The faculty members, Research scholars and PG Scholars of the AICTE approved institutions and Industry personel, are eligible to attend the Programme. Participants interested to attend this program need to make compulsory online registration. Last date of registration is 07/12/2024. Shortlisted candidates will be informed through their email within a week after registration is closed.

Registration

No charge for registration, Course and certification and references for filling FDP Proposal form. Program will be in **online**. Registration must be done only through AICTE-ATAL academy. The interested members must visit https://www.aicte-india.org/atal, register themselves by providing all their personal and student/ employment details. This procedure requires uploading of colour photo, Signature, ID Card (for students), and Consent letter (for employees) from their employers in JPEG format.

Certificate

Certificate will be provided by ATAL Academy after successful completion of FDP. Minimum 80% attendance and 70% marks in assessment conducted at the end of the program are required to earn the certificate.

Connectivity

Government College of Engineering is located near Bargur Town which is well connected by Road. It is 14 km west of Krishnagiri, 68 km west of Hosur and 260 km east of Chennai.

ORGANIZING COMMITTEE

Chief Patron: Dr. J. Nafeesa Begum,

Principal i/c, Government College of

Engineering, Bargur.

Convener : Dr. P.Thirumal,

Professor and Head, Government College of Engineering, Bargur.

Important Dates:

Last date for Registration : 07.12.2024 Selection Notification : 08.12.2024

FDP Duration : 09.12.2024 to 14.12.2024

Address For Communication



Dr. D.THIRUMALAIKUMARASAMY

Coordinator

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GOVERNMENT COLLEGE OF ENGINEERING, BARGUR

(Accredited with 'B' Grade by NAAC)



AICTE Training and Learning (ATAL) Academy



Sponsored Faculty Development Program (Advanced FDP) on

"Advanced Materials Rare earth and Critical Minerals"

09-14th Dec 2024



Coordinators

Dr.D.THIRUMALAIKUMARASAMY

Coordinator
Department of Mechanical Engineering

Dr. E.ELANGO

Co Coordinator Department of Mechanical Engineering

Organized by

Department of Mechanical Engineering

Government College of EngineeringBargur Krishnagiri District – 635104 Bargur(Tk), Tamilnadu

website: www.gcebargur.ac.in

About the Institute

The Government College of Engineering, Bargur (GCEB) is an autonomous engineering college located in the Krishnagiri district of Tamil Nadu, India. It was established in 1994 and is affiliated with Anna University. The college is situated on a 50-acre campus in Madepalli village, 4 km west of Bargur, and offers undergraduate and postgraduate programs in various engineering disciplines.

About the Faculty

The faculty of Government College of Engineering (GCE), Bargur, consists of experienced and qualified individuals who are dedicated to providing quality education to students. The institution has four departments of study namely Computer Science & Engineering, Electrical Engineering, Electronics and Communication Engineering, Mechanical Engineering, and Science and Humanities.

About the Department

Mechanical Engineering: The Mechanical Engineering Department at Government College of Engineering, Bargur (GCEB) is a vital part of the institution, offering undergraduate program in Mechanical Engineering. The department was established in 2009 and offers a fulltime Bachelor of Engineering (B.E.) in Mechanical Engineering, a four-year undergraduate program. The course is designed to provide students with a broad understanding of mechanical engineering principles. including fluid mechanics, thermodynamics, heat transfer, solid mechanics, materials engineering, manufacturing engineering, energy systems, dynamics, and control systems. The faculty members of the Mechanical Engineering Department at GCEB are involved in various research areas, including Micro Machining, IC Engines, Alternative Fuels, Nano Coatings, Composite materials, Coatings technology, Surface Engineering, Corrosion, Optimization, Nano Materials, Refrigeration, and Air conditioning. The department has a team of experienced faculty members. including professors, associate professors, and assistant professors, who are dedicated to teaching and research.

The department has well-equipped, state-of-the-art laboratories that cater to the needs of the students, providing them with hands-on experience in various aspects of mechanical engineering. The college has invested significantly in infrastructure development, including the construction of an Administrative Block, Electronics and Communication Engineering Block, Electrical and Electrical Engineering Block, Computer Science Engineering Block, Mechanical Engineering Block, Library Block, and Hostels for male and female students.

Admission to the B.E. in Mechanical Engineering program at GCEB is based on performance in the State higher secondary school examinations, with a cutoff calculated from the marks obtained in maths, physics, and chemistry. The college has a good placement record, with many students getting placed in reputed companies.

About the ATAL

The Government of India in association with All India Council for Technical Education (AICTE) launched the AICTE Training and Learning (ATAL) academy with a vision to empower faculty to achieve goals of higher Education such as access, equity and quality. ATAL Academy have started unique Faculty Development Programs in various thrust areas of modern technology. More than 1100 such programs have already been conducted in various AICTE approved institutions benefitting the faculty, Research Scholars and PG Students around the nation.

About the FDP

The FDP on "Advanced Materials: Rare Earth and Critical Minerals" is designed to provide an in-depth understanding of the current advancements and challenges in the field of materials science, focusing specifically on rare earth elements (REEs) and critical minerals. These materials are vital for various high-tech applications, including renewable energy technologies, electronics, and advanced manufacturing.

FDP Contents

- ✓ Introduction to Rare Earth and Critical Minerals
- ✓ Properties and Applications of Rare-earth Elements
- Synthesis and Fabrication Techniques for Advanced Materials
- ✓ Critical Minerals in Technology: Beyond Rare-earths
- ✓ Sustainability and Recycling of Advanced Materials and Rare-earth Elements
- ✓ Nanomaterials and Their Applications
- ✓ Advanced Materials in Renewable Energy Technologies
- ✓ Economic and Geopolitical Aspects of Rare-earth and Critical Minerals
- Advanced Characterization Techniques for Materials and Minerals
- ✓ Future Trends in Advanced Materials and Critical Minerals
- ✓ Revolutionizing Industries: The Role of Advanced Materials in Modern Technology
- Case Studies on the Use of Advanced Materials in Industry
- ✓ Extraction and Processing of Rare-earth Minerals
- ✓ Advanced Processing Methods

Speakers

The resource persons for the program shall include faculty members and renowned researchers from higher education & research institutions, and Engineers from Industries. The forum paves way for budding researchers to pass through innovative techniques.

Steps to Register:

Registration can be done only through AICTE-ATAL portal. Visit: https://www.aicte india.org/atal "Sign Up" and create a login as "participant". Login using your newly created login credentials, update your profile and click on "FDPs" Link. You can register by clicking on the "+" sign on FDP and press Ctr+F, enter 1730806515 as Application Number and find FDP on "Advanced Materials Rare earth and Critical Minerals".

Letter Head

Participant NOC Format

Subject: NOC for Attending ATAL FDP

Ref No.	Date:	To

Whomsoever It May Concern

	This	letter	is	to	expres	SS	No	Obje	ection	on
Mr./Mrs./Ms./Dr.			<				Participant			
name)	>	in	atte	ending	"Ac	dvan	ced	Mater	ials
Rare	eart	h and	C	ritic	al Mir	nera	ls"	cond	lucted	at
Government College of Engineering (Autonomous),										
Bargur, Tamilnadu from 09.12.2024 to 14.12.2024										

Signature of the Participant

Head of the Institution
(Signature and Seal)