



# Koneru Lakshmaiah Education Foundation

(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

Approved by AICTE ISO 21001:2018 Certified

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## DEPARTMENT OF EEE

### Y25 M.TECH (POWER ELECTRONICS & POWER SYSTEMS) STRUCTURE

SL	CAT	CODE	COURSE TITLE	L	T	P	S	Cr	CH
1	AUC	25UC5201	PROFESSIONAL COMMUNICATION SKILLS	0	0	4	0	0	4
2	AUC	CADCORL1V1	CAREER ADVANCEMENT: TRAINING IN CORE DOMAIN	0	0	0	8	0	8
	AUC	CADENTL1V1	CAREER ADVANCEMENT:ENTREPRENEURIAL CAREER PATHWAY TRAINING	0	0	0	8	0	8
	AUC	CADUPSL1V1	CAREER ADVANCEMENT: UPSC-CIVIL SERVICES EXAM TRAINING	0	0	0	8	0	8
	AUC	CADUPSL2V2	CAREER ADVANCEMENT: UPSC-CIVIL SERVICES EXAM TRAINING	0	0	0	8	0	8
	AUC	CADUPSL3V3	CAREER ADVANCEMENT: UPSC-CIVIL SERVICES EXAM TRAINING	0	0	0	8	0	8
	AUC	CRTVQRL2V2	CAMPUS RECRUITMENT: QUANTITATIVE APTITUDE TRAINING	0	0	0	8	0	8
	AUC	CRTVQRL3V3	CAMPUS RECRUITMENT: REASONING APTITUDE TRAINING	0	0	0	8	0	8
	AUC	CRTVQRL1V1	CAMPUS RECRUITMENT: VERBAL APTITUDE TRAINING	0	0	0	8	0	8
	AUC	CADCOML1V1	CAREER ADVANCEMENT:COMPETITIVE EXAM TRAINING	0	0	0	8	0	8
	AUC	CRTCODL1V1	CAMPUS RECRUITMENT: LOGIC BUILDING SKILLS TRAINING	0	0	0	8	0	8
	AUC	CRTCSSL1V1	CAMPUS RECRUITMENT: COMMUNICATION SKILLS TRAINING	0	0	0	8	0	8
	AUC	CRTCSSL2V2	CAMPUS RECRUITMENT: SOFT SKILLS TRAINING	0	0	0	8	0	8
			<b>TOTAL AUC</b>					<b>0</b>	
3	ESC	25EE5101	PYTHON PROGRAMMING FOR ELECTRICAL SYSTEMS	3	0	2	0	4	5
			<b>TOTAL ESC</b>					<b>4</b>	
4	PCC	25EE5102	ADVANCED POWER CONVERTERS	2	0	2	4	4	8
5	PCC	25EE5104	POWER SYSTEM STABILITY & CONTROL	3	0	2	0	4	5
6	PCC	25EE5111	MODELLING AND ANALYSIS OF ELECTRICAL MACHINES	3	1	0	0	4	4
7	PCC	25EE5212	ADVANCED ELECTRIC DRIVES	3	1	0	0	4	4
8	PCC	25EE5213	DIGITAL CONTROLLERS	3	1	0	0	4	4
9	PCC	25EE5214	EV BATTERIES & CHARGING SYSTEM	3	0	2	0	4	5
			<b>TOTAL PCC</b>					<b>24</b>	
10	PE-1	25EE51XX	PROFESSIONAL ELECTIVE-1	3	0	2	0	4	4
11	PE-2	25EE51XX	PROFESSIONAL ELECTIVE-2	3	0	0	0	3	3
12	PE-3	25EE51XX	PROFESSIONAL ELECTIVE-3	3	1	0	0	4	4
			<b>TOTAL PEC</b>					<b>11</b>	
13	OE	OEBT1001	IPR AND PATENT LAWS	3	0	0	0	3	3
		OEAD1001	FUNDAMENTALS OF BIG DATA	3	0	0	0		

		OECS1001	FUNDAMENTALS OF DBMS	3	0	0	0		
		OEEC1001	IMAGE PROCESSING	3	0	0	0		
		OEEC1002	ML FOR ENGINEERING AND SCIENTIFIC APPLICATIONS	3	0	0	0		
		OEEC1003	DATA SCIENCE: DL AND NN	3	0	0	0		
		OEME1001	MECHATRONICS	3	0	0	0		
		OEME1003	INDUSTRIAL AUTOMATION AND CONTROL	3	0	0	0		
		OECE1001	SOLID AND HAZARDOUS WASTE MANAGEMENT	3	0	0	0		
		OECE1002	ENVIRONMENTAL POLLUTION CONTROL METHODS	3	0	0	0		
		OECE1003	INDUSTRIAL WASTE WATER TREATMENT	3	0	0	0		
		OECS1002	SUSTAINABILITY AND ENVIRONMENTAL AWARENESS IN THE DIGITAL ERA	3	0	0	0		
			<b>TOTAL OEC</b>					<b>3</b>	
14	PRI	25IE5201	ESSENTIALS OF RESEARCH DESIGN	1	1	0	0	2	2
15	PRI	25IE5247	TERM PAPER	0	0	8	0	4	8
16	PRI	25IE6148	DISSERTATION (PART-1)	0	0	32	0	16	32
	PRI	25IE6150	INTERNSHIP-1	0	0	32	0	16	32
17	PRI	25IE6249	DISSERTATION (PART-2)	0	0	32	0	16	32
	PRI	25IE6251	INTERNSHIP-2	0	0	32	0	16	32
			<b>TOTAL PRI</b>					<b>38</b>	
18	VAC	25CC3071	PROGRAMMING USING PYTHON	2	0	0	0	0	2
	VAC	25CC3005	ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING USING PYTHON [ INDUSTRIAL AUTOMATION ]-L1	2	0	0	0	0	2
	VAC	25CC3006	ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING USING PYTHON [ INDUSTRIAL AUTOMATION ]-L2	2	0	0	0	0	2
	VAC	25CC3026	EMBEDDED SYSTEM APPLICATION & IOT PROGRAMMING - L1	2	0	0	0	0	2
	VAC	25CC3039	IIOT PROGRAMMING & AUTOMATION -L2	2	0	0	0	<b>0</b>	<b>2</b>
<b>TOTAL CREDITS</b>								<b>80.00</b>	

#### PROFESSIONAL ELECTIVES

CAT	CODE	COURSE TITLE	L	T	P	S	Cr	CH
PE-1	25EE51F1	OPTIMIZATION TECHNIQUES	3	0	2	0	4	5
PE-1	25EE51F2	RELIABILITY ENGINEERING AND APPLICATION TO POWER SYSTEMS	3	0	2	0	4	5
PE-2	25EE52H1	DIGITAL SIMULATION OF POWER ELECTRONIC SYSTEMS	3	0	0	0	3	3
PE-2	25EE52H2	SWITCHED MODE POWER SUPPLY AND PWM TECHNIQUES	3	0	0	0	3	3
PE-3	25EE52G1	FACTS AND POWER QUALITY	3	1	0	0	4	4
PE-3	25EE52C2	ENERGY CONSERVATION & AUDIT	3	1	0	0	4	4