



# The Kavery Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University)  
Mecheri, Mettur Tk. Salem Dt - 636 453.

---

## DEPARTMENT OF MECHANICAL ENGINEERING

### PROGRAMME: B. E. MECHANICAL ENGINEERING

#### VISION

- ❖ To deliver high quality education that creates new opportunities for students to meet the challenges and in pursuit of excellence in Mechanical Engineering.

#### MISSION

- ❖ To provide a sound mechanical engineering education for a successful career.
- ❖ To facilitate team work and culture to improve the social standards of graduates.
- ❖ To strengthen the industry institute interaction.

#### PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

- ❖ Effectuating success in careers by exploring with the design, digital and computational analysis of engineering systems, experimentation and testing, smart manufacturing, technical services, and research.
- ❖ Amalgamating effectively with stakeholders to update and improve their core competencies and abilities to ethically compete in the ever-changing multicultural global enterprise.
- ❖ To encourage multi-disciplinary research and development to foster advanced technology, and to nurture innovation and entrepreneurship in order to compete successfully in the global economy.
- ❖ To globally share and apply technical knowledge to create new opportunities that proactively advances our society through team efforts and to solve various challenging technical, environmental and societal problems.
- ❖ To create world class mechanical engineers capable of practice engineering ethically with a solid vision to become great leaders in academia, industries and society.

#### PROGRAM OUTCOMES (POs)

- ❖ Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- ❖ Problem analysis: Identify, formulate, review research literature, and analyse complex engineering



# The Kavery Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University)  
Mecheri, Mettur Tk. Salem Dt - 636 453.

---

problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

- ❖ Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- ❖ Conduct Investigations of Complex Problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- ❖ Modern Tool Usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
- ❖ The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- ❖ Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- ❖ Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- ❖ Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- ❖ Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- ❖ Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- ❖ Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.



# The Kavery Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University)  
Mecheri, Mettur Tk. Salem Dt - 636 453.

## PROGRAM SPECIFIC OUTCOMES (PSOs)

- ❖ Apply the knowledge gained in Mechanical Engineering for design and development and manufacture of engineering systems.
- ❖ Apply the knowledge acquired to investigate research-oriented problems in mechanical engineering with due consideration for environmental and social impacts.
- ❖ Use the engineering analysis and data management tools for effective management of multidisciplinary projects.

## COURSE OUTCOMES (COs)

COURSE OUTCOMES (COs)	
<b>Regulation</b>	2021
<b>Semester</b>	01
<b>Course Code</b>	IP3151
<b>Course Name</b>	Induction Programme
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>❖ To make the students feel comfortable in their new environment, open them up, set a healthy daily routine, create bonding in the batch as well as between faculty and students, develop awareness, sensitivity and understanding of the self, people around them, society at large, and nature.</li></ul>

<b>Regulation</b>	2021
<b>Semester</b>	01
<b>Course Code</b>	HS3151
<b>Course Name</b>	Professional English - I
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>❖ To listen and comprehend complex academic texts.</li><li>❖ To read and infer the denotative and connotative meanings of technical texts.</li><li>❖ To write definitions, descriptions, narrations and essays on various topics.</li><li>❖ To speak fluently and accurately in formal and informal communicative contexts.</li><li>❖ To express their opinions effectively in both oral and written medium of communication.</li></ul>



# The Javery Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University)  
Mecheri, Mettur Tk. Salem Dt - 636 453.

<b>Regulation</b>	2021
<b>Semester</b>	01
<b>Course Code</b>	MA3151
<b>Course Name</b>	Matrices and Calculus
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>❖ Use the matrix algebra methods for solving practical problems.</li><li>❖ Apply differential calculus tools in solving various application problems.</li><li>❖ Able to use differential calculus ideas on several variable functions.</li><li>❖ Apply different methods of integration in solving practical problems.</li><li>❖ Apply multiple integral ideas in solving areas, volumes and other practical problems.</li></ul>

<b>Regulation</b>	2021
<b>Semester</b>	01
<b>Course Code</b>	PH3151
<b>Course Name</b>	Engineering Physics
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>❖ Understand the importance of mechanics.</li><li>❖ Express their knowledge in electromagnetic waves.</li><li>❖ Demonstrate a strong foundational knowledge in oscillations, optics and lasers.</li><li>❖ Understand the importance of quantum physics.</li><li>❖ Comprehend and apply quantum mechanical principles towards the formation of energy bands.</li></ul>

<b>Regulation</b>	2021
<b>Semester</b>	01
<b>Course Code</b>	CY3151
<b>Course Name</b>	Engineering Chemistry
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>❖ To infer the quality of water from quality parameter data and propose suitable treatment methodologies to treat water.</li><li>❖ To identify and apply basic concepts of nanoscience and nanotechnology in designing the synthesis of nanomaterials for engineering and technology</li></ul>



# The Kavery Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University)  
Mecheri, Mettur Tk. Salem Dt - 636 453.

	<p>applications.</p> <ul style="list-style-type: none"><li>❖ To apply the knowledge of phase rule and composites for material selection requirements.</li><li>❖ To recommend suitable fuels for engineering processes and applications.</li><li>❖ To recognize different forms of energy resources and apply them for suitable applications in energy sectors.</li></ul>
--	--

<b>Regulation</b>	2021
<b>Semester</b>	01
<b>Course Code</b>	GE3151
<b>Course Name</b>	Problem Solving and Python Programming
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>❖ Develop algorithmic solutions to simple computational problems.</li><li>❖ Develop and execute simple Python programs.</li><li>❖ Write simple Python programs using conditionals and looping for solving problems.</li><li>❖ Decompose a Python program into functions.</li><li>❖ Represent compound data using Python lists, tuples, dictionaries etc.</li><li>❖ Read and write data from/to files in Python programs.</li></ul>

<b>Regulation</b>	2021
<b>Semester</b>	01
<b>Course Code</b>	GE3171
<b>Course Name</b>	Problem Solving and Python Programming Laboratory
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>❖ Develop algorithmic solutions to simple computational problems.</li><li>❖ Develop and execute simple Python programs.</li><li>❖ Implement programs in Python using conditionals and loops for solving problems.</li><li>❖ Deploy functions to decompose a Python program.</li><li>❖ Process compound data using Python data structures.</li><li>❖ Utilize Python packages in developing software applications.</li></ul>



# The Kavery Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University)  
Mecheri, Mettur Tk. Salem Dt - 636 453.

<b>Regulation</b>	2021
<b>Semester</b>	01
<b>Course Code</b>	BS3171
<b>Course Name</b>	Physics and Chemistry Laboratory
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>❖ Understand the functioning of various physics laboratory equipment.</li><li>❖ Use graphical models to analyze laboratory data.</li><li>❖ Use mathematical models as a medium for quantitative reasoning and describing physical reality.</li><li>❖ Access, process and analyze scientific information.</li><li>❖ Solve problems individually and collaboratively.</li><li>❖ To analyze the quality of water samples with respect to their acidity, alkalinity, hardness.</li><li>❖ To determine the amount of metal ions through volumetric and spectroscopic techniques.</li><li>❖ To analyze and determine the composition of alloys.</li><li>❖ To learn simple method of synthesis of nanoparticles.</li><li>❖ To quantitatively analyse the impurities in solution by electro analytical techniques.</li></ul>

<b>Regulation</b>	2021
<b>Semester</b>	01
<b>Course Code</b>	GE3172
<b>Course Name</b>	English Laboratory
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>❖ To listen and comprehend complex academic texts.</li><li>❖ To speak fluently and accurately in formal and informal communicative contexts.</li><li>❖ To express their opinions effectively in both oral and written medium of communication.</li></ul>

<b>Regulation</b>	2021
<b>Semester</b>	02



# The Kavery Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University)  
Mecheri, Mettur Tk. Salem Dt - 636 453.

<b>Course Code</b>	HS3251
<b>Course Name</b>	Professional English - II
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>• To compare and contrast products and ideas in technical texts.</li><li>• To identify cause and effects in events, industrial processes through technical texts</li><li>• To analyze problems in order to arrive at feasible solutions and communicate them orally and in the written format.</li><li>• To report events and the processes of technical and industrial nature.</li><li>• To present their opinions in a planned and logical manner, and draft effective resumes in context of job search.</li></ul>

<b>Regulation</b>	2021
<b>Semester</b>	02
<b>Course Code</b>	MA3251
<b>Course Name</b>	Statistics and Numerical Methods
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>• Apply the concept of testing of hypothesis for small and large samples in real life problems.</li><li>• Apply the basic concepts of classifications of design of experiments in the field of agriculture.</li><li>• Appreciate the numerical techniques of interpolation in various intervals and apply the numerical techniques of differentiation and integration for engineering problems.</li><li>• Understand the knowledge of various techniques and methods for solving first and second order ordinary differential equations.</li><li>• Solve the partial and ordinary differential equations with initial and boundary conditions by using certain techniques with engineering applications.</li></ul>

<b>Regulation</b>	2021
<b>Semester</b>	02
<b>Course Code</b>	PH3251



# The Kavery Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University)  
Mecheri, Mettur Tk. Salem Dt - 636 453.

<b>Course Name</b>	Materials Science
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>• Know basics of crystallography and its importance for varied materials properties.</li><li>• Gain knowledge on the electrical and magnetic properties of materials and their applications.</li><li>• Understand clearly of semiconductor physics and functioning of semiconductor devices.</li><li>• Understand the optical properties of materials and working principles of various optical devices.</li><li>• Appreciate the importance of functional nanoelectronic devices.</li></ul>

<b>Regulation</b>	2021
<b>Semester</b>	02
<b>Course Code</b>	BE3251
<b>Course Name</b>	Basic Electrical and Electronics Engineering
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>• Compute the electric circuit parameters for simple problems.</li><li>• Explain the working principle and applications of electrical machines.</li><li>• Analyze the characteristics of analog electronic devices.</li><li>• Explain the basic concepts of digital electronics.</li><li>• Explain the operating principles of measuring instruments.</li></ul>

<b>Regulation</b>	2021
<b>Semester</b>	02
<b>Course Code</b>	GE3251
<b>Course Name</b>	Engineering Graphics
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>• Use BIS conventions and specifications for engineering drawing.</li><li>• Construct the conic curves, involutes and cycloid.</li><li>• Solve practical problems involving projection of lines.</li><li>• Draw the orthographic, isometric and perspective projections of simple solids.</li><li>• Draw the development of simple solids.</li></ul>





# The Kavery Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University)  
Mecheri, Mettur Tk. Salem Dt - 636 453.

<b>Regulation</b>	2021
<b>Semester</b>	02
<b>Course Code</b>	GE3271
<b>Course Name</b>	Engineering Practices Laboratory
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>• Draw pipe line plan; lay and connect various pipe fittings used in common household plumbing work; Saw; plan; make joints in wood materials used in common household wood work.</li><li>• Wire various electrical joints in common household electrical wire work.</li><li>• Weld various joints in steel plates using arc welding work; Machine various simple processes like turning, drilling, tapping in parts; Assemble simple mechanical assembly of common household equipments; Make a tray out of metal sheet using sheet metal work.</li><li>• Solder and test simple electronic circuits; Assemble and test simple electronic components on PCB.</li></ul>

<b>Regulation</b>	2021
<b>Semester</b>	02
<b>Course Code</b>	BE3271
<b>Course Name</b>	Basic Electrical and Electronics Engineering Laboratory
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>• Use experimental methods to verify the Ohm's and Kirchhoff's Laws.</li><li>• Analyze experimentally the load characteristics of electrical machines.</li><li>• Analyze the characteristics of basic electronic devices.</li><li>• Use DSO to measure the various parameters.</li></ul>

<b>Regulation</b>	2021
<b>Semester</b>	02
<b>Course Code</b>	GE3272
<b>Course Name</b>	Communication Laboratory
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>• Speak effectively in group discussions held in a formal/semi formal contexts.</li></ul>



# The Kavery Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University)  
Mecheri, Mettur Tk. Salem Dt - 636 453.

	<ul style="list-style-type: none"><li>• Write emails and effective job applications.</li></ul>
--	--

<b>Regulation</b>	2021
<b>Semester</b>	03
<b>Course Code</b>	MA3351
<b>Course Name</b>	Transforms and Partial Differential Equations
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>• Understand how to solve the given standard partial differential equations.</li><li>• Solve differential equations using Fourier series analysis which plays a vital role in engineering applications.</li><li>• Appreciate the physical significance of Fourier series techniques in solving one- and two dimensional heat flow problems and one-dimensional wave equations.</li><li>• Understand the mathematical principles on transforms and partial differential equations would provide them the ability to formulate and solve some of the physical problems of engineering.</li><li>• Use the effective mathematical tools for the solutions of partial differential equations by using Z transform techniques for discrete time systems.</li></ul>

<b>Regulation</b>	2021
<b>Semester</b>	03
<b>Course Code</b>	ME3351
<b>Course Name</b>	Engineering Mechanics
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>• Illustrate the vector and scalar representation of forces and moments.</li><li>• Analyze the rigid body in equilibrium.</li><li>• Evaluate the properties of distributed forces.</li><li>• Determine the friction and the effects by the laws of friction.</li><li>• Calculate dynamic forces exerted in rigid body.</li></ul>



# The Kavery Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University)  
Mecheri, Mettur Tk. Salem Dt - 636 453.

<b>Regulation</b>	2021
<b>Semester</b>	03
<b>Course Code</b>	ME3391
<b>Course Name</b>	Engineering Thermodynamics
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>• Apply the zeroth and first law of thermodynamics by formulating temperature scales and calculating the property changes in closed and open engineering systems.</li><li>• Apply the second law of thermodynamics in analysing the performance of thermal devices through energy and entropy calculations.</li><li>• Apply the second law of thermodynamics in evaluating the various properties of steam through steam tables and Mollier chart.</li><li>• Apply the properties of pure substance in computing the macroscopic properties of ideal and real gases using gas laws and appropriate thermodynamic relations.</li><li>• Apply the properties of gas mixtures in calculating the properties of gas mixtures and applying various thermodynamic relations to calculate property changes.</li></ul>

<b>Regulation</b>	2021
<b>Semester</b>	03
<b>Course Code</b>	CE3391
<b>Course Name</b>	Fluid Mechanics and Machinery
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>• Understand the properties and behaviour in static conditions. Also, to understand the conservation laws applicable to fluids and its application through fluid kinematics and dynamics.</li><li>• Estimate losses in pipelines for both laminar and turbulent conditions and analysis of pipes connected in series and parallel. Also, to understand the concept of boundary layer and its thickness on the flat solid surface.</li><li>• Formulate the relationship among the parameters involved in the given fluid phenomenon and to predict the performances of prototype by</li></ul>



# The Kavery Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University)  
Mecheri, Mettur Tk. Salem Dt - 636 453.

	<p>model studies.</p> <ul style="list-style-type: none"><li>• Explain the working principles of various turbines and design the various types of turbines.</li><li>• Explain the working principles of centrifugal, reciprocating and rotary pumps and design the centrifugal and reciprocating pumps.</li></ul>
--	--

<b>Regulation</b>	2021
<b>Semester</b>	03
<b>Course Code</b>	ME3392
<b>Course Name</b>	Engineering Materials and Metallurgy
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>• Explain alloys and phase diagram, Iron-Iron carbon diagram and steel classification.</li><li>• Explain isothermal transformation, continuous cooling diagrams and different heat treatment processes.</li><li>• Clarify the effect of alloying elements on ferrous and non-ferrous metals.</li><li>• Summarize the properties and applications of non-metallic materials.</li><li>• Explain the testing of mechanical properties.</li></ul>

<b>Regulation</b>	2021
<b>Semester</b>	03
<b>Course Code</b>	ME3393
<b>Course Name</b>	Manufacturing Processes
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>• Explain the principle of different metal casting processes.</li><li>• Describe the various metal joining processes.</li><li>• Illustrate the different bulk deformation processes.</li><li>• Apply the various sheet metal forming process.</li><li>• Apply suitable molding technique for manufacturing of plastics components.</li></ul>

<b>Regulation</b>	2021
-------------------	------



# The Kavery Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University)  
Mecheri, Mettur Tk. Salem Dt - 636 453.

<b>Semester</b>	03
<b>Course Code</b>	ME3381
<b>Course Name</b>	Computer Aided Machine Drawing
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>• Prepare standard drawing layout for modelled assemblies with BoM.</li><li>• Model orthogonal views of machine components.</li><li>• Prepare standard drawing layout for modelled parts.</li></ul>

<b>Regulation</b>	2021
<b>Semester</b>	03
<b>Course Code</b>	ME3382
<b>Course Name</b>	Manufacturing Technology Laboratory
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>• Demonstrate the safety precautions exercised in the mechanical workshop and join two metals using GMAW.</li><li>• The students able to make the work piece as per given shape and size using machining process such as rolling, drawing, turning, shaping, drilling and milling.</li><li>• The students become make the gears using gear making machines and analyze the defects in the cast and machined components.</li></ul>

<b>Regulation</b>	2021
<b>Semester</b>	04
<b>Course Code</b>	ME3491
<b>Course Name</b>	Theory of Machines
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>• Discuss the basics of mechanism.</li><li>• Solve problems on gears and gear trains.</li><li>• Examine friction in machine elements.</li><li>• Calculate static and dynamic forces of mechanisms.</li><li>• Calculate the balancing masses and their locations of reciprocating and rotating masses.</li><li>• Computing the frequency of free vibration, forced vibration and damping coefficient.</li></ul>



# The Kavery Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University)  
Mecheri, Mettur Tk. Salem Dt - 636 453.

<b>Regulation</b>	2021
<b>Semester</b>	04
<b>Course Code</b>	ME3451
<b>Course Name</b>	Thermal Engineering
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>• Apply thermodynamic concepts to different air standard cycles and solve problems.</li><li>• To solve problems in steam nozzle and calculate critical pressure ratio.</li><li>• Explain the flow in steam turbines, draw velocity diagrams, flow in Gas turbines and solve problems.</li><li>• Explain the functioning and features of IC engine, components and auxiliaries.</li><li>• Calculate the various performance parameters of IC engines.</li></ul>

<b>Regulation</b>	2021
<b>Semester</b>	04
<b>Course Code</b>	ME3492
<b>Course Name</b>	Hydraulics and Pneumatics
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>• Apply the working principles of fluid power systems and hydraulic pumps.</li><li>• Apply the working principles of hydraulic actuators and control components.</li><li>• Design and develop hydraulic circuits and systems.</li><li>• Apply the working principles of pneumatic circuits and power system and its components.</li><li>• Identify various troubles shooting methods in fluid power systems.</li></ul>

<b>Regulation</b>	2021
<b>Semester</b>	04
<b>Course Code</b>	ME3493
<b>Course Name</b>	Manufacturing Technology
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>• Apply the mechanism of metal removal process and to identify the</li></ul>



# The Kavery Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University)  
Mecheri, Mettur Tk. Salem Dt - 636 453.

	<p>factors involved in improving machinability.</p> <ul style="list-style-type: none"><li>• Describe the constructional and operational features of centre lathe and other special purpose lathes.</li><li>• Describe the constructional and operational features of reciprocating machine tools.</li><li>• Apply the constructional features and working principles of CNC machine tools.</li><li>• Demonstrate the Program CNC machine tools through planning, writing codes and setting up CNC machine tools to manufacture a given component.</li></ul>
--	---

<b>Regulation</b>	2021
<b>Semester</b>	04
<b>Course Code</b>	CE3491
<b>Course Name</b>	Strength of Materials
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>• Understand the concepts of stress and strain in simple and compound bars, the importance of principal stresses and principal planes.</li><li>• Understand the load transferring mechanism in beams and stress distribution due to shearing force and bending moment.</li><li>• Apply basic equation of torsion in designing of shafts and helical springs</li><li>• Calculate slope and deflection in beams using different methods.</li><li>• Analyze thin and thick shells for applied pressures.</li></ul>

<b>Regulation</b>	2021
<b>Semester</b>	04
<b>Course Code</b>	GE3451
<b>Course Name</b>	Environmental Sciences and Sustainability
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>• Gain knowledge about environment and ecosystem.</li><li>• Students will learn about natural resource, its importance and environmental impacts of human activities on natural resource.</li></ul>



# The Kavery Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University)  
Mecheri, Mettur Tk. Salem Dt - 636 453.

	<ul style="list-style-type: none"><li>• Gain knowledge about the conservation of biodiversity and its importance.</li><li>• Aware students about problems of environmental pollution, its impact on human and ecosystem and control measures.</li><li>• Students will learn about increase in population growth and its impact on environment.</li></ul>
--	--

<b>Regulation</b>	2021
<b>Semester</b>	04
<b>Course Code</b>	CE3481
<b>Course Name</b>	Strength of Materials and Fluid Machinery Laboratory
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>• Determine the tensile, torsion and hardness properties of metals by testing.</li><li>• Determine the stiffness properties of helical and carriage spring.</li><li>• Apply the conservation laws to determine the coefficient of discharge of a venturimeter and finding the friction factor of given pipe.</li><li>• Apply the fluid static and momentum principles to determine the metacentric height and forces due to impact of jet.</li><li>• Determine the performance characteristics of turbine, rotodynamic pump and positive displacement pump.</li></ul>

<b>Regulation</b>	2021
<b>Semester</b>	04
<b>Course Code</b>	ME3461
<b>Course Name</b>	Thermal Engineering Laboratory
<b>Course Outcome</b>	<ul style="list-style-type: none"><li>• Conduct tests to evaluate performance characteristics of IC engines.</li><li>• Conduct tests to evaluate the performance of refrigeration cycle.</li><li>• Conduct tests to evaluate Performance and Energy Balance on a Steam Generator.</li></ul>