



A
FIVE-DAY SHORT TERM COURSE

ON

ENERGY STORAGE
-
BASICS AND DEVELOPMENTS
(ESBD-2022)

25-29 JULY 2022

PATRON

PROF. K. UMAMAHESHWAR RAO
DIRECTOR
NIT ROURKELA

CHAIRMAN

PROF. S. K. SAHOO
HEAD
DEPARTMENT OF MECHANICAL ENGINEERING

SPONSORED BY

COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH (CSIR)
NEW DELHI

ORGANIZED BY

DEPARTMENT OF MECHANICAL ENGINEERING
NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA-769008
ODISHA

ABOUT THE INSTITUTION

National Institute of Technology Rourkela is an institute of national importance created under the act of parliament. QS-World University-Asia Rankings has figured NIT Rourkela in the list of 271-280 in 2022. NIT Rourkela is the only NIT to appear in the top 980 universities in the world. THE World University Rankings has listed NIT Rourkela in 801-1000 in the year 2022. NIT Rourkela provides quality education in a diverse and multi-cultural environment. The mission of the institute is to become an internationally acclaimed institution of higher learning that will serve as a source of knowledge and expertise for society and be a preferred destination for undergraduate and graduate studies. The institute is offering Ph.D. and M.Tech by Research programme in 21 branches of Engineering. The institute's research centers are engaged in consultancy and research activities of several bodies such as DST, DAE, CSIR, DRDO, BARC, ISRO, and private industries.

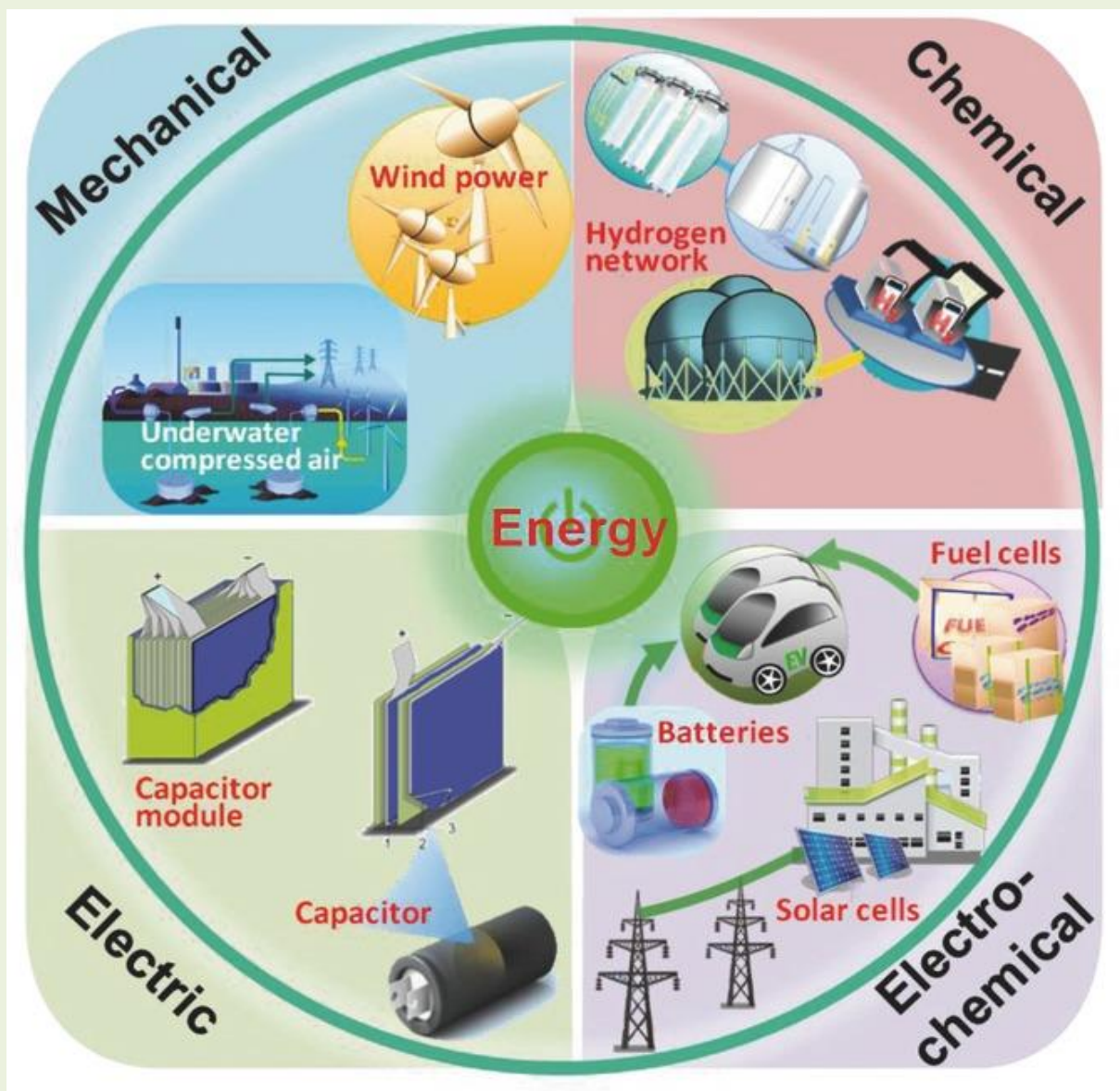
DEPARTMENT OF MECHANICAL ENGINEERING

The Mechanical Engineering Department of NIT, Rourkela is known for research in most of these fields. The main foci of research are on mechanical vibration, robotics, CAD/CAM, precision engineering, Metal forming, manufacturing, CFD, Industrial refrigeration and Cryogenics. The academic program of the department reflects not only the core areas of Mechanical Engineer but also the research specialization of the faculty. The department at present has over one hundred research scholars pursuing projects in diverse fields. The faculty is organized under three divisions and six groups. All the groups are working in close co-operation while retaining individual identities.

Many Research and Development projects are being pursued by the faculty are sponsored by Government agencies and private industries. Among the major sponsors are ARDB, CSIR, BRNS, DBT, DST, HBL Power Systems, and Lechier India Private Limited.

ABOUT THE SHORT TERM COURSE

Energy in any form is the need for everyday human activities. Energy storage is a method of capturing and storing energy produced in a variety of sources at one time. Energy can be harnessed from a variety of sources and availed in the form of radiation, heat, chemical, kinetic, potential, electrical potential, electricity, elevated temperature, and stored for later use. There are a lot of research works are going on in the field of energy storage and there is a huge potential for pursuing research in this field. Considering the scope of research, this course is intended to provide the basics of energy storage and the progress of different energy storage technologies to the faculty members, students, research scholars, and engineers of any discipline.



COURSE CONTENTS

The short term course will mainly provide lectures on the following topics;

- Biological energy storage
- Chemical energy storage
- Electrical and electromagnetic storage
- Electrochemical energy storage
- Fossil-fuel storage
- Mechanical storage
- Thermal storage

FACULTY

The course will be taught by the faculty members of NIT Rourkela. Experts from other research and academic institutions will be invited to share their latest research findings with the participants.

TARGET PARTICIPANTS

The course will be useful to engineers from industries, faculty members, and research scholars from engineering colleges, universities, and research institutes. Participants securing 80% attendance will be given a participation certificate.

IMPORTANT DATES

Last date for submission of application	17-07-2022
Notification about selection	18-07-2022
Confirmation by participants	21-07-2022

Selected candidates will be informed by email.

The course will be conducted in virtual mode (online).

The Online platform link (MS-Team) will be sent to the selected participants on 22-07-2022 for attending the course.

COURSE FEE

Faculties from academic institutions	Rs: 1000
Participants from industries	Rs: 2000
Research Scholars/Students	Rs: 500

PAYMENT

All payments should be made through the A/c payee demand draft in favor of “**Continuing Education, NIT Rourkela**”, payable at SBI NIT Campus branch, Rourkela (Code:2109). Send the DD along with the duly-signed and filled-in Registration form for to the address given below;

Dr. S. Murugan

Course Convener (ESBD-2022)

Department of Mechanical Engineering

National Institute of Technology, Rourkela

Odisha State, Pin code: 769008

Mail ID: murugans@nitrkl.ac.in / recmurugan@gmail.com

Mobile: 09437140949

For any queries, contact the Course Convener by mobile or mail.

You can also visit www.nitrkl.ac.in for downloading the registration form in word document.



REGISTRATION FORM

A

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ON

**ENERGY STORAGE -BASICS AND DEVELOPMENTS
(ESBD-2022)**

25-29 JULY 2022

Name: -----

Designation: -----

Institute/Organization: -----

Phone No. (R)------(O)-----

Mobile: -----Fax: -----

Email: -----

DD No: -----Date: -----

Name of the Bank and branch:

Date: -----Signature: -----

Signature of the applicant with date

Signature of the Head of the Institution with Seal