

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

4 Years B.Tech. (Electrical & Electronics Engineering) Course Structure : (2019-20)

I YEAR I SEMESTER

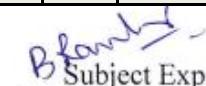
S. N O.	Subject Code	Course Categor y	Subject Title	Periods per week			C	Scheme of Examination Maximum Marks		
				L	T	P		Int.	Ext.	Total
1	19199101	BSC	Mathematics-I	3	0	0	3	30	70	100
2	19199102	HSMC	Communicative English-I	3	0	0	3	30	70	100
3	19192106	PCC	Engineering Electromagnetic	3	0	0	3	30	70	100
4	19199103	BSC	Applied Chemistry	3	0	0	3	30	70	100
5	19195105	ESC	Problem Solving & Programming in C	2	1	0	3	30	70	100
6	19199194	MC	Professional Ethics & Human Values	2	0	0	0	30*	-	-
7	19199114	BSC	Engineering Chemistry Laboratory	0	0	3	1.5	50	50	100
8	19193112	ESC	Basic Engineering Workshop	0	0	3	1.5	50	50	100
9	19199111	HSMC	Communicative English Laboratory	0	0	3	1.5	50	50	100
10	19195113	ESC	Problem Solving & Programming Laboratory with C	0	0	3	1.5	50	50	100
TOTAL				16	1	12	21	350	550	900
BSC-7.5	HSM C-4.5	PCC-03		ES C- 6	M C- 0					



University Nominee
(Dr.Y.Srinivasa Kishore Babu)



Subject Expert
(Dr.N.Viswanathan)



Subject Expert
(Dr.B.Ravi Kumar)



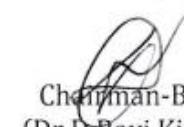
Internal Member
(Mr.T.Amar Kiran)



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(Ms.P.Suguna Ratnamala)



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(Mr.N.Vijaya Kumar)

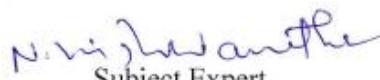


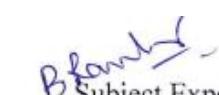
Chairman-BOS
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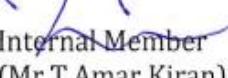
I YEAR II SEMESTER

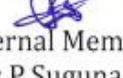
S. No.	Subject Code	Course Category	Subject Title	Periods per week			C	Scheme of Examination Maximum Marks		
				L	T	P		Int.	Ext.	Total
1	19199201a	BSC	Mathematics-II	3	0	0	3	30	70	100
2	19199204	BSC	Engineering Physics	3	0	0	3	30	70	100
3	19199202	HSMC	Communicative English-II	3	0	0	3	30	70	100
4	19199296a	MC	Environmental Studies	2	0	0	0	30*	-	-
5	19192203	PCC	Electrical circuit analysis-I	3	0	0	3	30	70	100
6	19193275	ESC	Engineering Graphics	1	0	3	2.5	30	70	100
7	19199212	BSC	Engineering Physics Laboratory	0	0	3	1.5	50	50	100
8	19199211	HSMC	Communicative English Laboratory II	0	0	3	1.5	50	50	100
9	19192213	PCC	Electrical Engineering workshop	0	0	3	1.5	50	50	100
				15	0	12	19	300	500	800
BSC-7.5		HSMC-4.5	PCC-4.5	ESC-2.5	MC-0					


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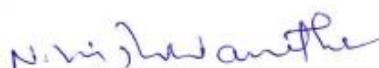

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II YEAR I SEMESTER

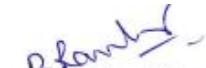
S. No.	Subject Code	Course Category	Subject Title	Periods per week			C	Scheme of Examination Maximum Marks		
				L	T	P		Int.	Ext.	Total
1	19120301	BSC	Complex variables and Transform Techniques	3	0	0	3	30	70	100
2	19120302	PCC	Electrical Circuits Analysis-II	3	0	0	3	30	70	100
3	19120303	PCC	Electrical Machines – I	3	0	0	3	30	70	100
4	19120304	PCC	Electronic Devices & Circuits	3	0	0	3	30	70	100
5	19120305	PCC	Electrical Measurements	3	0	0	3	30	70	100
6	19120306	MC	Design Thinking & Product Innovation	2	0	0	0	30*	-	-
7	19120312	PCC	Electrical Circuits Lab	0	0	3	1.5	50	50	100
8	19120313	PCC	Electrical Machines – I Lab	0	0	3	1.5	50	50	100
9	19120314	PCC	Electrical Measurements Lab	0	0	3	1.5	50	50	100
10	19124311	PCC	Electronic Devices & Circuits Lab	0	0	3	1.5	50	50	100
TOTAL				17	0	12	21	350	550	900
BSC-03	PCC-13.5	ESC-4.5	MC-0							



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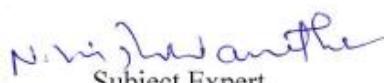


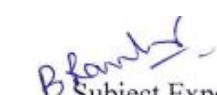
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II YEAR II SEMESTER

S. No .	Subject Code	Course Categor y	Subject Title	Periods per week			C	Scheme of Examination Maximum Marks		
				L	T	P		Int.	Ext.	Total
1	19129401	BSC	Numerical Methods and Probability & Statistics	3	0	0	3	30	70	100
2		OEC	Open Elective-I	3	0	0	3	30	70	100
	19123464a		Mech - Robotics							
	19123464b		CSE- Operating Systems							
	19123464c		ECE- Internet of Things							
	19123464d		CE- Environmental Pollution & Control							
	19123464e		AME – Basic Automobile Engineering							
	19123464f		MM – Elements of Mining Technology							


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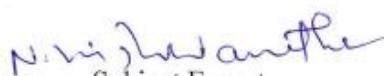

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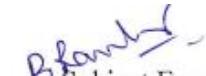
3	19120405	PCC	Power systems -I	3	0	0	3	30	70	100
4	19120406	PCC	Electrical Machines – II	3	0	0	3	30	70	100
5	19123403	ESC	Fluid Mechanics & Hydraulic Machinery	3	0	0	3	30	70	100
6	19124402	ESC	Internet of things	2	0	2	3	30	70	100
7	19120412	PCC	Electrical Machines – II Lab	0	0	3	1.5	50	50	100
8	19123411	ESC	Fluid Mechanics & Hydraulic Machinery Lab	0	0	3	1.5	50	50	100
TOTAL				17	0	8	21	280	520	800
BSC - 03	OEC-03	PCC-12	ESC-3							



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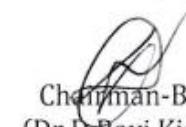
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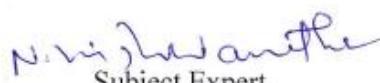


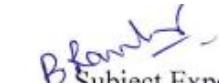
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III YEAR I SEMESTER

S. No	Subject Code	Course Category	Subject Title	Periods per week			C	Scheme of Examination Maximum Marks		
				L	T	P		Int.	Ext.	Total
1	19120503	PCC	Control Systems	3	0	0	3	30	70	100
2	19120504	PCC	Power Systems-II	3	0	0	3	30	70	100
3	19124501	PCC	Digital Electronics	3	0	0	3	30	70	100
4		PEC	Professional Elective - I	3	0	0	3	30	70	100
	19120565a		Power system dynamics & control							
	19120565b		Special electrical machines							
	19120565c		Advanced control systems							
	19120565d		Advanced power conversion systems							
5		OEC	Open Elective – II	3	0	0	3	30	70	100
	19123562a		Mech - MEMS							
	19123562b		CSE- Information Security							
	19123562c		ECE – Digital Image Processing							
	19123562d		CE – Solid Waste Management							


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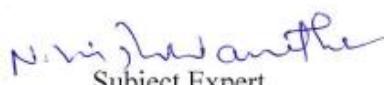
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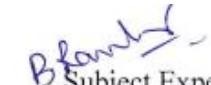
	19123562e		AME – Hybrid and Electric Vehicles							
			MM – Disaster Management in Mining							
6	19120512	PCC	Control Systems Lab	0	0	3	1.5	50	50	100
7	19124511	PCC	Digital Electronics Lab	0	0	3	1.5	50	50	100
8	19129596	MC	Constitution of India	2	0	0	0	30*	-	-
9	19120521	PR	Mini Project-I/ Study Project/ Internship	-	-	-	2	100	-	100
10	19120522	PR	Community service oriented project	0	0	1	0.5	100	-	100
TOTAL				17	0	7	20.5	450	450	900
PC C- 12	PEC-03	OEC-03		MC -0	P R- 2. 5					



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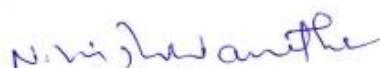
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III YEAR II SEMESTER

S. No.	Subject Code	Course Category	Subject Title	Periods per week			C	Scheme of Examination Maximum Marks		
				L	T	P		Int.	Ext.	Total
1		PEC	Professional Elective - II	3	0	0	3	30	70	100
	19120665a		Utilization of electrical energy							
	19120665b		Power semi-conductor drives							
	19120665c		Digital control systems							
	19120665d		Solar energy systems							
2		OEC	Open Elective - III	3	0	0	3	30	70	100
	19125662a		CSE – Human Computer Interaction							
	19125662b		ECE – Data Communication							
	19125662c		CE – Global Environment: Problems & Policies							
	19125662d		AME – Modern Vehicle Technology							
	19125662e		MM- Remote Sensing & GIS in Mining							
3		PCC	Power Electronics	3	0	0	3	30	70	100



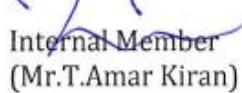
University Nominee
(Dr.Y.Srinivasa Kishore Babu)



Subject Expert
(Dr.N.Viswanathan)



Subject Expert
(Dr.B.Ravi Kumar)



Internal Member
(Mr.T.Amar Kiran)



Internal Member
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Internal Member
(Mr.N.Vijaya Kumar)



Chairman-BOS
(Dr.D.Ravi Kishore)

(AUTONOMOUS)

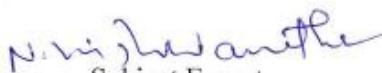
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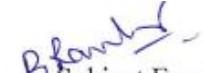
4	19124601	PCC	Microprocessors & Micro-controllers and applications	3	0	0	3	30	70	100
5	19124603	PCC	Switch Gear & Protection	3	0	0	3	30	70	100
6	19124604	PCC	Power system analysis	3	0	0	3	30	70	100
7	19124611	PCC	Microprocessors & Micro-controllers and applications Lab	0	0	3	1.5	50	50	100
8	19120612	PCC	Power Electronics Lab	0	0	3	1.5	50	50	100
9	19129696	HSMC	Soft Skills	0	0	3	1.5	50	50	100
Total				15	0	9	22.5	330	570	900
PEC-03	OEC-03	PCC-15	HSMC-1.5							



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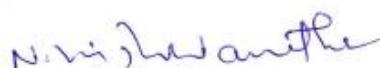
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IV YEAR I SEMESTER

S. No.	Subject Code	Course Category	Subject Title	Periods per week			C	Scheme of Examination		
				L	T	P		Int.	Ext.	Total
1		PEC	Professional Elective - III	3	0	0	3	30	70	100
	19120764a		Electrical distribution systems							
	19120764b		Advanced power electronic converters							
	19120764c		Modern control theory							
	19120764d		Wind energy systems							
2		PEC	Professional Elective - IV	3	0	0	3	30	70	100
	19120765a		Flexible Alternating Current Transmission Systems							



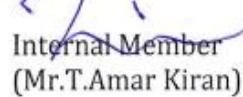
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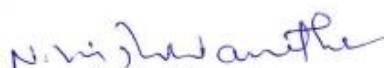


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	19120765b		High Voltage Engineering							
	19120765c		Adaptive Control Systems							
	19120765d		Operation of restructured power systems							
3		OEC	Open Elective – IV(MGMT)	3	0	0	3	30	70	100
	19129761a		MEFA							
	19129761b		Organizational behavior							
	19129761c		Human Resource management							
	19129761d		Entrepreneurship Qualities for Engineers							
	19129761e		Principles of Management							
	19129761f		Financial Management for Engineers							
	19129761g		Operations management							
	19129761h		Digital Marketing							
	19129761i		Total Quality Management							
4	19120702	PCC	HVDC	3	0	0	3	30	70	100



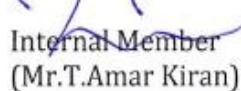
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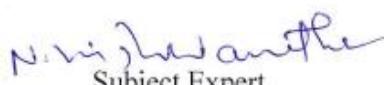
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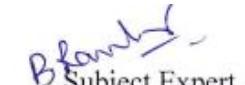
			transmission								
5	19120703	PCC	Power System Operation & Control	3	0	0	3	30	70	100	
6	19120711	PCC	Power systems Lab	0	0	3	1.5	50	50	100	
7	19120712	PCC	Electrical Simulation Lab	0	0	3	1.5	50	50	100	
8	19129796	MC	Intellectual Property Rights and Patents	2	0	0	0	30*	—	—	
9	19120721	PR	Internship/Mini Project II	-	-	-	2	100	—	100	
TOTAL				17	0	6	20	350	450	800	
PEC-06	OEC-03	PCC-09	PR-02								



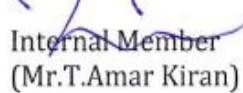
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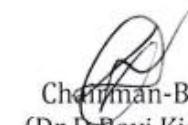
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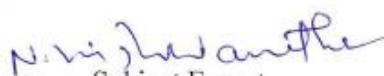
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IV YEAR II SEMESTER

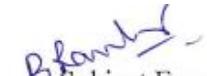
S. No.	Subject Code	Course Catego ry	Subject Title	Periods per week			C	Scheme of Examination		
				L	T	P		Maximum Marks	Int.	Ext.
1		PEC	Professional Elective - V							
2	19120862a		Smart Grid	3	0	0	3	30	70	100
	19120862b		Power Quality							
	19120862c		Non Linear Control Systems							
	19120862d		Electric Vehicles							
3	19120801	PCC	Energy Audit, Conservation & Management	3	0	0	3	30	70	100
4	19120841	PR	Project Work	-	-	18	9	80	120	200
TOTAL				6	0	0	15	140	260	400
PEC-03	PCC-03	PR-09								



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OPEN ELECTIVE-I

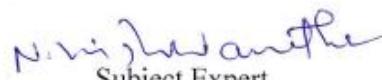
OPEN ELECTIVE-II

OPEN ELECTIVE-III

OPEN ELECTIVE-IV

Mech - Robotics	Mech - MEMS	Mech – Nano Technology	Managerial Economics and Financial Analysis
CSE- Operating Systems	CSE- Information Security	CSE – Human Computer Interaction	Entrepreneurship Qualities for Engineers
EEE- Utilization of Electrical Energy	EEE – Energy management	EEE – Renewable Energy Resources	Principles of Management
ECE- Internet of Things	ECE – Digital Image Processing	ECE – Data Communication	Financial Management for Engineers
CE- Environmental Pollution & Control	CE – Solid Waste Management	CE – Global Environment: Problems & Policies	Operations management
AME – Basic Automobile Engineering	AME – Hybrid and Electric Vehicles	AME – Modern Vehicle Technology	Digital Marketing
MM – Elements of Mining Technology	MM – Disaster Management in Mining	MM- Remote Sensing & GIS in Mining	Total Quality Management
			Organizational behavior
			Human Resource management


University Nominee
(Dr.Y.Srinivasa Kishore Babu)


Subject Expert
(Dr.N.Viswanathan)


Subject Expert
(Dr.B.Ravi Kumar)


Internal Member
(Mr.T.Amar Kiran)


Internal Member
(Ms.P.Suguna Ratnamala)


Internal Member
(Mr.N.Vijaya Kumar)


Chairman-BOS
(Dr.D.Ravi Kishore)

(AUTONOMOUS)

Accredited by NBA & NAAC 'A' Grade, Recognized under 2(f) and 12(b) of UGC, Permanently Affiliated to JNTUK, Kakinada.

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

4 Years B.Tech. (Electrical & Electronics Engineering) Course Structure : (2019-20)



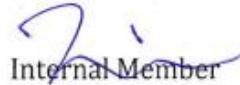
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Subject Expert
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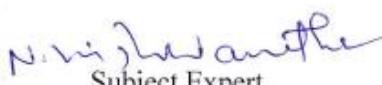
Subject Expert
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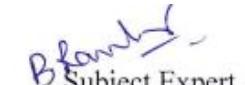
Professional Electives	POWER SYSTEMS	POWER ELECTRONICS & DRIVES	CONTROL SYSTEMS	ENERGY SYSTEMS
ELECTIVE-I	POWER SYSTEM DYNAMICS & CONTROL	SPECIAL ELECTRICAL MACHINES	ADVANCED CONTROL SYSTEMS	ADVANCED POWER CONVERSION SYSTEMS
ELECTIVE-II	UTILIZATION OF ELECTRICAL ENERGY	POWER SEMI-CONDUCTOR DRIVES	DIGITAL CONTROL SYSTEMS	SOLAR ENERGY SYSTEMS
ELECTIVE-III	ELECTRICAL DISTRIBUTION SYSTEMS	ADVANCED POWER ELECTRONIC CONVERTERS	MODERN CONTROL THEORY	WIND ENERGY SYSTEMS
ELECTIVE-IV	FACTS	HIGH VOLTAGE ENGINEERING	ADAPTIVE CONTROL	OPERATION OF RESTRUCTURED POWER SYSTEMS
ELECTIVE-V	SMART GRIDS	POWER QUALITY	NON LINEAR CONTROL	ELECTRIC VEHICLES



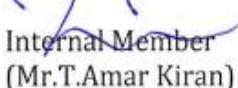
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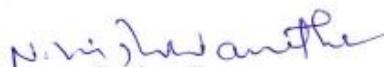
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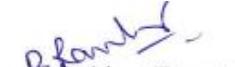
CATEGORY	EEE DEPARTMENT ALLOCATED CREDITS	AICTE	APSCHE
BSC	21	25	24
HSMC	10.5	12	13
PCC	72.0	48	59
ESC	16.0	24	24
MC	0	0	0
OEC	12	18	12
PEC	15	18	12
PR	13.5	15	13
LC	-	-	03
	160	160	160



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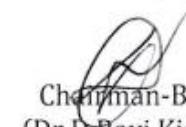
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