
CE 2212	Structural Mechanics and Engineering Materials Sessional	3.00	1.50	
CE 2262	Fluid Mechanics Sessional	3.00	1.50	

	Total =	**27.00**	**21.00**	

Theory: 15
Sessional: 6

3rd Year 1st Semester

Course code	Course Title	Contact hours/week	Credits	Remarks
CE 3111 Prereq.CE 2111	Structural Analysis and Design-I	3.00	3.00	
CE 3115 Prereq.CE 2213	Design of Concrete Structures-I	3.00	3.00	
CE 3161	Hydrology	3.00	3.00	
CE 3131	Geotechnical Engineering-I	3.00	3.00	
CE 3141	Environmental Engineering-I	3.00	3.00	
CE 3102	Professional Practices and Communication Sessional	3/2	0.75	
CE 3132	Geotechnical Engineering Sessional-I	3.00	1.50	
CE 3142	Environmental Engineering Sessional	3.00	1.50	
	Total =	**22.50**	**18.75**	

Theory: 15
Sessional: 3.75

3rd Year 2nd Semester

Course code	Course Title	Contact hours/week	Credits	Remarks
CE 3211 Prereq.CE3111	Structural Analysis and Design-II	3.00	3.00	
CE 3215 Prereq.CE3115	Design of Concrete Structures-II	3.00	3.00	
CE 3231	Geotechnical Engineering-II	3.00	3.00	
CE 3261 Prereq.CE 2261	Engineering Hydraulics	3.00	3.00	
CE 3251	Transportation Engineering-I	3.00	3.00	
CE 3216	Design of Concrete Structures Sessional-I	3.00	1.50	
CE 3262	Engineering Hydraulics Sessional	3.00	1.50	
CE 3000	Integrated Design Project (IDP)	3.00	1.50	
CE 3200	Civil Engineering Students'	*	1.50	

	Internship Program (CESIP)			
	Total =	24.00	21.00	

Theory: 15

Sessional: 6

*Equivalent Contact Hour [Duration – 4 Weeks; after Year Final Examination].

4th Year 1st Semester

Course code	Course Title	Contact hours/week	Credits	Remarks
CE 4141 Prereq. CE 3141	Environmental Engineering-II	3.00	3.00	
CE 4111 Prereq. CE 3111	Structural Analysis and Design-III	3.00	3.00	
CE 4161 Prereq. CE 3161	Irrigation and Flood Management	3.00	3.00	
CE 4131	Geotechnical Engineering-III	3.00	3.00	
CE 4151 Prereq. CE 3251	Transportation Engineering-II	3.00	3.00	
CE 4110	Design of Concrete Structures Sessional-II	3.00	1.50	
CE 4152	Transportation Engineering Sessional-I	3.00	1.50	
CE 3000	Integrated Design Project (IDP)	3.00	1.50	
CE 4000	Project /Thesis	3.00	1.50	
	Total =	**27.00**	**21.00**	

Theory: 15

Sessional: 6

4th Year 2nd Semester

Option I

Course code	Course Title	Contact hours/week	Credits	Remarks
CE 4201	Project Planning and Construction Management	3.0	3.0	

Option II (Structural Engineering)

Course code	Course Title	Contact hours/week	Credits	Remarks
CE 4213	Introduction to Steel-Concrete Composite Structures	2.0	2.0	
CE 4215	Prestressed Concrete	2.0	2.0	
CE 4217	Design of Concrete Structures-III	2.0	2.0	
CE 4219	Introduction to Finite Element Method	2.0	2.0	
CE 4221	Dynamics of Structures	2.0	2.0	
Course code	**Course Title**	**Contact hours/week**	**Credits**	**Remarks**
CE 4223	Structural Safety	2.0	2.0	
CE 4225	Seismic Design of Structures	2.0	2.0	
CE 4227	Advanced Solid Mechanics	2.0	2.0	
CE 4229	Design of Steel Structure	2.0	2.0	
CE 4212	Computer Aided Analysis and Design of Structures Sessional	3.0	1.5	
CE 4220	Steel Structures Design Sessional	3.0	1.5	

Option III(Geotechnical Engineering)

Course code	Course Title	Contact hours/week	Credits	Remarks
CE 4233	Geotechnical Engineering-IV	2.0	2.0	
CE 4235	Geotechnical Engineering-V	2.0	2.0	
CE 4237	Geotechnical Engineering-VI	2.0	2.0	
CE 4239	Numerical Methods in Geotechnics	2.0	2.0	
CE 4232	Geotechnical Engineering Design Sessional	3.0	1.5	

Option IV (Environmental Engineering)

Course code	Course Title	Contact hours/week	Credits	Remarks
CE 4241	Natural Resources and Renewable Energy	2.0	2.0	
CE 4243	Solid and Hazardous Waste Management	2.0	2.0	
CE 4245	Environmental Pollution management	2.0	2.0	
CE 4247	Climate Change and Disaster Management	2.0	2.0	
CE 4249	Environmental Impact Assessment and Sustainability	2.0	2.0	
CE 4242	Design of Water Supply, Sanitation and Sewerage Systems	3.0	1.5	

Option V (Transportation Engineering)

Course code	Course Title	Contact hours/week	Credits	Remarks
CE 4253	Transportation Engineering-III: Traffic Engineering Design & Management	2.0	2.0	
CE 4255	Transportation Engineering-IV: Pavement Management, Drainage and Airport	2.0	2.0	
CE 4257	Transportation Engineering-V: Urban Transportation Planning and Management	2.0	2.0	
CE 4259	Intelligent Transportation System	2.0	2.0	
CE 4251	Railway Engineering	2.0	2.0	
CE 4254	Transportation Engineering Sessional-II: Pavement Design and Traffic Studies	3.0	1.5	

Option VI (Water Resources Engineering)

Course code	Course Title	Contact hours/week	Credits	Remarks
CE 4261	Hydraulic Structures	2.0	2.0	
CE 4263	Coastal Engineering	2.0	2.0	
CE 4265	Groundwater Engineering	2.0	2.0	
CE 4267	Flood Mitigation and Management	2.0	2.0	
CE 4269	River Engineering	2.0	2.0	
CE 4262	Water Resources Engineering Sessional	3.0	1.5	

Option VII

Course code	Course Title	Contact hours/week	Credits	Remarks
CE 4000	Project /Thesis	6.0	3.0	

N.B. 1and 7-Compulsory course, (2-6) - Optional course. Students shall take one optional thesis related theory course and the corresponding sessional course from any optional group of 2-6 and three more optional theory courses from other options of 2-6 but not more than one from each option & another corresponding sessional course**.**

Option	Course Code	Course Title	Theory	
			Contact hours/week	Credits
1.	CE 4201	Project Planning and Construction Management	3.0	3.0
Structural Engineering				
2.	CE 4213	Introduction to Steel-Concrete Composite Structures	2.0	2.0
	CE 4215	Prestressed Concrete	2.0	2.0
	CE 4217	Design of Concrete Structures-III	2.0	2.0
	CE 4219	Introduction to Finite Element Method	2.0	2.0
	CE 4221	Dynamics of Structures	2.0	2.0
	CE 4223	Structural Safety	2.0	2.0
	CE 4225	Seismic Design of Structures	2.0	2.0
	CE 4227	Advanced Solid Mechanics	2.0	2.0
	CE 4229	Design of steel structure	2.0	2.0

	CE 4212	Computer Aided Analysis and Design of Structures Sessional	3.0	1.5
	CE 4220	Steel Structures Design Sessional	3.0	1.5
Geotechnical Engineering				
3.	CE 4233	Geotechnical Engineering IV	2.0	2.0
	CE 4235	Geotechnical Engineering V	2.0	2.0
	CE 4237	Geotechnical Engineering VI	2.0	2.0
	CE 4239	Numerical Methods in Geotechnics	2.0	2.0
	CE 4232	Geotechnical Engineering Design Sessional	3.0	1.5
Environmental Engineering				
4.	CE 4241	Natural Resources and Renewable Energy	2.0	2.0
	CE 4243	Solid and Hazardous Waste Management	2.0	2.0
	CE 4245	Environmental Pollution management	2.0	2.0
	CE 4247	Climate Change and Disaster Management	2.0	2.0
	CE 4249	Environmental Impact Assessment and Sustainability	2.0	2.0
	CE 4242	Design of Water Supply, Sanitation and Sewerage Systems	3.0	1.5
Transportation Engineering				
5.	CE 4253	Transportation Engineering-III: Traffic Engineering Design & Management	2.0	2.0
	CE 4255	Transportation Engineering-IV: Pavement Management, Drainage and Airport	2.0	2.0
	CE 4257	Transportation Engineering-V: Urban Transportation Planning and Management	2.0	2.0
	CE 4259	Intelligent Transportation System	2.0	2.0
	CE 4251	Railway Engineering	2.0	2.0
	CE 4254	Transportation Engineering Sessional-II: Pavement Design and Traffic Studies	3.0	1.5
Water Resources Engineering				
6	CE 4265	Groundwater Engineering	2.0	2.0
	CE 4267	Flood Mitigation and Management	2.0	2.0
	CE 4269	River Engineering	2.0	2.0
	CE 4261	Hydraulic Structures	2.0	2.0
	CE 4263	Coastal Engineering	2.0	2.0
	CE 4262	Water Resources Engineering Sessional	3.0	1.5
7.	CE 4200	Project /Thesis	6.0	3.0
		Total	**29.00**	**20.00**

Summary

Year and Semester	Credit			Contact Hours/Week		
	Theory	**Sessional**	**Total**	**Theory**	**Sessional**	**Total**
1st Year 1st Semester	18.00	3.75	21.75	18.00	7.50	25.50
1st Year 2nd Semester	16.00	5.25	21.25	16.00	10.50	26.50
2nd Year 1st Semester	13.00	5.25	18.25	13.00	10.50	23.50
2nd Year 2nd Semester	15.00	6.00	21.00	15.00	12.00	27.00
3rd Year 1st Semester	15.00	3.75	18.75	15.00	7.50	22.50
3rd Year 2nd Semester	15.00	6.00	21.00	15.00	9.00	24.00
4th Year 1st Semester	15.00	6.00	21.00	15.00	12.00	27.00
4th Year 2nd Semester	11.00	9.00	20.00	11.00	18.00	29.00
Grand Total	**118.00**	**45.00**	**163.00**	**118.00**	**87.00**	**205.00**

**CE 1204 Surveying Field Work may be conducted at a suitable time within the first year period depending upon the weather condition.

**Internship program will conducted after Year Final Examination.