PERI INSTITUTE OF TECHNOLOGY

(AUTONOMOUS)

REGULATIONS 2024

B.E. ELECTRICAL AND ELECTRONICS ENGINEERING

SEMESTER - I

S. NO.	COURSE CODE	COURSETITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.	24SH108106	Life Skills - I	EEC	1	0	0	1	1
2.	24SH108108	Personal and Professional Competencies for Engineers	EEC	1	0	0	1	1
3.	24SH101105	Engineering Mathematics-I	BSC	3	1	0	4	4
4.	24EC101101	Embedded C Programming	ESC	3	0	0	3	3
5.	24ME105101	Engineering Graphics and Design	ESC	2	0	4	6	4
6.	24EE101101	Introduction to Electrical and Electronics Engineering	PCC	3	0	0	3	3
LAB INTEGRATED COURSE								
7.	24SH102102	Physics for Electronics Engineering	BSC	3	0	2	5	4
PRACTICALS								
8.	24EC103102	Embedded C Programming laboratory	ESC	0	0	4	4	2
9.	24SH103107	Communication Lab - I	HSMC	0	0	2	2	1
			TOTAL	**16**	**1**	**12**	**29**	**23**

SEMESTER - II

S. NO.	COURSE CODE	COURSETITLE	CATE-GORY	PERIODSPER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.	24SH108205	Life Skills - II	EEC	1	0	0	1	1
2.	24SH101206	Tamils and Technology	HSMC	1	0	0	1	1
3.	24EE101202	Basic Electrical and Electronics Engineering	ESC	4	0	0	4	4
4.	24EC101201	Embedded Python Programming	ESC	3	0	0	3	3
LAB INTEGRATED COURSE								
5.	24SH102204	Engineering Chemistry	BSC	3	0	2	5	4
6.	24SH102202	Engineering Mathematics - II	BSC	3	0	2	5	4
PRACTICALS								
7.	24ME103203	IDEA Lab	ESC	0	0	4	4	2
8.	24EC103202	Embedded Python Programming lab	ESC	0	0	4	4	2
9.	24SH103207	Communication Lab - II	HSMC	0	0	2	2	1
MANDATORY COURSE								
10.	24SH112203	Environmental Science and Engineering	MC	2	0	0	2	0
			TOTAL	**17**	**0**	**14**	**31**	**22**

SEMESTER - III

S. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.	24EE101301	Probability and Complex Functions	BSC	3	1	0	4	4
2.	24EE101302	Electric Circuits and Networks	PCC	3	0	0	3	3
3.	24EE101303	Electrical Machines - I	PCC	3	0	0	3	3
4.	24EE106304	Open Elective -I (Advanced Python Programming)	OEC	3	0	0	3	3
5.	24EE107305	Life Skill – III Basic Conversion Skills	EEC	1	0	0	1	1
6.	24EE107306	Holistic Personality Development and Behavioral Skills	EEC	1	0	0	1	1
LAB INTEGRATED COURSE								
7.	24EE102307	Data Structures	ESC	3	0	2	5	4
8.	24EE102308	Digital Logic Circuits	PCC	3	0	2	5	4
PRACTICALS								
9.	24EE103309	Electrical Circuits Laboratory	PCC	0	0	3	3	1.5
10.	24EE1033010	Electrical Machines - I Laboratory	PCC	0	0	3	3	1.5
TOTAL				**20**	**1**	**10**	**31**	**26**

SEMESTER - IV

S. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.		Analog Electronics and Linear Integrated circuits	PCC	3	0	0	3	3
2.		Control Systems	PCC	3	1	0	3	4
3.		Electrical Machines - II	PCC	3	0	0	3	3
4.		Professional Elective -I	PEC	3	0	0	3	3
5.		Open Elective -II	OEC	3	0	0	3	3
6.		Life Skill - IV	EEC	1	0	0	1	1
7.		Inventive Principles	EEC	1	0	0	1	1
LAB INTEGRATED COURSE								
8.		Professional Elective -II	PEC	3	0	2	5	4
PRACTICALS								
9.		Electronics and Linear Integrated Circuits Laboratory	PCC	0	0	3	3	1.5
10.		Electrical Machines – II Laboratory	PCC	0	0	3	3	2
11.		Control and Instrumentation Lab	PCC	0	0	3	3	2
TOTAL				**20**	**1**	**07**	**27**	**27.5**

SEMESTER - V

S. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.		Generation, Transmision and Distribution	PCC	3	0	0	3	3
2.		Microprocessor and Interfacing Techniques	PCC	3	0	0	3	3
3.		Power Electronics	PCC	3	0	0	3	3
4.		Professional Elective - III	PEC	3	0	0	3	3
5.		Open Elective - III	OEC	3	0	0	3	3
6.		Life Skill - V	EEC	1	0	0	1	1
LAB INTEGRATED COURSE								
8.		Professional Elective - IV	PEC	3	0	2	5	4
PRACTICALS								
9.		Power Electronics and Drives Laboratory	PCC	0	0	3	3	1.5
10.		Microprocessor and Interfacing Techniques Laboratory	PCC	0	0	3	3	1.5
TOTAL				**19**	**0**	**08**	**27**	**23**

SEMESTER - VI

S. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.		Protection and Switch Gear	PCC	3	0	0	3	3
2.		Measurements and Instrumentation	PCC	3	0	0	3	3
3.		Power System Analysis and Control	PCC	3	0	0	3	3
4.		Professional Elective -V	PEC	3	0	0	3	3
5.		Open Elective -IV	OEC	3	0	0	3	3
6.		Life Skill - VI	EEC	1	0	0	1	1
LAB INTEGRATED COURSE								
7.		Professional Elective - VI	PEC	3	0	2	5	4
PRACTICALS								
8.		Power System Simulation Laboratory	PCC	0	0	3	3	1.5
9.		Innovative Project Lab for Electrical Engineers	PCC	0	0	3	3	1.5
TOTAL				**19**	**0**	**08**	**27**	**23**

SEMESTER - VII

S. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.		Professional Elective -VII	PEC	3	0	0	3	3
LAB INTEGRATED COURSE								
2.		Professional Elective -VIII	PEC	3	0	2	5	4
3.		Professional Elective - IX	PEC	3	0	2	5	3
.PRACTICALS								
4..		Internship	EEC	0	0	0	0	2
TOTAL				9	0	4	13	**12**

SEMESTER - VIII

S. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.		Management Course -I	MCC	3	0	0	3	3
2.		Management Course -II	MCC	3	0	0	3	3
LAB INTEGRATED COURSE								
2.								
3.								
.PRACTICALS								
4..		Internship/Project Work	EEC	0	0	0	0	10
			TOTAL	06	0	0	6	**16**

ANNEXURE III

PERI Institute of Technology

Department of Electrical and Electronics Engineering

Professional Elective Courses

Vertical 1	Vertical II	Vertical III	Vertical IV	Vertical V	Vertical VI
Power Engineering	**Converters and Drives**	**Embedded Systems**	**Electric Vehicle Technology**	**Advanced Control**	**Diversified Courses**
HVDC and FACTS	Electrical Drives	Embedded Control for Electric Drives	Design of Electric Vehicle Charging System	Model Based Control	High Voltage Engineering
Restructured Power Market -	SMPS and UPS	Smart System Automation	Testing of Electric Vehicles	Non-Linear Control	Sustainable and Environmental Friendly HV Insulation System
Under Ground Cable Engineering	Analysis of Electrical Machines	Embedded C Programming	Design of Motor and Power Converters for Electric Vehicles	Computer Control of Processes	Hybrid Energy Technology
Substation Engineering and Automation	Multilevel Power Converters	Embedded Processors	Intelligent control of Electric Vehicles	Process Modeling and Simulation	Design and Modelling of Renewable Energy Systems
Power Quality	Power Electronics for Renewable Energy Systems	MEMS and NEMS	Grid Integration of Electric Vehicles	Optimal Control	Power System Transients
Smart Grids	Special Electrical Machines	Embedded System Design	Electric Vehicle Architecture	Machine Monitoring System	Energy Storage Systems
Power Converters for Modern Power System	Design Installation and Commisioning of Solar and Wind Energy Systems	Electrical CAD	Electric Vehicle Design	PLC and SCADA Systems	Grid integrating Techniques and Challenges

ANNEXURE IV
PERI Institute of Technology
OPEN ELECTIVE COURSES : VERTICALS

Vertical 1	Vertical II	Vertical III	Vertical IV	Vertical V
Open Elective offered by Computer Engineering	**Open Elective offered by Electronics and communication Engineering**	**Open Elective offered by Civil Engineering**	**Open Elective offered by Mechanical Engineering**	**Open Elective offered by Electrical and Electronics Engineering**
Basic Python Programming	Microcontroller and Embedded System (3) E1	Civil Engineering Drawing Laboratory	Autocad	Grid Integration Techniques and Challenges
Advanced Python Programming	Advanced Embedded System and IoT (4) E2	Civil Engineering Modelling Laboratory	Solid Works	Design Implementation and Commisioning of Solar and Wind Energy Systems
Core Java Programming	VLSI Design and MEMS Technology (4) V1	Computational Structural Analysis Laboratory	ANSYS	PLC and SCADA Systems
Advanced Java Programming	Digital Design by using VHDL/Verilog V2	Plan Analysis & Design of Structure	HVAC	Electrical Vehicle Design
Fundamentals of Artificial Intelligence				
Artificial Intelligence and Machine Learning fundamentals				
IoT Concepts and Applications				
Database Management System				

Advanced Database Management System				