JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY: KAKINADA
KAKINADA – 533 003, Andhra Pradesh, India

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

COURSE STRUCTURE & SYLLABUS M.Tech CSE for COMPUTER SCIENCE & ENGINEERING PROGRAMME
(Applicable for batches admitted from 2019-2020)

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

I-SEMESTER

S.No	Course Code	Courses	Category	L	T	P	C
1	MTCSE1101	**Program Core-1** Mathematical Foundations of Computer Science	PC	3	0	0	3
2	MTCSE1102	**Program Core-2** Advanced Data Structures & Algorithms	PC	3	0	0	3
3	MTCSE1103	**Program Elective-1** 1. Big Data Analytics 2. Digital Image Processing 3. Advanced Operating Systems	PE	3	0	0	3
4	MTCSE1104	**Program Elective-2** 1. Advanced Computer Networks 2. Internet of Things 3. Object Oriented Software Engineering	PE	3	0	0	3
5	MTCSE1105	**Research Methodology and IPR**	CC			0	2
6	MTCSE1106	**Laboratory-1** Advanced Data Structures & Algorithms Lab	LB	0	0	4	2
7	MTCSE1107	**Laboartory-2** Advanced Computing Lab	LB	0	0	4	2
8	MTCSE1108	**Audit Course-1***	AC	2	0	0	0
		Total Credits					18

*****Student has to choose any one audit course listed below.**

II SEMESTER

S.No	Course Code	Courses	Category	L	T	P	C
1	MTCSE1201	**Program Core-3** Machine learning	PC	3	0	0	3
2	MTCSE1202	**Program Core-4** MEAN Stack Technologies	PC	3	0	0	3
3	MTCSE1203	**Program Elective-3** 1. Advanced Databases and Mining 2. Ad Hoc & Sensor Networks 3. Soft Computing	PE	3	0	0	3
4	MTCSE1204	**Program Elective-4** 1. Cloud Computing 2. Principles of computer security 3. High Performance Computing	PE	3	0	0	3
5	MTCSE1205	**Laboratory-3** Machine Learning with python lab	LB	0	0	4	2
6	MTCSE1206	**Laboartory-4** MEAN Stack Technologies Lab	LB	0	0	4	2
7	MTCSE1207	**Mini Project with Seminar**	MP	2	0	0	2
8	MTCSE1208	**Audit Course-2 ***	AC	2	0	0	0
		Total Credits					18

*****Student has to choose any one audit course listed below.**
Audit Course 1 & 2:
  1. English for Research Paper   5. Constitution of India

Writing
2. Disaster Management
3. Sanskrit for Technical Knowledge
4. Value Education

6. Pedagogy Studies
7. Stress Management by Yoga
8. Personality Development through Life Enlightenment Skills

III-SEMESTER

S.No	Course Code	Courses	Category	L	T	P	C
1	MTCSE2101	**Program Elective-5** 1. Deep Learning 2. Social Network Analysis 3. MOOCs-1 (NPTEL/SWAYAM) 12 Week Program related to the programme which is not listed in the course structure	PE	3	0	0	3
2	MTCSE2102	**Open Elective** 1. MOOCs-2 (NPTEL/SWAYAM)-Any 12 Week Course on Engineering/ Management/ Mathematics offered by other than parent department 2. Course offered by other departments in the college	OE	3	0	0	3
3	MTCSE2103	**Dissertation-I/ Industrial Project #**	PJ	0	0	20	10
		Total Credits					16

#Students going for Industrial Project/Thesis will complete these courses through MOOCs

M. Tech. (CSE) IV SEMESTER								
S.No	Course Code	Courses	Category	L	T	P	C
1	MTCSE2201	**Dissertation-II**	PJ	0	0	32	16
		Total Credits					16

Open Electives offered by the Department of CSE
1. Python Programming
2. Principles of Cyber Security
3. Internet of Things
4. Machine Learning
5. Digital forensics
6. Next Generation Databases