

PARUL UNIVERSITY

R/Notification-1403/2024-25

Office of the Registrar
December 17, 2024

NOTIFICATION

Sub: Value Added Courses to be offered in various B.Tech Engineering programmes

Ref: (i) Proceedings of the Eighteenth Meeting of the Governing Body held on December 2, 2024

(ii) Orders of the Provost

PREAMBLE:

Dean, Faculty of Engineering & Technology proposed Value Added Courses to be offered in various B.Tech Engineering programmes during the Eighteenth Meeting of the Governing Body held on December 2, 2024 which was approved by the Governing Body. Hence, the Order.

ORDER:

Particulars of Value Added Courses to be offered in various B.Tech Engineering programmes are enclosed in the Annexure.

By Order


Registrar

To,

1. Dean, Faculty of Engineering & Technology and Principal, PIET
2. Principal, PIT/PPI/PIET (DS)

Copy to,

- 1) The Controller of Examinations
- 2) Director (IQAC)
- 3) PUMIS Coordinator

Submitted to,

- 1) The President
- 2) The Provost

ANNEXURE

Faculty of Engineering and Technology - PIET			
B.Tech in Aeronautical Engineering			
Value Added Courses			
S. No.	Name of the Value Added Course To Be Offered	Semester	Expected Duration (Hr)
1	MS Office and ICT Tools	1 st	16
2	Computer Aided Design	2 nd	16
3	CATIA Modeling for Concept Design	3 rd	16
4	Combustion Theory	4 th	16
5	Recent Trends in Propulsion Systems	5 th	16
6	Structural Analysis of Aircraft Components	6 th	16
7	Helicopter Aerodynamics	7 th	16
8	Introduction to Indian Launch Vehicles	8 th	16

Faculty of Engineering and Technology - PIET			
Applied Sciences and Humanities			
Value Added Courses			
S. No.	Name of the Value Added Course To Be Offered	Semester	Expected Duration (Hr)
1	Vedic Mathematics	3 rd	30
2	Linear Programming	5 th	30

Faculty of Engineering and Technology - PIET			
B.Tech in Civil Engineering			
Value Added Courses			
S. No.	Name of the Value Added Course To Be Offered	Semester	Expected Duration (Hr)
1	Introduction to HEC-RAS from zero for hydraulic analysis	6 th and 8 th	18
2	Environmental Sampling and Legal aspects	5 th and 7 th	16
3	Advanced Construction Engineering and Materials	3 rd	20
4	Excel Modeling for Civil Engineering	4 th and 6 th	18

Faculty of Engineering and Technology - PIET			
B.Tech in Computer Science Engineering			
Value Added Courses			
S. No.	Name of the Value Added Course To Be Offered	Semester	Expected Duration (Hr)
1	Creating Scientific Report Writing and Resume Building using LATEX	6 th	16 Hours
2	Impact Training 7 th Sem	7 th	60 Hours
3	Impact Training 5 th Sem	5 th	30 Hours
4	Fundamentals of Web Designing	3 rd	18 Hours
5	Fundamentals of and ML	5 th	16 Hours
6	Data Visualization Tools	4 th	16 Hours
7	Artificial Intelligence/ ML Simulation Tools	6 th	16 Hours
8	Computer Vision with Open CV	7 th	16 Hours

Faculty of Engineering and Technology - PIET			
B.Tech in Electrical Engineering			
Value Added Courses			
S. No.	Name of the Value Added Course To Be Offered	Semester	Expected Duration (Hr)
1	Simulation of Power Electronics Converters using PSIM	7 th	16
2	Application of Software in Electrical Engineering	4 th	16
3	Arduino Application in Tinkercad	5 th	16
4	Foundations in MATLAB: A Certificate Program for beginners	2 nd	16

Faculty of Engineering and Technology - PIET			
B.Tech in Information Technology			
Value Added Courses			
S. No.	Name of the Value Added Course To Be Offered	Semester	Expected Duration (Hr)
1	Cloud Security	5 th and 6 th	16
2	Mobile Application Development	3 rd and 4 th	16
3	Quality Assurance And Testing Tools	7 th and 8 th	16

4	Innovation And Design Thinking	1 st and 2 nd	16
Faculty of Engineering and Technology - PIET			
B.Tech in Mechanical Engineering			
Value Added Courses			
S. No.	Name of the Value Added Course To Be Offered	Semester	Expected Duration (Hr)
1	Solid Works for Beginners	5 th	30
2	Fusion 360	3 rd	16
3	CNC Part Programming	7 th	16
4	IOT Applications in Mechanical Engineering	5 th	16
5	3D Printing Technology	5 th	16
6	Basic Design and Drafting	3 rd	30
7	Geometric Dimensioning and Tolerancing	7 th	16
8	Industrial Automation	7 th	16

Faculty of Engineering and Technology - PIET			
B.Tech in Electronics & Communication Engineering			
Value Added Courses			
Sr. No.	Name of the Value Added Course To Be Offered	Semester	Expected Duration (Hr)
1	Value Added Vocational Course on PCB Design	2 nd	16
2	Value Added Vocational Course on Python Fundamental for Data Science	3 th	16
3	Value Added Vocational Course on Networking Essentials	5 th	16
4	Value Added course on Embedded System with Machine Learning	5 th	16
5	Value Added course on Computer Vision	6 th	16

Faculty of Engineering and Technology - PIT			
B.Tech in Automobile Engineering			
Value Added Courses			
S. No.	Name of the Value Added Course To Be Offered	Semester	Expected Duration (Hr)
1	Six Sigma Methodology	7 th	20
2	Geometrical Dimensioning and Tolerances	3 rd and 5 th	16
3	Vehicle Maintenance and Overhauling	2 nd , 4 th and 8 th	16

Faculty of Engineering and Technology - PIT			
B.Tech in Biomedical Engineering			
Value Added Courses			
S. No.	Name of the Value Added Course To Be Offered	Semester	Expected Duration (Hr)
1	Virtual Instrumentation using LabVIEW for Beginners	7 th	20
2	From Theory to Practice: Hands-On Experience with Laminar Flow in Biomedical Contexts. Module 1	3 rd , 5 th and 7 th	16
3	From Theory to Practice: Hands-On Experience with Laminar Flow in Biomedical Contexts. Module 2	3 rd , 5 th and 7 th	16

Faculty of Engineering and Technology - PIT			
B.Tech in Biotechnology			
Value Added Courses			
S. No.	Name of the Value Added Course To Be Offered	Semester	Expected Duration (Hr)
1	Good laboratory practices, quality control and regulatory affairs	5 th	16

Faculty of Engineering and Technology - PIT			
B.Tech in Chemical Engineering			
Value Added Courses			
S. No.	Name of the Value Added Course To Be Offered	Semester	Expected Duration (Hr)
1	Characterization of materials using various techniques	5 th and 7 th	16

Faculty of Engineering and Technology - PIT			
B. Tech in Fire and Safety Engineering			
Value Added Courses			
S. No.	Name of the Value Added Course To Be Offered	Semester	Expected Duration (Hr)
1	Fire Ground Operation and Fire drill	7 th	16

Faculty of Engineering and Technology - PIT			
B.Tech in Petroleum Engineering			
Value Added Courses			
S. No.	Name of the Value Added Course To Be Offered	Semester	Expected Duration (Hr)
1	Industrial Safety and Six Sigma Policy in Industry.	7 th	16
2	Geo-politics in Crude Oil Production	5 th	16
3	Use of Excel for Designing of Well Plan	3 rd	16

Faculty of Engineering and Technology - PIT			
Diploma in Chemical Engineering and Diploma in Petrochemical Engineering			
Value Added Courses			
S. No.	Name of the Value Added Course To Be Offered	Semester	Expected Duration (Hr)
1	Introduction to Microsoft excel and basics of PowerPoint presentation	5 th	16

Faculty of Engineering and Technology - PIT			
B. Tech in Robotics and Automation Engineering			
Value Added Courses			
Sr. No.	Name of the Value Added Course To Be Offered	Semester	Expected Duration (Hr)
1	ROS Based Robotics	7	20
2	PCB Designing and Manufacturing	3 & 5	16
3	Mastering Industrial Automation: A Hands-On Workshop on PLC, HMI, and SCADA	2, 4 & 8	16

Faculty of Engineering and Technology - PIT			
B. Tech in Mechatronics Engineering			
Value Added Courses			
Sr. No.	Name of the Value Added Course To Be Offered	Semester	Expected Duration (Hr)
1	Mastering Industrial Automation: A Hands-On Workshop on PLC, HMI, and SCADA	7th	20
2	PCB Designing and Manufacturing	3 rd & 5th	16
3	Modelling of Mechanical Systems using Advanced Softwares like Fusion 360	2nd, 4th & 8th	16