

Computer Science and Engineering

SEMESTER - I (Common for all B.Tech Courses)

| S.No | C. Code | Course | L | T | P | C |
|------------------------------|------------------------------------|--|---|---|---|-----------|
| 1 | MA108T | Calculus | 3 | 1 | 0 | 8 |
| 2 | PH101T | Quantum Physics and Applications | 2 | 1 | 0 | 6 |
| 3 | CH 102 | Fundamental Concepts and Applications of Chemistry | 3 | 0 | 0 | 6 |
| 4 | BB101T | Introduction to Modern biology | 3 | 0 | 0 | 6 |
| 5 | PH 113 | Hands on Science Laboratory - I | 0 | 0 | 3 | 3 |
| 6 | CS101C | Computer Programming | 3 | 0 | 2 | 8 |
| 7 | HS101T | Design Thinking and Creativity | 1 | 0 | 0 | PP/N P |
| 8 | NO107/ NO105/ NO 106/ NO 108 | NSO/NSS/NCC/NCA | 0 | 0 | 2 | 2 |
| First Semester Total Credits | | | | | | 37 |

Semester - II

| S. No | Course Code | Course Name | L | T | P | C |
|---------------|------------------------------------|--|---|---|---|----|
| 1 | MA 102 | Linear Algebra (1st Half) | 3 | 1 | 0 | 4 |
| 2 | MA 103 | Differential Equations - I (2nd Half) | 3 | 1 | 0 | 4 |
| 3 | ME101C | Engineering Graphics Laboratory | 1 | 0 | 3 | 5 |
| 4 | EE101T | Introduction to Electrical Systems and Electronics | 3 | 0 | 0 | 6 |
| 5 | CS101T | Data Structures and Algorithms | 3 | 0 | 0 | 6 |
| 6 | CS101L | Data Structures and Algorithms Laboratory | 0 | 0 | 3 | 3 |
| 7 | ME 113 | Hands on Engineering Laboratory | 0 | 0 | 3 | 3 |
| 8 | PH102T | Electricity and magnetism | 2 | 1 | 0 | 6 |
| 9 | NO107/ NO105/ NO 106/ NO 108 | NSO/NSS/NCC/NCA | 1 | 0 | 0 | 2 |
| Total Credits | | | | | | 37 |

Semester III

| S.No | Course code | Course name | L | T | P | C |
|---------------|-------------|--|---|---|---|----|
| 1 | CS203T | Design and analysis of algorithms | 3 | 0 | 0 | 6 |
| 2 | CS202T | Discrete structures | 3 | 0 | 0 | 6 |
| 3 | EE205T | Introduction to Probability (1st Half) | 3 | 0 | 0 | 3 |
| 4 | EE 227 | Data Analysis (2nd Half) | 3 | 0 | 0 | 3 |
| 5 | HS201T | Economics | 3 | 0 | 0 | 6 |
| 6 | CS201C | Software Systems Lab | 1 | 3 | 0 | 8 |
| Total credits | | | | | | 32 |

| Semester IV | | | | | | |
|---------------------|-------------|---|---|---|---|----|
| S.No | Course code | Course name | L | T | P | C |
| 1 | CS201T | Automata theory | 3 | 1 | 0 | 8 |
| 2 | CS204T | Artificial intelligence | 3 | 0 | 0 | 6 |
| 3 | CS302T | Computer Architecture | 3 | 0 | 0 | 6 |
| 4 | EE103T | Digital systems | 3 | 0 | 0 | 6 |
| 5 | EE101L | Digital Circuits Laboratory | 3 | 0 | 0 | 3 |
| 6 | CS201L | Artificial intelligence lab | 0 | 0 | 3 | 3 |
| 7 | CS301L | Computer Architecture lab | 0 | 0 | 3 | 3 |
| Total credits | | | | | | 35 |
| | | | | | | |
| Semester V | | | | | | |
| S.No | Course code | Course name | L | T | P | C |
| 1 | CS303T | Operating systems | 3 | 0 | 0 | 6 |
| 2 | CS205T | Data Bases and Information Systems | 3 | 0 | 0 | 6 |
| 3 | | Elective I / R&D I# | 3 | 0 | 0 | 6 |
| 4 | | Elective II | 3 | 0 | 0 | 6 |
| 5 | | HSS Elective 1* | 3 | 0 | 0 | 6 |
| 6 | CS302L | Operating systems lab | 0 | 0 | 3 | 3 |
| 7 | CS202L | Data Bases and Information Systems Laboratory | 0 | 0 | 3 | 3 |
| Total credits | | | | | | 36 |
| | | | | | | |
| Semester VI | | | | | | |
| S.No | Course code | Course name | L | T | P | C |
| 1 | CS305T | Computer networks | 3 | 0 | 0 | 6 |
| 2 | CS304T | Compilers | 3 | 0 | 0 | 6 |
| 3 | CS304L | Compilers lab | 0 | 0 | 3 | 3 |
| 4 | CS303L | Computer networks lab | 0 | 0 | 3 | 3 |
| 5 | | HSS Elective II* | 3 | 0 | 0 | 6 |
| 6 | CE301T | Environmental studies | 3 | 0 | 0 | 6 |
| 7 | | Elective III / R&D I/II# | 3 | 0 | 0 | 6 |
| Total credits | | | | | | 36 |
| | | | | | | |
| Semester VII | | | | | | |
| S.No | Course Code | Course Name | L | T | P | C |
| 1 | | Elective IV | | | | 6 |
| 2 | | Elective V | | | | 6 |
| 3 | | Elective VI | | | | 6 |
| | | Elective VII / BTP# | | | | 6 |

| | | | | | | |
|---|--------------------|--------------------|----------|----------|----------|------------|
| Total credits | | | | | | 24 |
| | | | | | | |
| Semester VIII | | | | | | |
| S.No | Course Code | Course Name | L | T | P | C |
| 1 | | Elective VIII | | | | 6 |
| 2 | | Elective IX | | | | 6 |
| 3 | | Elective X/ BTP# | | | | 6 |
| Total credits | | | | | | 18 |
| | | | | | | |
| Overall Credits Required (Minimum) | | | | | | 255 |