

About the department

The Department of Mechanical Engineering was established in the year 1984. The department has qualified and experienced faculty members with industrial and research backgrounds to achieve excellence in academic and research activities. NBA has accredited the department since 2000, and is presently accredited under the Tier – I category. The department is recognized as a Research Centre by Anna University, Chennai. The department has fetched research projects worth Rs. 1.72 crores from various agencies such as DST, BRNS, AICTE, etc.,. The department has 12 Ph.D qualified faculty members and all of them are recognized as Research Supervisors by Anna University Chennai. So far, 35 Scholars have completed their PhD from the Research Center, and 12 scholars are currently doing research. The CDIO lab was established in the department in 2016 for new product development activities. Also, the department has setup an energy park comprising the different setups of Energy Engineering. More than 36 products were developed, among which five were commercialized. The department has published five Patents and twelve are under process.

About the Programme

The impact of conventional fuels on the natural environment has increased the usage of renewable energy. The green technology is an environment-friendly technology which generates heat and power from renewable energy resources such as solar, wind, bioenergy, hydro, geothermal, and ocean. The major source of renewable energy has been used in houses and automobiles. The effective utilization of these resources results in cheaper operational costs and a healthy environment.

This programme is designed to provide state-of-the-art trends and advancements in technologies involved in extracting energy from various renewable energy resources and energy conservation measures. The participants will be trained with a hands-on approach to have an in-depth insight into the domain of energy audit. They could extend their research in the field of emerging topics such as energy storage, hydrogen energy, fuel cell, etc. Direct exposure to wind farms could improve the practical experience in wind power production.

CHIEF PATRON

Tmt. Chennammal Ramasamy,
Chairman, NEC.

PATRONS

Thiru. K. R. Krishnamoorthy,
Vice-chairman, NEC.

Thiru. K. R. Arunachalam,
Correspondent, NEC.

CHAIRPERSONS

Dr. S. Shanmugavel,
Director, NEC.

Dr. K. Kalidasa Murugavel,
Principal, NEC.

COORDINATOR

Dr. S. Iyahraja,
Professor,
Department of Mechanical Engineering, NEC.

CO-COORDINATOR

Dr. W. Beno Wincy,
Assistant Professor,
Department of Mechanical Engineering, NEC.

About the institution

National Engineering College, the most prominent landmark of Kovilpatti, has been the crowning glory of this Matchless City of Matches. Its celebrated 'Son of the Soil' Thiru.K.Ramasamy transformed the entire social and cultural scenario in and around this small town by establishing the excellent educational institution popularly referred as "NEC". By wielding the magical wand of social commitment and munificence this foresighted philanthropist transformed a strip of barren land into a magnificent academic complex that has been consistently producing infallible engineers of high competence right from the day of its inception in 1984. This much-acclaimed temple of erudition was established under the self-financing scheme of the Government of Tamilnadu by the National Educational and Charitable Trust, Kovilpatti, Thoothukudi district.



AICTE Training and Learning (ATAL) Academy

Sponsored

Six Days

Faculty Development Program

on

GREEN TECHNOLOGY

5th to 10th February 2024



Organized by
Department of Mechanical Engineering



NATIONAL ENGINEERING COLLEGE

(An Autonomous Institution, Affiliated to Anna University-Chennai)

K.R.Nagar, Kovilpatti-628503.

Thoothukudi District, Tamil Nadu, India.



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Objectives of the Programme

- To know the advanced techniques in utilizing renewable energy.
- To inculcate energy conservation's importance and provide in-depth know-how of supporting hands-on tools for energy audit.
- To unleash the hidden research potential in green technologies to aspiring researchers.
- To create awareness about the benefits of energy storage, hydrogen fuel and fuel cells with the typical case study of typical applications.
- To facilitate the participants for an industrial visit to get practical exposure to wind power generation.
- Develop self-traits, stress management skills, mental health, and mindfulness with yoga practices.

Guidelines

- The FDP will be conducted in OFFLINE mode.
- There will be 10 sessions in five days and (two sessions, one practical session and one article discussion session).
- As per ATAL Academy guidelines, no registration fee will be charged from the participants.
- Attendance is mandatory.
- On completion of the course an objective/ quiz-based assessment of all participants will done.
- Participants who have the attendance of a minimum 80% and more than 60% score in the test will be issued a certificate by ATAL Academy.

Key dates

- Last Date for Application: 14.01.2024
- Date of the FDP: 05.02.2024 to 10.02.2024

Registration

Registration is mandatory for attending the FDP. The participants are requested to register in the ATAL portal. <https://atalacademy.aicte-india.org/login>

For further details

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ATAL FDP-Green Technology,
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Topics and Resource Persons



Fuel cell technologies
Dr. Raman Vedarajan,
Scientist,
Centre for Fuel Cell Technology,
International Advanced Research
Centre for Powder Metallurgy
and New Materials (ARCI),
Chennai.



Energy efficient buildings
Dr. E. Rajasekar,
Associate Professor,
Department of Mechanical
Engineering,
IIT-Roorkee



**Electric vehicles for
sustainable future**
Dr. S. Iyahrja,
Professor,
Department of Mechanical Engg.,
National Engineering College,
Kovilpatti.



Wind power technologies
Dr. S. Rajakumar,
Assistant Professor,
Department of Mechanical
Engineering,
Anna University Regional Campus,
Tirunelveli.



**Advanced research on solar
(PV and Thermal) applications**
Dr. K. Srithar,
Professor,
Department of Mechanical Eng.,
Thiagarajar College of Eng.,
Madurai.



**Energy storage systems:
fundamental, classification
and a technical comparative**
Dr. S. Suresh,
Professor,
Department of Mechanical Engg.,
NIT-Tiruchirappalli.



Hydrogen power train
Mr. M. Somashekar Nayak,
General Manager – Hydrogen Engine
and after treatment,
Mobility Group | New Energy
Initiative,
Reliance Industries Limited,
Bangalore.



**Smart technologies for energy
and environmental
sustainability**
Dr. D. Ruben Sudhakar,
Associate Professor,
Department of Energy and
Environment,
National Institute of Technology,
Tiruchirappalli.



**Energy audit for energy
conservation**
Dr. M. Vivekanandan,
Chief Executive Officer,
TryCAE Industrial Eng. Pvt. Ltd.,
Tiruchirappalli.



Time and stress management
Dr. S. Tamil Selvi
Professor,
Department of Electronics and
Communication Engineering,
National Engineering College,
Kovilpatti.