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| Program: **CSE** | Department: **CSE** |

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| **University Core (G**eneral **Ed**ucation**)** | | | **39** |  |  |  |
| **Stream** | **Course Code** | **Course Name** | **Credits** | **Grade** | **GP** | **Comments (if any)** |
| **Stream 1: *Writing Comprehension*** | ENG 091 | Foundation Course | 0.0 |  |  |  |
| ENG 101 | English Fundamentals | 3.0 |  |  |  |
| ENG 102 | English Composition I | 3.0 |  |  |  |
| ENG 103\* | Advanced Writing Skills and Presentation\* | 3.0 |  |  | **\*Only for ENG102 freshers** |
| **Stream 2:**  ***Math and Natural Sciences*** | MAT 092 | Remedial Course in Mathematics | 0.0 |  |  |  |
| MAT 110 | MATH I: Differential Calculus and  Co-ordinate Geometry | 3.0 |  |  |  |
| PHY 111 | Principles of Physics I | 3.0 |  |  |  |
| STA 201 | Elements of Statistics and Probability | 3.0 |  |  |  |
| **Optional:** CHE101, BIO101, ENV103 | | | | | |
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| ***Stream 3:***  ***Arts and Humanities*** | HUM 103 | Ethics and Culture | 3.0 |  |  |  |
| **Minimum two from:** BNG103 (If completed in RS) , HUM101, HUM102, HST102, HST104, HUM207, ENG113, ENG114, ENG115, ENG333 | | | | | |
| BNG 103 | Bangla Language and Literature | 3.0 |  |  |  |
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| **Or, those who have already completed the following courses before Fall 2022 (Cannot be taken now):** ACT201, ACT202, BUS101, BUS202, BCH101, BTE101, CHE110, CHN101, FRN101, FIN301, GEO101, LAW101, HUM111/HST407, STA301 | | | | | |
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| ***Stream 4:***  ***Social Sciences*** | EMB 101 / DEV 101 | Emergence Of Bangladesh /   Bangladesh Studies | 3.0 |  |  |  |
| **Minimum one from:** PSY101, SOC101, ANT101, POL101, BUS201, ECO101, ECO102, ECO105, BUS102, POL102, POL103, POL202, PSY102, DEV104, DEV201, POL201, SOC201/ANT202, ANT342, ANT351, BUS333 | | | | | |
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| ***Stream 5:***  ***Communities, Seeking Transformation*** | **Minimum one from:** CST201, CST301, CST302, CST303, CST304, CST305, CST306, CST307, CST308, CST309, CST310 | | | | | |
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| **School Core** | | | **12** |  |  |  |
|  | **Course Code** | **Course Name** | **Credits** | **Grade** | **GP** | **Comments (if any)** |
| MAT 120 | MATH II: Integral Calculus and Differential Equations | 3.0 |  |  |  |
| MAT 215 | MATH III: Complex Variables and Laplace Transformations | 3.0 |  |  |  |
| MAT 216 | MATH IV: Linear Algebra and Fourier Analysis | 3.0 |  |  |  |
| PHY 112 | Principles of Physics II | 3.0 |  |  |  |

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| **Program Core** | | | **75** |  |  |  |
|  | **Course Code** | **Course Name** | **Credits** | **Grade** | **GP** | **Comments (if any)** |
| CSE 110 /  CSE 161 + CSE 162 L / EEE/ECE103 + EEE/ECE103 L | Programming Language I | 3.0 |  |  |  |
| CSE 111 | Programming Language II | 3.0 |  |  |  |
| CSE 220 | Data Structures | 3.0 |  |  |  |
| CSE 221 | Algorithms | 3.0 |  |  |  |
| CSE 230 | Discrete Mathematics | 3.0 |  |  |  |
| CSE 250 | Circuits and Electronics | 3.0 |  |  |  |
| CSE 251 | Electronic Devices and Circuits | 3.0 |  |  |  |
| CSE 260 / EEE/ECE 283 + EEE/ECE 283L /EEE 301 + EEE 302 | Digital Logic Design | 3.0 |  |  |  |
| CSE 320 | Data Communications | 3.0 |  |  |  |
| CSE 321 | Operating System | 3.0 |  |  |  |
| CSE 330 | Numerical Methods | 3.0 |  |  |  |
| CSE 331 | Automata and Computability | 3.0 |  |  |  |
| CSE 340 | Computer Architecture | 3.0 |  |  |  |
| CSE 341 | Microprocessors | 3.0 |  |  |  |
| CSE 350 | Digital Electronics and Pulse Techniques | 3.0 |  |  |  |
| CSE 360 | Computer Interfacing | 3.0 |  |  |  |
| CSE 370 | Database Systems | 3.0 |  |  |  |
| CSE 420 | Compiler Design | 3.0 |  |  |  |
| CSE 421 | Computer Networks | 3.0 |  |  |  |
| CSE 422 | Artificial Intelligence | 3.0 |  |  |  |
| CSE 423 | Computer Graphics | 3.0 |  |  |  |
| CSE 460 | VLSI Design | 3.0 |  |  |  |
| CSE 461 | Introduction to Robotics | 3.0 |  |  |  |
| CSE 470 | Software Engineering | 3.0 |  |  |  |
| CSE 471 | Systems Analysis and Design | 3.0 |  |  |  |

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| **Program Elective (Min 1 CSE, others maybe COD/GenEd/Minor/2nd Major)** | | | **6** |  |  |  |
|  | **Course Code** | **Course Name** | **Credits** | **Grade** | **GP** | **Comments (if any)** |
| CSE \_\_\_ |  | 3.0 |  |  |  |
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| **Project / Internship / Thesis** | | | **4** |  |  |  |
|  | **Course Code** | **Course Name** | **Credits** | **Grade** | **GP** | **Comments (if any)** |
| CSE 400 | PROJECT & THESIS | 4.0 |  |  |  |