Engineering Practices Laboratory

Course supported

GE 8261- Engineering Practices Laboratory – II semester

All Departments (Civil, Mechanical, EEE, ECE, Geo Informatics.)

Faculty Dr.R.A.MALAIRAJAN, Head i/c,

Incharge Assistant Professor,

Department of Mechanical Engineering.

Lab Mr.R.RANJITHKUMAR & Mr.M.Vinothkumarkannan.

Laboratory Safety Information:

1. Students are ordered to come in proper uniform code and shoes.

2. Fire Extinguisher is available for the Laboratory safety purpose.

Lab Dimension 15m x 10m **Total cost estimation of the Lab** Rs. 28,41,361 /-

Photo Gallery

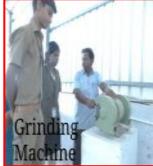














- 1. Power Shearing Machine
- 2. Centre Lathe
- 3. Arc Welding Machine
- 4. Injection Moulding Machine

Fluid Mechanics And Machinery Laboratory

Course supported

CE6461 Fluid Mechanics and Machinery Laboratory – III Semester Mechanical

Faculty Mr. A. KARTHIKEYAN, **Incharge** Assistant Professor,

Department of Mechanical Engineering.

Lab Incharge Mr.M.VINOTHKUMARKANNAN.

Laboratory Safety Information:

1. Students are ordered to come in proper uniform code and shoes.

2. Fire Extinguisher is available for the Laboratory safety purpose.

Lab Dimension 15m x 10m **Total cost estimation of the Lab** Rs.7,85,272/-

Photo Gallery







- 1. Francis turbine test rig
- 2. Gear oil pump test rig
- 3. Orifice meter test rig
- 4. Reciprocating pump test rig

COMPUTER AIDED DESIGN LABORATORY

Course supported

ME6611 & ME6711 COMPUTER AIDED DESIGN LABORATORY -6^{TH} & 7^{TH} SEMESTER (DEPARTMENT OF MECHANICAL ENGINEERING)

Faculty Dr.R.A.MALAIRAJAN, Head i/c,

Incharge Assistant Professor,

Department of Mechanical Engineering.

Lab Mr. S.KARTHIKEYAN

Incharge

Laboratory Safety Information:

1. Students are ordered to come in proper uniform code and shoes.

2. Fire Extinguisher is available for the Laboratory safety purpose.

Lab Dimension 10m x 5.2m **Total cost estimation of the Lab** Rs. 30,48,935/-

Photo Gallery







Software & Hardware Available

Sl.No.	Name of the software/Hardware	Purpose of SW/HW
1.	ANSYS 18.0	Engineering simulation and 3d design modeling solution which uses FEA
2.	CREO 3.0	3D CAD Modeling

- 1. INTEL i7 Processor with 8GB RAM & 1 TB hard disk
- 2. DELL POWER EDGE R820 SERVER with LAN
- 3. 10KVA UPS

COMPUTER AIDED MANUFACTURING LABORATORY

Course supported

ME6611- COMPUTER AIDED MANUFACTURING LABORATORY - 6^{TH} SEMESTER (DEPARTMENT OF MECHANICAL ENGINEERING)

Faculty Dr.R.A.MALAIRAJAN, Head i/c,

Incharge Assistant Professor,

Department of Mechanical Engineering.

Lab Mr. S.KARTHIKEYAN

Incharge

Laboratory Safety Information:

1. Students are ordered to come in proper uniform code and shoes.

2. Fire Extinguisher is available for the Laboratory safety purpose.

Photo Gallery







Software & Hardware Available

Sl.No.	Name of the Software/Hardware	Purpose of SW/HW
1	CNC TRAINER SOFTWARE	TO GET KNOWLEDGE OF BASICS IN CNC MACHINE OPERATION USING G-CODES & M-CODES.

- 1. CNC LATHE TRAINER
- 2. CNC MILL TRAINER

DYNAMICS LABORATORY

Course supported

ME6511- DYNAMICS LABORATORY - 5TH SEMESTER (DEPARTMENT OF MECHANICAL ENGINEERING)

Faculty Incharge Dr.S.AMAL BOSCO JUDE,

Assistant Professor,

Department of Mechanical Engineering.

Lab Incharge Mr. P.VENGALA KUMAR

Laboratory Safety Information:

1. Students are ordered to come in proper uniform code and shoes.

2. Fire Extinguisher is available for the Laboratory safety purpose.

Lab Dimension 20m x 10.5m **Total cost estimation of the Lab** Rs. 6,20,925/-

Photo Gallery





- 1. VIBRATION TEST FACILITIES APPARATUS
- 2. CAM ANALYSIS CAM PROFILE AND JUMP-SPEED CHARACTERISTICS
- 3. GYROSCOPIC
- 4. GOVERNOR

STRENGTH OF MATERIALS LABORATORY

Course supported

CE6315- STRENGTH OF MATERIALS LABORATORY - 4^{TH} SEMESTER (DEPARTMENT OF MECHANICAL ENGINEERING)

Faculty Incharge Mrs.T.USHA RANI,

Assistant Professor,

Department of Mechanical Engineering.

Lab Incharge Mr. P.VENGALA KUMAR

Laboratory Safety Information:

1. Students are ordered to come in proper uniform code and shoes.

2. Fire Extinguisher is available for the Laboratory safety purpose.

Lab Dimension 20m x 10.5m **Total cost estimation of the Lab** Rs. 8,53,082/-

Photo Gallery





- 1. UNIVERSAL TESTING MACHINE
- 2. BRINELL HARDNESS
- 3. ROCKWELL HARDNESS
- 4. MUFFLE FURANCE
- 5. TORSION TESTING MACHINE

METROLOGY AND MEASUREMENTS LABORATORY

Course supported

ME 6513 & ME 6513 T- METROLOGY AND MEASUREMENTS LABORATORY - $5^{\rm TH}$ SEMESTER (DEPARTMENT OF MECHANICAL ENGINEERING)

Faculty Mr. A. KARTHIKEYAN,

Incharge Assistant Professor,

Department of Mechanical Engineering.

Lab Mr. N. RAJKUMAR

Incharge

Laboratory Safety Information:

1. Students are ordered to come in proper uniform code and shoes.

2. Fire Extinguisher is available for the Laboratory safety purpose

Lab Dimension 20m x 10.5m

Total cost estimation of the Lab Rs. 5,49,204/-

Photo Gallery









- 1. Micrometer (0-25mm), (25-50mm) & (50-75mm).
- 2. Vernier Caliper (0-200mm) & (0-300mm)
- 3. Vernier Height Gauge
- 4. Vernier depth Gauge
- 5. Slip Gauge Set (M-12) & (M-83)6. Gear Tooth Vernier
- 7. Sine Bar (100mm) & (200mm)
- 8. Floating Carriage Micrometer
- 9. Autocollimator
- 10. Temperature Measuring Setup
- 11. Force Measuring Setup
- 12. Torque Measuring Setup
- 13. Vibration Measurement Setup
- 14. Displacement Measurement Setup

MECHATRONICS LABORATORY

Course supported

ME 6712 & ME 6712 T- MECHATRONICS LABORATORY -7TH SEMESTER (DEPARTMENT OF MECHANICAL ENGINEERING)

Faculty Mr. A. KARTHIKEYAN, **Incharge** Assistant Professor,

Department of Mechanical Engineering.

Lab Mr. N. RAJKUMAR

Incharge

Laboratory Safety Information:

1. Students are ordered to come in proper uniform code and shoes.

2. Fire Extinguisher is available for the Laboratory safety purpose

Lab Dimension 20m x 10.5m

Total cost estimation of the Lab Rs. 2,41,461/-

Photo Gallery





Software & Hardware Available

Sl.No.	Name of the software/Hardware	Purpose of SW/HW
1.	CECO PLC Simulation Software	To monitor and control the pneumatic systems

- 1. Basic Pneumatic Trainer Kit with manual and electrical
- 2. Basic Hydraulic Trainer Kit
- 3. 8051 Microcontroller kit with stepper motor and drive circuit sets

MANUFACTURING TECHNOLOGY LABORATORY - I

Course supported

ME 6311 / ME 6311T- MANUFACTURING TECHNOLOGY LABORATORY - I 3rd SEMESTER (DEPARTMENT OF MECHANICAL ENGINEERING)

Faculty Incharge Dr.S. AMAL BOSCO JUDE,

Assistant Professor,

Department of Mechanical Engineering.

Lab Incharge Mr. M.STENY EBENEZER.

Laboratory Safety Information:

1. Students are ordered to come in proper uniform code and shoes.

2. Fire Extinguisher is available for the Laboratory safety purpose

Lab Dimension 20m x 10.5m

Total cost estimation of the Lab Rs. 7,89,547/-

Photo Gallery





- 1. CENTRE LATHE MACHINE.
- 2. SHAPING MACHINE.

MANUFACTURING TECHNOLOGY LABORATORY - II

Course supported

ME 6411/ ME 6411T- MANUFACTURING TECHNOLOGY LABORATORY - II 4TH SEMESTER (DEPARTMENT OF MECHANICAL ENGINEERING)

Faculty Incharge Dr.S. AMAL BOSCO JUDE,

Assistant Professor,

Department of Mechanical Engineering.

Lab Incharge Mr. M. STENY EBENEZER

Laboratory Safety Information:

1. Students are ordered to come in proper uniform code and shoes.

2. Fire Extinguisher is available for the Laboratory safety purpose

Lab Dimension 20m x 10.5m

Total cost estimation of the Lab Rs. 33,31,598.00/-

Photo Gallery







- 1. CAPSTAN AND TURRET LATHE MACHINE.
- 2. GEAR HOBBING MACHINE.
- 3. SURFACE GRINDING AND CYLINDRICAL GRINDING MACHINE.
- 4. HORZIONTAL AND VERTICAL MILLING MACHINE.
- 5. RADIAL DRILLING MACHINE.

THERMAL ENGINEERING LABORATORY - I

Course supported

ME6412- THERMAL ENGINEERING LABORATORY - I 4^{TH} SEMESTER (DEPARTMENT OF MECHANICAL ENGINEERING)

Faculty Incharge Mrs. T. USHA RANI,

Assistant Professor,

Department of Mechanical Engineering.

Lab Incharge Mr. P.ANBURAJ

Laboratory Safety Information:

1. Students are ordered to come in proper uniform code and shoes.

2. Fire Extinguisher is available for the Laboratory safety purpose

Lab Dimension 20m x 10.5m

Total cost estimation of the Lab Rs. 14,60,139-/-

Photo Gallery







- 1. STEAM BOILER WITH TURBINE SETUP
- 2. SINGLE CYLINDER PETROL ENGINE WITH MECHANICAL LOADING
- 3. SINGLE CYLINDER DIESEL ENGINE WITH MECHANICAL LOADING

THERMAL ENGINEERING LABORATORY - II

Course supported

ME 6512- THERMAL ENGINEERING LABORATORY-II - 5^{TH} SEMESTER (DEPARTMENT OF MECHANICAL ENGINEERING)

Faculty Incharge Mrs.T.USHA RANI

Assistant Professor,

Department of Mechanical Engineering.

Lab Incharge Mr. P.ANBURAJ

Laboratory Safety Information:

1. Students are ordered to come in proper uniform code and shoes.

2. Fire Extinguisher is available for the Laboratory safety purpose

Lab Dimension 20m x 10.5m

Total cost estimation of the Lab Rs. 5,98,556/-

Photo Gallery







- 1. REFRIGERATION TEST RIG
- 2. AIR CONDITIONING TEST RIG
- 3. AIR COMPRESSOR TEST RIG