



VIDYA JYOTHI INSTITUTE OF TECHNOLOGY

(An Autonomous Institution)

(Accredited by NAAC & NBA, Approved by AICTE New Delhi & Permanently Affiliated to JNTUH)
Aziznagar Gate, C.B. Post, Hyderabad – 500 075

DEPARTMENT OF MECHANICAL ENGINEERING

I B.Tech I Semester

ENGINEERING WORKSHOP LABORATORY (A31381 & A31382)

OBJECTIVE:

To familiarize with the basic manufacturing processes and to study the various tools and equipment used, hands-on training is given in different sections. Essentially student should know the labour involved, machinery or equipment necessary, time required to fabricate and also should be able to estimate the cost of the product or job work.

Course outcomes:

- ✓ Upon the completion of this laboratory course, the students will be able to fabricate components with their own hands.
- ✓ They will also get practical knowledge of the dimensional accuracies and dimensional tolerances possible with different manufacturing processes.
- ✓ By assembling different components they will be able to produce small devices of their own interest.





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DEPARTMENT OF MECHANICAL ENGINEERING
I B.Tech I Semester
ENGINEERING WORKSHOP LABORATORY (A31381)
LIST OF EXPERIMENTS

S.No.	NAME OF THE EXPERIMENTS
1	MACHINE SHOP (Lathe machine)
2	FITTING
3	CARPENTRY
4	HOUSE WIRING
5	WELDING SHOP
6	TIN –SMITHY

LIST OF EQUIPMENT

S.No.	NAME OF THE EQUIPMENT
1	Lathe machine, vernier callipers.
2	Ballpeen hammer, steel rule, try square, peen hammer, scribers, flat rough file, flat dead smooth file, half round smooth file, half round rough file, square rough file, triangular smooth file, inside caliper, outside caliper, hack saw frame, scribing block bench vice.
3	Carpentry Vice, Wooden Mallet, Metal Jack Plane, Marking Gauges, mortise chisel, firmer chisel, Wood Rasp File, Hand, Tenon and Compass Saw, , tenon saw, steel rule, try square
4	Wire stripers, poker, screw drivers, Testers, Cutting plier, nose plier,
5	Arc welding, welding screen, welding gloves, electrode holder, wire brush, chipping hammer.
6	Try square, sheet metal flat chisel, stakes, nylon mallet, snips, support plate, swing blade protractor, rubber mallet, divider, square rough file, triangular smooth file, inside caliper, outside caliper, hack saw frame, scribing block bench vice. Soldering machine.



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DEPARTMENT OF MECHANICAL ENGINEERING I B.Tech II Semester ENGINEERING WORKSHOP LABORATORY (A32382) LIST OF EXPERIMENTS

S.No.	NAME OF THE EXPERIMENTS
1	MACHINE SHOP (Lathe machine)
2	FITTING
3	CARPENTRY
4	HOUSE WIRING
5	WELDING SHOP
6	TIN –SMITHY

LIST OF EQUIPMENTS

S.No.	NAME OF THE EQUIPMENT
1	Lathe machine, vernier caliper.
2	Ballpeen hammer, steel rule, try square, peen hammer, scribers, flat rough file, flat dead smooth file, half round smooth file, half round rough file, square rough file, triangular smooth file, inside caliper, outside caliper, hack saw frame, scribing block bench vice.
3	Carpentry Vice, Wooden Mallet, Metal Jack Plane, Marking Gauges, mortise chisel, firmer chisel, Wood Rasp File, Hand, Tenon and Compass Saw, tenon saw, steel rule, try square
4	Wire stripers, poker, screw drivers, Testers, Cutting plier, nose plier,
5	Arc welding, welding screen, welding gloves, electrode holder, wire brush, chipping hammer.
6	Try square, sheet metal flat chisel, stakes, nylon mallet, snips, support plate, swing blade protractor, rubber mallet, divider, square rough file, triangular smooth file, inside caliper, outside caliper, hack saw frame, scribing block bench vice. Soldering machine.