

Program Name: Bachelor of Science (Information Technology)
Abbreviation Name: B.Sc. (IT)
Semester: I
Program Code: ET110
With effect from: 2023-24

Course Code	Course Name	Type of Course	Credit	Hours per week				Theory (Marks)				Practical (Marks)				Total (Marks)
				L	T	P	Total	University Assessment		Continuous Assessment		University Assessment		Continuous Assessment		
								Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
11-ITM201-1C	Computer and Information Technology	MJ	4	3	0	2	5	18	50	09	25	-	-	09	25	100
11-ITM202-1C	Programming in C	MJ	4	3	0	2	5	18	50	09	25	-	-	09	25	100
11-ITE201-1C	Human Computer Interaction	MN	4	3	0	2	5	18	50	09	25	-	-	09	25	100
11-MDC201-1C	Basic Mathematics- I	MDC	4	3	1	0	4	18	50	18	50	-	-	-	-	100
11-AEC202-1C	Business Communication	AEC	2	1	1	0	2	09	25	09	25		-		-	50
11-SEC206-1C	IT Workshop	SEC	2	0	0	4	4					09	25	09	25	50
11-IKS201-1C	Indian Constitution	IKS	2	1	1	0	2	09	25	09	25		-		-	50
Total			22	14	3	10	27	-	250	-	175	-	25	-	100	550

Program Name: Bachelor of Science (Information Technology)
Abbreviation Name: B.Sc. (IT)
Semester: II
Program Code: ET110
With effect from: 2023-24

Course Code	Course Name	Type of Course	Credit	Hours per week				Theory (Marks)				Practical (Marks)				Total (Marks)
				L	T	P	Total	University Assessment		Continuous Assessment		University Assessment		Continuous Assessment		
								Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
12-ITM203-1C	Data Structures Using C	MJ	4	3	0	2	5	18	50	09	25	-	-	09	25	100
12-ITM204-1C	Operating System Concepts	MJ	4	3	0	2	5	18	50	09	25	-	-	09	25	100
12-ITE202-1C	Software Engineering and Modeling	MN	4	3	0	2	5	18	50	09	25	-	-	09	25	100
12-MDC202-1C	Introduction to Digital Electronics	MDC	4	3	0	2	5	18	50	09	25	-	-	09	25	100
12-AEC201-1C	Personality Development	AEC	2	1	1	0	2	09	25	09	25		-		-	50
12-SEC202-1C	Digital Marketing	SEC	2	0	0	4	4					09	25	09	25	50
12-VAC201-1C	Yoga and Wellness	VAC	2	0	0	4	4					09	25	09	25	50
Total			22	13	1	16	30	-	225		125	-	50	-	150	550

Program Name: Bachelor of Science (Information Technology)
Abbreviation Name: B.Sc. (IT)
Semester: III
Program Code: ET110
With effect from: 2023-24

Course Code	Course Name	Type of Course	Credit	Hours per week				Theory (Marks)				Practical (Marks)				Total (Marks)
				L	T	P	Total	University Assessment		Continuous Assessment		University Assessment		Continuous Assessment		
								Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
13-ITM205-2C	Database Management Systems	MJ	4	3	0	2	5	18	50	09	25	-	-	09	25	100
13-ITM206-2C	Object Oriented Programming Using Java	MJ	4	3	0	2	5	18	50	09	25	-	-	09	25	100
13-ITM207-2C	Network Basics	MJ	4	3	0	2	5	18	50	09	25	-	-	09	25	100
13-MDC203-2C	Computational Statistics	MDC	4	3	1	0	4	18	50	18	50	-	-	-	-	100
13-AEC221-2C	Functional Grammar and Composition	AEC	2	1	1	0	2	09	25	09	25		-		-	50
13-IKS202-2C	Vedic Mathematics	IKS	2	1	1	0	2	09	25	09	25		-		-	50
13-SEC203-2C	Web Programming	SEC	2	0	0	4	4					09	25	09	25	50
Total			22	14	3	10	27	-	250	-	175	-	25	-	100	550

Program Name: Bachelor of Science (Information Technology)
Abbreviation Name: B.Sc. (IT)
Semester: IV
Program Code: ET110
With effect from: 2023-24

Course Code	Course Name	Type of Course	Credit	Hours per week				Theory (Marks)				Practical (Marks)				Total (Marks)
				L	T	P	Total	University Assessment		Continuous Assessment		University Assessment		Continuous Assessment		
								Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
14-ITM208-2C	Python Programming	MJ	4	3	-	2	5	18	50	09	25	-	-	09	25	100
14-ITM209-2C	Data Mining & Warehouse	MJ	4	3	-	2	5	18	50	09	25	-	-	09	25	100
14-ITM210-2C	Usability Design for Software Application	MJ	4	3	-	2	5	18	50	09	25	-	-	09	25	100
14-ITE203-2C OR 14-ITE204-2C OR 14-ITE205-2C	Fundamentals of Cyber Security OR Machine Learning for Data Analysis OR Fundamentals of Internet of Things	MN	4	3	-	2	5	18	50	09	25	-	-	09	25	100
14-AEC222-2C	Environment Conservation & Disaster Management	AEC	2	2	-	-	2	09	25	09	25		-		-	50
14-SEC204-2C	Data Analysis using Excel	SEC	2	-	-	4	4					09	25	09	25	50
14-VAC211-2C	Human Values and Ethics	VAC	2	1	1	-	2	09	25	09	25		-		-	50
Total			22	15	1	12	28	-	250	-	150	-	25	-	125	550

Program Name: Bachelor of Science (Information Technology)
Abbreviation Name: B.Sc. (IT)
Semester: V
Program Code: ET110
With effect from: 2023-24

Course Code	Course Name	Type of Course	Credit	Hours per week				Theory (Marks)				Practical (Marks)				Total (Marks)
				L	T	P	Total	University Assessment		Continuous Assessment		University Assessment		Continuous Assessment		
								Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
15-ITM301-3C	Artificial Intelligence for Real World Application	MJ	4	3	0	2	5	18	50	09	25	-	-	09	25	100
15-ITM302-3C	Data Modelling & Visualization	MJ	4	3	0	2	5	18	50	09	25	-	-	09	25	100
15-ITM303-3C	Data Analytics & Reporting	MJ	4	3	0	2	5	18	50	09	25	-	-	09	25	100
15-ITE301-3C OR 15-ITE302-3C OR 15-ITE303-3C	Cyber Law OR Foundation of Data Science OR Wireless Networks	MN	4	3	0	2	5	18	50	09	25	-	-	09	25	100
15-ITE304-3C OR 15-ITE305-3C OR 15-ITE306-3C	Cryptography and Network Security OR Advanced Machine Learning Techniques OR Sensor Device and Components	MN	4	3	0	2	5	18	50	09	25	-	-	09	25	100
15-SEC310-3C	Entrepreneurship Skills	SEC	2	0	0	4	4					09	25	09	25	50
Total			22	15	0	14	29	-	250	-	125	-	25	-	150	550

Program Name: Bachelor of Science (Information Technology)
Abbreviation Name: B.Sc. (IT)
Semester: VI
Program Code: ET110
With effect from: 2023-24

Course Code	Course Name	Type of Course	Credit	Hours per week				Theory (Marks)				Practical (Marks)				Total (Marks)
				L	T	P	Total	University Assessment		Continuous Assessment		University Assessment		Continuous Assessment		
								Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
16-ITM304-3C	Big Data on Cloud	MJ	4	3	0	2	5	18	50	09	25	-	-	09	25	100
16-ITM305-3C	Intelligent Game Design	MJ	4	3	0	2	5	18	50	09	25	-	-	09	25	100
16-ITM306-3C	Design Thinking	MJ	4	3	0	2	5	18	50	09	25	-	-	09	25	100
16-ITE307-3C OR 16-ITE308-3C OR 16-ITE309-3C	Cyber Forensics OR Natural Language Processing OR Hybrid Application Development	MN	4	3	0	2	5	18	50	09	25	-	-	09	25	100
16-AEC223-3C	Social media and Blog Writing	AEC	2	0	0	4	4					09	25	09	25	50
16-ITM307-3C	Internship in Major Specific Course	MJ	4	0	0	8	8					18	50	18	50	100
Total			22	12	0	20	32	-	200	-	100	-	75	-	175	550

Program Name: Bachelor of Science (Information Technology) (Honours)
Abbreviation Name: B.Sc. (IT)
Semester: VII
Program Code: ET110
With effect from: 2023-24

Course Code	Course Name	Type of Course	Credit	Hours per week				Theory (Marks)				Practical (Marks)				Total (Marks)
				L	T	P	Total	University Assessment		Continuous Assessment		University Assessment		Continuous Assessment		
								Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
17-ITM401-4C	Deep Learning	MJ	4	3	0	2	5	18	50	09	25	-	-	09	25	100
17-ITM402-4C	Advanced Big Data Analytics	MJ	4	3	0	2	5	18	50	09	25	-	-	09	25	100
17-ITM403-4C	Research Methodology	MJ	4	3	0	2	5	18	50	09	25	-	-	09	25	100
17-ITE401-4C OR 17-ITE402-4C OR 17-ITE403-4C	Security in Cyber Physical Environment OR Computer Vision OR Embedded System Design	MN	4	3	0	2	5	18	50	09	25	-	-	09	25	100
17-ITM404-4C	On the Job Training	OJT	6	0	0	12	12	-	-	-	-	27	75	27	75	150
Total			22	12	0	20	32	-	200	-	100	-	75	-	175	550

Program Name: Bachelor of Science (Information Technology) (Honours with Research)
Abbreviation Name: B.Sc. (IT)
Semester: VII
Program Code: ET110
With effect from: 2023-24

Course Code	Course Name	Type of Course	Credit	Hours per week				Theory (Marks)				Practical (Marks)				Total (Marks)
				L	T	P	Total	University Assessment		Continuous Assessment		University Assessment		Continuous Assessment		
								Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
17-ITM401-4C	Deep Learning	MJ	4	3	0	2	5	18	50	09	25	-	-	09	25	100
17-ITM402-4C	Advanced Big Data Analytics	MJ	4	3	0	2	5	18	50	09	25	-	-	09	25	100
17-ITM403-4C	Research Methodology	MJ	4	3	0	2	5	18	50	09	25	-	-	09	25	100
17-ITE401-4C OR 17-ITE402-4C OR 17-ITE403-4C	Security in Cyber Physical Environment OR Computer Vision OR Embedded System Design	MN	4	3	0	2	5	18	50	09	25	-	-	09	25	100
17-ITM405-4C	Research Project-I	RP	6	0	0	12	12	-	-	-	-	27	75	27	75	150
Total			22	12	0	20	32	-	200	-	100	-	75	-	175	550

Program Name: Bachelor of Science (Information Technology) (Honours)
Abbreviation Name: B.Sc. (IT)
Semester: VIII
Program Code: ET110
With effect from: 2023-24

Course Code	Course Name	Type of Course	Credit	Hours per week				Theory (Marks)				Practical (Marks)				Total (Marks)
				L	T	P	Total	University Assessment		Continuous Assessment		University Assessment		Continuous Assessment		
								Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
18-ITM406-4C	Basic DevOps Engineering	MJ	4	3	0	2	5	18	50	09	25	-	-	09	25	100
18-ITM407-4C	Advanced Computer Networks	MJ	4	3	0	2	5	18	50	09	25	-	-	09	25	100
18-ITM408-4C	Research and Publication Ethics	MJ	4	3	0	2	5	18	50	09	25	-	-	09	25	100
18-ITE404-4C OR 18-ITE405-4C OR 18-ITE406-4C	Security Auditing, Risk & Compliance OR Virtual and Augmented Reality OR Embedded Programming	MN	4	3	0	2	5	18	50	09	25	-	-	09	25	100
18-ITM409-4C	On the Job Training	OJT	6	0	0	12	12	-	-	-	-	27	75	27	75	150
Total			22	12	0	20	32	-	200	-	100	--	75	--	175	550

Program Name: Bachelor of Science (Information Technology) (Honours with Research)
Abbreviation Name: B.Sc. (IT)
Semester: VIII
Program Code: ET110
With effect from: 2023-24

Course Code	Course Name	Type of Course	Credit	Hours per week				Theory (Marks)				Practical (Marks)				Total (Marks)
				L	T	P	Total	University Assessment		Continuous Assessment		University Assessment		Continuous Assessment		
								Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
18-ITM406-4C	Basic DevOps Engineering	MJ	4	3	0	2	5	18	50	09	25	-	-	09	25	100
18-ITM407-4C	Advanced Computer Networks	MJ	4	3	0	2	5	18	50	09	25	-	-	09	25	100
18-ITM408-4C	Research and Publication Ethics	MJ	4	3	0	2	5	18	50	09	25	-	-	09	25	100
18-ITE404-4C OR 18-ITE405-4C OR 18-ITE406-4C	Security Auditing, Risk & Compliance OR Virtual and Augmented Reality OR Embedded Programming	MN	4	3	0	2	5	18	50	09	25	-	-	09	25	100
18-ITM410-4C	Research Project-II	RP	6	0	0	12	12	-	-	-	-	27	75	27	75	150
Total			22	12	0	20	32	-	200	-	100	--	75	--	175	550

Sr. No	Track-1 Cyber Security	Track-2 Machine Learning & Data Science	Track-3 Embedded Systems and IoTs
1	Fundamentals of Cyber Security	Machine Learning for Data Analysis	Fundamentals of Internet of Things
2	Cyber Law	Foundation of Data Science	Wireless Networks
3	Cryptography and Network Security	Advanced Machine Learning Techniques	Sensor Device and Components
4	Cyber Forensics	Natural Language Processing	Hybrid Application Development
5	Security in Cyber Physical Environment	Computer Vision	Embedded System Design
6	Security Auditing, Risk & Compliance	Virtual and Augmented Reality	Embedded Programming

List of Multidisciplinary Courses (MD)

Sr. No.	Course Code	Course Name	Credit
1	11MDC201-1C	Basic Mathematics- I	4
2	12MDC202-1C	Introduction to Digital Electronics	4
3	13MDC203-2C	Computational Statistics	4

List of Ability Enhancement Courses (AEC)

Sr. No.	Course Code	Course Name	Credit
1	11-AEC202-1C	Business Communication	2
2	12-AEC201-1C	Personality Development	2
3	13-AEC221-2C	Functional Grammar and Composition	2
4	14-AEC222-2C	Environment Conservation & Disaster Management	2
5	16-AEC223-3C	Social Media and Blog Writing	2

List of Skill Enhancement Courses (SEC)

Sr. No.	Course Code	Course Name	Credit
1	11-SEC206-1C	IT Workshop	2
2	12-SEC202-1C	Digital Marketing	2
3	13-SEC203-2C	Web Programming	2
4	14-SEC204-2C	Data Analysis using Excel	2
5	15-SEC310-3C	Entrepreneurship Skills	2

List of Value Addition Courses (VAC/IKS)

Sr. No.	Course Code	Course Name	Credit
1	11-IKS201-1C	Indian Constitution	2
2	12-VAC201-1C	Yoga and Wellness	2
3	13-IKS202-2C	Vedic Mathematics	2
4	14-VAC211-2C	Human Values and Ethics	2

Internship Course

Sr. No.	Course Code	Course Name	Credit
1	16-ITM307-3C	Internship in Major Specific Course	4