

Scheme of Study for semesters Fall 2023 onwards

Semester 1

| | | |
|---|----|-----|
| EN-100: Functional English | GE | 3 |
| PK-100: Ideology & Constitution of Pakistan | GE | 2 |
| MA-101: Calculus & Analytical Geometry | GE | 3 |
| CSC-110: Applications of ICT | GE | 2+1 |
| CSC-104: Problem Solving & Programming | CC | 3+1 |

Credit Hours 15

Semester 2

| | | |
|--|----|-----|
| EN-200: Expository Writing | GE | 3 |
| IS-100: Islamic Studies / Ethics | GE | 2 |
| Social Sciences Elective | GE | 2 |
| PH-110: Introductory Mechanics and Waves | GE | 3 |
| MA-202: Multivariable Calculus | MS | 3 |
| CSC-121: Object Oriented Programming | CC | 3+1 |

Credit Hours 17

Semester 3

| | | |
|--|----|-----|
| MA-203: Discrete Mathematics | GE | 3 |
| EN-2XX: Technical and Business Writing | MS | 3 |
| CSC-103: Introduction to Computer Org. | CC | 3 |
| CSC-211: Data Structures | CC | 3+1 |
| CSC-212: Human Computer Interaction | DC | 3 |

Credit Hours 16

Semester 4

| | | |
|--|----|-----|
| Civics and Community Engagement | GE | 2 |
| MA-302: Linear Algebra | MS | 3 |
| CSC-222: Analysis & Design of Software Systems | CC | 3 |
| CSC-224: Database Systems | CC | 3+1 |
| CSC-313: Computer Architecture | DC | 3 |

Credit Hours 15

Semester 5

| | | |
|--|----|-----|
| ST-101: Probability and Statistics | MS | 3 |
| CSC-322: Software Construction | DC | 2+1 |
| CSC-226: Operating Systems | CC | 2+1 |
| CSC-311: Analysis & Design of Algorithms | CC | 3 |
| CSC-414: Artificial Intelligence | CC | 3 |
| Domain Elective 1 | DE | 3 |

Credit Hours 18

Semester 6

| | | |
|---|----|-----|
| CSC-331: Theory of Automata | DC | 3 |
| CSC-325: Advanced Database Systems | DC | 2+1 |
| CSC-215: Computer Org. & Assembly Language | CC | 2+1 |
| CSC-312: Computer Communications & Networks | CC | 3 |
| Domain Elective 2 | DE | 3 |
| Domain Elective 3 | DE | 3 |

Credit Hours 18

Semester 7

| | | |
|--------------------------------|----|---|
| Entrepreneurship | GE | 2 |
| Arts and Humanities Elective | GE | 2 |
| CSC-411: Compiler Construction | DC | 3 |
| CSC-489: Project-I | CC | 2 |
| Domain Elective 4 | DE | 3 |
| Domain Elective 5 | DE | 3 |

Credit Hours 15

Semester 8

| | | |
|---|----|---|
| Elective Supporting | ES | 3 |
| CSC-4XX: Introduction to Cyber Security | CC | 3 |
| CSC-490: Project-II | CC | 4 |
| Domain Elective 6 | DE | 3 |
| Domain Elective 7 | DE | 3 |

Credit Hours 16

The students must do an internship of six to eight weeks during their degree. The internships will be coordinated by the internship coordinator.

| Category | Abbr. | Cr. Hrs |
|----------------------|-------|---------|
| Computing Core | (CC) | 46 |
| Domain Core | (DC) | 18 |
| Domain Elective | (DE) | 21 |
| Maths and Supporting | (MS) | 12 |
| Elective Supporting | (ES) | 3 |
| General Education | (GE) | 30 |