NEW CURRICULUM FROM SPRING 2019		EXISTING CURRICULUM BEFORE SPRING 2019	
UNIVERSITY AND SCHOOL CORE COURES	**57**	**UNIVERSITY AND SCHOOL CORE COURES**	**55**
Orientation (non-credit courses), credit hours = 0; ENG102: 3cr. counted, if not exempted		**Orientation (non-credit courses), credit hours = 0; ENG102: 3cr. counted, if not exempted**	
CEE100 Introduction to Civil & Environmental Engineering	3	CEE100 Introduction to Civil & Environmental Engineering	3
MAT116 Pre-calculus	3	MAT116 Pre-calculus	3
ENG102 Introduction to Composition	3	ENG102 Introduction to Composition	3
	9		**9**
Mathematics, Credit hours = 18		**Mathematics, Credit hours = 15**	
MAT120 Calculus and Analytic Geometry I	3	MAT120 Calculus and Analytic Geometry I	3
MAT130 Calculus and Analytic Geometry II	3	MAT130 Calculus and Analytic Geometry II	3
MAT250 Calculus and Analytic Geometry-IV	3		
MAT361 Introduction to Probability and Statistics	3	MAT140 Probability and Statistics for Scientists and Engineers (or MAT361 Introduction to Probability and Statistics)	3
MAT125 Linear Algebra	3	MAT125 Linear Algebra (or MAT230 Linear Algebra and Vector Analysis for Engineers)	3
MAT350 Engineering Mathematics	3	MAT260 Differential Equations & Orthogonal Functions (or MAT350 Engineering Mathematics)	3
	18		**15**
Basic & Applied Sciences, Credit hours = 24		**Basic & Applied Sciences, Credit hours = 25**	
ENV107 Environmental Science	3	ENV107 Environmental Science	3
PHY107 Physics I	3	PHY107 Physics I	3
PHY107L Physics Lab. I	1	PHY107L Physics Lab. I	1
PHY108 Physics II	3	PHY108 Physics II	3
PHY108L Physics Lab. II	1	PHY108L Physics Lab. II	1
CHE120 Inorganic chemistry (or CHE 101 Chemistry I)	3	CHE120 Inorganic chemistry (or CHE 101 Chemistry I)	3
CHE 101L Chemistry I Lab.	1	CHE120L Inorganic chemistry Lab. (or CHE 101L Chemistry I Lab.)	1
CEE209 Environmental Chemistry	3	CEE209 Environmental Chemistry	3
		CEE209L Environmental Chemistry Lab.	1
CEE260 Hydrology	3	CEE260 Hydrology	3
ENV311 Geology and Geomorphology	3	ENV311 Geology and Geomorphology	3
	24		**25**
Arts and Social Sciences, Credit hours=12		**Arts and Social Sciences, Credit hours=12**	
Mandatory 9 credits		Mandatory 9 credits	
ENG103 Intermediate Composition	3	ENG103 Intermediate Composition	3
BEN205 Bangla Language and Literature	3	BEN205 Bangla Language and Literature	3
HIS103 Emergence of Bangladesh	3	HIS103 Emergence of Bangladesh	3
Elective 3 credits		Elective 3 credits	
One University GED course from: ECO101, ECO104, SOC101, PSY210, POL210, LAW200, MGT210, PHI101, ENG105 etc.	3	One University GED course from: ENG 105, ECO101, ECO104, SOC101, PSY210, POL210, LAW200, MGT210, PHI101, etc.	3
	12		**12**

Rules:
1. Students admitting on Spring 2019 or later must follow the new curriculum on left side
2. Students who intend to obtain BSCEE degree on the new curriculum must fulfil all requirements of it.
3. No course from new curriculum might be made equivalent to a course of the old curriculum
4. Students from 191 and onwards will take CEE271L + CEE371L. All previous batch students will take CEE209L + CEE370L + CEE373L
5. MAT140 = MAT361; MAT260 = MAT350; MAT125 = MAT230
6. CHE120 = CHE101; CHE120L = CHE101L

NEW CURRICULUM FROM SPRING 2019		EXISTING CURRICULUM BEFORE SPRING 2019	
PROGRAM CORE COURSES	**83**	**PROGRAM CORE COURSES**	**85**
Engineering Tools: credit hours = 31		**Engineering Tools: credit hours = 36**	
CEE110 Computer Aided Drawing (CAD) for Engineers	3	CEE110 Computer Aided Drawing (CAD) for Engineers	3
CEE215 Numerical Analysis & Computer Programming	3	CEE215 Numerical Analysis & Computer Programming	3
CEE210 Engineering Mechanics	3	CEE210 Engineering Mechanics	3
CEE211 Fluid Mechanics	3	CEE211 Fluid Mechanics	3
CEE211L Fluid Mechanics Lab.	1	CEE211L Fluid Mechanics Lab.	1
CEE212 Solid Mechanics	3	CEE212 Solid Mechanics	3
CEE212L Solid Mechanics Lab.	1	CEE212L Solid Mechanics Lab.	1
CEE213 Surveying & Introduction to GIS	3	CEE213 Surveying & Introduction to GIS	3
CEE213L Surveying & Introduction to GIS Lab	1	CEE213L Surveying & Introduction to GIS Lab	1
CEE214 Engineering Materials	3	CEE214 Engineering Materials (with Lab.)	3
CEE214L Engineering Materials Lab.	1		
CEE310 Quantity Survey and Cost Estimates	3	CEE310 Quantity Survey and Cost Estimates	3
CEE415 Socioeconomic Aspects of Development Projects	3	CEE415 Socioeconomic Aspects of Development Projects	3
		ENV373 Environmental Impact Assessment	3
		ENV455 Research Methodology	3
	31		**36**
Civil Engineering Core Courses, 49 credits		**Civil Engineering Core Courses, 46 credits**	
Structural Engineering, credit hours =14		**Structural Engineering, credit hours =14**	
CEE330 Structural Analysis and Design - I	3	CEE330 Structural Analysis and Design - I	3
CEE330L Structural Analysis and Design Lab	1	CEE330L Structural Analysis and Design Lab	1
CEE331 Structural Analysis and Design – II	3	CEE331 Structural Analysis and Design – II	3
CEE335 Reinforced Concrete Design - I	3	CEE335 Reinforced Concrete Design - I	3
CEE335L Reinforced Concrete Design Lab.	1	CEE335L Reinforced Concrete Design Lab.	1
CEE430 Reinforced Concrete Design - II	3	CEE430 Reinforced Concrete Design - II	3
Geotechnical Engineering, credit hours =7		**Geotechnical Engineering, credit hours =7**	
CEE240 Introduction to Soil Mechanics & Foundation Engineering	3	CEE240 Introduction to Soil Mechanics & Foundation Engineering	3
CEE240L Soil Mechanics Lab	1	CEE240L Soil Mechanics Lab	1
CEE340 Advanced Foundation Engineering	3	CEE340 Advanced Foundation Engineering	3
Transportation Engineering, credit hours =7		**Transportation Engineering, credit hours =7**	
CEE250 Introduction to Transportation Engineering	3	CEE250 Introduction to Transportation Engineering	3
CEE250L Transportation Engineering Lab	1	CEE250L Transportation Engineering Lab	1
CEE350 Traffic Analysis and Design	3	CEE350 Traffic Analysis and Design	3
Water resources Engineering, credit hours =7		**Water resources Engineering, credit hours =7**	
CEE360 Open-Channel Hydraulics	3	CEE360 Open-Channel Hydraulics	3
CEE360L Open-Channel Hydraulics Lab	1	CEE360L Open-Channel Hydraulics Lab	1
CEE460 Groundwater Hydraulics	3	CEE460 Groundwater Hydraulics	3
Environmental Engineering, credit hours = 14		**Environmental Engineering, credit hours = 11**	
CEE271L Environmental Engineering Lab. I	1		
CEE370 Water Supply and Treatment	3	CEE370 Water Supply and Treatment	3
CEE371L Environmental Engineering Lab. II	1		
		CEE370L Water Supply and Treatment Lab	1
CEE373 Sanitation and Wastewater Engineering	3	CEE373 Sanitation and Wastewater Engineering	3
		CEE373L Sanitation and Wastewater Engineering Lab	1
ENV373 Environmental Impact Assessment	3		
CEE470 Solid and Hazardous Waste Engineering	3	CEE470 Solid and Hazardous Waste Engineering	3
	49		**46**

NEW CURRICULUM FROM SPRING 2019		EXISTING CURRICULUM BEFORE SPRING 2019	
Capstone Design Project, Credit hours = 3		**Capstone Design Project, Credit hours = 3**	
CEE499A Engineering Project I	1	CEE499A Engineering Project I	1.5
CEE499B Engineering Project II	1	CEE499B Engineering Project II	1.5
CEE499C Engineering Project III	1		
Internships: 0 credits		**Internships: 0 credits (mandatory for 181 and later students)**	
CEE498 internship		CEE498 internship	
(four to six weeks)		(four to six weeks)	
Notes		Notes	
A series of three courses as CEE499A, CEE499B and CEE499C (1+1+1)will be offered		A series of two courses CEE499A and CEE499B (1.5 + 1.5) will be offered two more semesters	
Fall 2019, Spring 2020 and Summer 2020		Spring 2019 and Summer 2019	
Spring 2020, Summer 2020 and Fall 2020 and onwards		Summer 2019 and Fall 2019	

NEW CURRICULUM FROM SPRING 2019		EXISTING CURRICULUM BEFORE SPRING 2019	
Civil and Environmental Engineering Elective courses: credit hours=12		**Civil and Environmental Engineering Elective courses: credit hours=12**	
Two courses (6 credits) from a single Group (Group A to Group E) and another two courses (6 credits) from any remaining group(s).		Any four courses from the following list (12 credits)	
GROUP A: Structural Engineering			
CEE431 Introduction to Structural Dynamics	3	CEE431 Introduction to Structural Dynamics	3
CEE432 Composite Structures	3		
CEE433 Finite Element Methods	3	CEE433 Finite Element Methods	3
CEE 434 Advanced Reinforced Concrete Design	3		
CEE435 Prestressed Concrete	3	CEE435 Prestressed Concrete	3
CEE437 Behavior and Design of Metal Structures	3	CEE437 Behavior and Design of Metal Structures	3
CEE439 Earthquake-resistant Design	3	CEE439 Earthquake-resistant Design	3
GROUP B: Geotechnical Engineering			
CEE441 Advanced Geotechnical Engineering	3		
CEE442 Earthen Dam and Slope Stability	3		
CEE443 Earth Retaining Structures	3		
CEE444 Advanced Soil Mechanics	3		
GROUP C: Transportation Engineering			
CEE450 Road and Traffic Safety Engineering	3	CEE490B Road and Traffic Safety Engineering	
CEE452 Pavement Analysis, Design and Construction	3		
CEE454 Advanced Traffic Engineering	3	CEE490A Advanced Traffic Engineering	
CEE458 Transportation Systems Engineering and Planning	3		
CEE459 Geometric Analysis and Design of Roads	3		
GROUP D: Water Resources Engineering			
CEE463 Integrated Water Resources Planning and Management	3		
CEE465 River Engineering	3	CEE465 River Engineering	3
CEE467 Irrigation and Drainage Engineering	3	CEE467 Irrigation and Drainage Engineering	3
CEE473 Coastal and Estuarine Analysis	3	CEE473 Coastal and Estuarine Analysis	3
CEE475 Water Resources and Environmental Modelling	3	CEE475 Environmental Modelling	3
GROUP E: Environmental Engineering			
CEE477 Ecological Engineering	3	CEE477 Ecological Engineering	3
CEE479 Air Quality Engineering	3	CEE479 Air Quality Engineering	3
CEE471 Pollution Control	3		
CEE472 Climate Change and Disaster management	3		
CEE474 Green Building and Infrastructure	3		
GROUP F: Special Topic			
CEE410 Construction Engineering	3	CEE410 Construction Engineering	3
CEE425 GIS and Remote Sensing	3		
CEE426 Urban Planning	3		
CEE427 Advance Procurement Systems	3		
CEE490 Special Topic	3	CEE490 Special Topic	3
CEE492 Undergraduate Research	3	CEE492 Undergraduate Research	3
		ENV309 Environmental Toxicology	3
		ENV408 Environmental Pollution Control	3
Total minimum Credits = 149 + 9 non-credits	**158**	**Total minimum Credits = 149 + 9 non-credits**	**158**

(Note: if ENG102 is not waived, it is counted. Total credit count will show 152. If ENG102 is waived, Total credit count will show 149.