

Master of Science in Information Technology

Eligibility

Entry-level requirement is a Bachelor's degree in any branch of Engineering/ Technology or Master's Degree in Computer Science and Applications (MCA) with a score of 60 % marks or above or CGPA of 6.5 or above in 10 points scale in the qualifying examination is required. SC/ST candidates are eligible for admission, if they have minimum pass marks in the qualifying examination.

Number of seats

The number of seats for the program is 60.

Selection Criteria

Admissions are based on All India Admission Test and Interview. Candidates with valid GATE scores and those applying under NRI / Foreign National category are exempted from the admission test. The All India test will be conducted at Bengaluru, Bhubaneswar, Chennai, Delhi, Hyderabad, Kochi, Kolkatta, Lucknow, Patna, Thiruvananthapuram. Those who qualify the test will be called for interview at the test centres or in IITM-K, Thiruvananthapuram

Course Description

Master of Science in Information Technology is the flagship programme offered by the Indian Institute of Information Technology and Management-Kerala and aims at high standards in basic and applied sciences, technology, management and information system. The programme focuses on a broad grasp of foundations in Computer Science and IT, deep understanding of the area of specialization, an innovative ability to solve new problems, and a capacity to learn continually and interact with trans-disciplinary groups. Extensive use of Technology Enhanced Learning methodologies together with Web based course management and on-line learning systems enriches the programme delivery and facilitate students to broaden their horizons.

Course objectives

- To impart sound knowledge in Science, Technology and Management related to Information Systems and their applications in relevant fields with the latest technologies.
- Build a pool of technically qualified manpower to build a knowledge Society.

- To cater the needs of industry and scientific organizations in global era in IT and aligned areas.
- Develops professionals and leaders of high caliber imbued with values of entrepreneurship, ethics and social
- Responsibility
- To emerge as leader in the vital areas that are essential to the effective integration of IT enabled services.

Course Duration and Credits

The duration of the programme is 2 years full time. The courses are carefully designed to attain both technical and managerial aspects that enable them to grow into competent, seasoned professionals. There are 13 core courses spread across 3 semesters accumulating 48 credits. The 4th semester is for internship with 18 credits. Students are required to undergo an industry or research oriented project in any leading IT or R and D organization. Students are also required to take up two electives of 6 credits and the total requirement of credit is 72 for post graduation.

Core Courses

The student should have earned 48 credits from the following 13 core courses:

- ITMS2101 Discrete Mathematics
- ITMS2102 Computer Architecture and Organization
- ITMS2103 Principles of Programming
- ITMS2104 Technical Communication
- ITMS2105 Object-Oriented Programming in JAVA
- ITMS2201 Data Structures and Algorithms
- ITMS2202 Operating Systems
- ITMS2203 Computer Networks
- ITMS2204 Database Management System
- ITMS2202 Object Oriented Analysis and Design
- ITMS2303 Web Technology

Elective Courses

The student is required to earn at least six credits in 2 Elective courses from the following list of courses:

- ITMS2E01 Soft Computing

- ITMS2E02 Geographical Information Systems
- ITMS2E03 Computational Biology
- ITMS2E04 Embedded Systems
- ITMS2E05 Artificial Intelligence and Software Agents
- ITMS2E06 Digital Signal Processing
- ITMS2E07 Scientific Computing
- ITMS2E08 Software project Management
- ITMS2E09 Principles of Management
- ITMS2E10 Software Engineering

TENTATIVE SEMESTER-WISE BREAKUP OF COURSES FOR 2 YEARS**Semester I**

No	Course Code	Course Title	Credits
1	ITMS2101	Discrete Maths	3
2	ITMS21021	Computer Archi.and Organ	4
3	ITMS2103	Principles of Program	4

4	ITMS2104	Technical Comm.	3
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5	ITMS2105	Object Orient.Pro. In JAVA	
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Total for Semester I	18	15	9
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Semester II

No	Course Code	Course Title	Credits
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1	ITMS2201	Data Struct. And Algor.	4
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2	ITMS22021	Operating Systems	4
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3	ITMS2203	Computer Networks	4
4	ITMS2204	Database Mang.System	4
5	ITMS2EX1	Principles of Management	
Total for Semester II	19	15	12

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Semester III

No	Course Code	Course Title	Credits
1	ITMS 23021	Object Orient. Analysis	4

2	ITMS2303	Web Technology	4
3	ITMSEX2	Software Engineering	3
4	ITMSEX3	Elective I	3
5	ITMSEX4	Elective II	3
Total for Semester III		15	6

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IE - Internal Examination
UE - University Examination

Semester IV

No	Course Code	Course Title	Marks
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IE	UE	Total	
1	ITMS2306	Research/Internship	200

Graduation Eligibility

For graduation, the student must satisfy all the requirements as per the CUSAT rules.