

## SYED AMMAL ENGINEERING COLLEGE

Approved by the AICTE, New Delhi, and Affiliated to Anna University, Chennai, Govt. of Tamilnadu Dr. E.M.Abdullah Campus, Ramanathapuram  $-623\,502$ .



## **Department of Mechanical Engineering**

## THERMAL LABORATORY I & II

Laboratory In charge:Mr.D.Soma Sundaram.M.E. & Mr.K.Dinesh Babu.M.E

**Technician:** Mr.G.Vijayasankar.

## **Description:**

- > Thermal laboratory has well furnished by power supply.
- > Thermal laboratory has well facilities for students as per norms given by Anna University.
- Major Equipment's Cost in Thermal Lab: Rs. 17, 03,115.



Area of the laboratory: 332 Sq.M

The following courses are conducted in this Laboratory for the Academic Year (2016-17)

ME 6412 Thermal Engineering Lab I (4<sup>th</sup> Semester)

ME 6512 Thermal Engineering Lab II (5<sup>th</sup> Semester)

#### **CAD/CAM Laboratory**

Laboratory In charge: Mr.S.Rajesh Babu.M.E

Technician: Mr.N.Sivasubramanian

#### **Description:**

- ➤ There are 72 systems with 16Mbps internet connections provided in this laboratory.
- ➤ The Lab is completely air –conditioned with 14 ton A/C.
- ➤ This laboratory cover Anna university syllabus belongs to the Computer, and simulation related experiments.
- > The Lab has the Various Simulation Software Packages for Students Welfare.
- ➤ It also has a CNC Lathe and CNC Milling Machines for the Students Welfare.
- ➤ Major Equipment's Cost in Lab: Rs.55, 96,823.

Configuration Details: AMD Phenom II \*4955 Process 3.2GHZ 6MB L3 Cache. Asus 760C mother board, 8GB DDR3 1066GHZ RAM 500GB SATA HDD @ 7200rpm NVIDIA GT 610 Graphics Card, 20 "Wide TFT Monitor, Wipro Keyboard, Wipro Optical Mouse



Area of the laboratory: 235Sq.M

The following courses are conducted in this Laboratory for the Academic Year (2016-17)

GE6261 Computer Aided Drafting and Modelling Laboratory (2nd Semester)

ME6611 C.A.D. / C.A.M. Laboratory (6<sup>th</sup> Semester)

ME6711 Simulation and Analysis Laboratory (7<sup>th</sup> Semester)

## Manufacturing Technology Laboratory I & II

**Laboratory In charge:** Mr.K.Senthil Kumar.M.E

**Technician:** Mr. MuthuPavun.

### Description:

- There are 14 lathes And 12 special machines in this laboratory.
- The machines are fully working conditions.
- This laboratory covered Anna university syllabus belongs to the manufacturing technology laboratories I & II related experiments.
- ➤ Major Equipment's Cost Cost in Lab: Rs.13,92,282.00





Area of the laboratory: 351Sq.M

The following courses are conducted in this Laboratory for the Academic Year (2016-17)

ME 6311 Manufacturing Technology Lab I (3<sup>rd</sup> Semester) ME 6411 Manufacturing Technology Lab II (4<sup>th</sup> Semester)

## **Mechatronics Laboratory**

Laboratory In charge: Mr.C.Thirugnanam.M.E.

**Technician:** Mr.G.Vijayasankar.

## **Description:**

- Mechatronics laboratory has well furnished with power supply.
- ➤ It has well facilities for students as per the norms given by Anna University.

> Major Equipment's Cost: Rs.11, 00,989



Area of the laboratory: 122 Sq.M

The following courses are conducted in this Laboratory for the Academic Year (2016-17)

ME 6712 Mechatronics Laboratory (7<sup>th</sup> Semester)

## **Metrology and Measurements Laboratory**

Laboratory Incharge: Mr.V.Manoj Kumar.M.E.

Technician: Mr.N.Sivasubramanian.

#### **Description:**

- ➤ There are 22 Measuring instruments provided in this laboratory.
- > This laboratory cover Anna university syllabus belongs to the Metrology and measurement related experiments.
- ➤ The Lab has the Coordinate Measuring Machine for Students Welfare.
- ➤ It also has Digital surface roughness measuring device and Autocollimator for the Students Welfare

Major Equipment's Cost in Metrology and Measurements Lab: Rs.11, 54,570



Area of the laboratory: 90 Sq.M

The following courses are conducted in this Laboratory for the Academic Year (2016-17)

ME 6513 Metrology and measurement Laboratory (5<sup>th</sup> Semester)

## **Dynamics Laboratory**

**Laboratory Incharge:** Mr.P.Senthil Kumar.M.E.

**Technician:** Mr.N.Periyar Selvan.

## **Description:**

- > The laboratory has good adequate power supply
- > The laboratory has well-furnished and equipped as per norms given by Anna University
- > To study about static and dynamics analysis in Mechanical field
- > The students are understand how certain measuring devices are used for dynamic testing
- ➤ Major Equipment's Cost in Dynamics Lab: Rs. 2, 66,700



Area of the laboratory: 89.85Sq.M

The following courses are conducted in this Laboratory for the Academic Year (2016-17) ME 6511 Dynamics Laboratory (5<sup>th</sup> Semester)

## **Engineering Practice Laboratory**

Laboratory Incharge: Mr. Mohamed Rafeek . M.E.

**Technician:** Mr.N.Periyar Selvan.

## Description:

- > The lab has good adequate power supply and has good facilities for welding
- > The lab has well facilities for students as per norms given by Anna University.
- > It has two centre lathes and power hacksaw cutter and have facilities for working carpentry and sheet metal works
- ➤ Major Equipment's Cost in Engineering Practice Lab: Rs.101450

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Area of the laboratory: 272.84Sq.M

The following courses are conducted in this Laboratory for the Academic Year (2016-17)

GE 6162 Engineering Practice Laboratory (All UG 1st Year)

## Fluid Mechanics Laboratory

Laboratory Incharge: Mr.K.Senthil Kumar M.E.

Technician: Mr. Rajiv

## **Description:**

- This lab is utilized for civil and Mechanical students
- > This laboratory cover Anna university syllabus belongs to the Fluids that means discharge related experiments
- > The Lab has the pumps and turbines.

# Major Equipment's Cost in Fluid Mechanics Lab: Rs 11, 82,049



Area of the laboratory: 179 Sq.M

The following courses are conducted in this Laboratory for the Academic Year (2016-17)

CE6461 – Fluid Mechanics and Machinery Lab (3<sup>rd</sup> semester)

## **Strength of Materials Laboratory**

Laboratory Incharge: Mr.R.Kalyana Sundaram.M.E & Mr.P.Senthil Kumar.M.E

Technician: Mr.Rajiv

## **Description:**

- > The lab has well furnished with adequate power supply
- ➤ This laboratory cover Anna university syllabus belongs to the Strength of materials
- ➤ The major equipment's of this lab are Universal Testing Machine, Torsion Testing Machine and Compression Testing machine
- ➤ Major Equipment's Cost in Strength of Materials Lab: Rs 6, 41,459.



Area of the laboratory: 120Sq.M

The following courses are conducted in this Laboratory for the Academic Year (2016-17)

CE 6315 Strength of Materials Laboratory (4<sup>th</sup> semester)

## **Research Laboratory**

Laboratory Incharge: Mr.R.Kalyana Sundaram.M.E

**Technician:** Mr.N.Sivasubramanian

## Description:

- > This lab is mainly used for the various research projects on Metal Matrix Composite Materials.
- ➤ In this lab we have two major equipment's for producing Metal Matrix Composite Materials and conducting the wear test on same
- > The major equipment's are Bottom Pour Stir Casting Furnace and Pin on Disc Wear testing machine
- > It is widely used for Research project for both our students and outside researchers also students from other colleges
- ➤ Major Equipment's Cost in Research Lab: Rs 7, 57,483





Area of the laboratory: 120 Sq.M