**Civil Engineering**Bangladesh University of Engineering and Technology

| CORE: CE                                      |         |  |  |  |
|---|---------|--|--|--|
| 01  | CE      | BASIC - Analytic Mechanics   |  |  |
| 02  | CE      | BASIC - Mechanics of Solids 1  |  |  |
| 03  | CE      | BASIC - Mechanics of Solids 2  |  |  |
| 04  | CE      | BASIC - Engineering Materials (with Sessional)   |  |  |
| 05  | CE      | BASIC - Engineering Geology and Geomorphology  |  |  |
| 06  | CE      | BASIC - Surveying  |  |  |
| 07  | CE      | BASIC - Numerical Methods  |  |  |
| 08  | CE      | BASIC - Applied Mathematics of Engineering   |  |  |
| 09  | CE      | CIVIL - Professional Practices and Communication (with Sessional)                        |  |  |
| 10  | CE      | CIVIL - Project Planning and Construction Management                                     |  |  |
| 11  | CE      | STRUCTURE - Structural Analysis  |  |  |
| 12  | CE      | STRUCTURE - Design of Concrete Structures 1  |  |  |
| 13  | CE      | STRUCTURE - Design of Concrete Structures 2  |  |  |
| 14  | CE      | STRUCTURE - Design of Steel Structures   |  |  |
| 15  | CE      | STRUCTURE - Analysis of Indeterminate Structures   |  |  |
| 16  | CE      | ENVIRONMENTAL - Environmental Engineering 1 (with Sessional)                             |  |  |
| 17  | CE      | ENVIRONMENTAL - Environmental Engineering 2 (with Sessional)                             |  |  |
| 18  | CE      | GEOTECHNICAL - Principles of Soil Mechanics  |  |  |
| 19  | CE      | GEOTECHNICAL - Frinciples of Soft Mechanics  GEOTECHNICAL - Foundation Engineering       |  |  |
| 20  | CE      |  |  |  |
| -   | _       | TRANSPORTATION - Transportation Engineering 1 (Transportation Planning and Traffic)      |  |  |
| 21  | CE      | TRANSPORTATION - Transportation Engineering 2 (Pavement Design and Railways)             |  |  |
| 22  | CE      | Engineering Computation Sessional  |  |  |
| 23  | CE      | Civil Engineering Drawing Sessional  |  |  |
| 24  | CE      | Computer Aided Drafting Sessional  |  |  |
| 25  | CE      | Practical and Quantity Surveying Sessional   |  |  |
| 26  | CE      | Structural Mechanics and Materials Sessional   |  |  |
| 27  | CE      | Architectural Engineering and Planning Appreciation Sessional                            |  |  |
| 28  | CE      | Details of Construction Sessional  |  |  |
| 29  | CE      | Bridge Design Sessional  |  |  |
| 30  | CE      | Building Design Sessional  |  |  |
| 31  | CE      | Steel Structures Design Sessional  |  |  |
| 32  | CE      | Geotechnical Engineering Sessional   |  |  |
| 33  | CE      | Transportation Engineering 1: Highway Materials and Traffic Engineering Design Sessional |  |  |
| 34  | CE      | Undergraduate Thesis   |  |  |
| 35  | CE      | Capstone Project   |  |  |
| CORE: SCINECT AND TECHNOLOGY                  |         |  |  |  |
| 01  | MATH    | Differential and Integral Calculus   |  |  |
| 02  | MATH    | Differential Equations   |  |  |
| 03  | MATH    | Laplace Transform and Vector Analysis  |  |  |
| 04  | MATH    | Matrices and Statistics  |  |  |
| 05  | PHY     | Physical Optics, Wave and Oscillation, Heat and Thermodynamics (Sessional)               |  |  |
| 06  | PHY     | Structure of Matter, Electricity and Magnetism, Modern Physics (Sessional)               |  |  |
| 07  | CHE     | Chemistry  |  |  |
| 08  | CHE     | Inorganic Quantitative Analysis Sessional  |  |  |
| 09  | IPE     | Engineering Economics  |  |  |
| 10  | WRE     | Fluid Mechanics (with Sessional)   |  |  |
| 11  | WRE     | Open Channel Flow (with Sessional)   |  |  |
| 12  | WRE     | Hydrology, Irrigation and Flood Management   |  |  |
| 13  | EEE     | Basic Electrical Technology  |  |  |
| 14  | CSE     | Computer Programming Sessional   |  |  |
| 15  | SHOP    | Workshop Sessional   |  |  |
| ELECTIVE: CIVIL ENGINEERING (Any One Course)  |         |  |  |  |
| 01  | CE      | Sustainability of Development Projects   |  |  |
| 02  | CE      | Business and Career Development  |  |  |
| 03  | CE      | Principles of Project Finance  |  |  |
| ELECTIVE: STRUCTURAL ENGINEERING (Can Choose) |         |  |  |  |
| 01  | CE CE   | Introduction to Steel-Concrete Composite Structures                                      |  |  |
| 02  | CE      | Pre-stressed Concrete  |  |  |
| 03  | CE      | Design of Concrete Structures 3  |  |  |
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| 04  | CE | Introduction to Finite Element Method                                       |  |
|---|----|---|--|
| 05  | CE | Dynamics of Structures  |  |
| ELECTIVE: ENVIRONMENTAL ENGINEERING (Can Choose)  |    |   |  |
| 01  | CE | Solid and Hazardous Waste Management  |  |
| 02  | CE | Environmental Pollution Management  |  |
| 03  | CE | Basic Environmental Management  |  |
| ELECTIVE: GEOTECHNICAL ENGINEERING (Can Choose)   |    |   |  |
| 01  | CE | Earth Retaining Structures  |  |
| 02  | CE | Elementary Soil Dynamics  |  |
| 03  | CE | Soil-Water Interaction  |  |
| ELECTIVE: TRANSPORTATION ENGINEERING (Can Choose) |    |   |  |
| 01  | CE | Transportation Engineering 3 (Traffic Engineering Design and Management)    |  |
| 02  | CE | Transportation Engineering 4 (Pavement Management, Drainage and Airport)    |  |
| 03  | CE | Transportation Engineering 5 (Urban Transportation Planning and Management) |  |