PERI INSTITUTE OF TECHNOLOGY

(AUTONOMOUS)

REGULATIONS 2024

B.E. COMPUTER SCIENCE AND ENGINEERING

SEMESTER - I

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.		Life Skills - I	EEC	1	0	0	1	1
2.		Personal and Professional Competencies for Engineers	EEC	1	0	0	1	1
3.		Engineering Mathematics – I	BSC	3	1	0	4	4
4.		Introduction to Advanced Computer Technologies	PCC	3	0	0	3	3
5.		Fundamentals of Programming for Problem Solving	ESC	3	0	0	3	3
6.		Basic Electrical & Electronics Engineering	ESC	4	0	0	4	4
LAB INTEGRATED COURSE								
7.		Engineering Chemistry	BSC	3	0	2	5	4
PRACTICALS								
8.		Communication Lab-1	HSMC	0	0	2	2	1
			TOTAL	**18**	**1**	**8**	**27**	**23**

SEMESTER - II

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.		Life Skills -II	EEC	1	0	0	1	1
2.		Tamil and Technology	HSMC	1	0	0	1	1
3.		Engineering Graphics and Design	ESC	2	0	4	6	4
4.		Python Programming	PCC	3	0	0	3	3
LAB INTEGRATED COURSE								
5.		Physics for Information Science	BSC	3	0	2	5	4
6.		Engineering Mathematics – II	BSC	3	0	2	5	4
PRACTICALS								
7.		Python Programming	PCC	0	0	4	4	2
8.		IDEA Lab Workshop	ESC	0	0	4	4	2
		Communication Lab - II	HSMC	0	0	2	2	1
MANDATORY COURSE								
9.		Environmental Science and Engineering	MC	2	0	0	2	0
			TOTAL	**15**	**0**	**18**	**33**	**22**

SEMESTER – III

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.		Discrete Mathematics	BSC	3	1	0	4	4
2.		Computer Architecture	PCC	3	0	0	3	3
3.		Basic conversation skills Life Skill – III	EEC	0	0	2	2	1
4		Holistic Personality Development And Behavioral Skills	EEC	1	0	0	1	1
LAB INTEGRATED COURSE								
5		Digital Principles and Computer Organization	ESC	3	0	2	5	4
6		Object Oriented Programming using Java	PCC	3	0	2	5	4
7.		Data Structures	PCC	3	0	2	5	4
8.		Foundations of Data Science	PCC	3	0	2	5	4
MANDATORY COURSE								
9.		Indian Constitution	MC	2	0	0	2	0
			TOTAL	**21**	**1**	**10**	**32**	**25**

SEMESTER - IV

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.		Software Engineering	PCC	3	0	0	3	3
2.		Design and Analysis of Algorithms	PCC	3	0	0	3	3
3.		Professional Elective - I	PEC	3	0	0	3	3
4.		Public speaking practices Life Skill – IV	EEC	0	0	2	2	1
5.		Invention – Principles and Practices	EEC	1	0	0	1	1
LAB INTEGRATED COURSE								
6.		Operating Systems	PCC	3	0	2	5	4
7.		Computer Networks	PCC	3	0	2	5	4
PRACTICALS								
8.		Professional Elective – I Lab	PEC	0	0	4	4	2
MANDATORY COURSE								
9.		Social Services	MC	2	0	0	2	0
			TOTAL	**18**	**0**	**10**	**28**	**21**

SEMESTER – V

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.		Artificial Intelligence and Machine Learning	PCC	3	0	0	3	3
2.		Database Management Systems	PCC	3	0	0	3	3
3.		Theory of Computation	PCC	3	0	0	3	3
4.		Cryptography and Network security	PCC	3	0	0	3	3
5.		Professional Elective - II	PEC	3	0	0	3	3
6.		Open Elective – I	OEC	3	0	0	3	3
PRACTICALS								
7.		Database Management Systems Lab	PCC	0	0	4	4	2
8.		Professional Elective- II Lab	PEC	0	0	4	4	2
9.		Life Skill – III	EEC	0	0	2	2	1
MANDATORY COURSE								
10.		Quantitative Aptitude – I / GRE TOFEL - I		2	0	0	2	0
11.		Essence of Indian Traditional Knowledge and Science	MC	2	0	0	2	0
			TOTAL	**22**	**0**	**10**	**32**	**23**

SEMESTER - VI

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.		Compiler Design	PCC	3	0	0	3	3
2.		Cyber Security	PCC	3	0	0	3	3
3.		Object Oriented Analysis and Design	PCC	3	0	0	3	3
4.		Cloud Computing	PCC	3	0	0	3	3
5.		Professional Elective - III	PEC	3	0	0	3	3
6.		Open Elective – II	OEC	3	0	0	3	3
PRACTICALS								
7.		Professional Elective – III Lab	PCC	0	0	4	4	2
8.		Innovative Project Lab for Computer Engineers	EEC	0	0	4	4	2
9.		Life Skill – IV	EEC	**0**	0	2	2	1
MANDATORY COURSE								
10.		Quantitative Aptitude – II / GRE TOFEL - II		2	0	0	2	0
11.		Behavioural Science and Psychology	MC	2	0	0	2	0
			TOTAL	**22**	**0**	**10**	**32**	**23**

SEMESTER - VII

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.		Professional Elective - IV	PEC	3	0	0	3	3
2.		Open Elective -III	OEC	3	0	0	3	3
PRACTICALS								
3.		Internship / Project Phase - I	EEC	0	0	5	5	4
			TOTAL	**6**	**0**	**5**	**11**	**10**

SEMESTER - VIII

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.		Elective - Management	HSC	3	0	0	3	3
2.		Human Values and Ethics	HSC	3	0	0	3	3
PRACTICALS								
3.		Project Work – Phase II	EEC	0	0	8	8	10
			TOTAL	**6**	**0**	**8**	**14**	**16**

PERI INSTITUTE OF TECHNOLOGY

B.E. COMPUTER SCIENCE AND ENGINEERING

LIST OF PROFESSIONAL ELECTIVES: VERTICALS

Sno	PE1 Emerging Technologies	PE2 Full Stack Development	PE3 Data Science	PE4 Cloud Computing & Data Center Technologies	PE5 Creative Media	PE6 Artificial Intelligence
1	Advanced Python Programming	Web Application Security	Big Data Analytics	Virtualization	Multimedia and Animation	Knowledge Engineering
2	Augmented Reality / Virtual Reality	Java Full Stack	Data Exploration and Visualization	Cloud Services Management	Game Development	Soft Computing
3	UI and UX Design	App Development	Advanced Database Management System	Security and Privacy in Cloud	UI and UX Design	Neural Networks and Deep Learning
4	Machine Learning	UI and UX Design	Image and Video Analytics	Storage Technologies	Digital marketing	Generative AI Fundamentals
5	Embedded Systems and IoT	Software Testing and Automation	Data Science using Python (NPTEL)	DevOps	Multimedia Data Compression	Game Theory

PERI Institute of Technology
Department of Computer Science and Engineering

OPEN ELECTIVE COURSES: VERTICALS

Vertical I	Vertical II	Vertical III	Vertical IV
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**
Microcontroller and Embedded System	Civil Engineering Drawing Laboratory	AutoCAD	Electrical CAD
Advanced Embedded System and IoT	Civil Engineering Modelling Laboratory I	Solid Works	Design Implementation and Commissioning of Solar and Wind Energy Systems
VLSI Design and MEMS Technology	Computational Structural Analysis Laboratory	ANSYS	PLC and SCADA Systems
Digital Design by using VHDL/Verilog	Plan Analysis & Design of Structure		Electrical Vehicle Design
	HVAC		