

ABOUT THE COLLEGE

Kongu Engineering College (KEC) established in 1984, approved by AICTE, New Delhi, accredited by NAAC for 5 years with the grade of “A” and an autonomous institution affiliated to Anna University Chennai, has completed 34 years of dedicated and excellent service in the field of technical education. The college offers 14 UG, 19 PG and 16 research programmes in Engineering and Applied Sciences. It is one of the best self financing engineering colleges imparting high quality technical education in Tamil Nadu, India, and is well-known for its technical excellence, modern facilities, record of performance with excellent results and enterprising students. Ranked 2nd Position in Tamilnadu and 26th position in India among Engineering Institutes in India (including IITs and NITs) by CSR Magazine. Ranked 1st Position in Tamilnadu and 39th position at all India level by “Outlook” magazine, 3rd Position in Tamilnadu and 32nd Position in private Engineering colleges in India by “The Week” Magazine.

ABOUT THE MECHANICAL ENGINEERING DEPARTMENT

The Department of Mechanical Engineering was established during 1984. The department has 64 experienced faculty members. The department has conducted 26 funded seminars sponsored by AICTE, DST, SERB, CSIR, BRNS, MNRE & UGC. The department has conducted 6 Short Term training Programmes (STTP) sponsored by AICTE-ISTE and organized 4 international conferences and 4 national conferences. It has good infrastructural facilities such as CAD center, Thermal and Heat transfer lab, Refrigeration and Air Conditioning Lab, Metrology Lab, Dynamics Lab and Vibration Diagnosis Lab and Renewable Energy Lab. The department has been involved in various research projects of worth 1.4 crores. Solar Radiation Monitoring station is installed in the department with the help of MNRE.

ABOUT THE WORKSHOP

The two day programme on Design of Solar PV and thermal Energy systems will focus on the design and fabrication of solar based renewable energy systems which can be integrated in the built environment. The workshop is open to all UG students .It will be very useful for final year students doing project in the area of renewable energy such as solar stills, solar PV, solar thermal collectors and wind turbines.

This workshop aims to give participants the foundation to:

- Design a standalone PV system for home.
- Design and fabricate a rooftop solar still and solar cooker.
- Design and fabricate solar collectors .

SESSION SCHEDULE

19.07.19 (2.5 hrs)	Design of Photovoltaic systems Electricity basics. Components of a PV system. PV systems- design methodology . Selection of PV panel, battery, inverter.
19.07.19 (2.5 hrs)	Design of Solar cookers and solar still Construction of box and panel type cookers. Thermal performance, overall efficiency, cooking power. Indoor and outdoor cooking tests. Solar stills- fabrication and energy balance.
20.07.19 (2.5 hrs)	Design of concentrating collectors Dish design and mathematical modeling. Concentrating collectors - Thermal and optical performance, Concentration ratio , Ray tracing methods.
20.07.19 (2.5 hrs)	Design of flat plate collectors Energy balance for Flat Plate Collectors; Thermal analysis; Heat capacity effect; Testing methods; Types of Flat Plate Collectors: Liquid Flat Plate Collectors, Air flat-plate Collectors-Thermal analysis.
20.07.19 (2 hrs)	Hands on training on the above experimental set up in the Renewable Energy Laboratory.

REGISTRATION FEE

The registration fee is Rs 1000/-+18% GST for external participants and Rs 800/-+18% for internal participants. The registration fee shall be paid through DD in favour of “IIP Cell Grant in Aid Account”, payable at **Perundurai**. Application form complete in all aspects is to be sent before 15/07/2019 to

Abubakkar A

Renewable Energy Laboratory
Department of Mechanical Engineering,
Kongu Engineering College,
Perundurai, Erode-638 060,
TamilNadu.

E-mail:abu.mech@kongu.edu

Contact No.: 6380885935

Participants are requested to fill the below mentioned form online to express their willingness for participation. Payments and hard copy to be sent at a later time after confirmation.

<https://docs.google.com/forms/d/e/1FAIpQLSftJhMk2LNIs1yBUOuHvLh99uU2z83CUaTbwidKvIXdXm5koA/viewform>

KONGU ENGINEERING COLLEGE
(Autonomous)
PERUNDURAI, ERODE 638060 TAMILNADU

Two day workshop on
Design of solar PV and thermal
Energy systems
19.07.19 and 20.07.19

Coordinator
A.Abubakkar
R.Manivannan



Organized by
Department of Mechanical Engineering
School of Building and Mechanical Sciences
Kongu Engineering College
Erode- 638 060, Tamil Nadu.

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Website :www.kongu.ac.in

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PERUNDURAI, ERODE 638060 TAMILNADU
APPLICATION FORM

Name			
Age			
Organization			
Particulars For Student	Particulars For Faculty		
Year :	Designation :		
Course of study:	Department :		
Department :	Teaching Exp.:		
Address for Communication			
Mobile no.		E-mail ID	
Accommodation	Yes/ No		
DD number and date			
Amount in Rs			
Name of the bank			

** Accommodation will be provided in the college premises to the participants only on Payable basis.*

DECLARATION:

The above information is true to the best of my knowledge. I agree to abide by the rules and regulations governing the course. If selected, I shall attend the course for the entire duration. I also under take the responsibility to inform the coordinator in case I am unable to attend the course.

Place :

Date :

Signature of the applicant