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| **Bachelor of Software Engineering**  Institute of Information Technology  Dhaka University | | |
| **SEMISTER 01** | | |
| CSE 101 | Structured Programming | 3 |
| CSE 102 | Discrete Mathematics | 3 |
| STA 103 | Probability and Statistics for Engineers I | 3 |
| MAT 104 | Calculus and Analytical Geometry | 3 |
| SE 106 | Introduction to Software Engineering | 3 |
| **SEMISTER 02** | | |
| CSE 201 | Data Structure and Algorithm | 3 |
| CSE 211 | Computer Organization | 3 |
| STA 203 | Probability and Statistics for Engineers II | 3 |
| MAT 204 | Ordinary Differential Equations | 3 |
| SE 206 | Object Oriented Concepts I | 3 |
| **SEMISTER 03** | | |
| CSE 301 | Combinatorial Optimization | 3 |
| SE 312 | Theory of Computing | 3 |
| CSE 311 | Computer Networking | 3 |
| MAT 304 | Numerical Analysis for Engineers | 3 |
| SE 306 | Object Oriented Concepts II | 3 |
| SE 305 | Software Project Lab I | 3 |
| **SEMISTER 04** | | |
| CSE 401 | Operating System and System Programming | 3 |
| CSE 411 | Information Security | 3 |
| CSE 404 | Database management System I | 3 |
| SE 406 | Software Requirements Specification and Analysis | 3 |
| GE 402 | Business Psychology | 3 |
| BU 405 | Business Studies for Engineers | 3 |
| **SEMISTER 05** | | |
| SE 511 | Professional Ethics for Information Systems | 3 |
| CSE 502 | Web Technology | 3 |
| CSE 504 | Database Management System II | 3 |
| SE 506 | Design Patterns | 3 |
| SE 506 | Software Project Lab II | 3 |
| BU 503 | Business Communications | 3 |
| **SEMISTER 06** | | |
| CSE 601 | Distributed Systems | 3 |
| SE 611 | Software Metrics | 3 |
| SE 612 | Software Security | 3 |
| CSE 604 | Artificial Intelligence | 3 |
| SE 605 | Software Testing and Quality Assurance | 3 |
| SE 606 | Software Design and Analysis | 3 |
| **SEMISTER 07** | | |
| SE 811 | Software Maintenance | 3 |
| SE 803 | Software Project Management | 3 |
|  | Elective I | 3 |
|  | Elective II | 3 |
| **Elective Subjects** | | |
| CSE 802 | Computer Data ad Network Security | 3 |
| CSE 823 | Embedded Systems | 3 |
| CSE 825 | Data Mining and Warehousing | 3 |
| CSE 829 | Pattern Recognition and Image Processing | 3 |
| CSE 830 | Mobile and Wireless Computing | 3 |
| CSE 831 | Computer Graphics and Multimedia | 3 |
| CSE 837 | Machine Learning | 3 |
| CSE 839 | Human Computer Interaction | 3 |
| CSE 840 | Information Retrieval | 3 |
| CSE 844 | Applied Data Science | 3 |