

Scheme of Courses/Examination
B.Tech (Information Technology)
3rd Semester

| Code | Paper | L | T | P | Credits |
|---------|---|----|---|----|---------|
| IT-201 | Digital Electronics | 3 | 1 | - | 3.5 |
| HUT-211 | Organizational Behavior | 2 | 1 | - | 2.5 |
| IT-203 | Object Oriented Programming Using C++ | 3 | 1 | - | 3.5 |
| IT-205 | Data Structures | 4 | 1 | - | 4.5 |
| IT-207 | Web Site Design | 3 | 1 | - | 3.5 |
| IT-209 | Program Design and File Structures | 3 | 1 | - | 3.5 |
| IT-211 | Digital Electronics (P) | - | - | 2 | 1 |
| IT-213 | Object Oriented Programming Using C++ (P) | - | - | 2 | 1 |
| IT-215 | Data Structures (P) | - | - | 3 | 1.5 |
| IT-217 | Web Site Design (P) | - | - | 2 | 1 |
| IT-219 | Program Design and File Structures (P) | - | - | 2 | 1 |
| TOTAL | | 18 | 6 | 11 | 26.5 |

4th Semester

| S. No. | Course No. | Subject | Teaching Schedule | | | | Duration of Exam (Hours) | Credits |
|--------|------------|--------------------------------------|-------------------|---|-----|-------|--------------------------|---------|
| | | | L | T | P/D | Total | | |
| 1 | IT – 202 | Computer Organization & Architecture | 3 | 1 | - | 4 | 3 | 3.5 |
| 2 | IT – 204 | Unix & Linux Programming | 3 | 1 | - | 4 | 3 | 3.5 |
| 3 | IT – 206 | Database Management Systems | 3 | 1 | - | 4 | 3 | 3.5 |
| 4 | IT – 208 | Java Programming | 3 | 1 | - | 4 | 3 | 3.5 |
| 5 | MAT-206 | Mathematics-V | 4 | 2 | - | 6 | 3 | 5.0 |
| 6 | IT – 212 | Operating Systems | 3 | 1 | - | 4 | 3 | 3.5 |
| 7 | IT – 214 | Unix & Linux Programming (Pr) | - | - | 2 | 2 | 2 | 1.0 |
| 8 | IT – 216 | Database Management Systems (Pr) | - | - | 3 | 3 | 3 | 1.5 |
| 9 | IT – 218 | Java Programming (Pr) | - | - | 2 | 2 | 2 | 1.0 |
| 10 | IT – 222 | Operating System Pr | - | - | 2 | 2 | 2 | 1.0 |
| Total | | | 19 | 7 | 9 | 35 | | 27 |

NOTE: Students of all branches will undergo a practical training of 6 weeks duration after the 4th semester exam.

5th Semester

| Course No. | Subject | Teaching Schedule | | | | Credits |
|------------|-----------------------------------|-------------------|---|----|-----|---------|
| | | L | T | P | Tot | |
| IT – 301 | Design and Analysis of Algorithms | 4 | 1 | - | 5 | 4.5 |
| IT – 303 | Software Engineering | 3 | 1 | - | 4 | 3.5 |
| IT –305 | Microprocessors | 3 | 1 | - | 4 | 3.5 |
| IT – 307 | Computer Networks | 4 | 1 | - | 5 | 4.5 |
| IT -309 | Communication Systems | 4 | 1 | | 5 | 4.5 |
| IT – 311 | Algorithms Pr | | | 2 | 2 | 1 |
| IT – 313 | Software Engineering Pr | - | - | 3 | 3 | 1.5 |
| IT – 315 | Microprocessors Pr | - | - | 2 | 2 | 1.0 |
| IT -317 | Advanced Java (Pr) | - | - | 3 | 3 | 1.5 |
| IT – 319 | Seminar | - | 2 | - | 2 | 1.0 |
| IT – 321 | Training viva | - | | | | 2 |
| Total | | 18 | 7 | 10 | 35 | 28.5 |

6th Semester

| Course No. | Subject | Teaching Schedule | | | | Credits |
|------------|---|-------------------|---|----|-----|---------|
| | | L | T | P | Tot | |
| IT – 302 | Object Oriented Analysis and Design using UML | 3 | 1 | - | 4 | 3.5 |
| IT – 304 | Software Quality Assurance | 3 | 1 | - | 4 | 3.5 |
| IT –306 | Automata Theory | 4 | 1 | - | 5 | 4.5 |
| HUT-311 | Deptt. Elective-1 | 3 | 1 | - | 4 | 3.5 |
| | Business Management | 3 | 1 | - | 4 | 3.5 |
| IT- 312 | Computer Network Pr | - | - | 3 | 3 | 1.5 |
| IT – 314 | Advanced Pr-1 | - | - | 3 | 3 | 1.5 |
| IT – 316 | Visual Programming and Server Side programming Pr | - | - | 3 | 3 | 1.5 |
| IT – 318 | Software Testing Pr | - | - | 3 | 3 | 1.5 |
| HUT-322 | Soft skills Workshop | - | 2 | - | 2 | 2.0 |
| Total | | 16 | 7 | 12 | 35 | 26.5 |

List of Courses for Deptt. Elective-I

1. IT-322 Information Security
2. IT-324 Advanced Database System
3. IT-326 VHDL

7th Semester

| Course No. | Subject | Teaching Schedule | | | | Credits |
|------------|-----------------------------|-------------------|---|---|-----|---------|
| | | L | T | P | Tot | |
| | Open Elective-I | 3 | 1 | - | 4 | 3.5 |
| IT – 401 | Advanced Data Structures | 3 | 1 | - | 4 | 3.5 |
| IT – 403 | Compiler Design | 3 | 1 | - | 4 | 3.5 |
| IT –405 | Software Project Management | 3 | 1 | - | 4 | 3.5 |
| | Deptt. Elevctive-II | 3 | 1 | - | 4 | 3.5 |
| IT – 411 | Advanced Data Structures Pr | | | 3 | 3 | 1.5 |
| IT – 413 | Minor Project | - | - | 6 | 6 | 6.0 |
| IT – 415 | Training viva | - | - | - | - | 3.0 |
| IT -417 | Seminar | - | 1 | - | 1 | 1.5 |
| Total | | 15 | 6 | 9 | 30 | 29.5 |

List of Courses for Deptt. Elective-II

1. IT-421 Data Warehousing and Data Mining
2. IT-423 Advanced Communications
3. IT-425 Computer Graphics
4. IT-427 Security & Cryptography
5. IT-429 Mobile Computing

8th Semester

| Course No. | Subject | Teaching Schedule | | | | Credits |
|------------|---|-------------------|----------|----------|----------|------------|
| | | L | T | P | Tot | |
| | Open Elective-II | 4 | - | - | 4 | 0.0 |
| IT – 402 | Statistical Models for Computer Science | 3 | 1 | - | 4 | 3.5 |
| IT – 404 | Advanced Networks | 3 | 1 | - | 4 | 3.5 |
| | Deptt. Elective-III | 3 | 1 | - | 4 | 3.5 |
| IT- 412 | Advanced Pr II | - | - | 2 | 2 | 1.0 |
| IT – 414 | Major Project | - | - | 11 | 11 | 14.0 |
| IT – 416 | General Fitness & Professional Aptitude | - | - | - | - | 3.0 |
| IT – 418 | Seminar | - | 1 | - | 1 | 1.5 |
| Total | | 12 | 5 | 13 | 30 | 30 |

List of Courses for Deptt. Elective-III

1. IT-422 Distributed Operating System
2. IT-424 E-Commerce
3. IT-426 Artificial Intelligence
4. IT-428 Embedded System
5. IT-430 E-Governance
6. IT-432 Natural Language Processing
7. IT-434 Multimedia Techniques