# B.TECH - INFORMATION TECHNOLOGY

## (FOUR YEAR FULL TIME)

### REGULATIONS 2008

**SEMESTER – I**

| CODE NO. | COURSE TITLE | L | T | P | C |
|---|---|---|---|---|---|
| **THEORY** | | | | | |
| XIT101 | Technical English | 3 | 1 | 0 | 4 |
| XIT102 | Mathematics- I | 3 | 1 | 0 | 4 |
| XIT103 | Applied Physics | 3 | 1 | 0 | 4 |
| XIT104 | Applied Chemistry | 3 | 1 | 0 | 4 |
| XIT105 | Fundamentals of Electric and Electronic Circuits | 4 | 0 | 0 | 4 |
| XIT106 | Digital Computer Fundamentals | 4 | 0 | 0 | 4 |
| **PRACTICAL** | | | | | |
| XIT107 | Applied Physics Lab | 0 | 0 | 3 | 2 |
| XIT108 | Applied Chemistry Lab | 0 | 0 | 3 | 2 |
| XIT109 | Basic Workshop Practices | 0 | 0 | 3 | 2 |

**Total Hours: 33**                     **Total Credits: 30**

## *SEMESTER – II*

| CODE NO. | COURSE TITLE | L | T | P | C |
|---|---|---|---|---|---|
| **THEORY** | | | | | |
| XIT201 | Mathematics – II | 3 | 1 | 0 | 4 |
| XIT202 | Linux Programming | 3 | 0 | 0 | 3 |
| XIT203 | Computer Programming | 4 | 0 | 0 | 4 |
| XIT204 | Engineering Graphics | 2 | 0 | 3 | 4 |
| XIT205 | Digital Systems Design | 3 | 1 | 0 | 4 |
| XIT206 | Engineering Mechanics | 3 | 1 | 0 | 4 |
| **PRACTICAL** | | | | | |
| XIT207 | Computer Programming Lab | 0 | 0 | 3 | 2 |
| XIT208 | Communication Skills Enhancement | 2 | 0 | 2 | 3 |
| XIT209 | Electronics Lab | 0 | 0 | 3 | 2 |

**Total Hours: 31**                          **Total Credits: 30**

## SEMESTER III

| CODE NO. | COURSE TITLE | L | T | P | C |
|---|---|---|---|---|---|
| THEORY | | | | | |
| XIT301 | Professional Ethics & Human Values (IT) | 3 | 0 | 0 | 3 |
| XIT302 | Discrete Mathematics | 3 | 1 | 0 | 4 |
| XIT303 | Microprocessors and Microcontrollers | 3 | 1 | 0 | 4 |
| XIT304 | Principles of Communication Engineering | 3 | 1 | 0 | 4 |
| XIT305 | Signals and Systems | 3 | 1 | 0 | 4 |
| XIT306 | Data Structures | 3 | 1 | 0 | 4 |
| PRACTICAL | | | | | |
| XIT307 | Microprocessors and Microcontrollers Lab | 0 | 0 | 3 | 2 |
| XIT308 | Data Structures Lab | 0 | 0 | 3 | 2 |

**Total Hours: 29**                          **Total Credits: 27**

## SEMESTER IV

| CODE NO. | COURSE TITLE | L | T | P | C |
|---|---|---|---|---|---|
| THEORY | | | | | |
| XIT401 | Environmental Science and Engineering | 3 | 0 | 0 | 3 |
| XIT402 | Probability and Statistics | 3 | 1 | 0 | 4 |
| XIT403 | Information Coding Techniques | 3 | 1 | 0 | 4 |
| XIT404 | Object Oriented Programming | 3 | 0 | 0 | 3 |
| XIT405 | Digital Signal Processing | 3 | 1 | 0 | 4 |
| XIT406 | Computer Architecture | 3 | 1 | 0 | 4 |
| PRACTICAL | | | | | |
| XIT407 | Object Oriented Programming Lab | 0 | 0 | 3 | 2 |
| XIT408 | DSP and Communications Systems Lab | 0 | 0 | 3 | 2 |

**Total Hours: 28**                          **Total Credits: 26**

**SEMESTER V**

| CODE NO. | COURSE TITLE | L | T | P | C |
|---|---|---|---|---|---|
| THEORY | | | | | |
| XIT501 | Total Quality Management | 3 | 0 | 0 | 3 |
| XIT502 | Numerical Methods | 3 | 1 | 0 | 4 |
| XIT503 | Operating Systems | 3 | 0 | 0 | 3 |
| XIT504 | System software and Compiler Design | 3 | 0 | 0 | 3 |
| XIT505 | Design and Analysis of Algorithm | 3 | 0 | 0 | 3 |
| XIT506 | Database Management System | 3 | 1 | 0 | 4 |
| PRACTICAL | | | | | |
| XIT507 | Operating System Lab | 0 | 0 | 3 | 2 |
| XIT508 | Database Management System Lab | 0 | 0 | 3 | 2 |

**Total Hours: 26**                                            **Total Credits: 24**

**SEMESTER VI**

| CODE NO. | COURSE TITLE | L | T | P | C |
|---|---|---|---|---|---|
| THEORY | | | | | |
| XIT601 | Object Oriented Analysis and Design | 3 | 1 | 0 | 4 |
| XIT602 | Computer Networks | 3 | 0 | 0 | 3 |
| XIT603 | Visual Programming | 3 | 0 | 0 | 3 |
| XIT604 | Embedded Systems | 3 | 1 | 0 | 4 |
| XIT605 | Software Engineering | 3 | 0 | 0 | 3 |
| XITE** | Elective – I | 3 | 0 | 0 | 3 |
| PRACTICAL | | | | | |
| XIT607 | Visual Programming Lab | 0 | 0 | 3 | 2 |
| XIT608 | Network Lab | 0 | 0 | 3 | 2 |

**Total Hours: 26**                                            **Total Credits: 24**

**SEMESTER VII**

| CODE NO. | COURSE TITLE | L | T | P | C |
|---|---|---|---|---|---|
| THEORY | | | | | |
| XIT701 | Entrepreneurial Development Management | 3 | 0 | 0 | 3 |
| XIT702 | C # and .NET Framework | 3 | 0 | 0 | 3 |
| XIT703 | Mobile Computing | 3 | 1 | 0 | 4 |
| XIT704 | Graphics and Multimedia | 3 | 0 | 0 | 3 |
| XITE** | Elective - II | 3 | 0 | 0 | 3 |
| XITE** | Elective - III | 3 | 0 | 0 | 3 |
| PRACTICAL | | | | | |
| XIT707 | C # and .NET Lab | 0 | 0 | 3 | 2 |
| XIT708 | Graphics and Multimedia Lab | 0 | 0 | 3 | 2 |
| XIT709 | Mini Project | 0 | 0 | 3 | 4 |

**Total Hours: 28**                                **Total Credits: 27**


**SEMESTER VIII**

| CODE NO. | COURSE TITLE | L | T | P | C |
|---|---|---|---|---|---|
| THEORY | | | | | |
| XIT801 | Social Engineering | 3 | 0 | 0 | 3 |
| XIT802 | Cryptography and Network Security | 3 | 1 | 0 | 4 |
| XITE** | Elective – IV | 3 | 0 | 0 | 3 |
| XITE** | Elective – V | 3 | 0 | 0 | 3 |
| PRACTICAL | | | | | |
| XIT805 | Project Work | 0 | 0 | 12 | 6 |

**Total Hours: 25**                                **Total Credits: 19**

# LIST OF ELECTIVES

| CODE NO. | COURSE TITLE | L | T | P | C |
|----------|--------------|---|---|---|---|
| XITE51 | Network Programming and Management | 3 | 0 | 0 | 3 |
| XITE52 | Bio - informatics | 3 | 0 | 0 | 3 |
| XITE53 | Pattern Recognition | 3 | 0 | 0 | 3 |
| XITE54 | Artificial Intelligence | 3 | 0 | 0 | 3 |
| XITE55 | Web Technology | 3 | 0 | 0 | 3 |
| XITE56 | Data Mining And Data warehousing | 3 | 0 | 0 | 3 |
| XITE57 | Wireless and Sensor Networks | 3 | 0 | 0 | 3 |
| XITE58 | Web services | 3 | 0 | 0 | 3 |
| XITE59 | Nano Technology | 3 | 0 | 0 | 3 |
| XITE60 | Soft Computing | 3 | 0 | 0 | 3 |
| XITE61 | Free Open Source Software | 3 | 0 | 0 | 3 |
| XITE62 | Web Engineering | 3 | 0 | 0 | 3 |
| XITE63 | Distributed computing | 3 | 0 | 0 | 3 |
| XITE64 | User Interface Design | 3 | 0 | 0 | 3 |
| XITE65 | Digital Image Processing | 3 | 0 | 0 | 3 |
| XITE66 | Computer Installation & Trouble shooting | 3 | 0 | 0 | 3 |
| XITE67 | Component Based Technology | 3 | 0 | 0 | 3 |
| XITE68 | Information Security | 3 | 0 | 0 | 3 |
| XITE69 | VLSI Design | 3 | 0 | 0 | 3 |
| XITE70 | Pervasive Computing | 3 | 0 | 0 | 3 |
| XITE71 | High Performance Computing | 3 | 0 | 0 | 3 |

TOTAL CREDITS: 207

NOTE:

**L** ⟶ LECTURE HOURS

**T** ⟶ TUTORIAL HOURS

**P** ⟶ PRACTICAL HOURS

**C** $\longrightarrow$ CREDITS HOURS