

WORKSHOP LAB



In PVPSIT we have a well equipped workshop facility which supports the teaching and research activities of the engineering. The workshop covers an area of approx. 627 Sqm and has a dedicated staff of 6 workshop technicians. The primary function in this area is the fabrication and manufacture of engineering components from student/staff designs.

Equipment in our workshop includes, drilling, wood planer and wood turning , A.C welding sets , D.C welding set, spot welding, Tig-welding ,power hacksaw and general fabrication facilities.

The workshop supports teaching activities in the engineering by providing demonstrations of trades and other manufacturing processes and by manufacturing equipment used in teaching and research laboratories. Our workshop facility plays an important role in the design phase of nearly all work that passes through this

area. Workshop staff assists both undergraduate and postgraduate students with all aspects of fabrication.

The workshop manufactures fixtures and apparatus for the following groups/areas:

- Undergraduate laboratory activities and development.
- 4th year undergraduate projects.
- Postgraduate research projects.
- Staff research projects.

❖ The following trades being practiced in workshop are as follows:

- TIN SMITHY
- HOUSE WIRING
- FITTING
- CARPENTRY
- BLACK SMITHY

❖ The following trades being practiced in Production Technology Laboratory are as follows:

- FOUNDRY
- WELDING
- PATTERN MAKING

WORKSHOP/ PRODUCTION TECHNOLOGY LAB OVERVIEW	
Area	627 Sqm
Established in the year	1998
Total investment	Rs.3,97,272
Major Equipment	Wood Turning Lathe, Wood Planing Machine, Hand operated bending machine, Power Hacksaw, Spot welding Machines, Hand shearing Machine, Circular Cut off Saw, TIG Welding set, Arc welding machines, Gas welding machines, Hand grinding machine, welding dooms.

Lab utilization	12 hrs/week I-SEM: MECH, EEE	12 hrs/week II-SEM: ECE, Civil
		12hrs/week IV-SEM: MECH
	Academic project works.	
Faculty in-charge	G.Balakrishna, K.Venkatrao Assistant.Professor	
Technicians	K.Nagendra Prasad P.Ramakrishna Rao N.Raghava Rao G.Venkateswararao T.Naresh G.Ramesh D.Uma Maheswrarao	

LIST OF EXPERIMENTS: Basic Work Shop (As Per PVP-19 Regulations)

Wood Working:	Familiarity with different types of woods and tools used in wood working and make following joints i) Half – Lap joint. ii) Mortise and Tenon joint. iii) Corner Dovetail joint or Bridle joint.
Sheet Metal Working	Familiarity with different types of tools used in sheet metal working, Developments of following sheet metal job from GI sheets i) Tapered tray ii) Conical funnel ii) Elbow pipe
Fitting	Familiarity with different types of tools used in fitting and do the following fitting exercises i) V-fit ii) Semi-circular fit iii) Bicycle tire puncture and change of two wheeler tire
Electrical Wiring:	Familiarities with different types of basic electrical circuits and make the following connections i) Preparation of a circuit for Parallel and series connection. ii) Preparation of a circuit Go down lighting using Two way switch and tube light. iii) Soldering of wires

LIST OF EXPERIMENTS: (As Per PVP-14 Regulations)

TRADES:

CARPENTRY

1. T-Lap Joint
2. Cross Lap Joint
3. Dovetail Joint
4. Mortise and Tennon Joint

FITTING

1. Vee Fit
2. Square Fit
3. Half Round Fit
4. Dovetail Fit

BLACK SMITHY

1. Round rod to Square
2. S-Hook
3. Round Rod to Flat Ring
4. Round Rod to Square headed bolt

HOUSE WIRING

1. Parallel / Series Connection of three bulbs
2. Stair Case wiring
3. Florescent Lamp Fitting
4. Measurement of Earth Resistance

TIN SMITHY

1. Taper Tray
2. Square Box without lid
3. Open Scoop
4. Funnel



Tin Smithy



House Wiring



Fitting



Carpentry



Black Smithy

