

ABOUT DEPARTMENT:

Established in the year 1994, the Manufacturing Engineering Department of COEP with its team of dedicated, qualified and experienced faculty, offers a sound program at both UG and PG levels. The UG program is B.Tech.(Manufacturing Science Engineering). Department runs four PG programs MTech Production Engineering (Manufacturing Engg. & Automation), MTech Mechatronics, MTech Project Management and M. Tech (AI and Robotics). Department also runs three post graduate diploma courses namely PGD-ERP, PGD-Additive Manufacturing, and PGD-Product Design. The department aims at providing a valuable resource not only to the industries but also the society through excellence in technical education and research. An outreach project of MIT's centre for Bits and Atoms (CBA), COEP's Fab Lab provides a significant fillip to technological empowerment; peer to peer project based technical training and high-tech business incubation. The centralized Robotics and Automation Laboratory of COEP is a notable feature of the department. To keep abreast of the technological trends the departmental faculty undergoes a number of programs and refresher courses and participates actively in seminars and conferences. With rich hardware and software resources and collaborative projects with the academia and industries, the department aims at providing an elite workforce of future leaders in myriad areas like manufacturing, designing, quality management and marketing. Department is having state of the art facility as Rapid Prototyping Lab as well as Tribology & Terotechnology Lab. Department runs many continuing education program like CAD/CAM, Mechatronics etc.. Department also takes up consultancy work in the area of Reliability Engineering, Industrial Engineering, Optimization, Ergonomics, Rapid Prototyping, Tribology & Terotechnology etc.

ABOUT COEP:

The College of Engineering Pune (COEP) was established in 1854. It is one of the oldest and premier engineering institutions in the country. It has rich history and dedication to the pursuit of excellence and offers a unique learning experience across a spectrum of academic and social experiences. With a firm footing in truth and humanity, the institute provides its students with the understanding of both technical developments and the ethics that go with it. COEP offers undergraduate programs in 10 disciplines and post graduate programs in 24 specializations. It is a recognized Research Center for doctoral programs of the Savitribai Phule Pune University as well as QIP centre. COEP has been consistently ranked amongst the top 21 technical institutes in India and its alumni have a lion's share in the development of national infrastructure. COEP has many eminent alumni such as Bharat Ratna Sir M. Visvesvaraya. Many of them are heading several leading engineering industries and organizations.

RESOURCE PERSONS

Sessions will be conducted by COEP faculty, and experts from various renowned automobile manufacturer, & testing/certifying industry from India and abroad.

PATRON

Prof. B. B. Ahuja, Director, COEP

ADVISORY COMMITTEE

Prof. M.S. Sutaone, Deputy Director, COEP
Prof.(Mrs.)Jibi Abraham, Dean, Academics, COEP
Prof. M J Rathod, Dean Faculty, COEP
Prof. S. L. Patil, Dean Alumni and IR, COEP
Prof. S.N. Sapali, Dean Quality, COEP
Prof. A.G. Thosar, Dean R&D, COEP

HEAD OF DEPARTMENT : Dr. P.D. Pantawane

COORDINATOR : Dr. J.S. Karajagikar

MEMBERS:

Dr. B. Rajiv	Prof. N.R. Rajhans
Dr. B. U. Sonawane	Dr. A.V. Mulay
Dr. S.S. Anasane	Dr. M.R. Dhanvijay
Dr. M.D. Jaybhaye	Dr. S.M. Patil
Mr. S.U. Ghunage	Mr. M.N. Shaikh

AICTE Sponsored One Week (Face to face) Faculty Development Program On "Product Design, Development and Manufacturing through a Boot camp"

10th Jan to 14th Jan 2022



Course Coordinator

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Organized by
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College of Engineering, Pune
(An autonomous Institute of Government of
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Pune- 411005

Introduction

Product Design, development, its manufacturing, and testing are an important aspect in product life cycle. The need for a qualified designer well-versed with the range of product designs was also felt by the industry. Product design is all about converting ideas into reality. Long term objective is to optimize profitability and survival of the industry.

Product design and its development is a step by step process. Designer's role is to understand need of probable customer in right way. This is really needed to come up with good product conceptualization, prototyping, and manufacturing. Concept of Design for manufacture, design for usability and sustainability, design for reliability, design for maintainability and human factors consideration are points of consideration while design evolution.

The use of integrated manufacturing through digitalization, use of state of art manufacturing techniques such as additive manufacturing, are important tools in modern era product prototyping and manufacturing.

The program is specifically designed for faculty members, research scholars, PG scholars, engineers & professionals. After conduct of the FDP course, faculty will:

- Learn to apply knowledge in various technology domains of product life cycle with multidisciplinary approach.
- Develop skills, knowledge, and aptitude to bring about innovation in teaching-learning through creative problem solving, while addressing a product.
- Advocate & propagate Entrepreneurship amongst students.

Program Contents:

- Introduction to Product design and development
- Product Integration
- Design for Usability and Sustainability
- Collaborative design methods for new product development
- Integrated Product Manufacturing (Digitalization and Digital twin)
- Design for Reliability and Maintainability
- Design Failure Mode Effect Analysis (DFMEA)
- Design for Additive Manufacturing
- Reverse Engineering
- Product Virtual Testing
- Role of marketing in product development
- Quality function deployment (QFD)
- Economic view of Product development
- Case studies on Promoting Entrepreneurship in Institutes (Design & manufacturing of Products) and COEP's BHAU Institute of Entrepreneurship tour
- Demos on FAB Lab, Rhino, Fusion 360 software interface and additive mfg. lab demo

Course will be punctuated with Sessions on Product design, development and manufacturing with a tour of COEP's BHAU Institute of Entrepreneurship.

IMPORTANT DATES

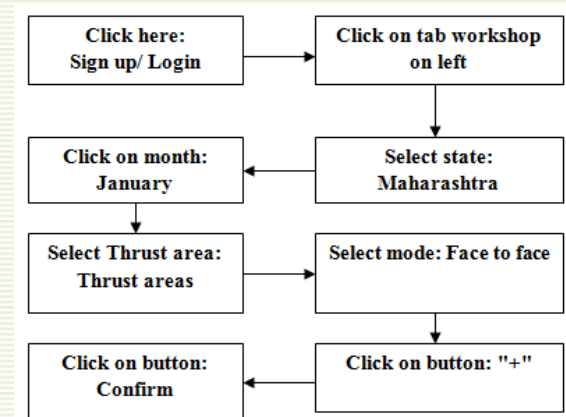
Submission of registration form: On or before 30th Dec. 2021

Confirmation to participants: 8th Jan. 2022

Course commencement date: 10th Jan 2022.

Program Registration:

- Those who are willing to participate are requested to register at ATAL website through the link provided therein.
- If you are not registered user: <https://atalacademy.aicteindia.org/signup/>
- For registered user: <https://atalacademy.aicteindia.org/login/>
- Use flow chart for registration as shown below::



Selection:

- Selection of participant will be based on ATAL Academy norms.

Benefits to Participants:

- The registration fee is nil for participants..
- A test shall be conducted at the end of the program and participants will be awarded a Certificate of participation from ATAL Academy.