

Final Examination:

Institute of science and technology, Tribhuvan University, will conduct the final examination at the end of each semester. 80% weightage will be given to the final examination for theory course and 60% will be given for the course having both theory and practical.

Course Structure:

Semester I

| Course Code | Course Title | Credit Hours | Full Marks |
|--------------|--|--------------|------------|
| CSC109 | Introduction to Information Technology | 3 | 100 |
| CSC110 | C Programming | 3 | 100 |
| CSC111 | Digital Logic | 3 | 100 |
| MTH112 | Mathematics I | 3 | 100 |
| PHY113 | Physics | 3 | 100 |
| Total | | 15 | 500 |

Semester II

| Course Code | Course Title | Credit Hours | Full Marks |
|--------------|-----------------------------|--------------|------------|
| CSC160 | Discrete Structure | 3 | 100 |
| CSC161 | Object Oriented Programming | 3 | 100 |
| CSC162 | Microprocessor | 3 | 100 |
| MTH163 | Mathematics II | 3 | 100 |
| STA164 | Statistics I | 3 | 100 |
| Total | | 15 | 500 |

Semester III

| Course Code | Course Title | Credit Hours | Full Marks |
|--------------|-------------------------------|--------------|------------|
| CSC206 | Data Structure and Algorithms | 3 | 100 |
| CSC207 | Numerical Method | 3 | 100 |
| CSC208 | Computer Architecture | 3 | 100 |
| CSC209 | Computer Graphics | 3 | 100 |
| STA210 | Statistics II | 3 | 100 |
| Total | | 15 | 500 |

Semester IV

| Course Code | Course Title | Credit Hours | Full Marks |
|--------------|----------------------------|--------------|------------|
| CSC257 | Theory of Computation | 3 | 100 |
| CSC258 | Computer Networks | 3 | 100 |
| CSC259 | Operating Systems | 3 | 100 |
| CSC260 | Database Management System | 3 | 100 |
| CSC261 | Artificial Intelligence | 3 | 100 |
| Total | | 15 | 500 |

Semester V

| Course Code | Course Title | Credit Hours | Full Marks |
|--------------|-----------------------------------|--------------|------------|
| CSC314 | Design and Analysis of Algorithms | 3 | 100 |
| CSC315 | System Analysis and Design | 3 | 100 |
| CSC316 | Cryptography | 3 | 100 |
| CSC317 | Simulation and Modeling | 3 | 100 |
| CSC318 | Web Technology | 3 | 100 |
| | Elective I | 3 | 100 |
| Total | | 18 | 600 |

List of Electives:

1. Multimedia Computing (CSC319)
2. Wireless Networking (CSC320)
3. Image Processing (CSC321)
4. Knowledge Management (CSC322)
5. Society and Ethics in Information Technology (CSC323)
6. Microprocessor Based Design (CSC324)

Semester VI

| Course Code | Course Title | Credit Hours | Full Marks |
|--------------|----------------------------------|--------------|------------|
| CSC364 | Software Engineering | 3 | 100 |
| CSC365 | Compiler Design and Construction | 3 | 100 |
| CSC366 | E-Governance | 3 | 100 |
| CSC367 | NET Centric Computing | 3 | 100 |
| CSC368 | Technical Writing | 3 | 100 |
| | Elective II | 3 | 100 |
| Total | | 18 | 600 |

List of Electives:

1. Applied Logic (CSC369)
2. E-commerce (CSC370)
3. Automation and Robotics (CSC371)
4. Neural Networks (CSC372)
5. Computer Hardware Design (CSC373)
6. Cognitive Science (CSC374)

Semester VII

| Course Code | Course Title | Credit Hours | Full Marks |
|--------------|----------------------------------|--------------|------------|
| CSC409 | Advanced Java Programming | 3 | 100 |
| CSC410 | Data Warehousing and Data Mining | 3 | 100 |
| MGT411 | Principles of Management | 3 | 100 |
| CSC412 | Project Work | 3 | 100 |
| | Elective III | 3 | 100 |
| Total | | 15 | 500 |

List of Electives:

1. Information Retrieval (CSC413)
2. Database Administration (CSC414)
3. Software Project Management (CSC415)
4. Network Security (CSC416)
5. Digital System Design (CSC417)
6. International Marketing (MGT418)

Semester VIII

| Course Code | Course Title | Credit Hours | Full Marks |
|--------------|-------------------|--------------|------------|
| CSC461 | Advanced Database | 3 | 100 |
| CSC462 | Internship | 6 | 200 |
| | Elective IV | 3 | 100 |
| | Elective V | 3 | 100 |
| Total | | 15 | 500 |

List of Electives:

1. Advanced Networking with IPV6 (CSC463)
2. Distributed Networking (CSC464)
3. Game Technology (CSC465)
4. Distributed and Object Oriented Database (CSC466)
5. Introduction to Cloud Computing (CSC467)
6. Geographical Information System (CSC468)
7. Decision Support System and Expert System (CSC469)
8. Mobile Application Development (CSC470)
9. Real Time Systems (CSC471)
10. Network and System Administration (CSC472)
11. Embedded Systems Programming (CSC473)
12. International Business Management (MGT474)