

Central Fabrication facility - Mechanical Workshop




Central Workshop is the one of the oldest and largest division of Mechanical Engineering established in the year 1998. The Workshop is the central facility where students acquire knowledge on the operation of various processes involved in manufacturing and production of engineering components. The workshop is equipped with combination of manually operated tools and mechanized tools so as to makes students competent in handling practical work in engineering environment. The workshop is the backbone for fabrication, research and development activities in the college and it is open for all students and faculty of college. The

Workshop faculty, supervisors and technicians are well trained, experienced and committed to deliver knowledge to the students through hands-on practice on various machines/facilities provided in the workshop. Here in addition to meet the requirements of academic curriculum the students are supported for developing models and prototypes of their third year group projects and final year projects. The PG students are also facilitated for developing the R&D setups. Students are also provided complete tooling and technical guidance in manufacturing various types of vehicles to participate in national and international level competitions such as SAE-BAJA (ATV), Efficycle, Go-Kart championship, ESVC (Solar Vehicle). This workshop is also extensively used during the inter-disciplinary projects such as Robotics, Drones.

Workshop is broadly divided into seven different trades handling different types of tools and workpieces. The trades are given hereunder:

- 1) Fitting Shop
- 2) Carpentry
- 3) Electrical & Electronics
- 4) Welding shop
- 5) Casting
- 6) Tin Smithy
- 7) Machine Shop
- 8) Plastic molding & Glass Cutting

FITTING		
	Facilities	Bench Vices (20 Nos), and fitting tools
	Strength of Students	10 Students
	Practice Jobs:	Preparation of T-shape and U- shape Work piece

CARPENTRY



Facilities

Carpenters
Lathe,
Carpenters
Vices (10 Nos),

Strength
of
Students

10 Students

Practice
Jobs:

T Lap Joint,
Dovetail Joint, T
Pattern, Core
box

Electrical & Electronics



Facilities

Wiring boards,
Electrical Tools
etc.

Strength
of
Students

10 Students

Practice
Jobs:


One lamp one
switch Practice ,
Stair case wiring
Practice


WELDING



Facilities	MIG Welding Set, TIG Welding Set, Spot Welding Machine, Gas welding Set, Electric Arc Welding Set, & Power Hacksaw.
Strength of Students	10 Students
Practice Jobs	Butt Joint and Lap Joint
Value Added Experiments	Welding on Non Ferrous Materials by TIG Welding

Casting

	Facilities	Mould box-8, and moulding tools 5 sets, No of patterns -10
	Strength of Students	10 Students
	Practice Jobs	Mould cavity preparation: Solid, Split pattern etc
	Value Aided Experiments	Sand properties testing - -for strengths, and permeability Pattern Design and making

	Tin smithy	
	Facilities	Drill Machine, Bench vices (8 Nos), Fitters Tables (4 Nos), Disc Cutting Machine, Pipe Bending Machine, Punching Machine
	Strength of Students	10 Students
Practice Jobs:	Square Tray of GI Sheet, Funnel of GI Sheet, Plug & Socket Joint.	

Machine Shop



Facilities

Centre Lathes-10
Nos , Tool & Cutter
Grinder, Shaper,
Surface Grinder,
Bench Grinder,
Pillar type Drill
Machine, Hydraulic
Power Hacksaw

Strength of
Students

10 Students

Practice
Jobs:

Typical Turning
Specimen of Mild
Steel, V-Block
Manufacturing of
Mild Steel, Gear
Tooth Machining

Plastic molding & Glass Cutting



Facilities

Injection Moulding Machine , Glass Cutting Tools

Strength of Students

5 Students

Practice Jobs:

Extraction of plastic components using various Injection moulding Dies