* *The following tables provide the list of courses included in each of the course groups.*

|  |  |  |
| --- | --- | --- |
| **Course Group** | **Credit Hours** | **Percentage** |
| Computing – Core (C-C) | 41 | 30 |
| Computing-Supportive (C-S) | 12 | 9 |
| IT– Core (IT-C) | 21 | 16 |
| IT – Supporting (IT-S) | 15 | 9 |
| General Education (GE) | 19 | 11 |
| University Electives (UE) | 9 | 9 |
| IT – Electives (IT-E) | 18 | 16 |
| **Total** | **135** |  |

Scheme of Study

|  |  |  |  |
| --- | --- | --- | --- |
| **Semester 1** | | | |
| **Course Code** | **Course Title** | **Credit Hours** | **Course Type** |
| IT-161 | Introduction to Information and Communication Technology | 3+0 | C-C |
| IT-103 | Programming Fundamentals | 4(3+1) | C-C |
| MATH-107 | Calculus and Analytical Geometry | 3 | C-S |
| PHY-107 | Basic Electronics | 3 | C-S |
| ENG-101 | Functional English (English-I) | 3 | GE |

|  |  |  |  |
| --- | --- | --- | --- |
| **Semester 2** | | | |
| **Course Code** | **Course Title** | **Credit Hours** | **Course Type** |
| IT-363 | Information Systems | 3 | IT-S |
| IT-108 | Object Oriented Programming | 4(3+1) | C-C |
| IT-151 | Digital Logic Design | 3(2+1) | C-C |
| PKS-101 | Pakistan Studies | 2 | GE |
| ENG-102 | Communication Skills (English-II) | 3 | GE |
|  | University Elective 1 | 3 | UE |

|  |  |  |  |
| --- | --- | --- | --- |
| **Semester 3** | | | |
| **Course Code** | **Course Title** | **Credit Hours** | **Course Type** |
| CS-261 | Discrete Structures | 3 | C-C |
| **IT-204** | Multimedia Systems and Design | 3 | IT-C |
| IT-212 | Data Communications and Networks | 4(3+1) | C-C |
| ISL-100 | Islamic Studies/Ethics | 2 | GE |
|  | University Elective 2 | 3 | UE |
| IT-304 | Web Systems and Technologies | 3(2+1) | IT-C |

|  |  |  |  |
| --- | --- | --- | --- |
| **Semester 4** | | | |
| **Course Code** | **Course Title** | **Credit Hours** | **Course Type** |
| IT-321 | Software Engineering | 3 | C-C |
| IT-206 | Data Structures and Algorithm | 4(3+1) | C-C |
| STAT-205 | Probability and Statistics | 3 | C-S |
| MATH-314 | Linear Algebra | 3 | C-S |
| IT-205 | Operating Systems | 3 | C-C |
|  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Semester 5** | | | |
| **Course Code** | **Course Title** | **Credit Hours** | **Course Type** |
| **IT-313** | Internet Architecture & Protocols | 3 | IT-S |
| IT-245 | Database Systems | 4(3+1) | C-C |
| IT-325 | Object Oriented  Analysis and Design | 3 | IT-S |
|  | IT Elective – 1 | 3 | IT-E |
|  | IT Elective – 2 | 3 | IT-E |
|  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Semester 6** | | | |
| **Course Code** | **Course Title** | **Credit Hours** | **Course Type** |
| IT-312 | Network Security | 3 | IT-C |
| IT-318 | Cloud Computing | 3 | IT-C |
| IT-402 | Human Computer Interaction | 3 | C-C |
| IT-302 | Technology Management | 3 | IT-C |
|  | IT-Elective-3 | 3 | IT-E |
|  | IT Elective – 4 | 3 | IT-E |

|  |  |  |  |
| --- | --- | --- | --- |
| **Semester 7** | | | |
| **Course Code** | **Course Title** | **Credit Hours** | **Course Type** |
| IT-406 | Project/Thesis  (In progress) | 6 | C-C |
| IT-413 | Systems and Network Administration | 3 | IT-C |
| ENG-310 | Business and Technical Writing (English-III) | 3 | GE |
| SS-301 | Professional Practices | 3 | GE |
|  | University Elective 3 | 3 | UE |
|  | IT-Elective-5 | 3 | IT-E |

|  |  |  |  |
| --- | --- | --- | --- |
| **Semester 8** | | | |
| **Course Code** | **Course Title** | **Credit Hours** | **Course Type** |
| IT-406 | Project/Thesis (Completed) | 6 | C-C |
| **IT-425** | IT Project Management | 3 | IT-S |
| **IT-445** | Database Administration & Management | 3 | IT-S |
| IT-423 | System Integration and Architecture | 3 | IT-C |
| - | IT Elective – 6 | 3 | IT-E |