Masters in Information Technology (MIT)

Introduction:

The Masters in Information Technology (MIT) curriculum is designed by closely following the courses practiced in accredited international universities, subject to the condition that the intake students are mostly from Bachelor in Masters in Information Technology, Computer Science, Computer Engineering, Computer Application, Information Management, or Information Systems. The Masters in Information Technology (MIT) provides the knowledge, understanding and research skills to solve real-world problems with cutting-edge technology. The MIT program avails to develop deep theoretical and practical knowledge in specific areas of information technology so that MIT graduates will have the intellectual and conceptual foundation to play leading roles in the development of the information technology industry. The MIT program curriculum covers the standard core and elective Information Technology courses. In addition, the program offers several courses that provide knowledge for both research and development information technology areas. The foundation and core courses are designed to meet the graduate program requirement, and the service courses are designed to meet the need of fast changing computer technologies and their application. All graduate students are required to complete at least 59 credit hours and they may complete maximum of 62 credit hours. The program is under Institute of Science and Technology (IOST).

Objective:

The main objective of MIT program is to deliver comprehensive education in principles and practices on information technology so to provide students' depth knowledge and research skills in the information technology domain including theories, programming practices, and application of computers.

Admission Requirement:

The student entering the MIT program must have completed Bachelor of Information Technology degree offered by TU or its equivalent. Prospective student can apply for admission by submitting a completed from as required by the general rule of the university. The students for admission are selected based on the scores in the entrance test conducted by the admitting college. The program also admits students having Bachelor of Computer Science, Bachelor of Computer Science and Information Technology, Bachelor of Information Technology, Bachelor of Engineering in Computer and Electronics, Bachelor of Information Management, Bachelor of Information Systems, Bachelor of Computer Application of their equivalent.

Evaluation:

All the courses, seminar, Literature Review Research, and Project/ Thesis should have internal weightage of 40% and external weightage of 60%. A student should secure minimum of 50% in overall weightage to pass a course. The final grade point in each course will be the sum of overall weightage of in all categories.

The Seminar, Literature Review Research, and Project/Thesis are evaluated by different evaluators. To pass these, students should secure at least 50% marks in the evaluation of each evaluator and the final grade point will be the sum of all the evaluations. For the evaluation of final presentations, an external examiner will be assigned.

Grading System:

The grade awarded to each student in each course is based on his/her overall performance through internal and external evaluations. Several evaluation criteria are used for the continuous internal evaluation. External evaluation is solely based on examination conducted by Institute of Science and Technology (IoST). The grade in each course is assigned using a letter grade that indicates the overall performance of each student in each course. The chart below represents letters with its corresponding grading scale, grade point, and performance remarks.

Letter Grade	Grading Scale	Grade Point	Performance Remarks
A	90-100	4	Distinction
A^-	80 – less than 90	3.7	Very Good

B^+	70 – less than 80	3.3	First Division
B	60 – less than 70	3	Second Division
B^-	50 – less than 60	2.7	Pass in individual subject
F	0 – less than 50	0	Fail

The performance of each student in each semester shall be evaluated in terms of Semester Grade Point Average (SGPA) which is the grade point average for the semester. SGPA is calculated as

$$\text{SGPA} = \frac{\text{Total Grade Points earned in a Semester}}{\text{Total number of credits earned in the semester}}$$

The cumulative grade point average (CGPA) is the grade point average for all completed semesters. CGPA is calculated as

$$\text{CGPA} = \frac{\text{Total Grade Points earned}}{\text{Total number of credits completed}}$$

Final Examination:

Institute of Science and Technology, Tribhuvan University, will conduct the final examination at the end of each semester for each course except Seminar, Literature review research, and Project/Thesis. The weightage of this final examination is 60% of the overall weightage.

Course Structure:

Semester I

Course Code	Course Title	Credit Hours	Full Marks
MIT501	Object Oriented Analysis and Design	3	75
MIT502	Advanced Database System	3	75
MIT503	Enterprise Applications	3	75
MIT504	Information Security	3	75
MIT505	Programming Language	3	75
Total		15	375

Semester II

Course Code	Course Title	Credit Hours	Full Marks
MIT551	Distributed and Cloud Computing	3	75
MIT552	Digital Marketing	3	75
MIT553	IT Project Management	3	75
MIT554	Intelligent Computing	3	75
MIT555	Seminar	1	25
	Elective I	3	75
Total		16	400

List of Electives:

1. Internet of Things (MIT556)
2. Data Structures and Algorithms Analysis (MIT557)
3. E-commerce and E-business (MIT558)
4. Advanced Programming (MIT559)

Semester III

Course Code	Course Title	Credit Hours	Full Marks
MIT601	Cybersecurity and Digital Forensics	3	75
MIT602	Data Anaytics and Visualization	3	75
MIT603	Digital Governance	3	75
MIT554	Term Paper	2	50
	Elective II	3	75
Total		14	350

List of Electives:

1. Digital Economy (MIT605)
2. Mobile Computing (MIT606)
3. Human Computer Interaction (MIT607)
4. Database Administration (MIT608)

Semester IV

Course Code	Course Title	Credit Hours	Full Marks
MIT651	IT Entrepreneurship and Innovation	3	75
MIT652	Thesis/Project	8	200
	Elective III	3	75
	Extra Elective	3	75
Total		14	350

List of Electives/Extra Electives:

1. Social Network Analytics (MIT653)
2. Software Testing (MIT654)
3. Network and System Administration (MIT655)
4. Web Technology (MIT656)
5. International Business (MIT657)