



ATAL Academy
Faculty Development Programme
on
**“Green Technology & Waste Management:
The era of Advance Manufacturing & Circular
Economy”**

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Sponsored by
AICTE Training & Learning (ATAL)
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Organized by



Department of Chemical Engineering
&
Department of Mechanical Engineering
C.V. Raman Global University,
Bhubaneswar, Odisha-752054

ABOUT THE INSTITUTE

C. V. Raman Global University (CGU), Odisha was established as per “Odisha Act 01 of 2020”. The university’s vision is to develop integrated scholastic ability and skills in students, through quality education. Especially linking knowledge and skill seamlessly through experiential learning, leading to competence for employability, innovation, research and entrepreneurship. Then taking India knowledge and innovation across the globe and create a new paradigm.

CGU, has evolved and come a long way from being an engineering college named as C.V. Raman College of Engineering (CVRCE) established in 1997. Since its inception, it was wedded to quality and steadfastly remained committed to bringing about rapid transformations in the field of technical education. This led to establishment of smart classrooms, world class labs, skilled courses and over 25 Centres of Excellence in collaboration with industries. This includes Bosch Rexroth, Festo, Siemens, Schneider Electric, Cisco, AWS, CDAC, Tata technologies, Marcraft, GalSen, Quasar to our own advance manufacturing center catering to PSUs, ISRO to global industries.

These linking of skills and knowledge has led to research projects, consultancy and production of industrial components worth multiple crores, to CGU student winning India’s first gold by an Indian in world skills. The university today has over 20 startups under its AIC and TBI incubation centres. Further CGU trains 1000s of children under skilling program working with Govt. of Odisha and GoI. Leveraging the NEP2020 process CGU aspires to be a truly global university.

ABOUT THE DEPARTMENTS

The **Department of Chemical Engineering and Mechanical Engineering** are the oldest department in CGU existing from the time inception. The programs in both the departments have been accredited and are imparting quality education linked with experiential learning. The departments also have multiple skill based learning Center of Excellence established in collaboration with industry including those of Bosch Rexroth, Festo, Water Technology, Advanced Welding, Robotics, Industry 4.0 ready center for manufacturing and an advanced center for Airconditioning and Refrigeration (HVAC). Students trained under these centers have won awards at national and international events like World Skills, Water Technology contest and BRICS skill contest.

The faculty are involved in wide range of research and and the department has received grants over crores of rupees. The department provides a thriving teaching, learning and research environment and offers B.Tech., M.Tech. and Ph.D. programs.

ABOUT THE COURSE

The development of any country depends mainly on four verticals viz. Technological Development, Optimum Utilization of Natural Resources, Manufacturing and Private Enterprises development.

In the majority of cases, the rethinking and redesigning of many processes and technologies will help to modify the technologies as per industrial norm. Specific tools and relevant case studies will be presented to provide an engineering approach to the course.

Exploring recent developments and trends in green technology system and waste management is outmost important in the era of circular economy. This will also serve the broader goal of “Atmanirbhar Bharat”.

The proposed faculty development program on “Green Technology & Waste Management: The era of Advance Manufacturing & Circular Economy” is a small step in this direction. The program will help in imparting the comprehensive knowledge of recent advances and developments in the field of materials, manufacturing and processes for the cleaner, safer, environmental friendly & more cost-effective technologies used for the coming generation.

COURSE CONTENTS

- ✓ Introduction to Green Engineering.
- ✓ The cleaner and environmental friendly technologies for the next generation processes.
- ✓ Sustainable manufacturing
- ✓ Chemical processes for sustainable energy aspects
- ✓ Green Machining process like EDM and Grinding
- ✓ Eco-friendly coating
- ✓ Waste and E-waste management
- ✓ Mining waste Technology & management
- ✓ Bio-fuel synthesis
- ✓ Bioremediation and waste water engineering

RESOURCE PERSONS

Eminent professors from premier institutions such as IITs, IISERs, NITs, CGU-Odisha and industrial experts will deliver lectures during the programme.

PROSPECTIVE PARTICIPANTS

This FDP is open for participants from academic Institution including faculty members, post graduate students and PhD scholars from AICTE approved technical institutions.

BENEFITS OFFERED TO PARTICIPANTS

- ✓ No registration fee for the participants.
- ✓ The conduction of this FDP is only in online mode using a suitable platform.
- ✓ A test shall be conducted at the end of the program and participants will be awarded a certificate of participation from ATAL Academy.
- ✓ The attendees can develop & teach an open elective course on Manufacturing by Green Technology & Waste Management, which one of the thrust areas identified by AICTE peer committee.

HOW TO REGISTER?

- Those who are willing to participate are requested to Register at ATAL website through the link:
<https://atalacademy.aicte-india.org/signup>
- Once sign in successful, you can choose the workshop “Green Technology & Waste Management: The era of Advance Manufacturing & Circular Economy” by clicking “+” button of corresponding workshop.

REQUIREMENTS TO GET E-CERTIFICATE

- Minimum 80% attendance.
- Minimum 60% marks in the assessment test.
- Submission of feedback on the ATAL portal at the end of the program.

PROGRAM COORDINATOR

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ORGANIZING COMMITTEE

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