

New Syllabus For B.E
Department of Information Technology

| 1st Year 1st semester | | | | | | | |
|--|---------------------------------|-------------------|----------|----------|---------------|--------------|------------------|
| Code | Subject | Pds / week | | | Credit | Marks | |
| | | L | T | S | | Exam | Sessional |
| IT/T/111 | Introduction to Programming | 3 | 0 | 0 | 3 | 100 | |
| IT/PHY/T/112 | Physics-IA | 3 | 0 | 0 | 3 | 100 | |
| IT/IEE/T/113 | Basic Electronics | 3 | 0 | 0 | 3 | 100 | |
| IT/MATH/T/114 | Mathematics I (Modules 1 and 2) | 3 | 0 | 0 | 3 | 100 | |
| IT/PE/T/115 | Engineering Mechanics | 3 | 0 | 0 | 3 | 100 | |
| IT/PE/T/116 | Electrical Circuits | 3 | 0 | 0 | 3 | 100 | |
| IT/IEE/S/111 | Basic Electronics Laboratory | 0 | 0 | 3 | 3 | | 100 |
| IT/ S/112 | Programming Laboratory | 0 | 0 | 3 | 3 | | 100 |
| IT/PE/S/113 | Engineering Drawing | 0 | 0 | 3 | 3 | | 100 |
| IT/PE/S/114 | Workshop | 0 | 0 | 3 | 3 | | 100 |
| | Sub- Total | 18 | 0 | 12 | 30 | 600 | 400 |
| | Total | 30 | | | | 1000 | |

| 1st Year 2nd semester | | | | | | | |
|--|--|-------------------|----------|----------|---------------|--------------|------------------|
| Code | Subject | Pds / week | | | Credit | Marks | |
| | | L | T | S | | Exam | Sessional |
| IT/T/121 | Data Structures & Algorithms | 3 | 0 | 0 | 3 | 100 | |
| IT/ MATH/T /122 | Mathematics II (Modules 5 and 6) | 3 | 0 | 0 | 3 | 100 | |
| IT/IEE/T/123 | Digital Logic & Digital Circuit | 3 | 0 | 0 | 3 | 100 | |
| IT/ PE /T/124 | Electrical Measurements | 3 | 0 | 0 | 3 | 100 | |
| IT/PHY/T/125 | Physics II A | 3 | 0 | 0 | 3 | 100 | |
| IT/Hum/T/126 | English For Communication & Social Studies | 3 | 0 | 0 | 3 | 100 | |
| IT/ S/121 | Data Structure Laboratory* | 1 | 0 | 3 | 3 | | 100 |
| IT/IEE/S/122 | Digital Logic Laboratory | 0 | 0 | 3 | 3 | | 100 |
| IT/PE/S/123 | Electrical Technology Laboratory | 0 | 0 | 3 | 3 | | 100 |
| | Sub- Total | 19 | 0 | 9 | 27 | 600 | 300 |
| | Total | | | | 28 | 900 | |

* Laboratory has to be allocated in continuous 4 periods

| 2 nd Year 1st semester | | | | | | | |
|-----------------------------------|---|------------|---|---|--------|-------|-----------|
| Code | Subject | Pds / week | | | Credit | Marks | |
| | | L | T | S | | Exam | Sessional |
| IT/T/211 | Object Oriented programming | 3 | 0 | 0 | 3 | 100 | |
| IT/ MATH/T /212 | Mathematics – III (Modules 3 and 10) | 3 | 0 | 0 | 3 | 100 | |
| IT/T/213 | Database Management Systems | 3 | 0 | 0 | 3 | 100 | |
| IT/T/214 | Principles of Communication Engineering | 3 | 0 | 0 | 3 | 100 | |
| IT/T/215 | Computer Graphics | 3 | 0 | 0 | 3 | 100 | |
| IT/T/216 | Computer Architecture | 3 | 0 | 0 | 3 | 100 | |
| IT/ S/211 | Object Oriented programming Laboratory | 0 | 0 | 3 | 3 | | 100 |
| IT/ S/212 | Database Management Systems Laboratory | 0 | 0 | 3 | 3 | | 100 |
| IT/ S/213 | Programming Practice laboratory* | 1 | 0 | 3 | 3 | | 100 |
| | Sub- Total | 19 | 0 | 9 | 27 | 600 | 300 |
| | Total | 28 | | | 27 | 900 | |

* Laboratory has to be allocated in continuous 4 periods

| 2 nd Year 2nd semester | | | | | | | |
|-----------------------------------|---|------------|---|---|--------|-------|-----------|
| Code | Subject | Pds / week | | | Credit | Marks | |
| | | L | T | S | | Exam | Sessional |
| IT/T/221 | Object Oriented Systems | 3 | 0 | 0 | 3 | 100 | |
| IT/ MATH/T/222 | Mathematics – IV (Modules 8 and 12) | 3 | 0 | 0 | 3 | 100 | |
| IT/T/223 | Software Engineering | 3 | 0 | 0 | 3 | 100 | |
| IT/ T/224 | Microprocessors | 3 | 0 | 0 | 3 | 100 | |
| IT/T/225 | Computer Networks | 3 | 0 | 0 | 3 | 100 | |
| IT/T226 | Numerical Methods & Optimization Techniques | 3 | 0 | 0 | 3 | 100 | |
| IT/ S/211 | Object Oriented Programming Laboratory – II | 0 | 0 | 3 | 3 | | 100 |
| IT/ S/212 | Microprocessor Laboratory* | 1 | 0 | 3 | 3 | | 100 |
| IT/ S/213 | Numerical Analysis Laboratory | 0 | 0 | 3 | 3 | | 100 |
| | Sub- Total | 19 | 0 | 9 | 3 | 600 | 300 |
| | Total | 28 | | | 27 | 900 | |

* Laboratory has to be allocated in continuous 4 periods

| 3rd Year 1 st Semester | | | | | | | |
|-----------------------------------|------------------------------------|------------|---|---|--------|-------|-----------|
| Code | Subject | Pds / week | | | Credit | Marks | |
| | | L | T | S | | Exam | Sessional |
| IT/T/311 | Multimedia Coding & communications | 3 | 0 | 0 | 3 | 100 | |
| IT/T/312 | Wireless Networks | 3 | 0 | 0 | 3 | 100 | |
| IT/T/313 | Graph Theory | 3 | 0 | 0 | 3 | 100 | |
| IT/T/314 | Web Technologies – I | 3 | 0 | 0 | 3 | 100 | |
| IT/T/315 | Principles of Compiler Design | 3 | 0 | 0 | 3 | 100 | |
| IT/T/316 | Operating Systems | 3 | 0 | 0 | 3 | 100 | |
| IT/ S/311 | Multimedia Laboratory | 0 | 0 | 3 | 3 | | 100 |
| IT/ S/312 | Systems Programming Laboratory* | 1 | 0 | 3 | 3 | | 100 |
| IT/ S/313 | Operating System Laboratory | 0 | 0 | 3 | 3 | | 100 |
| | Sub- Total | 19 | 0 | 9 | 27 | 600 | 300 |
| | Total | 28 | | | 27 | 900 | |

* Laboratory has to be allocated in continuous 4 periods

| 3rd Year 2 nd Semester | | | | | | | |
|-----------------------------------|-----------------------------------|------------|---|---|--------|-------|-----------|
| Code | Subject | Pds / week | | | Credit | Marks | |
| | | L | T | S | | Exam | Sessional |
| IT/T/321 | Design & Analysis of Algorithm | 3 | 0 | 0 | 3 | 100 | |
| IT/T/322 | Cryptography & Network Security | 3 | 0 | 0 | 3 | 100 | |
| IT/T/323 | Distributed Systems: Algorithms | 3 | 0 | 0 | 3 | 100 | |
| IT/T/324 | Web Technologies – II | 3 | 0 | 0 | 3 | 100 | |
| IT/T/325 | Formal language & Automata Theory | 3 | 0 | 0 | 3 | 100 | |
| IT/T/326 | Elective – I | 3 | 0 | 0 | 3 | 100 | |
| IT/ S/321 | Web Application Laboratory | 0 | 0 | 3 | 3 | | 100 |
| IT/ S/322 | Software Laboratory – I* | 1 | 0 | 3 | 3 | | 100 |
| IT/ S/323 | Software Laboratory – II | 0 | 0 | 3 | | | 100 |
| | Sub- Total | 19 | 0 | 9 | 9 | 600 | 300 |
| | Total | 28 | | | 27 | 900 | |

* Laboratory has to be allocated in continuous 4 periods

Elective I: Computational Geometry, Mathematical Methods, Artificial Intelligence

| 4th Year 1 st Semester | | | | | | | |
|-----------------------------------|-----------------------------|------------|---|---|--------|-------|-----------|
| Code | Subject | Pds / week | | | Credit | Marks | |
| | | L | T | S | | Exam | Sessional |
| IT/T/411 | Elective – I | 3 | 0 | 0 | 3 | 100 | |
| IT/T/412 | Elective – II | 3 | 0 | 0 | 3 | 100 | |
| IT/T/413 | Image Processing | 3 | 0 | 0 | 3 | 100 | |
| IT/T/414 | Economics | 3 | 0 | 0 | 3 | 100 | |
| IT/ S/411 | Image Processing Laboratory | 0 | 0 | 3 | 3 | | 100 |
| IT/ S/312 | Project Laboratory* | 1 | 0 | 3 | 4 | | 100 |
| IT/ S/313 | Seminar | 0 | 0 | 3 | 3 | | 100 |
| | Sub- Total | 13 | 0 | 9 | 22 | 400 | 300 |
| | Total | 21 | | | 22 | 700 | |

* Laboratory has to be allocated in continuous 4 periods

Elective – II: Parallel Algorithms and Architectures, Fuzzy Logic & Neural Computing
 Elective – III: Data Mining / Real Time and Embedded Systems

| 4th Year 2nd Semester | | | | | | | |
|-----------------------|-----------------------------------|------------|---|---|--------|-------|-----------|
| Code | Subject | Pds / week | | | Credit | Marks | |
| | | L | T | S | | Exam | Sessional |
| IT/T/421 | Distributed System & Applications | 3 | 0 | 0 | 3 | 100 | |
| IT/T/422 | Management | 3 | 0 | 0 | 3 | 100 | |
| IT/T/423 | Elective – IV | 3 | 0 | 0 | 3 | 100 | |
| IT/T/424 | Digital Signal Processing | 3 | 0 | 0 | 3 | 100 | |
| IT/ S/421 | Comprehensive Viva Voce | 0 | 0 | 3 | 3 | | 100 |
| IT/ S/422 | Project | 0 | 0 | 3 | 4 | | 100 |
| IT/ S/423 | Seminar | 0 | 0 | 3 | 3 | | 100 |
| | Sub- Total | 12 | 0 | 9 | 22 | 400 | 300 |
| | Total | 21 | | | 22 | 700 | |

Elective – IV: Cluster and Grid Computing, Bio Informatics, Pattern Recognition