

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.TECH. IN INTERNET OF THINGS
COURSE STRUCTURE AND SYLLABUS
EFFECTIVE FROM ACADEMIC YEAR 2022-23 ADMITTED BATCH

I YEAR I – SEMESTER

Course Code	Course Title	L	T	P	Credits
Professional Core - I	IoT Architectures & System Design	3	0	0	3
Professional Core - II	ARM Microcontrollers	3	0	0	3
Professional Elective - I	1. Optimization Theory and Applications 2. Advanced Computer Architecture 3. Pattern Recognition and Machine Learning	3	0	0	3
Professional Elective - II	1. Cloud Architecture & Computing 2. Hardware & Software Codesign 3. Embedded Real Time Operating Systems	3	0	0	3
Lab - I	IoT With Arduino, ESP, and Raspberry-Pi Lab	0	0	4	2
Lab - II	ARM Microcontrollers Lab	0	0	4	2
	Research Methodology & IPR	2	0	0	2
Audit - I	Audit Course – I	2	0	0	0
	Total	16	0	8	18

I YEAR II – SEMESTER

Course Code	Course Title	L	T	P	Credits
Professional Core - III	Hardware Security	3	0	0	3
Professional Core - IV	Machine Learning for Communication Systems	3	0	0	3
Professional Elective - III	1. IoT Enabling Technologies 2. Secure Networks 3. Mobility Modelling	3	0	0	3
Professional Elective - IV	1. Social Networks 2. IoT Communication & Protocols 3. Voice and Data Networks	3	0	0	3
Lab – III	Hardware Security Lab	0	0	4	2
Lab – IV	Machine Learning for Communications Systems Lab	0	0	4	2
	Mini Project with Seminar	0	0	4	2
Audit – II	Audit Course – II	2	0	0	0
	Total	14	0	12	18

II YEAR I – SEMESTER

Course Code	Course Title	L	T	P	Credits
Professional Elective - V	1. 5G and Beyond Communications 2. Embedded Sensors 3. Human-Machine Interfacing	3	0	0	3
Open Elective	Open Elective	3	0	0	3
Dissertation	Dissertation Work Review – II	0	0	12	6
	Total	6	0	12	12

II YEAR II - SEMESTER

Course Code	Course Title	L	T	P	Credits
Dissertation	Dissertation Work Review - III	0	0	12	06
Dissertation	Dissertation Viva-Voce	0	0	28	14
	Total	0	0	40	20

Open Electives:

1. Business Analytics
2. Industrial Safety
3. Operations Research
4. Cost Management of Engineering Projects
5. Composite Materials

Audit Course I & II:

1. English for Research Paper Writing
2. Disaster Management
3. Sanskrit for Technical Knowledge
4. Value Education
5. Constitution of India
6. Pedagogy Studies
7. Stress Management by Yoga
8. Personality Development Through Life Enlightenment Skills