BSIT- Semester wise Road Map - Total Credit Hours 132

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1stYear** | | | | | | | | | |
| **Fall Semester** | | | | | | **Spring Semester** | | | |
| **Code** | **Course Title** | | **Cr. Hrs** | | **Pre req.** | **Code** | **Course Title** | **Cr. Hrs** | **Pre req.** |
| IT1091 | Introduction to ICT | | 2 | | - - - - | CC1022 | Object Oriented Programming | 3 | CC1021, CC1021L |
| IT1091L | Introduction to ICT Lab | | 1 | | - - - - | CC1022L | Object Oriented Programming Lab | 1 | CC1021, CC1021L |
| EN111 | English Grammar & Comprehension | | 3 | | - - - - | CC1041 | Discrete Structures | 3 | - - - - |
| MA107 | Calculus & Analytical Geometry | | 3 | | - - - - | EN125 | Composition and Communication | 3 | EN111 |
| CC1021 | Programming Fundamentals | | 3 | | - - - - |  | University Elective – I | 3 | - - - - |
| CC1021L | Programming Fundamentals Lab | | 1 | | - - - - |  | University Elective – II | 3 | - - - - |
| NS125 | Applied Physics | | 2 | | - - - - |  |  |  |  |
| NS125L | Applied Physics Lab | | 1 | | - - - - |  |  |  |  |
| **Semester Credit Hours** | | | **16** | |  | **Semester Credit Hours** | | **16** |  |
| **2ndYear** | | | | | | | | | |
| **Code** | **Course Title** | **Cr. Hrs** | | **Pre req.** | | **Code** | **Course Title** | **Cr. Hrs** | **Pre req.** |
| CC2042 | Data Structures & Algorithms | 3 | | CC1022, CC1022L | |  | IT Supporting Course – II (e.g. SE2102 - SRE) | 3 | - - - - |
| CC2042L | Data Structures & Algorithms Lab | 1 | | CC1022, CC1022L | |  | IT Supporting Course – I  (e.g. IT2234 - Enterprise Systems) | 3 | - - - - |
| MA150 | Probability & Statistics | 3 | | - - - - | | CC3071 | Computer Networks | 3 | - - - - |
| CC2101 | Software Engineering | 3 | | - - - - | | CC3071L | Computer Networks Lab | 1 | - - - - |
| MA210 | Linear Algebra | 3 | | - - - - | | CC2141 | Database Systems | 3 | CC2042, CC2042L |
|  | University Elective – III | 3 | | - - - - | | CC2141L | Database Systems Lab | 1 | CC2042, CC2042L |
|  |  |  | |  | | CC3121 | Information Security | 3 | - - - - |
| **Semester Credit Hours** | | **17** | |  | | **Semester Credit Hours** | | **16** |  |

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| **3rdYear** | | | | | | | | |
| **Fall Semester** | | | | **Spring Semester** | | | | |
| **Code** | **Course Title** | **Cr. Hrs** | **Pre req.** | **Code** | | **Course Title** | **Cr. Hrs** | **Pre req.** |
|  | IT Elective – I | 3 | - - - - | IT3161 | | Web Technologies | 3 | - - - - |
| ISL101 | Islamic Studies | 3 | - - - - | IT3072 | | System and Network Administration | 3 | CC3011, CC3011L |
| CC3011 | Operating Systems | 3 | CC2042, CC2042L | IT3072L | | System and Network Administration Lab | 1 | CC3011, CC3011L |
| CC3011L | Operating Systems Lab | 1 | CC2042,  CC2042L | IT4122 | | Cyber Security | 3 | - - - - |
| IT3142 | Database Administration and Management | 3 | CC2141, CC2141L |  | | IT Elective – III | 3 | - - - - |
| IT3142L | Database Administration and Management Lab | 1 | CC2141, CC2141L | IT3171 | | Virtual Systems and Services | 3 | - - - - |
|  | IT Elective – II | 3 | - - - - | IT3171L | | Virtual Systems and Services Lab | 1 | - - - - |
| SD100 | English Immersion | 0 | - - - - | SD102 | | 21st Century Skills | 0 | - - - - |
| **Semester Credit Hours** | | **17** |  | **Semester Credit Hours** | | | **17** |  |
| **4thYear** | | | | | | | | |
| **Code** | **Course Title** | **Cr. Hrs** | **Pre req.** | | **Code** | **Course Title** | **Cr. Hrs** | **Pre req.** |
| CC4181 | Final Year Project – I | 3 | - - - - | | CC4182 | Final Year Project – II | 3 | CC4181 |
| EN220 | Research Paper  Writing and Presentation | 3 | EN125 | |  | University Elective – IV | 3 | - - - - |
| IT2231 | IT Infrastructure | 3 | - - - - | |  | IT Elective – V | 3 | - - - - |
|  | IT Elective – IV | 3 | - - - - | | HU4092 | Professional Practices | 3 | - - - - |
| IT4191 | IT Project Management | 3 | - - - - | | POL101 | Pakistan Studies | 3 | - - - - |
|  | IT Supporting Course – III (e.g. IT4052-  Operations Research) | 3 | - - - - | |  |  |  |  |
| **Semester Credit Hours** | | **18** |  | | **Semester Credit Hours** | | **15** |  |