				UNIVERSITY DEPARTMENTS	, RTU, I	КОТА					
			L	ST OF DEPARTMENTAL SPECIALIZA	TION W	ITH COL	JRSES				
Department offering Specialiazation	Year/ Sem	Course Code	Paper Code	Subject Name	Туре	CORE/ ELECTI VE	Group	Dep.Spec.	Max Marks Internal	Max Marks External	Credit/ Unit
	4			Fundamentals of Electric Drives or		ELECTI		Electric Drives &			
Electrical Engineering	Sem.	EEL1DS11	EEL1DS11	its equivalent MOOC	TH	VE	13	Control	50	100	3
	4			Industrial Drives - Power		ELECTI		Electric Drives &			
Electrical Engineering	Sem.	EEL1DS12	EEL1DS12	Electronics or its equivalent MOOC	TH	VE	14	Control	50	100	3
	5			Advance Electric Drives or its		ELECTI		Electric Drives &			
Electrical Engineering	Sem.	EEL1DS13	EEL1DS13	equivalent MOOC	TH	VE	15	Control	50	100	3
	5			Motors and Motor Circuits or its		ELECTI		Electric Drives &			
Electrical Engineering	Sem.	EEL1DS14	EEL1DS14	equivalent MOOC	TH	VE	16	Control	50	100	3
	6			Electric Motor Control or its		ELECTI		Electric Drives &			
Electrical Engineering	Sem.	EEL1DS15	EEL1DS15	equivalent MOOC	TH	VE	13	Control	50	100	3
	6			Drives & Control or its equivalent		ELECTI		Electric Drives &			
Electrical Engineering	Sem.	EEL1DS16	EEL1DS16	моос	TH	VE	14	Control	50	100	3
	7			Fundamentals of Power Electronics		ELECTI		Electric Drives &			
Electrical Engineering	Sem.	EEL1DS17	EEL1DS17	or its equivalent MOOC	TH	VE	12	Control	50	100	3
	7			Advance Power Electronics &		ELECTI		Electric Drives &			
Electrical Engineering	Sem.	EEL1DS18	EEL1DS18	Control or its equivalent MOOC	TH	VE	13	Control	50	100	3
	7							Electric Drives &			
Electrical Engineering	Sem.	EED415	EED415	Mini Project	PR	CORE	21	Control	50	25	5
	4			Technologies for Clean Renewable				Renewable			
	Sem.			Energy Production or its equivalent		ELECTI		Energy			
Electrical Engineering	Jeiii.	EEL1RS11	EEL1RS11	моос	TH	VE	17	Technologies	50	100	3
	4			Development or its equivalent		ELECTI		Energy			
Electrical Engineering	Sem.	EEL1RS12	EEL1RS12	моос	TH	VE	18	Technologies	50	100	4
	5			Renewable Energy Engineering:				Renewable			
	Sem.			Solar, Wind, and Biomass Energy		ELECTI		Energy			
Electrical Engineering	JC111.	EEL1RS13	EEL1RS13	Systems or its equivalent MOOC	TH	VE	19	Technologies	50	100	3

	5			Photovoltaic System or its		ELECTI		Energy			
Electrical Engineering	Sem.	EEL1RS14	EEL1RS14	equivalent MOOC	TH	VE	20	Technologies	50	100	3
	6			Wind Energy or its equivalent		ELECTI		Energy			
Electrical Engineering	Sem.	EEL1RS15	EEL1RS15	моос	TH	VE	17	Technologies	50	100	3
	6			Renewable Energy: Fundamentals				Renewable			
	•			and Job Opportunities or its		ELECTI		Energy			
Electrical Engineering	Sem.	EEL1RS16	EEL1RS16	equivalent MOOC	TH	VE	18	Technologies	50	100	3
	7			Global Energy and Climate Policy		ELECTI		Energy			
Electrical Engineering	Sem.	EEL1RS17	EEL1RS17	or its equivalent MOOC	TH	VE	15	Technologies	50	100	3
	7			Renewable Power and Electricity		ELECTI		Energy			
Electrical Engineering	Sem.	EEL1RS18	EEL1RS18	System or its equivalent MOOC	TH	VE	16	Technologies	50	100	3
	7							Energy			
Electrical Engineering	Sem.	EED417	EED417	Mini Project	PR	CORE	23	Technologies	50	25	5
	8			Design of Photovoltaic Systems or		ELECTI		Energy			
Electrical Engineering	Sem.	EEL1RS19	EEL1RS19	its equivalent MOOC	TH	VE	9	Technologies	50	100	4
	4	EEL1RAS1	EEL1RAS1	Industrial Automation and Control		ELECTI		Robotics &			
Electrical Engineering	Sem.	1	1	or its equivalent MOOC	TH	VE	19	Automation	50	100	4
	4	EEL1RAS1	EEL1RAS1	Mechatronics or its equivalent		ELECTI		Robotics &			
Electrical Engineering	Sem.	2	2	моос	TH	VE	20	Automation	50	100	3
	5	EEL1RAS1	EEL1RAS1	Industrial Automation with PLC &		ELECTI		Robotics &			
Electrical Engineering	Sem.	3	3	SCADA or its equivalent MOOC	TH	VE	21	Automation	50	100	3
	5	EEL1RAS1	EEL1RAS1	Sensors and Actuators or its		ELECTI		Robotics &			
Electrical Engineering	Sem.	4	4	equivalent MOOC	TH	VE	22	Automation	50	100	4
	6	EEL1RAS1	EEL1RAS1	Design of Mechatronic Systems or		ELECTI		Robotics &			
Electrical Engineering	Sem.	5	5	its equivalent MOOC	TH	VE	19	Automation	50	100	4
	6	EEL1RAS1	EEL1RAS1	Introduction to Robotics or its		ELECTI		Robotics &			
Electrical Engineering	Sem.	6	6	equivalent MOOC	TH	VE	20	Automation	50	100	4
	7	EEL1RAS1	EEL1RAS1	Fundamentals of Automotive		ELECTI		Robotics &			
Electrical Engineering	Sem.	7	7	Systems or its equivalent MOOC	TH	VE	17	Automation	50	100	4
	7	EEL1RAS1	EEL1RAS1	Robotics and Control: Theory and		ELECTI		Robotics &			
Electrical Engineering	Sem.	8	8	Practice or its equivalent MOOC	TH	VE	18	Automation	50	100	3

	7							Robotics &			
		FFD410	FED 410	Mini Dunio at	DD	CODE	24		50	25	_
Electrical Engineering	Sem.	EED418	EED418	Mini Project	PR	CORE	24	Automation	50	25	5
						EL EOTI		c			
	4	55146644		Linear Systems Theory or its		ELECTI	4-	Systems &		400	
Electrical Engineering	Sem.	EEL1SS11	EEL1SS11	equivalent MOOC	TH	VE	15	Control	50	100	4
	4			Control & Tuning Methods in							
	Sem.			Switched Mode Power Converters		ELECTI		Systems &			
Electrical Engineering		EEL1SS12	EEL1SS12	or its equivalent MOOC	TH	VE	16	Control	50	100	4
	5			System Design Through VERILOG		ELECTI		Systems &			
Electrical Engineering	Sem.	EEL1SS13	EEL1SS13	or its equivalent MOOC	TH	VE	17	Control	50	100	3
	5			Linear Dynamical Systems or its		ELECTI		Systems &			
Electrical Engineering	Sem.	EEL1SS14	EEL1SS14	equivalent MOOC	TH	VE	18	Control	50	100	3
	6			Sensors and Actuators or its		ELECTI		Systems &			
Electrical Engineering	Sem.	EEL1SS15	EEL1SS15	equivalent MOOC	TH	VE	15	Control	50	100	4
	6			Industrial Automation and Control		ELECTI		Systems &			
Electrical Engineering	Sem.	EEL1SS16	EEL1SS16	or its equivalent MOOC	TH	VE	16	Control	50	100	4
	7			Intelligent Systems and Control or		ELECTI		Systems &			
Electrical Engineering	Sem.	EEL1SS17	EEL1SS17	its equivalent MOOC	тн	VE	14	Control	50	100	4
	7			·				Systems &			
Electrical Engineering	Sem.	EED416	EED416	Mini Project	PR	CORE	22	Control	50	25	5
<u> </u>				,							
	4										
	Sem.			  Project Management / Equivalent				BUSINESS			
Mechanical Engineering	Jenn.	MEL416	MEL416	MOOC Equivalent	TH	CORE	13	ADMINISTRATION	50	100	3
Wicehamear Engineering		IVILLATO	IVILLATO	l l l	1	CONE	13	7.0101110110111011		100	
	4										
	Sem.			  Marketing Management /				BUSINESS			
Machanias I Engine anima	Sem.	NACL 417	   NATI 447			CODE	1,		Γ0	100	ا
Mechanical Engineering		MEL417	MEL417	Equivalent MOOC	TH	CORE	14	ADMINISTRATION	50	100	3
	_										
	5							DUCINIECC			
<u> </u>	Sem.			Supply and Operations				BUSINESS		4.5.5	
Mechanical Engineering		MEL420	MEL420	Management / Equivalent MOOC	TH	CORE	13	ADMINISTRATION	50	100	3

	6										
	Sem.			  Financial Management /				BUSINESS			
Mechanical Engineering		MEL422	MEL422	Equivalent MOOC	TH	CORE	12	ADMINISTRATION	50	100	3
0 11 0				7							
	7										
	Sem.			Human Resource Management/				BUSINESS			
Mechanical Engineering		MEL424	MEL424	Equivalent MOOC	TH	CORE	10	ADMINISTRATION	50	100	3
	7										
	Sem.							BUSINESS			
Mechanical Engineering		MED413	MED413	Minor Project	PR	CORE	15	ADMINISTRATION	50	25	5
	4			Design of Heat Exchanger /				THERMAL			
Mechanical Engineering	Sem.	MEL433	MEL433	Equivalent MOOC	TH	CORE	19	SYSTEMS	50	100	3
	4			Refrigeration System Design /				THERMAL			
Mechanical Engineering	Sem.	MEL434	MEL434	Equivalent MOOC	TH	CORE	20	SYSTEMS	50	100	3
	5			Air Conditioning System Design /				THERMAL			
Mechanical Engineering	Sem.	MEL435	MEL435	Equivalent MOOC	TH	CORE	16	SYSTEMS	50	100	3
	6			Thermal Systems / Equivalent				THERMAL			
Mechanical Engineering		MEL437	MEL437	моос	TH	CORE	15	SYSTEMS	50	100	3
	7			Design and Analysis of Thermal				THERMAL			
Mechanical Engineering		MEL439	MEL439	Systems/ Equivalent MOOC	TH	CORE	13	SYSTEMS	50	100	3
	7							THERMAL			
Mechanical Engineering	Sem.	MED416	MED416	Minor Project	PR	CORE	17	SYSTEMS	50	25	5
Electronics and	4										
Communication	Sem.			Pattern Recognition & Machine				Control &		400	
Engineering		EIL293	EIL293	Learning	TH	CORE	14	Instrumentation	50	100	3
Electronics and	4			Dattaun Danamitia - C Adaabi				Cambral 8			
Communication	Sem.	EID202	LIDOOO	Pattern Recognition & Machine	DD	CODE	4 -	Control &		3.5	اړ
Engineering		EIP293	EIP293	Learning Lab	PR	CORE	15	Instrumentation	50	25	1

Electronics and											
Communication	5			Analog Modeling and Simulation				Control &			
Engineering	Sem.	EIL395	EIL395	with SPICE	TH	CORE	14	Instrumentation	50	100	3
Electronics and	_										
Communication	5			Analog Modeling and Simulation				Control &			
Engineering	Sem.	EIP395	EIP395	Lab	PR	CORE	15	Instrumentation	50	25	1
Electronics and	6										
Communication	Sem.							Control &			
Engineering	Seiii.	EIL396	EIL396	Introduction to IOT	TH	CORE	14	Instrumentation	50	100	3
Electronics and	6										
Communication	Sem.							Control &			
Engineering	Jeiii.	EIP396	EIP396	IOT Lab	PR	CORE	15	Instrumentation	50	25	1
Electronics and	7										
Communication	Sem.							Control &			
Engineering	30111.	EIL496	EIL496	Control System Design	TH	CORE	11	Instrumentation	50	100	3
Electronics and	7										
Communication	Sem.							Control &			
Engineering	36	EIP496	EIP496	Control System Design Lab	PR	CORE	12	Instrumentation	50	25	1
Electronics and	7										
Communication	Sem.							Control &			
Engineering		EID413	EID413	Minor project	PR	CORE	13	Instrumentation	50	25	4
Electronics and	4										
Communication	Sem.			Pattern Recognition & Machine				Digital			_
Engineering	1	ECL294	ECL294	Learning	TH	CORE	14	Communication	50	100	3
Electronics and	4										
Communication	Sem.			Pattern Recognition & Machine				Digital			
Engineering		ECP294	ECP294	Learning Lab	PR	CORE	15	Communication	50	25	1
Electronics and	5										
Communication	Sem.	-0.00-		Analog Modeling and Simulation				Digital			_
Engineering		ECL395	ECL395	with SPICE	TH	CORE	14	Communication	50	100	3

Electronics and	_										
Communication	5			Analog Modeling and Simulation				Digital			
Engineering	Sem.	ECP395	ECP395	Lab	PR	CORE	15	Communication	50	25	1
Electronics and											
Communication	6							Digital			
Engineering	Sem.	ECL396	ECL396	Antenna Theory & Techniques	TH	CORE	14	Communication	50	100	3
Electronics and	6										
Communication	Sem.			Antennas and Radiating Systems				Digital			
Engineering	Sem.	ECP396	ECP396	lab	PR	CORE	15	Communication	50	25	1
Electronics and	7										
Communication	Sem.							Digital			
Engineering	Jein.	ECL494	ECL494	VLSI Physical Design	TH	CORE	10	Communication	50	100	3
Electronics and	7										
Communication	Sem.							Digital			
Engineering	30111.	ECP494	ECP494	VLSI Physical Design Lab	PR	CORE	11	Communication	50	25	1
Electronics and	7										
Communication	Sem.							Digital			
Engineering	30111.	ECD413	ECD413	Minor project	PR	CORE	16	Communication	50	25	4
	5			Construction Equipments and its				CONSTRUCTION			
Civil Engineering	Sem.	CEL411	CEL411	management	TH	CORE	15	MANAGEMENT	50	100	3
	6							CONSTRUCTION			
Civil Engineering	Sem.	CEL412	CEL412	Materials Management	TH	CORE	13	MANAGEMENT	50	100	4
	7			Contract Management and Labour				CONSTRUCTION			
Civil Engineering	Sem.	CEL413	CEL413	Laws	TH	CORE	10	MANAGEMENT	50	100	4
	7			Project Economics and Financial				CONSTRUCTION			
Civil Engineering	Sem.	CEL414	CEL414	Management	TH	CORE		MANAGEMENT	50	100	4
	7			Minor Project in Construction				CONSTRUCTION			
Civil Engineering	Sem.	CED413	CED413	Management	PR	CORE	18	MANAGEMENT	50	100	5
	5										
	Sem.				L			TRANSPORTATIO			
Civil Engineering		CEL415	CEL415	Transportation Planning	TH	CORE	16	N ENGINEERING	50	100	3

Civil Engineering	6 Sem.	CEL416	CEL416	Traffic Engineering and Field Studies	TH	CORE	14	TRANSPORTATIO N ENGINEERING	50	100	4
Civil Engineering	7 Sem.	CEL417	CEL417	Advanced Highway Material Charecterization	TH	CORE	11	TRANSPORTATIO N ENGINEERING	50	100	3
Civil Engineering	7 Sem.	CEP417	CEP417	Advanced Highway Material Charecterization Lab	PR	CORE	12	TRANSPORTATIO N ENGINEERING	50	25	1
Civil Engineering	7 Sem.	CEL418	CEL418	Highway Pavement Maintenance	TH	CORE	17	TRANSPORTATIO N ENGINEERING	50	100	4
Civil Engineering	7 Sem.	CED414	CED414	Minor Project in Transportation Engineering	PR	CORE	19	TRANSPORTATIO N ENGINEERING	50	100	5