DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (NETWORKS)

B.Tech. CSE(Artificial Intelligence & Machine Learning)-SCHEME (URR18) (w.e.f. 2020-21)

of

(III, IV, V, VI, VII & VIII SEMESTERS)



KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE, WARANGAL-15 (An Autonomous Institution under Kakatiya University, Warangal)



Opp: Yerragattu Gutta, Hasanparthy (Mandal), WARANGAL - 506 015, Telangana, INDIA. काकतीय प्रैद्योगिकी एवं विज्ञान संस्थान, वरंगल - ५०६ ०१५ तेलंगाना, भारत ತಾಕತಿಯ ನಾಂತೆತಿಕ ವಿಜ್ಞಾನ ಕಾನ್ತ್ರ ವಿದ್ಯಾಲಯಂ, ಪರಂಗಕ - ಸಂ೭ ೦೧೫ ತಲಂಗಾಣ, ಘರಕಡೆಕಮು

(An Autonomous Institute under Kakatiya University, Warangal)

Estd-1980 (An Autonomous Institute under Kakatiya University, warangat)

KITSW (Approved by AICTE, New Delhi; Recognised by UGC under 2(f) & 12(B); Sponsored by EKASILA EDUCATION SOCIETY)

VISION OF THE INSTITUTE

To make our students technologically superior and ethically strong by providing quality education with the help of our dedicated faculty and staff and thus improve the quality of human life

MISSION OF THE INSTITUTE

- To provide latest technical knowledge, analytical and practical skills, managerial competence and interactive abilities to students, so that their employability is enhanced
- To provide a strong human resource base for catering to the changing needs of the Industry and Commerce
- To inculcate a sense of brotherhood and national integrity

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VISION OF THE DEPARTMENT

Attaining centre of excellence status in various fields of Computer Science and Engineering by offering worthful education, training and research to improve quality of software services for ever growing needs of the industry and society.

MISSION OF THE DEPARTMENT

- Practice qualitative approach and standards to provide students better understanding and profound knowledge in the fundamentals and concepts of computer science with its allied disciplines.
- Motivate students in continuous learning to enhance their technical, communicational, and managerial skills to make them competent and cope with the latest trends, technologies, and improvements in computer science to have a successful career with professional ethics.
- Involve students in analyze, design and experimenting with contemporary research problems in computer science to impact socio-economic, political and environmental aspects of the globe.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs) UG - COMPUTER SCIENCE & ENGINEERING (NETWORKS) - AI & ML PROGRAM Within first few years after graduation, the COMPUTER **EDUCATIONAL** SCIENCE AND ENGINEERING (NETWORKS) graduates **OBJECTIVES (PEOs)** will be able to ... Apply the fundamental knowledge of the core courses of PEO1: computer science, Artificial Intelligence and Machine Learning for **Technical Expertise** developing the effective and transformational software solutions. Excel in profession, higher education and entrepreneurship with PEO2:

Successful Career	updated technologies in software, artificial intelligence and data
	science based domains.
PEO3:	Exhibit professional ethics, effective communication and team
Soft Skills and Life Long	work in solving contemporary knowledge engineering problems
Learning	and to excel in social innovations.

PROGRAM OUTCOMES (POs) & PROGRAM SPECIFIC OUTCOMES (PSOs)

	(PSOs)							
UG - COMP	UTER SCIENCE & ENGINEERING (NETWORKS)- AI & ML							
PROGRAM	At the time of graduation, the COMPUTER SCIENCE AND							
OUTCOMES (POs)	ENGINEERING (NETWORKS) graduates will be able to							
PO1: Engineering	apply the knowledge of mathematics, science, engineering fundamentals, and an engineering							
knowledge	specialization to the solution of complex engineering problems							
PO2: Problem	identify, formulate, review research literature, and analyze complex engineering problems							
analysis	reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences							
PO3:Design/develop	design solutions for complex engineering problems and design system components or							
ment of solutions	processes that meet the specified needs with appropriate consideration for the public health							
	and safety, and the cultural, societal, and environmental Considerations							
PO4: Conduct	use research-based knowledge and research methods including design of experiments,							
investigations of	analysis and interpretation of data, and synthesis of the information to provide valid							
complex problems	conclusions							
PO5: Modern tool	create, select, and apply appropriate techniques, resources, and modern engineering and IT							
usage	tools including prediction and modeling to complex engineering activities with an							
	understanding of the limitations							
PO6:The engineer	apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal							
and society	and cultural issues and the consequent responsibilities relevant to the professional							
	engineering practice							
PO7:Environment	understand the impact of the professional engineering solutions in societal and							
and sustainability	environmental contexts, demonstrate the knowledge of, and need for sustainable							
	development							
PO8:Ethics	apply ethical principles and commit to professional ethics, responsibilities, and norms of the							
	engineering practice							
PO9:Individual and	function effectively as an individual, and as a member or leader in diverse teams, and in							
team work	multidisciplinary settings							
PO10:Communication	communicate effectively on complex engineering activities with the engineering community							
	and with society at large, such as, being able to comprehend and write effective reports and							
	design documentation, make effective presentations, and give and receive clear instructions							
PO11:Project	demonstrate knowledge and understanding of the engineering and management principles							
management and	and apply these to one's own work, as a member and leader in a team, to manage projects							
finance	and in multidisciplinary environments							
PO12:Life-long	recognize the need for, and have the preparation and ability to engage in independent and							
learning	life-long learning in the broadest context of technological change							
PROGRAM SPECIFI	C OUTCOMES (PSOs):							
PSO1: Software	Apply the fundamentals of computer science and engineering knowledge in							
Development and Quality assurance	developing the effective computing solutions for real world complex engineering							
Quality assurance								

	problems.
PSO2: Maintenance	Design and configure solutions for various artificial intelligence systems and cognitive applications using contemporary hardware and software tools.
PSO3: Immediate professional practice	Develop effective machine learning applications to improve efficiency of existing data processing applications by continuous adaptation of flourishing updates.



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (NETWORKS) KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE, WARANGAL - 15

(An Autonomous Institute under Kakatiya University, Warangal)

SCHEME OF INSTRUCTION & EVALUATION

I-SEMESTER OF 4-YEAR B. TECH DEGREE PROGRAM

[5Th+2P+3MC]

S1.					iods/w	veek	Credits	Evaluation scheme						
No	Category	Course Code	Course Title	T	Т	P	С		CIE		ESE	Total		
				L	1	1		TA	MSE	Total	ESE	Marks		
1	BSC	U18MH101	Engineering Mathematics - I	3	1	-	4	10	30	40	60	100		
2	ESC	U18CS102	Programming for Problem Solving using C	3	1	-	3	10	30	40	60	100		
3	BSC	U18CH103	Engineering Chemistry	3	1	-	4	10	30	40	60	100		
4	ESC	U18ME104	Engineering Drawing	2	-	4	4	10	30	40	60	100		
5	ESC	U18CE105	Engineering Mechanics	3	1	-	4	10	30	40	60	100		
6	ESC	U18CS107	Programming for Problem Solving using C Laboratory	-	-	2	1	40	-	40	60	100		
7	BSC	U18CH108	Engineering Chemistry Laboratory	-	-	2	1	40	-	40	60	100		
8	MC	U18CH109	Environmental Studies	2	-	-	-	10	30	40	60	100		
9	MC	U18EA110	EAA *: Sports/Yoga/NSS	-	-	2	-	100	-	100	-	100		
10	MC	U18EA111	Universal Human Value-I (Induction Programme)	-	-	-	-	-	-	-	-	-		
			Total:	16	3	10	21	240	180	420	480	900		

[L= Lecture, T = Tutorials, P = Practicals& C = Credits] EAA: Extra Academic Activity

* indicates mandatory non-credit course

Total Contact Periods/Week: 29 Total Credits: 21

Stream-I: ME, CSE, IT, CSN, CSE(IOT) Stream-II: CE, EIE, EEE, ECE, ECI, CSE(AI&ML)



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (NETWORKS) KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE, WARANGAL - 15

(An Autonomous Institute under Kakatiya University, Warangal)

SCHEME OF INSTRUCTION & EVALUATION II-SEMESTER OF 4-YEAR B. TECH DEGREE PROGRAM

[5Th+4P+1MC]

		Course		Perio	ods/v	week	Credits	Evaluation scheme						
S1.	Category	Code	Course Title	т	Т	P	С		CIE			Total		
No				L	1	1	C	TA	MSE	Total	ESE N	Marks		
1	BSC	U18MH201	Engineering Mathematics - II	3	1	-	4	10	30	40	60	100		
2	ESC	U18CS202	Data Structures through C	3	-	-	3	10	30	40	60	100		
3	BSC	U18PH203	Engineering Physics	3	1	-	4	10	30	40	60	100		
4	HSMC	U18MH204	English for Communication	2	-	2	3	10	30	40	60	100		
5	ESC	U18EE205	Basic Electrical Engineering	3	1	_	4	10	30	40	60	100		
6	ESC	U18EE206	Basic Electrical Engineering Laboratory	-	-	2	1	40	-	40	60	100		
7	ESC	U18CS207	Data Structures through C Laboratory	-	-	2	1	40	-	40	60	100		
8	BSC	U18PH208	Engineering Physics Laboratory	_	_	2	1	40	-	40	60	100		
9	ESC	U18ME209	Workshop Practice	-	_	2	1	40	-	40	60	100		
10	MC	U18EA210	EAA: Sports/Yoga/NSS*	-	-	2	-	100	-	100	-	100		
Tota	1:			14	3	12	22	310	150	460	540	1000		

[L= Lecture, T = Tutorials, P = Practicals& C = Credits] EAA: Extra Academic Activity

* indicates mandatory non-credit course

Total Contact Periods/Week: 29

Total Credits: 22

Stream-I: ME, CSE, IT, CSN, CSE(IOT)

Stream-II: CE, EIE, EEE, ECE,

ECI,CSE(AI&ML)

Internships: All students should plan for mandatory 6-8 weeks internship, from end of II semester to commencement of VII semester at industry/R&D organizations/industries of national importance (IITs/IIITs/NITs). As part of Internship Evaluation in VII Semester, students are expected to submit a well-documented internship report and give an informative ppt presentation in VII semester.



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING(NETWORKS) KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE, WARANGAL - 15

(An Autonomous Institute under Kakatiya University, Warangal)

SCHEME OF INSTRUCTION & EVALUATION III-SEMESTER OF 4-YEAR B. TECH DEGREE PROGRAM

[7Th+2P]

		Course		Perio	ds/v	veek	Credits		Evalu	ation sc	heme	
S.No	Category	Code	Course Title	т	Т	P	С		CIE		ESE	Total
				L	1	1		TA	MSE	Total	ESE	Marks
1	BSC	U18MH301	Engineering Mathematics - III	3	1	-	4	10	30	40	60	100
2	HSMC	U18MH302	Soft and Inter personal Skills	_	_	2	1	100	-	100	-	100
	DCC	T 110 A T202	Object Oriented Programming through	2	1		4	10	30	40	60	100
3	PCC	U18AI303	JAVA	3	1	-	4					
4	PCC	U18AI304	Operating Systems	3	-	-	3	10	30	40	60	100
5	PCC	U18AI305	Computer Organization and Architecture	3	-	-	3	10	30	40	60	100
6	PCC	U18AI306	Advanced Data Structures	3	-	-	3	10	30	40	60	100
7	PCC	U18AI307	Formal Languages and Automata Theory	3	-	-	3	10	30	40	60	100
0	PCC	U18AI310	Object Oriented Programming through Java			2	1	40	-	40	60	100
8	rcc	U10A1310	Laboratory	-	-	2	1					
9	PCC	U18AI311	Advanced Data StructuresLaboratory	_	_	2	1	40	-	40	60	100
	•		Total:	18	2	6	23	240	180	420	480	900

[L= Lecture, T = Tutorials, P = Practicals& C = Credits] Total Contact Periods/Week: 26Total Credits: 23

Stream-I: ME, CSE, IT, CSN, CSE(IOT) Stream-II: CE, EIE, EEE, ECE, ECI, CSE(AI&ML)



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING(NETWORKS) KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE: WARANGAL - 15

(An Autonomous Institute under Kakatiya University, Warangal)

SCHEME OF INSTRUCTION & EVALUATION IV-SEMESTER OF 4-YEAR B. TECH DEGREE PROGRAM

[6Th+3P+2MC]

S1.		Course		Perio	ds/v	veek	Credits		Eval	uation	scheme	
No	Category	Code	Course Title	L	Т	P	С		CIE		ESE	Total
110		Couc					TA	MSE	Total	ESE	Marks	
1	OE	U18OE401	Open Elective-II	3	1	-	4	10	30	40	60	100
2	HSMC	U18TP402	Professional English	-	-	2	1	100	•	100	-	100
3	OE	U18OE403	Open Elective-I	3	-	-	3	10	30	40	60	100
4	PCC	U18AI404	Artificial Intelligence	3	-	-	3	10	30	40	60	100
5	PCC	U18AI405	Database Management Systems	3	1	-	4	10	30	40	60	100
6	PCC	U18AI406	Python Programming	3	-	-	3	10	30	40	60	100
7	PCC	U18AI407	Database Management Systems Laboratory	-	-	2	1	40	-	40	60	100
8	PCC	U18AI408	Python Programming Laboratory	-	-	2	1	40	-	40	60	100
9	OE	U18OE411	Open Elective-I based Laboratory	_	_	2	1	40	-	40	60	100
10	MC	U18MH415	Essence of Indian Traditional Knowledge	2	-	-	-	10	30	40	60	100
			Total:	17	2	8	21	280	180	460	540	1000
11	MC	U18CH416	Environmental Studies*	2	_	_	_	10	30	40	60	100

[L= Lecture, T = Tutorials, P = Practicals& C = Credits] Total Contact Periods/Week: 27 Total Credits: 21

Open	Elec	tiv	e-I:	
11100	T400	•	\sim 1	

U18OE403A: Object Oriented Programming (CSE)

U18OE403B: Fluid Mechanics & Hydraulic Machines(CE)

U18OE403C: Mechatronics (ME) U18OE403D: Web Programming (IT) U18OE403E: Microprocessors (ECE) U18OE403F: Strength of Materials (ME)

Open Elective-II:

U18OE401A: Applicable Mathematics (MH)

U18OE401B: Basic Electronics Engineering (ECE)

U18OE401C: Elements of Mechanical Engineering (ME) U18OE401D: Measurements & Instrumentation (EIE)

U18OE401E: Fundamentals of Computer Networks

(CSE)

U18OE401F: Renewable Energy Sources (EEE)

U18OE401G: Essential Mathematics and Statistics for

Machine Learning (MH)

Open Elective-I based Lab:

U18OE411A: Object Oriented Programming Laboratory

(CSE)

U18OE411B: Fluid Mechanics & Hydraulic Machines

Laboratory (CE)

U18OE411C: Mechatronics Laboratory (ME)

U18OE411D: Web Programming Laboratory (IT) U18OE411E: Microprocessors Laboratory (ECE)

U18OE411F: Strength of Materials Laboratory (CE)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING(NETWORKS) KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE: WARANGAL - 15

(An Autonomous Institute under Kakatiya University, Warangal)

SCHEME OF INSTRUCTION & EVALUATION V-SEMESTER OF 4-YEAR B. TECH DEGREE PROGRAM

[6Th+3P+Seminar]

S1.		Course		Perio	ods/v	veek	Credits		Eval	uation	scheme	-
No	Category	Code	Course Title	т	т	P	С		CIE		ESE	Total
				L	1	Г	C	TA	MSE	Total		Marks
1	MC	U18MH501	Universal Human Values -II	2	-	-	-	10	30	40	60	100
2	PE	U18AI502	Professional Elective - I/MOOC-I	3	-	-	3	10	30	40	60	100
3	PCC	U18AI503	Internet of Things	3	-	-	3	10	30	40	60	100
4	PCC	U18AI504	Software Engineering	3	-	-	3	10	30	40	60	100
5	PCC	U18AI505	Compiler Design	3	-	-	3	10	30	40	60	100
6	PCC	U18AI506	Machine Learning	3	-	-	3	10	30	40	60	100
7	PCC	U18AI507	Advanced Java Programming Laboratory	-	-	2	1	40	-	40	60	100
8	PCC	U18AI508	Internet of Things Laboratory	-	-	2	1	40	-	40	60	100
9	PCC	U18AI509	Machine Learning Laboratory	-	-	2	1	40	-	40	60	100
10	PROJ	U18AI510	Seminar	-	-	2	1	100	-	100	-	100
Total:		17	-	8	19	280	180	460	540	1000		
	Additional Learning*:Maximum credits allowed forHonours/Minor in Engineering			-	-	-	7	-	-	-	-	-
	Total credits for students opted for Honours/Minor			-	-	1	19+7	•	-	-	-	-

^{*} List of courses for additional learning through **MOOCs** towards Honours/Minor in Engineering shall be prescribed by the department under Honours/Minor Curricula

[L= Lecture, T = Tutorials, P = Practicals& C = Credits] Total Contact Periods/Week: 25Total Credits: 19

Professional Elective-I / MOOC-I:

U18AI502A: Computer Networks

U18AI502B: Advanced Database Management System

U18AI502C: Computer Graphics U18AI502M: MOOCs course

MOOCs: Students are encouraged to do Massive Open Online Courses (MOOCs) on SWAYAM platform(https://www.swayam.gov.in) offered by NPTEL, CEC, IIM-B, IGNOU. Students shall contact the Head of the Department (HoD) to get their interested MOOCs approved by the HoD/Dean Academic Affairs for proper transfer of the credits for the MOOCs.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (NETWORKS) KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE: WARANGAL - 15

(An Autonomous Institute under Kakatiya University, Warangal)

SCHEME OF INSTRUCTION & EVALUATION VI-SEMESTER OF 4-YEAR B. TECH DEGREE PROGRAM

[6Th+3P+Miniproject]

Total Credits: 21

S1.		Course		Peri	ods/	week	Credits	Evaluation scheme						
No	Category	Code	Course Title	т	Т	P	С		CIE		ESE	Total		
				L	1	r	C	TA	MSE	Total		Marks		
1	HSMC	U18TP601	Quantitative Aptitude & Logical Reasoning	2	-	-	1	10	30	40	60	100		
2	HSMC	U18MH602	Managerial Economics and Accountancy	3	-	-	3	10	30	40	60	100		
3	PE	U18AI603	Professional Elective - II / MOOC-II	3	-	-	3	10	30	40	60	100		
4	PCC	U18AI604	Design and Analysis of Algorithms	3	-	-	3	10	30	40	60	100		
5	PCC	U18AI605	Deep Learning	3	-	-	3	10	30	40	60	100		
6	PCC	U18AI606	Computer Vision and Image Processing	3	1	-	4	10	30	40	60	100		
7	PCC	U18AI607	Design and Analysis of Algorithms		_	2	1	40	-	40	60	100		
	icc	U10A1007	Laboratory				1							
8	PCC	U18AI608	Deep Learning Laboratory	-	-	2	1	40	-	40	60	100		
9	PCC	U18AI609	Computer Vision and Image Processing	_		2	1	40	-	40	60	100		
	100	010/11009	Laboratory				1							
10	PROJ	U18AI610	Mini Project	-	-	2	1	100	-	100	-	100		
			Total:	17	1	8	21	280	180	460	540	1000		
Add	Additional Learning*: Maximum credits allowed forHonours/Minor in Engineering			-	-	-	7	-	-	-	-	-		
	Total credits for students opted for Honours/Minor students:			-	-	-	21+7	-	_	-	-	-		

^{*} List of courses for additional learning through **MOOCs** towards Honours/Minor in Engineering shall be prescribed by the department under Honours/Minor Curricula

[L= Lecture, T = Tutorials, P = Practicals& C = Credits]

Total Contact Periods/Week: 26

Professional Elective-II / MOOC-II:

U18AI603A: Natural Language Processing U18AI603B: Information Retrieval Systems

U18AI603C: Soft Computing U18AI603M: MOOCs Course

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (NETWORKS) KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE: WARANGAL - 15

(An Autonomous Institute under Kakatiya University, Warangal)

SCHEME OF INSTRUCTION & EVALUATION VII-SEMESTER OF 4-YEAR B. TECH DEGREE PROGRAM

[4Th+2P+1MC+1MP-I]

									Larr	1 1 21 1 110	1 . 11411	• •]
S1.				Per	iods/v	veek	Credits		Eva	aluation s	scheme	
No	Category	Course Code	Course Title	т	т	P	С		CIE		ESE	Total
				L	1	r	C	TA	MSE	Total		Marks
1	OE	U18OE701	Open Elective - III	3	_	_	3	10	30	40	60	100
2	PE	U18AI702	Professional Elective - III / MOOC-III	3	-	-	3	10	30	40	60	100
3	PE	U18AI703	Professional Elective - IV / MOOC-IV	3	-	-	3	10	30	40	60	100
4	PCC	U18AI704	Cloud Computing	3	-	-	3	10	30	40	60	100
5	PCC	U18AI705	Cloud Computing Laboratory	-	-	2	1	40	-	40	60	100
6	PCC	U18AI706	Natural Language Processing Laboratory	-	-	2	1	40	-	40	60	100
7	PROJ	U18AI707	Major Project - Phase - I	-	-	6	3	100	-	100	-	100
8	MC	U18AI708	Internship Evaluation	-	-	2	-	-	-	-	-	-
		•	Total:	12	_	12	17	220	120	340	360	700
Addi	Additional Learning*: Maximum credits allowed forHonours/Minor in Engineering			-	-	-	7	-	-	-	-	-
	Total credits for students opted for Honours/Minor students:				_	-	17+7	-	-	-	-	-

^{*} List of courses for additional learning through MOOCs towards Honours/Minor in Engineering shall be prescribed by the department under Honours/Minor Curricula

[L= Lecture, T = Tutorials, P = Practicals& C = Credits] Total Contact Periods/Week: 24Total Credits: 17

Open Elective-III:	Professional Elective-III / MOOC-III:	Professional Elective-IV / MOOC-IV:
U18OE602A: Disaster Management	U18AI702A: Reinforcement Learning	U18AI703A:Robotics
U18OE602B: Project Management	U18AI702B: Big Data Analytics	U18AI703B: Cognitive Computing Systems
U18OE602C: Professional Ethics in	U18AI702C: Social and Information Network Analysis	U18AI703C: Cryptography and Network Security
Engineering	U18AI702M: MOOCs course	U18AI703M: MOOCs course
U18OE602D: Rural Technology and		
Community Development		

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (NETWORKS) KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE: WARANGAL - 15

(An Autonomous Institute under Kakatiya University, Warangal)

SCHEME OF INSTRUCTION & EVALUATION VIII-SEMESTER OF 4-YEAR B. TECH DEGREE PROGRAM

[3Th+1MP-II]

S1. No	Category	Course Code	Course Title	Periods/week			Credits	Evaluation scheme			9	
				т	т	D	С	CIE			ESE	Total
					1			TA	MSE	Total		Marks
1	PE	U18AI801	Professional Elective - V / MOOC-V	3	-	-	3	10	30	40	60	100
2	PE	U18AI802	Professional Elective - VI / MOOC-VI	3	-	-	3	10	30	40	60	100
3	OE	U18OE803	Open Elective - IV / MOOC-VII	3	-	-	3	10	30	40	60	100
4	PROJ	U18AI804	Major Project - Phase - II	-	-	14	7	60	-	60	40	100
	Total					14	16	90	90	180	220	400
Add	Additional Learning*: Maximum credits allowed for Honours/Minor in Engineering			-	-	-	7	-	-	-	-	-
	Total credits for students opted for Honours/Minor students:				-	-	16+7	-	-	-	-	-

^{*} List of courses for additional learning through **MOOCs** towards Honours/Minor in Engineering shall be prescribed by the department under Honours/Minor Curricula

[L= Lecture, T = Tutorials, P = Practicals& C = Credits]

Total Contact Periods/Week: 23 Total Credits: 16

Professional Elective-V / MOOC-V:	Professional Elective-VI/ MOOC-VI:	Open Elective-IV/MOOC-VII:
U18AI801A: Ethical Hacking	U18AI802A: Data Visualization	U18OE803A: Operations Research
U18AI801B: Virtual Reality Technologies	U18AI802B:Fog and Edge Computing	U18OE803B: Management Information Systems
U18AI801C: Robotic Process Automation	U18AI802C: Block Chain Technologies	U18OE803C: Entrepreneurship Development
U18AI801M: MOOCs course	U18AI802M: MOOCs course	U18OE803D: Forex &Foreign Trade
		U18OE803M: MOOCs Course

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING(NETWORKS) KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE: WARANGAL - 15

(An Autonomous Institute under Kakatiya University, Warangal)

SCHEME OF INSTRUCTION & EVALUATION

I to VIII SEMESTER OF 4-YEAR B. TECH DEGREE PROGRAM

SEMESTER Vs COURSE CATEGORY WEIGHTAGE

(in terms of Total No. of Courses / Total No. Credits)

	Number of Courses / Number of Credits (Course Category wise)									
Semester	BSC	ESC	HSMC	PCC	OE	PE	PROJ	MC	TOTAL	B. Tech (Honours/Minor) Programme
I	3/9	4/12	-	-	-	-	-	3/0	10/21	J
II	3/9	5/10	1/3	-	-	-	-	1/0	10/22	Additional
III	1/4	-	1/1	7/18	-	-	-	-	09/23	20 credits through
IV	-	-	1/1	5/12	3/8	-	-	2/0	11/21	8 courses out of
V	-	-	-	7/16	-	1/3	1/1	1/0	10/19	the list of courses
VI	-	-	2/4	6/12	-	1/3	1/1	-	10/21	prescribed under Honours/Minor
VII	-	-	-	3/5	1/3	2/6	1/3	1/0	08/17	curricula
VIII	-	-	-	-	1/3	2/6	1/7	-	04/16	-
Total	7/22	9/22	5/9	28/63	5/14	6/18	4/12	8/0	72/160	(72+8)/(160+20)
0/0										
Weightage	13.75 %	13.75 %	5.625 %	39.375%	8.75 %	11.25 %	7.5 %	0 %	100 %	
of Course	(22/160)	(22/160)	(9/160)	(63/160)	(14/160)	(18/160)	(12/160)	0 /0	(160/160)	-
Category										