

1.2.1 New Courses Introduced

Department of Electrical and Electronics Engineering

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Department of Electrical & Electronics Engineering

Minimum Credits to be earned: 164 (for Regular Students) 131 (for Lateral Entry Students)

Sev	enth Seme	ester					
1		Elective V (Professional Elective)		3	1	-	3
2		Elective VI (Professional Elective)		3	1	-	3
3		Elective VII (Open Elective III)		3	1	-	3
4	19EE701	Summer Internship II	1,2,5,6,10,12	-	-	-	1.5
5	19EE702	Project	1 to12,PSO1,PSO2	-	-	16	8
			Total	9	3	16	18.5
Eig	hth Semes	ter	Total	9	3	16	18.5
Eig 1	hth Semes	ter Elective VIII (Professional Elective)	Total	9	-	16	18.5
	hth Semes		Total			- -	
1	hth Semes	Elective VIII (Professional Elective)	1,2,5,8,9,10,PSO1, PSO2			- - -	3

List of Electives

Electi							
Caree	r Path I, II, III	and Other Core Electives					
1	19EEC13	Battery Management Systems	2,12, PSO1, PSO2	3	1	-	3
2	19EEC23	Hybrid Renewable Energy Systems Design	2,12, PSO1, PSO2	3	1	-	3
3	19EEC33	Communication and Security in Smart Grid	2,12, PSO1, PSO2	3	1	-	3
4	19EE010	Electrical Distribution Systems	2,3,PSO2	3	1	-	3
5	19EC401	Analog and Digital Communications	1,2	3	1	-	3
6	19IT304	Database Management Systems	1,2,3,12	3	1	-	3
7		MOOCs		-	-	-	3
Electi	ve VI						
1	19EE011	Utilization of Electrical Energy	3,6,7,8	3	1	-	3
2	19EE012	Microprocessors and Microcontroller interfacing	2,3,10,PSO2	3	1	-	3
3	19EE013	Programmable Logic Controllers	2,3,PSO2	3	1	-	3
		MOOCs		-	-	-	3
Electi	ve VII:Open E	lective III					
1	19CE003	Solid Waste Management	3,7,12	3	1	-	3
2	19EE003	Fundamentals of Electrical Vehicle Technology	2,3,12	3	1	-	3
3	19ME003	Industrial Engineering and Management	1,11	3	1	-	3
4	19EC003	Interfacing and Programming with Arduino	1,2	3	1	-	3
5	19CS003	Data Science for Engineering Applications	2,3,4	3	1	-	3
6	19CH003	Industrial Ecology for Sustainable Development	2,6,7	3	1	-	3
7	19IT003	Fundamentals of Mobile Computing	1,7	3	1	-	3
8	19BS004	Advanced Materials of Renewable Energy	1,7	3	1	-	3
9	19BS005	Applied Linear Algebra for Engineers	1,12	3	1	-	3
Electi	ve VIII (Profe	ssional Elective)					
1	19EE014	Power system Deregulation	2,3,PSO2	-	- 1	-	3
2	19EE015	Energy Audit, Conservartion & Management	2,3,12,PSO2	-	-	-	3
3	19EE016	High Voltage Engineering	2,3,PSO2	-	-	-	3
Electi	ve IX (Open E						
		Green Buildings	1,7,12				3

Comment [U1]: Approved in 13th BoS, EEE conducted on 19.12.2020

Comment [U2]: Approved in 13th BoS, EEE conducted on 19.12.2020

Comment [U4]: Approved in 15th BoS, EEE conducted on 26.03.2022

Comment [U5]: Approved in 15th BoS, EEE conducted on 26.03.2022

Comment [U6]: Approved in 15th BoS, EEE conducted on 26.03.2022

Comment [U3]: Approved in 15th BoS, EEE conducted on 26.03.2022

Comment [U7]: Approved in 15th BoS, EEE conducted on 26.03.2022

Comment [U8]: Approved in 15th BoS, EEE conducted on 26.03.2022

Comment [U9]: Approved in 15th BoS, EEE conducted on 26.03.2022

Comment [U10]: Approved in 15th BoS, EEE conducted on 26.03.2022

Comment [U11]: Approved in 15th BoS, EEE conducted on 26.03.2022

Comment [U12]: Approved in 15th BoS, EEE conducted on 26.03.2022

Comment [U13]: Approved in 15th BoS, EEE conducted on 26.03.2022

Comment [U14]: Approved in 15th BoS, EEE conducted on 26.03.2022

Comment [U15]: Approved in 15th BoS, EEE conducted on 26.03.2022

1 1970 101	2	19EE017	Sustainable Energy	1,2,12		_	_	3
4 19EC011 Communication Technologies 1.2								
5 19CS020 Applications of Artificial Intelligence 2,3,6,7 - - 3								
6 19CH016 Green Technologies 1,6,7								
1917015								_
8 19BS006 Handling of Industrial waste and waste water								
1 9AT001 Communication Etiquette in Workplaces - - - - - -					_			
1 9AT001 Communication Etiquette in Workplaces - - - - - -			Hallulling of fillustrial waste and waste water	1,7	-	_	-	3
2			Communication Etiquette in Workplaces	_		_	_	-
19AT003								
3	2	19AT002		-	-	-	-	-
4	3	19AT003		_	-	_	_	
5					-			
6				_	-		_	
7				_	-	-	_	
8				_		-	_	
9				-	-	-	_	_
10						-	_	
11				_	-	-	_	
19AT012						-		
13			The Art of Photography and Film Making	_			_	
14			Gender Equality for Sustainbility	_	-	-	_	
15						-	_	
19AT016 Climate Changes and Circular Economy B. Tech. (Honors)				_	-	-	_	
Domain I: Al in Electrical and Electronics Engineering								
Domain I: AI in Electrical and Electronics Engineering			- Commute changes and circular Beenemy					
19EEH11 Computational Intellegence in Electrical Engineering 2,12, PSO2 4 4			trical and Electronics Engineering					
19EEH12 Data analytics in Electrical Engineering 2,12, PSO2 4 - - 4				0.40 P000				
19EEH12 Data analytics in Electrical Engineering 2,12	01	19EEH11		2,12, PSO2	4	-	-	4
19EEH13	02	19EEH12		2,12	4	-	-	4
Domain II: Power Systems	03	19EEH13	Internet of Things in Electrical Engineering		4	-	-	4
01 19EEH21 Design and Layout of Power Systems 2,3,8 4 4 4 02 19EEH22 Distributed Generation Technologies 2,6,7,8,PSO2 4 4 4 03 19EEH23 Distribution System Planning and Automation 2,3,6,PSO2 4 4 4 04 19EEH24 Power Quality 2,3,RSO2 4 4 4 04 19EEH31 Adaptive Control Systems 2,3,PSO2 4 4 4 02 19EEH32 Introduction to Autonomous Vehicles 2,3,PSO2 4 4 4 03 19EEH32 Introduction to Robust Control Systems 2,3,PSO1,PSO2 4 4 4 04 19EEH34 Optimal Control Systems 2,3,PSO1,PSO2 4 4 4 04 19EEH34 Optimal Control Systems 2,3,PSO1,PSO2 4 4 4 02 19EEH41 Advanced Power Electronics 2,3,PSO1,PSO2 4 4 4 02 19EEH41 Advanced Power Electronic Systems 2,3,PSO2 4 4 4 0	04	19EEH14			4	-	-	4
02 19EEH22 Distributed Generation Technologies 2,6,7,8,PSO2 4 4 03 19EEH23 Distribution System Planning and Automation 2,3,6,PSO2 4 4 04 19EEH24 Power Quality 2,3,8,PSO2 4 4 Domain III: Control Systems 01 19EEH31 Adaptive Control Systems 2,3,PSO1,PSO2 4 4 02 19EEH32 Introduction to Autonomous Vehicles 2,3,PSO1,PSO2 4 4 03 19EEH33 Introduction to Robust Control Systems 2,3,PSO1,PSO2 4 4 04 19EEH34 Optimal Control Systems 2,3,PSO1,PSO2 4 4 04 19EEH34 Optimal Control Systems 2,3,PSO1,PSO2 4 4 01 19EEH41 Advanced Power Electronics 2,3,PSO1,PSO2 4 4 02 19EEH42 Flexible AC Transimission Systems 2,3,PSO1 4 4 03 19EEH43 Power Electronic Control of DC Drives 2,3,PSO2 4 4 04 19EEH44 Power Electronic Control of AC Drives 2,3,PSO2 4 4 04 19EHM11 Foundation of Energ	Domai	n II: Power S	ystems					
03 19EEH23 Distribution System Planning and Automation 2,3,6,PSO2 4 - - 4 04 19EEH24 Power Quality 2,3,8,PSO2 4 - - 4 Domain III: Control Systems 01 19EEH31 Adaptive Control Systems 2,3,PSO1,PSO2 4 - - 4 02 19EEH32 Introduction to Robust Control Systems 2,3,PSO1,PSO2 4 - - 4 03 19EEH33 Introduction to Robust Control Systems 2,3,PSO1,PSO2 4 - - 4 04 19EEH34 Optimal Control Systems 2,3,PSO1,PSO2 4 - - 4 Domain IV: Power Electronics and Drives 01 19EEH41 Advanced Power Electronics 2,3,PSO1,PSO2 4 - - 4 02 19EEH42 Flexible AC Transimission Systems 2,3,PSO2 4 - - 4 04 19EEH43 Power Electronic Control of DC Drives 2,3,PSO2	01	19EEH21	Design and Layout of Power Systems	2,3,8	4	-	-	4
19EEH24 Power Quality 2,3,8,PSO2 4 - - 4	02	19EEH22	Distributed Generation Technologies	2,6,7,8,PSO2	4	-	-	4
Domain III: Control Systems 01 19EEH31 Adaptive Control Systems 2,3,PSO1,PSO2 4 - - 4 02 19EEH32 Introduction to Autonomous Vehicles 2,3,PSO2 4 - - 4 03 19EEH33 Introduction to Robust Control Systems 2,3,PSO1,PSO2 4 - - 4 04 19EEH34 Optimal Control Systems 2,3,PSO1,PSO2 4 - - 4	03	19EEH23	Distribution System Planning and Automation	2,3,6,PSO2	4	-	-	4
01 19EEH31 Adaptive Control Systems 2,3,PSO1,PSO2 4 - - 4 02 19EEH32 Introduction to Autonomous Vehicles 2,3,PSO2 4 - - 4 03 19EEH33 Introduction to Robust Control Systems 2,3,PSO1,PSO2 4 - - 4 04 19EEH34 Optimal Control Systems 2,3,PSO1,PSO2 4 - - 4 Domain IV: Power Electronics and Drives 2,3,PSO1,PSO2 4 - - 4 02 19EEH41 Advanced Power Electronics 2,3,PSO1,PSO2 4 - - 4 02 19EEH42 Flexible AC Transimission Systems 2,3,PSO1 4 - - 4 03 19EEH43 Power Electronic Control of DC Drives 2,3,PSO2 4 - - 4 04 19EH44 Power Electronic Control of AC Drives 2,3,PSO2 4 - - 4 B. Tech. (Minors) Energy Science & Technology 01 19CHM11 Foundation of Energy Science and Technology 1,	04	19EEH24	Power Quality	2,3,8,PSO2	4	-	-	4
02 19EEH32 Introduction to Autonomous Vehicles 2,3,PSO2 4 - - 4 03 19EEH33 Introduction to Robust Control Systems 2,3,PSO1,PSO2 4 - - 4 04 19EEH34 Optimal Control Systems 2,3,PSO1,PSO2 4 - - 4 Domain IV: Power Electronics and Drives 01 19EEH41 Advanced Power Electronics 2,3,PSO1,PSO2 4 - - 4 02 19EEH42 Flexible AC Transimission Systems 2,3,PSO1 4 - - 4 03 19EEH43 Power Electronic Control of DC Drives 2,3,PSO2 4 - - 4 04 19EH44 Power Electronic Control of AC Drives 2,3,PSO2 4 - - 4 B. Tech. (Minors) Energy Science & Technology 01 19CHM11 Foundation of Energy Science and Technology 1,2,3,5,7,12 4 - - 4 02 19CHM12 Energy Generation from Waste 1,2,3,6,7 4 - -	Domai	n III: Control	Systems					
03 19EEH33 Introduction to Robust Control Systems 2,3,PSO1,PSO2 4 4 04 19EEH34 Optimal Control Systems 2,3,PSO1,PSO2 4 4 Domain IV: Power Electronics and Drives 01 19EEH41 Advanced Power Electronics 2,3,PSO1,PSO2 4 4 02 19EEH42 Flexible AC Transimission Systems 2,3,PSO1 4 4 03 19EEH43 Power Electronic Control of DC Drives 2,3,PSO2 4 4 04 19EEH44 Power Electronic Control of AC Drives 2,3,PSO2 4 4 B. Tech. (Minors) Energy Science & Technology 01 19CHM11 Foundation of Energy Science and Technology 1,2,3,5,7,12 4 4 02 19CHM12 Energy Generation from Waste 1,2,3,4,5 4 4 03 19CHM13 Energy Storage Systems 1,2,3,6,7 4 4 04 19CHM14 Hydrogen Energy and Fuel Cells 1,2,3,7 4 4 Nano Science & Technology 01 19CHM21 Introduction and Characterization of Nano 1,2,3,7 4 4 <td>01</td> <td>19EEH31</td> <td>Adaptive Control Systems</td> <td>2,3,PSO1,PSO2</td> <td>4</td> <td>-</td> <td>-</td> <td>4</td>	01	19EEH31	Adaptive Control Systems	2,3,PSO1,PSO2	4	-	-	4
04 19EEH34 Optimal Control Systems 2,3,PSO1,PSO2 4 - - 4 Domain IV: Power Electronics and Drives 01 19EEH41 Advanced Power Electronics 2,3,PSO1,PSO2 4 - - 4 02 19EEH42 Flexible AC Transimission Systems 2,3,PSO1 4 - - 4 03 19EEH43 Power Electronic Control of DC Drives 2,3,PSO2 4 - - 4 04 19EH44 Power Electronic Control of AC Drives 2,3,PSO2 4 - - 4 B. Tech. (Minors) Energy Science & Technology 4 - - 4 01 19CHM11 Foundation of Energy Science and Technology 1,2,3,5,7,12 4 - - 4 02 19CHM12 Energy Generation from Waste 1,2,3,4,5 4 - - 4 03 19CHM13 Energy Storage Systems 1,2,3,6,7 4 - - 4 04 19CH	02	19EEH32	Introduction to Autonomous Vehicles	2,3,PSO2	4	-	-	4
Domain IV: Power Electronics and Drives 01 19EEH41 Advanced Power Electronics 2,3,PSO1,PSO2 4 4 4 02 19EEH42 Flexible AC Transimission Systems 2,3,PSO1 4 4 4 03 19EEH43 Power Electronic Control of DC Drives 2,3,PSO2 4 4 4 04 19EEH44 Power Electronic Control of AC Drives 2,3,PSO2 4 4 4 B. Tech. (Minors) Energy Science & Technology 5 4 4 4 5 4 4 4 6 4 4 4 6 4 <td>03</td> <td>19EEH33</td> <td></td> <td>2,3,PSO1,PSO2</td> <td>4</td> <td>-</td> <td>-</td> <td>4</td>	03	19EEH33		2,3,PSO1,PSO2	4	-	-	4
01 19EEH41 Advanced Power Electronics 2,3,PSO1,PSO2 4 4 02 19EEH42 Flexible AC Transimission Systems 2,3,PSO1 4 4 03 19EEH43 Power Electronic Control of DC Drives 2,3,PSO2 4 4 04 19EEH44 Power Electronic Control of AC Drives 2,3,PSO2 4 4 B. Tech. (Minors) Energy Science & Technology 01 19CHM11 Foundation of Energy Science and Technology 1,2,3,5,7,12 4 4 02 19CHM12 Energy Generation from Waste 1,2,3,4,5 4 4 03 19CHM13 Energy Storage Systems 1,2,3,6,7 4 4 04 19CHM14 Hydrogen Energy and Fuel Cells 1,2,3,7 4 4 Nano Science & Technology 01 19CHM21 Introduction and Characterization of Nano 1,2,3,7 4 4	04	19EEH34	Optimal Control Systems	2,3,PSO1,PSO2	4	-	-	4
02 19EEH42 Flexible AC Transimission Systems 2,3,PS01 4 4 03 19EEH43 Power Electronic Control of DC Drives 2,3,PS02 4 4 04 19EEH44 Power Electronic Control of AC Drives 2,3,PS02 4 4 B. Tech. (Minors) Energy Science & Technology 01 19CHM11 Foundation of Energy Science and Technology 1,2,3,5,7,12 4 4 02 19CHM12 Energy Generation from Waste 1,2,3,4,5 4 4 03 19CHM13 Energy Storage Systems 1,2,3,6,7 4 4 04 19CHM14 Hydrogen Energy and Fuel Cells 1,2,3,7 4 4 Nano Science & Technology 01 19CHM21 Introduction and Characterization of Nano 1,2,3,7 4 4	Domai	n IV: Power I	Electronics and Drives					_
03 19EEH43 Power Electronic Control of DC Drives 2,3,PS02 4 4 04 19EEH44 Power Electronic Control of AC Drives 2,3,PS02 4 4 B. Tech. (Minors) Energy Science & Technology 01 19CHM11 Foundation of Energy Science and Technology 1,2,3,5,7,12 4 4 02 19CHM12 Energy Generation from Waste 1,2,3,4,5 4 4 03 19CHM13 Energy Storage Systems 1,2,3,6,7 4 4 04 19CHM14 Hydrogen Energy and Fuel Cells 1,2,3,7 4 4 Nano Science & Technology 01 19CHM21 Introduction and Characterization of Nano 1,2,3,7 4 4	01	19EEH41	Advanced Power Electronics	2,3,PSO1,PSO2	4	-	-	4
04 19EEH44 Power Electronic Control of AC Drives 2,3,PSO2 4 4 B. Tech. (Minors) Energy Science & Technology 01 19CHM11 Foundation of Energy Science and Technology 1,2,3,5,7,12 4 4 02 19CHM12 Energy Generation from Waste 1,2,3,4,5 4 4 03 19CHM13 Energy Storage Systems 1,2,3,6,7 4 4 04 19CHM14 Hydrogen Energy and Fuel Cells 1,2,3,7 4 4 Nano Science & Technology 01 19CHM21 Introduction and Characterization of Nano 1,2,3,7 4 4	02	19EEH42	Flexible AC Transimission Systems	2,3,PSO1	4	-	-	4
B. Tech. (Minors) Energy Science & Technology 1,2,3,5,7,12 4 4	03	19EEH43	Power Electronic Control of DC Drives	2,3,PSO2	4	-	-	4
Energy Science & Technology 01 19CHM11 Foundation of Energy Science and Technology 1,2,3,5,7,12 4 4 02 19CHM12 Energy Generation from Waste 1,2,3,4,5 4 4 03 19CHM13 Energy Storage Systems 1,2,3,6,7 4 4 04 19CHM14 Hydrogen Energy and Fuel Cells 1,2,3,7 4 4 Nano Science & Technology 01 19CHM21 Introduction and Characterization of Nano 1,2,3,7 4 4	04	19EEH44	Power Electronic Control of AC Drives	2,3,PSO2	4	-	-	4
01 19CHM11 Foundation of Energy Science and Technology 1,2,3,5,7,12 4 4 02 19CHM12 Energy Generation from Waste 1,2,3,4,5 4 4 03 19CHM13 Energy Storage Systems 1,2,3,6,7 4 4 04 19CHM14 Hydrogen Energy and Fuel Cells 1,2,3,7 4 4 Nano Science & Technology 01 19CHM21 Introduction and Characterization of Nano 1,2,3,7 4 4	B. Tech	. (Minors)						
02 19CHM12 Energy Generation from Waste 1,2,3,4,5 4 4 03 19CHM13 Energy Storage Systems 1,2,3,6,7 4 4 04 19CHM14 Hydrogen Energy and Fuel Cells 1,2,3,7 4 4 Nano Science & Technology 01 19CHM21 Introduction and Characterization of Nano 1,2,3,7 4 4	Energy							
03 19CHM13 Energy Storage Systems 1,2,3,6,7 4 4 04 19CHM14 Hydrogen Energy and Fuel Cells 1,2,3,7 4 4 Nano Science & Technology 01 19CHM21 Introduction and Characterization of Nano 1,2,3,7 4 4	01	19CHM11	Foundation of Energy Science and Technology	1,2,3,5,7,12	4	-	-	4
04 19CHM14 Hydrogen Energy and Fuel Cells 1,2,3,7 4 4 Nano Science & Technology 01 19CHM21 Introduction and Characterization of Nano 1,2,3,7 4 4					4	-	-	4
Nano Science & Technology Old 19CHM21 Introduction and Characterization of Nano 1237 4 4 4	03			1,2,3,6,7	4	-	-	4
01 19CHM21 Introduction and Characterization of Nano 1237 4				1,2,3,7	4	-	-	4
	Nano S	cience & Tec						
Materials 1,2,3,7	01	19CHM21		1237	4			4
	01	1761111121	Materials	1,4,3,7				т

Comment [U16]: Approved in 15th BoS, EEE conducted on 26.03.2022

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Comment [U19]: Approved in 15th BoS, EEE conducted on 26.03.2022

Comment [U20]: Approved in 15th BoS, EEE conducted on 26.03.2022

02	19CHM22	Carbon Nanostructures and Applications	1,3,4,5	4	-	-	4
03	19CHM23	Energy, Environment & Biomedical	1,2,3,7	4	_	_	4
		Nanotechnology					
04	19CHM24	Industrial Applications of Nano Technology	2,3,5,7	4	-	-	4
	nmental Eng						
01	19CEM11	Watershed Management	6,7	4	-	-	4
02	19CEM12	Industrial Pollution Control and Engineering	3,6,7	4	-	-	4
03	19CEM13	Solid and Hazardous Waste Management	1,3,6,7	4	-	-	4
04	19CEM14	Ecology and Environmental Assessment	1,3,6,7	4	-	-	4
		ce & Machine Learning					
01	19CSM11	Fundamentals of AI & Machine Learning	1,12	4	-	-	4
02	19CSM12	Feature Engineering for Machine Learning	1,2,3	4	-	-	4
03	19CSM13	Exploratory Data Analytics	1,4	4	-	-	4
04	19CSM14	Deep Learning	1,2,4	4	-	-	4
	Security						
01	19CSM21	Fundamentals of Security	1,2	4	-	-	4
02	19CSM22	Management of Information Security	3,6,7	4	-	-	4
03	19CSM23	Cyber Security	1,3,4	4	-	-	4
04	19CSM24	Cloud Security	2,3	4	-	-	4
Data S	cience & Ana						
01	19CSM31	Data Cleaning	2,3,4	4	-	-	4
02	19CSM32	Data Engineering	1,2,3,4	4	-	-	4
03	19CSM33	Text Analytics	1,2,4	4	-	-	4
04	19CSM34	Social Network and Semantic Analysis	2,4	4	-	-	4
Compu	iter Systems	Programming					
01	19CSM41	Programming Fundamentals	1,2,3	4	-	-	4
02	19CSM41	Data Structures & Algorithms	1,2,3,4	4	-	-	4
03	19CSM41	Fundamentals of Databases	1,4	4	-	-	4
04	19CSM41	Fundamentals of Computer Networks & Operating Systems	1,2,3	4	-	-	4
Digital	IC Design						
01	19ECM11	Fundamentals of VLSI Design	1,2,3	4	-	-	4
02	19ECM12	Digital Design using HDL	1,2,3	4	-	-	4
03	19ECM13	FPGA Technology	1,2	4	-	-	4
04	19ECM14	Analog and Mixed Signal Design	1,2	4	-	-	4
Indust	rial Automat						
01	19ECM21	Microcontrollers and Interfacing	1,2,3	4	-	-	4
02	19ECM22	Sensors and Data Acquisition System	1,2	4	-	-	4
03	19ECM23	Fundamentals of Labview	1,2	4	-	-	4
04	19ECM24	Medical Robotics	1,2,3	4	_	_	4
		157 . 11	1,2,0				1
		nd Networking	T				
01	19ECM31	Principles of Communications	1,2	4	-	-	4
02		Coding Theory and Practice	1,2	4	-	-	4
03	19ECM33	Ad-hoc and Wireless Sensor Networks	1,2,3	4	-	-	4
04	19ECM34	Fundamentals of Multimedia Networking	1,2,3	4	-	-	4
Avioni							
01	19ECM41	Principles of Aerodynamics	1,2	4	-	-	4
02	19ECM42	Aircraft Electrical Systems	1,2	4	-	-	4
03	19ECM43	Aircraft Instrument Systems	1,2	4	-	-	4
04	19ECM44	Aircraft Communication and Navigational Systems	1,2	4	-	_	4
Gengra	aphic Informa		1				
01	19ECM51	Sensors and Sensing Technology	1,2	4	_	_	4
02	19ECM51	Geographic Information Systems	1,2	4	-	-	4
03	19ECM52	Digital Image Processing	1,2	4	-	-	4
US	T DECIMOS	Digital illiage Flucessilly	كر1	4		_	4

04	19ECM54	Lidar Systems	1,2	4	-	-	4
Cloud A	Application D	Development					
01	19ITM11	Introduction to Cloud Computing	6,7,12	4	-	-	4
02	19ITM12	Introduction to Web Development with HTML, CSS, JavaScript	1,2,3,9,12	4	-	-	4
03	19ITM13	Developing Cloud Native Applications	5,8,10	4	-	-	4
04	19ITM14	Developing Cloud Apps with Node.js and React	5,8,10	4	-	-	4
Roboti	cs and Auton	nation					
01	19MEM11	Introduction to Robotics	1,2,3	4	-	-	4
02	19MEM12	Drives and Sensors	1,2,3,4	4	-	-	4
03	19MEM13	Control Systems for Robotics	1,2,3,4	4	-	-	4
04	19MEM14	Machine Learning for Robotics	2,5	4	-	-	4
Indust	rial Systems	Engineering					
01	19MEM21	Industrial Management	1,10,11,12	4	-	-	4
02	19MEM22	Fundamentals of Operations Research	1,2,3,5	4	-	-	4
03	19MEM23	Enterprise Resource Planning	1,2,3,5,11,12	4	-	-	4
04	19MEM24	Production Planning and Control	1,2,3,5,11,12	4	-	-	4

Departmnt of Electrical & Electronics Engineering, GMRIT | Curriculum under Academic Regulation 2020

Department of Electrical & Electronics Engineering

Minimum Credits to be earned: 160 (for Regular Students) 127 (for Lateral Entry Students)

Fift	h Semester	·						
1	20IT306	Fundamentals of Object Oriented Programming	1,2,3,4,5	3	-	2	4	
2	20EE502	Control Systems	2,3,4,5,PSO1,PSO2	3	-	2	4	
3	20EE503	Electrical Drives	2,3,PSO2	3	1	-	3	Ī
4	20EE504	Power System Protection	2,3,PSO2	3	1	-	3	Ī
5		Elective I (Professional Elective)		3	1	-	3	
6		Elective II (Open Elective I)		3	1	-	3	
7	20EE507	Power Electronics and Drives Lab	4,5	-	-	3	1.5	
8	20TPX01	Term Paper	1,4,10,12	-	-	3	1.5	
9	20ESX02	Employability Skills II	1,2,5,8,10,12	1	1	1	_	
10	20HSX12	CC & EC Activities II	6,7,9,10	-	-	1	_	
11	20SIX01	Summer Internship I	1,2,8,10,12				1.5	I
			Total	19	5	12	24.5	
Sixt	th Semester	r						l
1	20HSX10	Engineering Economics and Project Management	11,12	3	1	-	3	
2	20EE602	Power System Analysis and Control	2,3,PSO1,PSO2	3	1	-	3	Ī
3	20EE603	Utilization of Electrical Energy	3,6,7,8	3	1	-	3	
4		Elective III (Professional Elective)		3	-	2	4	
5		Elective IV (Open Elective II)		3	1	-	3	
6	20EE606	Power Systems Lab	4,5	-	-	3	1.5	
7	20MPX01	Mini Project	1 to12,PSO1,PSO2	-	-	3	1.5	ĺ
8	20ESX02	Employability Skills II	1,2,5,8,10,12	1	1	1	3	Î
9	20HSX12	CC & EC Activities II	6,7,9,10	-	-	1	1	I
10		Audit Course	12	-	-	-	-	Ī
			Total	16	5	10	23	Ī

Comment [U21]: Approved in 14th BoS of EEE, Conducted on 04.09.2021.

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List of Electives

	Electi							
2 20EEC21 Micro and Smart Grid Technologies 2,3 12 8 1 -					-			
20EBC03								
20EE004 Electrical Machine Design 2,3 PSO2 3 1 3 3 6 20EE005 High Voltage DC Transmission 2,3 PSO2 3 1 3 3 6 20EE006 Special Electrical Machines 2,3 PSO2 3 1 3 3 3 6 20EE007 MOCS 3 3 3 3 3 3 3 3								
Society Communication Co								
Color								
Total								
Disaster Management		20EE006		2,3,PSO2	3	1		
1					-	-		3
2 20EE001 Electrical Installation, Safety and Auditing				0.7	-			
3								
4 20EC001 Sensors for Engineering Applications 1 3 1 - 3								
S							_	
Energy Conversion and Storage Devices								_
7						_	_	_
Relective III Career Path I, II, III and Other Core Electives Career Path I, II, III and Other Core Electives Career Path I, II, III and Other Core Electives Career Path I, II, III and Other Core Electives Capacity Ca						_	_	
Elective III						_		
Career Path I, II, III and Other Core Electives 2,00 2			Nano Materials and Technology	1,12	3	1	-	3
1 20EEC12 Electric Vehicle Drive Train Systems 2,3,12,PSO2 3 - 2 4 - 2 2 2 2 2 2 2 2 2			w lost o which					
2 20EEC22 Power Electronic Applications to Green Energy Systems 2,3,5,12,PSO2 3 - 2 4 4 4 4 4 20EE007 Advanced Control Systems 2,3,4,5,PSO1,PSO2 3 - 2 4 4 4 20EE007 Advanced Control Systems 2,3,4,5,PSO1,PSO2 3 - 2 4 4 4 20EE009 Machine Modelling and Steady State Analysis 2,3,4,5,PSO1,PSO2 3 - 2 4 4 4 20EE009 Machine Modelling and Steady State Analysis 2,3,4,5,PSO1,PSO2 3 - 2 4 4 4 20EE002 Air Pollution and Environmental Impact Assessment 20EE002 Air Pollution and Environmental Impact 6,7,12 3 1 - 3 3 3 - 3 3 4 20EE002 Electronics for Agriculture 1,2 3 1 - 3 3 3 - 3 3 3 - 3 3	Caree						_	
2	1	20EEC12	Electric Vehicle Drive Train Systems	2,3,12,PSO2		-	2	
Systems Syst		2055622	Power Electronic Applications to Green Energy	2 2 E 12 DCO2	3	-	2	4
Systems		ZUEECZZ	Systems	2,3,5,12,P3U2				
20EE007 Advanced Control Systems 2,3,4,5,PSO1,PSO2 3 2 4	2	2055622	Control and Instrumentation of Smart Grid	2 4 E 12 DCO2	3	-	2	4
Source Discrete Signal Processing 2,3,4,5,PSO1,PSO2 3 - 2 4	3	ZUEEC3Z		3,4,3,12,1302				
Column C	4	20EE007	Advanced Control Systems			-		4
Correction Communication Etiquette in Workplaces Contemporary India: Economy, Policy and Society Contemporary India: Human Values and Professional Etheics Contemporary Rights and Patents Contemporary Rights a	5	20EE008		2,3,4,5,PSO1,PSO2		-		
1				2,3,4,5	3	-	2	4
Assessment	Electi	ve IV : Open						
Assessment	1	20CE002	Air Pollution and Environmental Impact	6,7,12	3	1	-	3
3 20ME002 Principles of Entrepreneurship 1,11 3 1 - 3 4 20EC002 Electronics for Agriculture 1,2 3 1 - 3 5 20CS002 Fundamental of Machine Learning 2,3 3 1 - 3 3 6 20CH002 Industrial Safety and Hazard Management 1,2,3,6,8 3 1 - 3 3 7 20IT002 Fundamentals of Cloud Computing 1,7 3 1 - 3 3 8 20BS002 Advanced Numerical Techniques 1,2 3 1 - 3 3 9 20BS003 Functional Materials and Applications 1,4 3 1 - 3 3 3 - 3 3 4 - 3 3 4 - 3 3 4 - 3 4 3 1 - 3 4 3 1 - 3 4 4 3 1 - 3 4 4 3 1 - 3 4 4 4 4 4 4 4 4 4								
4 20EC002 Electronics for Agriculture 1,2 3 1 - 3 5 20CS002 Fundamental of Machine Learning 2,3 3 1 - 3 6 20CH002 Industrial Safety and Hazard Management 1,2,3,6,8 3 1 - 3 7 20IT002 Fundamentals of Cloud Computing 1,7 3 1 - 3 8 20BS002 Advanced Numerical Techniques 1,2 3 1 - 3 9 20BS003 Functional Materials and Applications 1,4 3 1 - 3 Audit Course 1 20AT001 Communication Etiquette in Workplaces -		20EE002			_	_		
5 20CS002 Fundamental of Machine Learning 2,3 3 1 - 3 6 20CH002 Industrial Safety and Hazard Management 1,2,3,6,8 3 1 - 3 7 20IT002 Fundamentals of Cloud Computing 1,7 3 1 - 3 8 20BS002 Advanced Numerical Techniques 1,2 3 1 - 3 9 20BS003 Functional Materials and Applications 1,4 3 1 - 3 Audit Course 1 20AT001 Communication Etiquette in Workplaces -<						_	-	_
6 20CH002 Industrial Safety and Hazard Management 1,2,3,6,8 3 1 - 3 7 20IT002 Fundamentals of Cloud Computing 1,7 3 1 - 3 8 20BS002 Advanced Numerical Techniques 1,2 3 1 - 3 9 20BS003 Functional Materials and Applications 1,4 3 1 - 3 Audit Course 1 20AT001 Communication Etiquette in Workplaces -<								
7 20IT002 Fundamentals of Cloud Computing 1,7 3 1 - 3 8 20BS002 Advanced Numerical Techniques 1,2 3 1 - 3 9 20BS003 Functional Materials and Applications 1,4 3 1 - 3 Audit Course 1 20AT001 Communication Etiquette in Workplaces - <							-	
8 20BS002 Advanced Numerical Techniques 1,2 3 1 - 3 9 20BS003 Functional Materials and Applications 1,4 3 1 - 3 Audit Course 1 20AT001 Communication Etiquette in Workplaces -						_	-	
9 20BS003 Functional Materials and Applications 1,4 3 1 - 3 Audit Course 1 20AT001 Communication Etiquette in Workplaces -							-	_
Audit Course 1 20AT001 Communication Etiquette in Workplaces -					_	_	-	
1 20AT001 Communication Etiquette in Workplaces -	_		Functional Materials and Applications	1,4	3	1	-	3
2 20AT002 Contemporary India: Economy, Policy and Society -	Audit	Course						
3 20AT003 Design The Thinking -<				-	-		-	-
4 20AT004 Ethics and Integrity -				-	-	-	-	-
5 20AT005 Indian Heritage and Culture -	3			-	-	-	-	-
6 20AT006 Human Values and Professional Etheics -				-	-	-	-	-
7 20AT007 Intellectual Property Rights and Patents - <t< td=""><td>5</td><td></td><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></t<>	5			-	-	-	-	-
8 20AT008 Introduction to Journalism -		20AT006		-	-		-	-
9 20AT009 Mass Media Communication - <			Intellectual Property Dights and Datents	_	-	-	-	-
10 20AT010 Science, Technology and Development -<	7	20AT007						
1120AT011Social Responsibility1220AT012The Art of Photography and Film Making1320AT013Gender Equality for Sustainbility	7 8	20AT007 20AT008	Introduction to Journalism	-	-	-	-	
12 20AT012 The Art of Photography and Film Making	7 8 9	20AT007 20AT008 20AT009	Introduction to Journalism Mass Media Communication					
13 20AT013 Gender Equality for Sustainbility	7 8 9 10	20AT007 20AT008 20AT009 20AT010	Introduction to Journalism Mass Media Communication Science, Technology and Development	-	-	-	-	
	7 8 9 10 11	20AT007 20AT008 20AT009 20AT010 20AT011	Introduction to Journalism Mass Media Communication Science, Technology and Development Social Responsibility	-	-	-	-	-
14 20AT014 Women in Leadership - - -	7 8 9 10 11 12	20AT007 20AT008 20AT009 20AT010 20AT011 20AT012	Introduction to Journalism Mass Media Communication Science, Technology and Development Social Responsibility The Art of Photography and Film Making		- - -	-	-	
	7 8 9 10 11 12 13	20AT007 20AT008 20AT009 20AT010 20AT011 20AT012 20AT013	Introduction to Journalism Mass Media Communication Science, Technology and Development Social Responsibility The Art of Photography and Film Making Gender Equality for Sustainbility	- - - -		- - - -	- - -	

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15	20AT015	Introduction to Research Methodology	-	- -	-	-
16	20AT016	Climate Chnages and Circular Economy				
B. Tee	ch. (Honors)					
Doma	in I: AI in Ele	ectrical and Electronics Engineering				
01	20EEH11	Computational Intellegence in Electrical Engineering	1,2,12,PSO2	4 -	-	4
02	20EEH12	Data analytics in Electrical Engineering	1,2,12	4 -	-	4
03	20EEH13	Internet of Things in Electrical Engineering	1,2,12, PSO1	4 -	-	4
04	20EEH14	Introduction to Smart Cities	1,2,12, PSO2	4 -	-	4
_	in II: Power				,	
01	20EEH21	Design and Layout of Power Systems	1,2,3,8	4 -	-	4
02	20EEH22	Distributed Generation Technologies	1,2,6,7,8, PSO2	4 -	-	4
03	20EEH23	Distribution System Planning and Automation	2,3,6, PSO2	4 -	-	4
04	20EEH24	Power Quality	2,3,8, PSO2	4 -	-	4
	in III: Contro		0.0 0.001 0.000		1	
01	20EEH31	Adaptive Control Systems	2,3,PSO1,PSO2	4 -	-	4
02	20EEH32	Introduction to Autonomous Vehicles	2,3, PSO2	4 -	-	4
03	20EEH33	Introduction to Robust Control Systems	2,3, PSO1,PSO2	4 -	-	4
04	20EEH34	Optimal Control Systems	2,3, PSO1,PSO2	4 -	-	4
Doma	in IV: Power	Electronics and Drives				
01	20EEH41	Advanced Power Electronics	2,3, PSO1,PSO2	4 -	-	4
02	20EEH42	Flexible AC Transimission Systems	2,3, PSO1	4 -	-	4
03	20EEH43	Power Electronic Control of DC Drives	2,3,PSO2	4 -	-	4
04	20EEH44	Power Electronic Control of AC Drives	2,3,PSO2	4 -	-	4
	ch. (Minors)					
	y Science & '					
01	20CHM11	Foundation of Energy Science and Technology	1,2,3,5,7,12	4 -	-	4
02	20CHM12	Energy Generation from Waste	1,2,3,4,5	4 -	-	4
03	20CHM13	Energy Storage Systems	1,2,3,6,7	4 -	-	4
04	20CHM14	Hydrogen Energy and Fuel Cells	1,2,3,7	4 -	-	4
Nano	Science & Te				1	
01	20CHM21	Introduction and Characterization of Nano Materials	1,2,3,7	4 -	-	4
02	20CHM22	Carbon Nanostructures and Applications	1,3,4,5	4 -	-	4
03	20CHM23	Energy, Environment & Biomedical Nanotechnology	1,2,3,7	4 -	-	4
04	20CHM24	Industrial Applications of Nano Technology	2,3,5,7	4 -	-	4
Envir	onmental En					
01	20CEM11	Watershed Management	6,7	4 -	-	4
02	20CEM12	Industrial Pollution Control and Engineering	3,6,7,12	4 -	-	4
03	20CEM13	Solid and Hazardous Waste Management	1,3,6,7	4 -	-	4
04	20CEM14	Ecology and Environmental Assessment	1,3,6,7	4 -	-	4
Artifi		nce & Machine Learning				
01	20CSM11	Fundamentals of AI & Machine Learning	1,12	4 -	-	4
02	20CSM12	Feature Engineering for Machine Learning	1,2,3	4 -	-	4
03	20CSM13	Exploratory Data Analytics	1,4	4 -	-	4
04	20CSM14	Deep Learning	1,2,4	4 -	-	4
	Security					
01	20CSM21	Fundamentals of Security	1,2	4 -	-	4
02	20CSM22	Management of Information Security	3,6,7	4 -	-	4
03	20CSM23	Cyber Security	1,3,4	4 -	-	4
04	20CSM24	Cloud Security	2,3	4 -	-	4
	Science & An	Data Cleaning	224	4		
01	20CSM31		2,3,4	4 -	-	4
02	20CSM32	Data Engineering	1,2,3,4	4 -	-	4
03	20CSM33	Text Analytics	1,2,4	4 -	_	4

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04	20CSM34	Social Network and Semantic Analysis	2,4	4	-	-	4
_		s Programming	_, <u>-</u> , <u>.</u>	1			1
01	20CSM41	Programming Fundamentals	1,2,3	4	-	-	4
02	20CSM41	Data Structures & Algorithms	1,2,3,4	4	-	-	4
03	20CSM41	Fundamentals of Databases	1,4	4	-	-	4
04	20CSM41	Fundamentals of Computer Networks & Operating Systems	1,2,3	4	-	-	4
Digita	al IC Design						
01	20ECM11	Fundamentals of VLSI Design	1,2,3	4	-	-	4
02	20ECM12	Digital Design using HDL	1,2,3	4	-	-	4
03	20ECM13	FPGA Technology	1,2	4	-	-	4
04	20ECM14	Analog and Mixed Signal Design	1,2	4	-	-	4
Indus	strial Automa						
01	20ECM21	Microcontrollers and Interfacing	1,2,3	4	-	-	4
02	20ECM22	Sensors and Data Acquisition System	1,2	4	-	-	4
03	20ECM23	Fundamentals of Labview	1,2	4	-	-	4
04	20ECM24	Medical Robotics	1,2,3	4	-	-	4
Comn	nunications a	and Networking					
01	20ECM31	Principles of Communications	1,2	4	-	-	4
02	20ECM32	Coding Theory and Practice	1,2	4	-	-	4
03	20ECM33	Ad-hoc and Wireless Sensor Networks	1,2,3	4	-	-	4
04	20ECM34	Fundamentals of Multimedia Networking	1,2,3	4	-	-	4
Avior	nics	<u> </u>					
01	20ECM41	Principles of Aerodynamics	1,2	4	-	-	4
02	20ECM42	Aircraft Electrical Systems	1,2	4	-	-	4
03	20ECM43	Aircraft Instrument Systems	1,2	4	-	-	4
04	20ECM44	Aircraft Communication and Navigational Systems	1,2	4	-	-	4
Geogr	raphic Inforn	nation System					
01	20ECM51	Sensors and Sensing Technology	1,2	4	-	-	4
02	20ECM52	Geographic Information Systems	1,2	4	-	-	4
03	20ECM53	Digital Image Processing	1,2	4	-	-	4
04	20ECM54	Lidar Systems	1,2	4	-	-	4
		Development					_
01	20ITM11	Introduction to Cloud Computing	6,7,12	4	-	-	4
02	20ITM12	Introduction to Web Development with HTML, CSS, JavaScript	1,2,3,9,12	4	-	-	4
03	20ITM13	Developing Cloud Native Applications	5,8,10	4	-	_	4
04	20ITM13	Introduction to Cloud Computing	6,7,12	4	-	_	4
	tics and Auto	i g	0,7,114	1 7			Т
01	20MEM11	Introduction to Robotics	1,2,3	4	-	_	4
02	20MEM12	Drives and Sensors	1,2,3,4	4	-	-	4
03	20MEM12	Control Systems for Robotics	1,2,3,4	4	-		4
04	20MEM13	Machine Learning for Robotics	2,5	4	-	-	4
		s Engineering		T			Т
01	20MEM21	Industrial Management	1,10,11,12	4	-	-	4
02	20MEM21	Fundamentals of Operations Research	1,2,3,5	4	-	-	4
03	20MEM22	Enterprise Resource Planning	1,2,3,5,11,12	4	-	_	4
04	20MEM23	Production Planning and Control	1,2,3,5,11,12	4	-		4
04	ZUMENIZ4	i i ouucuon i ianning anu conti oi	1,4,0,0,0,11,14	1 4		_	_ T

Departmnt of Electrical & Electronics Engineering, GMRIT | Curriculum under Academic Regulation 2021

Department of Electrical & Electronics Engineering

Minimum Credits to be earned: 160 (for Regular Students) 127 (for Lateral Entry Students)

Thi	rd Semeste	r					
1	21MA302	Engineering Mathematics III	1,4,5	3	-	2	4
2	21EE302	DC Machines and Transformers	1,2	3	1	-	3
3	21EE303	Electrical Circuit Analysis	1,2,PSO1	3	1	-	3
4	21EE304	Electromagnetic Field Theory	1,2	3	1	-	3
5	21EE305	Measurements and Instrumentation	1,2,3	3	1	-	3
6	21EE306	Semiconductor Devices and Circuits	1,2, 3, 4,5	3	-	2	4
7	21EE307	DC Machines Lab	4	-	-	3	1.5
8	21EE308	Electrical Circuits and Simulation Lab	4,5	-	-	3	1.5
9	21BEA01	Environmental Studies	1,6,7,12	-	-	-	-
10	21ESX01	Employability Skills I	1,2,5,8,10,12	1	1	1	-
11	21HSX11	CC & EC Activities I	6,7,9,10	-	-	1	-
			Total	19	5	12	23
Fou	ırth Semest	er					
1	21EE401	AC Machines	1,2	3	1	-	3
2	21EE402	Linear and Digital Integrated Circuits	1,2,4	3	-	2	4
3	21EE403	Power Electronics	2,3,PSO1,PSO2	3	1	-	3
4	21EE404	Power Generation, Transmission and	1, 2,6	3	1	-	3
5	2155405	Distribution Signals and Systems Theory	3,5,PSO1	3	1	_	3
6	21EE405	Signals and Systems Theory	3 5 PSUT				.5
				3	_	2	
	21EE406	AC Machines Lab	4	-	Ī	3	1.5
7				-	-	3	
	21EE406	AC Machines Lab Measurements and Instrumentation	4	-	Ī		1.5
7	21EE406 21EE407	AC Machines Lab Measurements and Instrumentation Lab	4	-		3	1.5 1.5

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Date: 19/12/2020

MINUTES OF MEETING

Meeting Title	13th BoS Meeting	Datè	19/12/2020
Department	EEE	Start Time	11:30 AM
Place / Venue	Virtual - Microsoft Teams	Stop Time	03:30 PM

Participants

S. No.	Name	Designation	Signature
		Scientist-E	
		Naval Science &	
1	Mr. B. Venkat Rao	Technolo _s ical	M. Johnson
		Laboratory,	M. A
		Visakhapatnam	
		SC/ENG-SG	()
2	Mr. K. Koteswara Rao	Head, SR, SDSC	1.1-000
		SHAR(ISRO),	hoter was
		Sriharikota Professor/EEE	Cr
		University College of	
3	Dr. G. Yesuratnam	Engineering, OU-	esu,
		Hyderabad	2
		Professor/EEE	
4	Dr. G. V. Marutesheswar	Sri Venkateswara	Ge
		University, Tirupathi	
	Dr. Gopi Chand Naik	Professor/EEE	. 1-
5		Andhra University,	1
		Visakhapatnam	12
		Professor and Head,	
		Dept. of Electrical and	
6	Dr. N. Kumarappan	Electronics	27-
	предоставляний предоставлений предоставляний предос	Engineering,	- WXX
		Annamalai University,	
		Annamalainagar Senior Engineer	
7	Mr. P. Nishanth	R&D Division, BHEL,	· what
	The state of the s	Hyderabad	· y
8	Dr. P. Bharani Chandra		011
0	Kumar	Professor & HoD	My
9	Dr. Chandra Sekhar	Professor	m
10	Dr. P. Ramana		KQ.
11	Dr. T.S. Kishore		m
12	Dr. K.V.S. Prasad		Jup-
13	Dr. Rajeshkumar Patnaik	Associate Professor	Retnam
14	Dr. K. Karthick		BI ARRENT
15	Dr. D. Danalakshmi		D. J.
16	Dr. T.S.L.V. Ayya Rao	0 1 1	Thesa
17	Dr. G. Indira Kishore	Sr. Assistant Professor	0.0

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18	Dr. L. V. Suresh Kumar		asses
19	Dr. S.P. Mishra		Section
20	Mr. J.S.V. Siva Kumar		J.S.V. GUGLE
21	Dr. P. Upendra Kumar		W/
22	Dr. M. Premkumar		N.
23	Mr. V. Srikanth Babu		Many
24	Mr. M. Vinay Kumar	Assistant Professor	
25	Mr. M. Venkatesh		M. Ulu
26	Mr. R. Ramakrishna		See/
27	Mr. D. Rajesh Babu		70
28	Mr. R. Vijaya Krishana		Dark
29	Mr. J. Ravi Kumar		June
30	Mr. NSS. Ramakrishna		·Cu

Agenda

- 1. Academic Regulation 2020
- Curriculum design and development 2020 under Academic Regulation 2020
- 3. Syllabus (first four semesters) in Curriculum under Academic Regulation 2020
- 4. Modifications in Academic Regulation 2019
- 5. Revised Curriculum under Academic Regulation 2019
- 6. Changes in the Syllabus in 3rd and 4th Semesters in Curriculum under Academic Regulation 2019
- 7. Any other matter

Agenda points were discussed and the MOM is as follows:

S.No.	Points Discussed	Remarks
1	Dr. P. Bharani Chandra Kumar welcomes the gathering, and Dr. P. Ramana briefed about the agenda of the BoS meeting.	Dr PR, Dr PBCK
2	The curriculum design and development of both AR19 and AR20 was briefed to all BoS members and faculty members	Dr PR
3	The difference between AR19 and AR20 is also brought to the notice of all BoS members. Briefly, discussed about the APSCHE curriculum.	Dr PR
4	The BoS members suggested to mention the mark distribution between the theory and laboratory component for the integrated courses.	Dr GVM, Dr GY
5	The BoS members suggested to keep Electrical Circuit Analysis and its respective laboratory as a two separate courses. And, also suggested to keep the Semiconductor devices and circuits as an integrated course.	Dr GVM, Dr GY
6	The BoS members inquired about the theory and its laboratory component in the same semester. The HoD and Dr PR has explained the situation of why theory and laboratory are placed in the same semester. In addition, the BoS members are felt that the number of courses is more in third semester. The HoD also explained about the practical difficulty in reducing the course in third and fourth semester.	Mr KKR, Dr PBCK, Dr PR
7	All the members of BoS felt that DC machine laboratory should shift to the third semester. And, they asked to shift the Measurement and Instrumentation lab or semiconductor & devices laboratory to the fourth semester.	All Members
8	The BoS members felt that the academic load in 7th and 8th semester is very much less than the 2th and 3th year loads. And, they also told that for average students, it will be tough to study since they are just coming to the respective department. The HoD explained that due to the	Mr KKR, Dr PBCK

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	placement activities and APSCHE guidelines, the work load is reduced during final year.	
9	Dr PR and Dr PBCK briefed the evolution of career path courses and its importance to the BoS members. The BoS members appreciated the effort taken by the department with regard to the career path courses.	All members
10	HoD briefed about B. Tech. (Regular/Minor/Honors). One of the BoS members raised the question about the usefulness of the B.Tech. (Minor). He suggested to discuss with the higher authority before implementing this scheme.	Dr GVM, Dr. PBCK
11	One of the BoS members suggested to keep some essential courses such as computation fluid dynamics, thermodynamics, etc. in open elective courses.	Mr KKR
12	Suggested to keep calibration related topics in Measurement and Instrumentation or its respective laboratory.	Mr KKR
13	Suggested to include electronic instruments as a separate unit in Measurements and Instrumentation subject.	Dr KA
14	Suggested to include Magnetic Circuits in EMFT subject.	Dr KA
15	One of the BoS member suggested to keep B.L. Theraja as a reference text book in DC Machines and Transformers and as well as in AC Machines. The same member is also suggested to keep Electric Power Generation, Transmission and Distribution by S. N. Singh in the subject Power Generation, Transmission and Distribution.	Dr KA
16	Suggested to include Signals and Systems Theory as an elective course instead of core course if possible.	Dr KA
18	One of the BoS member advised that while mapping POs to various subjects, utmost care should be taken.	Dr KA
19	Suggested to change the title of Unit-III in Measurement and Instrumentation course as "Potentiometers and Bridges".	Dr GY
20	Suggested to shift the conventional speed control techniques of Induction motor to electrical drives course.	Gr GVM
21	The BoS members felt that the contents in Power generation, transmission, and distribution course is somewhat high. Also suggested to reduce some content wherever possible.	Dr GY, Dr GVM, Dr KA
22	Dr PR also discussed about the extra courses to get B.Tech. (Honors) degree and the syllabus of the same. The BoS members are satisfied with all the selected courses.	Dr PR
23	Suggested to recheck the content in Data analytic course since the topic "probability" is already covered in Signal and Systems Theory.	Mr KKR

Signature of HOD

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Date: 04/09/2021

MINUTES OF MEETING

Meeting Title	14th BoS Meeting	Date	04/09/2021
Department	EEE	Start Time	11:15 AM
Place / Venue	Virtual - Microsoft Learns	Stop Time	04:00 PM

Participants

S. No.	Name	Designation	Signature
1.	Dr. G. Yesuratnam		Attended through online
2.	Dr. Gopi Chand Naik	Professor/EEE Andhra University. Visakhapatnam	Attended through online
3.	Dr. N. Kumarappan	Professor and Head/EEE. Annamalai University. Annamalai Nagar. Chidambaram. Tamil Nadu	Attended through online
4.	Mr. B. Venkat Rao	Scientist-E Naval Science & Technological Laboratory, Visakhapatnam	Attended through online
5.	Mr. P. Nishanth	Senior Engineer R&D Division, BHEL, Hyderabad.	Attended through
6.	Dr. P. Bharani Chandra Kumar	Professor & HoD	RU
7.	Dr. Chandra Sekhar	Professor	sp-
8.	Dr. P. Ramana		RU
9.	Dr. T.S. Kishore		8
10.	Dr. K.V.S. Prasad		den-a
11.	Dr. Rajeshkumar Patnaik	Associate Professor	8
12.	Dr. K. Karthick		a gram
13.	Dr. D. Danalakshmi		Dul
14.	Dr. T.S.L.V. Ayya Rao		tourand
15.	Dr. G. Indira Kishore	_	1
16.	Dr. L. V. Suresh Kumar	-	avy
17,	Dr. S.P. Mishra	Sr. Assistant Professor	n.
18.	Dr.Ch. Hemanth Kumar	_	430
19.	Dr.M. Rambabu	_	dr.
20.	Mr. J.S.V. Siva Kumar		12

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Dr.N.V.A. Ravi Kumar Dr. P. Upendra Kumar

Mr. V. Srikanth Babu

Dr. M. Vinay Kumar

Mr. D. Rajesh Babu

Mr. J. Ravi Kumar

Mr.V. Manoj

Mr. R. Vijaya Krishna

Mr. NSS. Ramakrishna Dr. P. Praveen Kumar

Mr. M. Venkatesh Mr. R. Ramakrishna

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Academic Regulation 2019 and 2020 (AR 2019, AR2020).

Mr. P.V.V. Pawan Kumar

- Curriculum 2019, 2020(Modifications).
- 3. Syllabi for the B.Tech 5th and 6th semesters under AR 2019 and AR 2020, B.Tech Honors.
- 4. Any other modifications in the existing Curriculum and Syllabi in AR 2016, if any.
- 5. Any other matter

Agenda points were discussed and the MOM is as follows:

S. No.	Points Discussed	Remarks
1	Dr. P. Bharani Chandra Kumar welcomes the gathering, and Dr. P. Ramana briefed about the agenda of the BoS meeting.	Dr PR, Dr PBCK
2	The curriculum modifications of both AR19 and AR20 was briefed to all BoS members and faculty members	Dr PR
3	The details of Honors and Minors were briefed to all BoS members.	Dr PR
4	The BoS members suggested to rename the course "Introduction to Sustainability".	Dr NK, Dr GY
5	The BoS members suggested to rename the course "Electrical Installation and safety" as "Electrical Audit and Safety".	Dr NK, Dr GY
6	The BoS members suggested to check the availability of text book for the Career path, Honors and Minor courses.	All Members
7	The BoS members suggested to move the power quality course from honors to elective / core course.	Dr NK, Dr GY
8	Dr PBCK and Dr PR briefed about career path courses, honors, minor courses and its importance to the BoS members. The BoS members appreciated the efforts taken by the department with regard to the career path courses, honors and minor courses.	All members
9	One of the BoS members suggested to change the course "Artificial Intelligence" as "Computational Intelligence" and the text books 1 & 3 prescribed in the syllabus need to be reviewed.	Dr NK
10	The BoS members suggested that Electronics can be added as one category of course in honors.	
11	One of the BoS members suggested to review the title "Electric Drives and Controllers for EVs in minor courses.	Dr NK

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12	One of the BoS members suggested that Computer Vision in EVs course in minor may require some prerequisite. The syllabus should be framed accordingly.	Dr NK
13	The HoS members suggested to remove the power system transient's part from the course of "Power System Protection" and distribute the remaining portion into four units.	Dr GY, Dr NK
14	The BoS members suggested that the simulation experiments can be added in the Power Systems lab.	Dr GY, Dr NK
15	One of the BoS members suggested to specify the type of forecasting in Unit IV of entegory I major course "2011/1111 Artificial Intelligence in Electrical Engineering" and select suitable text book for the course.	Dr.NK
16	One of the BoS members suggested to incorporate the text book Allen J. Wood, and Bruce F. Wolfenberg in Power System Analysis and Control subject.	Dr NK
17	Green Unergy technologies course Unit titles should be changed.	Dr NK
18	The basics of engineering syllabus modification is brought to the notice of BoS members. The swapping of Unit 3 & 4 to Unit 1 & 2 is accepted by them.	All members
19	The Head of the department brought to the notice to all the BoS members about the question bank method instead of question paper setting method. The suggestions from BoS members were asked. The BoS members agreed to question bank method and suggested to take more care during the preparation of question bank to each course.	All members
20	The minor modifications in COs of the courses in AR16 are brought to the notice to BoS and got approval from them.	All members
21	 The transitory regulations of the students who are detained in AR16 and joined in AR19 has been discussed and BoS members approved the same. Devupalli Chandu (18341A0223), AR-16 student Re-joined with AR-19 from First Semester, has to acquire 174 credits. Yagati Anandarao (18341A0284), AR-16 student Re-joined with AR-19 from Second Semester, has to acquire 174 credits. The following courses have been identified to compensate the balance 4 credits in AR-19 regulation. a) Electrical Engineering Lab 2 credits (4th sem) b) Electrical systems and simulation lab 2 credits (7th sem) 	All members

Signature of HOD

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Date: 26/03/2022

MINUTES OF MEETING

Meeting Title	15th BoS Meeting	Date	26/03/2022
Department	EEE	Start Time	10:30 AM
Place / Venue	Virtual - Microsoft Teams	Stop Time	01:15 PM

Members Present

S. No.	Name	Designation	Signature
1.	Dr. G. Yesuratnam	Professor, Dept. of Electrical Engineering University College of Engineering, OU-Hyderabad	esus
2.	Dr. Gopi Chand Naik	Professor, Dept. of Electrical Engineering, Andhra University, Visakhapatnam.	J. P.
3.	Dr. N. Kumarappan	Professor and Head, Dept. of Electrical and Electronics Engineering. Annamalai University, Annamalai Nagar	Jan-
4.	Dr. M. Nageswara Rao	Associate Professor, Department of EEE. University College of Engineering (A), JNTUK, Kakinada.	1110
5.	Mr. B. Venkat Rao	Scientist -D, Electrical Engineering Department, Naval Science & Technological Laboratory Visakhapatnam	N- Markey
6.	Mr. P. Nishanth	Senior Engineer R&D Division, BHEL, Hyderabad	malante
7.	Dr P Ramana	Professor & HoD	NE
8.	Dr G Chandra Sekhar	Professor	M
9.	Dr T S Kishore		g.
10.	Dr Rajesh Kumar Patnaik	- Associate Professor	Sylvan
11.	Dr K Karthick	Associate Professor	ag. sourn
12	Dr D Danalakshmi		Done

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13.	Dr G Indira Kishore	Sr. Assistant Professor	lh
14.	Dr T S L V Ayya Rao		Ham
15.	Dr Ch Hemanth Kumar		1/2
16.	Dr L V Suresh Kumar		local
17.	Dr S P Misra		482
18.	Dr N V A Ravi Kumar		lay!
19,	Dr M Vinay Kumar		Vita
20.	Dr M Rambabu		N.8.
21.	Mr J S V Siva Kumar		9506x4
22.	Dr P Upendra Kumar	Assistant Professor	Al.
23.	Dr P Praveen Kumar		Ar.
24.	Mr M Venkatesh		J M. Ulco
25.	Mr R Rama Krishna		10
26.	Mr R Vijaya Kishna		201
27.	Mr D Rajesh Babu		33
28.	Mr J Ravi Kumar		Pan/
29.	Mr NSS Rama Krishna		
30.	Mr V Manoj		Vistag

Agenda

- Finalization of the course titles and syllabus for 7th & 8th semesters as per AR 19 and AR 20 curriculum
- 2 Finalization of titles and Syllabus for Honors and Minors degrees as for AR 19 and AR 20
- 3 Approval of substitute / equivalent courses for readmitted students (2021-22 & 2022-23) as per the transitory regulations
- 4 Updating and finalization of the program wise subject expert lists for question paper setting, valuation etc.
- 5 Initiate the preparation of Question Bank for all the semester end exams
- 6 Any other point



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Agenda points were discussed and the MOM is as follows:

No.	Points Discussed	Remarks
1	Dr. P. Ramana Professor & HoD welcomes the gathering, and Dr. L. V. Sureshkumar briefed about the agenda of the BoS meeting.	Dr PR, Dr LVS
2	The semester wise credits distribution and curriculum of AR19 & AR20 has been discussed	All Members
3	The details of Honors and Minors were briefed to all BoS members.	Dr PR
4	The seventh and eighth semester courses, honors, minors, open electives, and career path / professional / core electives in AR19 & AR20 regulation courses have all been carefully reviewed by all the BoS members.	All Members
5	One of the members of the BoS suggested that the Elective V course "Battery Management Systems" contain content that is primarily relevant to chemical engineering. The syllabus should cover topics related to storage systems. It is necessary to verify the textbook's availability.	Dr NK
6	Dr. N. Kumarappan, a member of the BoS, proposed adding the Indian publisher's textbook for the "Hybrid Renewable Energy Systems Design" course in Elective V list.	Dr NK
7	The BoS members suggested that for the course "Communication and Security in the Smart Grid," fundamental topics be added to unit 1. Second text book should be replaced in the given list.	Dr NK, Dr MNR
8	In the course "Electrical Distribution Systems" the FACT devices can also be added	Dr NK
9 .	In the course "Energy Audit, Conservation, and Management," it is necessary to verify the relevance of the second text book and reference book.	Dr NK, Dr GCN
10	The content relevant to ARM processors can be added to Unit IV of the course "Microprocessors and Microcontroller Interfacing." Additionally, a text book covering ARM processor topics should be included.	Dr NK
11	The BoS members appreciated the effort taken by the department with regard to the career path courses, honors and minors courses.	All members
12	The third text book can be removed from the text book list for the course "Programmable Logic Controllers."	Dr NK
13	"Power system Deregulation" course in Elective VIII, Change the name of the unit I as "Fundamentals of deregulation" instead of "Optimal flow". Units II and III have been found to be irrelevant to the course and must be restructured.	Dr NK
14	Prabha Kundur's "Power System Stability and Control" text book can be added to the "Power System Dynamics and Control" course. There are a few topics that look like they belong in a PG level course.	Dr NK
15	A few topics in Unit III should be shifted to Unit IV for the "High Voltage Engineering" course. C L Wadhwa text book	Dr NK

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16	the transitory regulations for students (16345A0217- L. Lakshman Rao, 14341A02B2-U. Praveen, 15341A0276- P. Sowjanya, 17341A02B2-V. Ashok Kumar) who were re- admitted due to a lack of attendance (transfer of students from one regulation to another) were discussed. All the Bo5 members agreed and approved the transitory regulations presented by Hol).	All members
17	The list of external subject experts has been shared to all members of the BoS. The new initiative of developing a question bank in preparation of question paper for the end-of-semester examinations was discussed. The members of the BoS suggested to form a subject expert team to finalize the question bank. The team should ensure that the curriculum requirements are met. Additionally, they suggested to ensure the confidentiality of the prepared questions.	All members
18	The Bots members suggested to check the course (Minor category Course) names similarity.	All members
19	The changes in COs and minor modifications to the syllabus content for AR19/AR20 courses up to the sixth semester have been discussed and approved.	All members
20	The modifications in PG regulation have been discussed and approved by all members	All members
21	The automation of the post examination process i.e., On screen marking and online assessment has been discussed. The MOOCs course platforms has been identified.	All members