Program Road Map (Batch # 14)

| | | | 1 st | Year | | | |
|---------------|--|----------|-----------------|---------|--------------------------------------|---------|---------|
| Fall Semester | | | | | Spring Semest | er | |
| Code | Course Title | Cr. Hrs. | Prereq. | Code | Course Title | Cr. Hrs | Prereq. |
| IT1091 | Introduction to ICT | 2-1 | | CC1022 | Object Oriented Programming | 3-1 | CC1021 |
| EN111 | English Grammar and Comprehension | 3-0 | | CC1041 | Discrete Structures | 3-0 | |
| MA100 | Calculus & Analytical Geometry | 3-0 | | EN125 | Composition and Communication | 3-0 | EN111 |
| CC1021 | Programming Fundamentals | 3-1 | | | University Elective – 1 | 3-0 | |
| NS125 | Applied Physics | 2-1 | | | University Elective – 2 | 3-0 | |
| Semeste | er Credit Hours | 13-3 | | Semeste | er Credit Hours | 15-1 | |
| | | | 2 nd | Year | | | |
| | Fall Semester | r | | | Spring Semest | er | |
| Code | Course Title | Cr. Hrs. | Prereq. | Code | Course Title | Cr. Hrs | Prereq. |
| CC2042 | Data Structures & Algorithms | 3-1 | CC1022 | IT2102 | IT Supporting Course – II (e.g. SRE) | 3-0 | |
| MA150 | Probability & Statistics | 3-0 | | CC4121 | Information Security | 3-0 | |
| CC3101 | Software Engineering | 3-0 | | CC3071 | Computer Networks | 3-1 | |
| IT2234 | IT Supporting Course – I (e.g. Enterprise Systems) | 3-0 | | | University Elective – 3 | 3-0 | |
| MA210 | Linear Algebra | 3-0 | | CC2141 | Database Systems | 3-1 | CC2042 |
| Semeste | er Credit Hours | 15-1 | | Semeste | er Credit Hours | 15-2 | |

Total Credit Hours: 132

| 3 rd Year | | | | | | | | | |
|----------------------|-----------------|----------|---------|-----------------|------------------|---------|---------|--|--|
| Fall Semester | | | | Spring Semester | | | | | |
| Code | Course Title | Cr. Hrs. | Prereq. | Code | Course Title | Cr. Hrs | Prereq. | | |
| | IT Elective – 1 | 3-0 | | IT3161 | Web Technologies | 3-0 | | | |

| ISL101 | Islamic Studies | 3-0 | | IT3072 | System and Network Administration | 3-1 | CC3011 | |
|---------------|---|----------|-----------------|-----------------|--------------------------------------|----------|---------|--|
| CC3011 | Operating Systems | 3-1 | CC2042 | IT3231 | IT Infrastructure | 3-0 | | |
| IT3142 | Database Administration and Management | 3-1 | IT2141 | | IT Elective – 3 | 3-0 | | |
| | IT Elective – 2 | 3-0 | | IT3171 | Virtual Systems and Services | 3-1 | | |
| Semeste | er Credit Hours | 15-2 | | Semeste | er Credit Hours | 15-2 | | |
| | | | 4 th | Year | | <u> </u> | 1 | |
| Fall Semester | | | | Spring Semester | | | | |
| Code | Course Title | Cr. Hrs. | Prereq. | Code | Course Title | Cr. Hrs | Prereq. | |
| CC4181 | Final Year Project – I | 0-3 | | CC4182 | Final Year Project – II | 0-3 | CC4181 | |
| EN220 | Research Paper Writing and Presentation | 3-0 | EN125 | | University Elective – 4 | 3-0 | | |
| | IT Elective – 4 | 3-0 | | | IT Elective – 5 | 3-0 | | |
| IT4122 | Cyber Security | 3-0 | CC4121 | SE4092 | Professional Practices | 3-0 | | |
| IT4191 | IT Project Management | 3-0 | | POL101 | Pakistan Studies | 3-0 | | |
| IT4052 | IT Supporting Course – III (e.g. Operations Research) | 3-0 | | | | | | |
| | 1 | 15-3 | | _ | er Credit Hours | 12-3 | | |