



ESTD : 1946

**THE NATIONAL INSTITUTE OF ENGINEERING
MYSORE – 8
(Autonomous Institution under VTU)**

M.Tech (Information Technology)

Scheme of I-IV Semester

M.Tech (Information Technology)

(2021-2023)

Department of Computer Science and Engineering

Department of Computer Science and Engineering

MASTER OF TECHNOLOGY IN INFORMATION TECHNOLOGY

VISION

The Department shall contribute globally acceptable computer engineers with value based technology and educational perspective, trained through best in class faculty and infrastructure.

MISSION

To evolve into a globally acknowledged department with sound contribution in the areas of teaching, research and consultancy, through good infrastructure, well equipped laboratories with highly qualified staff and innovative teaching methodology.

Program Educational Objectives

The Department will produce graduates who are able to

PEO1: Our graduates will be successful information engineers, serving in academia, research and industry both at supportive and leadership roles, with analytical skills, effective communication and high regards to ethical practices.

PEO2: Our graduates will engage in life-long learning, both formal and informal, to remain current in their profession.

Program Outcomes

At the time of the graduation, our students will

PO1: An ability to independently carry out research /investigation and development work to solve practical problems in the field of information technology

PO2: An ability to write and present a substantial technical report/document

PO3: Students should be able to demonstrate a degree of mastery over the area with respect to information technology

PO4: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's work to manage projects and in multidisciplinary environments

PO5: Ability to engage in life-long learning, independent and out of box thinking

SCHEME OF TEACHING AND EXAMINATION

I SEMESTER M.Tech (IT)

Sl.No	Code	Subject	Dept./Board	Category	Hrs/week			Credits
					L	T	P	
1	MIT1C01	Advances in Computer Networks	CS&E	FC	4	2	0	5
2	MIT1C02	Storage Area Networks	CS&E	FC	4	2	0	5
3	MIT1C03	Web Services	CS&E	FC	3	2	0	4
4	AMT1C02	Discrete Mathematics and Probability Theory	Maths	GC	4	0	0	4
5	MIT1E1XX	Elective-1	CS&E	FE	3	0	0	3
6	MIT1E2XX	Elective-2	CS&E	FE	3	0	0	3
7	MIT1CRM	Research Methodology	CS&E	FC	2	0	0	2
8	MIT1L01	Advanced Computer Networks Laboratory	CS&E	FC	0	0	2	1
Total					31			27

SCHEME OF TEACHING AND EXAMINATION

II SEMESTER M.Tech (IT)

Sl.No.	Code	Subject	Dept./Board	Category	Hrs/week			Credits
					L	T	P	
1	MIT2C01	Cyber Security and Cyber law	CS&E	FC	3	2	0	4
2	MIT2C02	Cloud Computing	CS&E	FC	4	2	0	5
3	MIT2C03	Protocol Engineering	CS&E	FC	4	2	0	5
4	MIT2C04	Advanced Database Management Systems	CS&E	FC	4	0	0	4
5	MIT2E3XX	Elective – III	CS&E	FE	3	0	0	3
6	MIT2E4XX	Elective – IV	CS&E	FE	3	0	0	3
7	MIT2IXX	Industry Driven Elective	CS&E	FC	2	0	0	2
8	MIT2L01	Advanced DBMS Laboratory	CS&E	FC	0	0	2	1
Total					31			27

SCHEME OF TEACHING AND EXAMINATION

III SEMESTER M.Tech(IT)

Sl.No.	Subject Code	Subject	Category	L	T	P	Cr.
1	MIT3MO01	Open Elective - MOOC (SWAYAM NPTEL) (Other Department) – 8 weeks	FE	2	0	0	2
2	MIT3M01	MOOC Department Specific/Management (SWAYAM NPTEL) – 12 weeks	FC	3	0	0	3
3	MIT3C02	Seminar/Paper Presentation	FC	0	0	0	1
4	MIT3C03	Internship	FC	0	0	0	5
5	MIT3C05	Project Phase-I	FC	0	0	0	8
Total Credits							19

SCHEME OF TEACHING AND EXAMINATION

IV SEMESTER M.Tech(IT)

Sl.No.	Subject Code	Subject	Category	L	T	P	Cr.
1	MIT4C01	Project- Phase-2		0	0	0	15
Total Credits							15

ELECTIVE COURSES

Sl. No	Subject Code	Subject	Category	Teaching Hours/ Week			Credits
				L	T	P	
Elective I							
1	MIT1E101	Advanced Digital Communication	FE	3	0	0	3
2	MIT1E102	OOAD & Design Patterns	FE	3	0	0	3
3	MIT1E103	C# and .NET	FE	3	0	0	3
4	MIT1E104	Multimedia Information Systems	FE	3	0	0	3
5	MIT1E1XX	Image Processing and Applications	FE	3	0	0	3
Elective II							
1	MIT1E201	Information and Network Security	FE	3	0	0	3
2	MIT1E202	Supply Chain Management	FE	3	0	0	3
3	MIT1E203	Network Management	FE	3	0	0	3
4	MIT1E204	Client Server Computing	FE	3	0	0	3
Elective III							
1	MIT2E301	Distributed systems	FE	3	0	0	3
2	MIT2E302	Information Retrieval	FE	3	0	0	3
3	MIT2E303	4G Technologies	FE	3	0	0	3
4	MIT2E304	Internet of Things	FE	3	0	0	3
5	MIT2E305	Artificial Intelligence	FE	3	0	0	3
Elective IV							
1	MIT2E401	Optical Networks	FE	3	0	0	3
2	MIT2E402	AdHoc Networks	FE	3	0	0	3
3	MIT2E403	Python Programming & Applications	FE	3	0	0	3
4	MIT2E404	Web Programming	FE	3	0	0	3
5	MIT2E405	Introduction to Machine Learning	FE	3	0	0	3

INDUSTRY DRIVEN ELECTIVE COURSES

Sl.No	Subject Code	Subject	Category	Teaching Hours/ Week			Credits
				L	T	P	
1	MIT2IXX	Offered by Industry	FE	2	0	0	2

OPEN ELECTIVES(MOOC) – 2 Credits

Sl.No	Subject Code	Subject	Category	Teaching Hours/ Week			Credits
				L	T	P	
1	MIT2OXX	MOOC Elective(NPTEL)	FE	2	0	0	2

OPEN ELECTIVES – 2 Credits

Sl.No	Subject Code	Subject	Category	Teaching Hours/ Week			Credits
				L	T	P	
1	MIT2OXX	Web Commerce	FE	2	0	0	2