



DEPARTMENT OF MECHANICAL ENGINEERING

Report on Faculty Development Programme

Duration of the FDP: 08/09/2025 – 12/09/2025 (5 Days)

Time: 09:30 AM – 04:30 PM

Title of the FDP: Next-Gen Product Innovation: CATIA, ENOVIA & 3DEXPERIENCE

Organizing Departments:

Department of Mechanical Engineering,
Skill Development Centre,
Department of Applied Science,
in collaboration with EDS Technologies, Bangalore

Attendees: Faculty members from the Departments of Mechanical Engineering and Applied Science.

Resource Persons:

- Mr. Firoz Itagi, Senior Application Engineer, EDS Technologies
- Mr. Vinayak Choudhary, Senior Application Engineer, EDS Technologies

Duration: 7 Hours

Objective of the FDP:

To enhance the knowledge of researchers and faculty members in the field of Product Lifecycle Management (PLM) using the 3DEXPERIENCE platform.

About the Resource Persons:

The resource persons, serving as Senior Application Engineers at EDS Technologies, Bangalore, bring six years of professional experience from the field.

Trainers' Expertise:

The trainers hold over 60 certifications across CATIA V5, 3DEXPERIENCE, Architecture and Installation Fundamentals, ENOVIA, DELMIA, SIMULIA, and BIOVIA by Dassault Systèmes. They have delivered more than 500 hours of training to academic and corporate clients, including Infosys, Ferra Aerospace, Dynamics, Ather Electric, KGTTI, and Tech Mahindra, along with specialized TXO (Data Model Customization) training for various institutions.

Programme Content

DAY WISE SCHEDULE	ENOVIA TRAINING MODULES	HANDS-ON DETAILS
DAY -1 08/09/2025	3DEXPERIENCE Gateway Overview, including the Collaborative Business Innovator and Collaborative Industry Innovator Roles, Widget Management, and an overview of 3DEXPERIENCE CATIA	Exploring 3DEXPERIENCE Gateway, practicing Collaborative Business/Industry Innovator Roles, Managing Widgets, and gaining introductory experience in CATIA design within the integrated platform.
DAY -2 09/08/2025	Basics of CATIA, including Part Design, Assembly Design, and Drafting	Practicing CATIA basics through creating 3D part models, assembling components, and generating detailed 2D drafting views to understand design, integration, and documentation processes effectively.
DAY -3 10/09/2025	NC Programming for the shop floor	Creating NC programs, defining tool paths, simulating machining operations, and generating G-codes to connect digital designs with real shop floor manufacturing processes.
DAY -4 11/09/2025	Overview of ENOVIA Project Management	Exploring ENOVIA project management tools, creating project structures, assigning tasks, tracking progress, and managing collaboration for efficient execution of engineering and business projects.
DAY -5	Variant Management and BOM	Creating and managing product variants, configuring Bill of Materials (BOM), analyzing

12/09/2025		dependencies, and ensuring accurate product definitions for efficient design, customization, and manufacturing workflows.
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Conclusion:

The Faculty Development Programme on “Basics of CATIA Surface Design, with an Overview of ENOVIA Project Management” equipped participants with essential knowledge in advanced 3D modeling and collaborative project execution. The sessions strengthened their understanding of surface design techniques, component assembly, and documentation workflows in CATIA, while also introducing practical methods for project structuring and progress tracking using ENOVIA. By combining design accuracy with project management tools, the programme improved both technical skills and team collaboration. Overall, the FDP empowered faculty with practical expertise, enhanced academic delivery, and aligned teaching with current industry standards.

ABOUT THE COLLEGE

New Horizon College of Engineering (NHCE) is an Autonomous College affiliated to Visvesvaraya Technological University (VTU), approved by All India Council for Technical Education (AICTE) and University Grants Commission (UGC). New Horizon College of Engineering has been accredited by NAAC with an 'A' GRADE and National Board of Accreditation (NBA). It is an ISO 9001:2008 certified institution.

ABOUT THE DEPARTMENT

From the very inception of the college in 2001, The Department of Mechanical Engineering has been unique in its own way and has been instrumental in moulding a multitude of engineers. The Department has undertaken various projects in the emerging fields of robotics, rapid prototyping, surface engineering, and non-conventional energy with assistance from the Vision Group Department of Science and Technology, Government of Karnataka. The Department comprises of highly talented and experienced faculty members who are committed to their work and are equipped with state-of-the-art facilities for full-time and part-time research scholars. Our students have won many prizes and awards at National and international levels for their creative projects.



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HoD-Applied Science

Coordinators

Dr. Nagabhushana N
Senior Assistant Professor - ME

Dr. Hemant Raju T
Associate Professor - ME

Dr. Sudarshan T A
Senior Assistant Professor - ME

Dr. Veerasha G
Assistant Professor - ME

Co-coordinators

Dr. Asha P K
Associate Professor - AS

Dr. Bhavya
Associate Professor - AS

Dr. P Baskar
Associate Professor-AS



Faculty Development Program on

Next-Gen Product Innovation: CATIA, ENOVIA & 3DEXPERIENCE

8 - 12 September 2025

Organized by

Department of Mechanical Engineering

In association with

Skill Development Centre, NHCE
Department of Applied Sciences, NHCE
EDS Technologies, Bangalore

ABOUT EDS TECHNOLOGIES PVT. LTD

EDS Technologies (EDST) is a leading technology solutions provider with three decades of experience in driving digital transformation across industries. Founded in 1995 and headquartered in Bengaluru, we have a strong presence across 11 Indian cities including Ahmedabad, Chennai, Coimbatore, Gurugram, Guwahati, Hyderabad, Kolkata, Mumbai, Noida, and Pune.

EDST has built the largest customer base in India for PLM and Visual Simulation, partnering with over 2,000 customers in automotive, aerospace, defence, electronics, industrial equipment, and medical devices industries.

Through strategic partnerships with global leaders like Dassault Systèmes, Synopsys, EOS, Optomec, Esri, Humanetics, Technia, MAK Technologies, Agenium, and Aechelon Technology, we bring world-class solutions to manufacturing, electronics, R&D, life sciences, and government sectors.

ABOUT THE EVENT

The Faculty Development Program (FDP) on "Next-Gen Product Innovation: CATIA, ENOVIA & 3DEXPERIENCE" is designed to empower faculty with hands-on knowledge of Dassault Systems advanced design and product lifecycle management (PLM) tools. The program introduces CATIA for innovative product design, ENOVIA for collaborative project and data management, and the 3DEXPERIENCE platform for digital continuity across the product lifecycle. This FDP aims to bridge academia – industry gaps by enabling faculty to integrate cutting-edge PLM practices into teaching, research, and project guidance.

OBJECTIVES OF THE PROGRAMME

The main objective of this faculty development program is to enhance the knowledge of researchers, faculty members in the area of Product Life Cycle Management using 3D EXPERIENCE and CATIA.

RESOURCE PERSONS

Mr. Vinayak V C
Sr. Application Engineer – Technical
EDS Technologies

Mr. Firoz Itagi
Sr. Application Engineer – Technical
EDS Technologies

AUDIENCE

Open to faculty members, research scholars, and industry professionals.

CONTACT FOR QUERIES

Skill Development Centre – NHCE

Faculty Coordinators

Dr. Nagabhushana N
Senior Assistant Professor - ME
Mob: +91-9741127552

Dr. Asha P K
Associate Professor - AS
Mob: +91-8105302003
Email: hod_mee@newhorizonindia.edu



SCHEDULE

Day 1 – 08-09-2025

3DEXPERIENCE Gateway Overview, including the Collaborative Business Innovator and Collaborative Industry Innovator roles, widget management, and an overview of 3DEXPERIENCE CATIA.

Day 2 – 09-09-2025

Basics of CATIA, including Part Design, Assembly Design, and Drafting.

Day 3 – 10-09-2025

NC Programming for the shop floor.

Day 4 – 11-09-2025

Generating resources, building a 3D layout, and defining factory flow simulation.

Day 5 – 12-09-2025

Basics of CATIA Surface Design, with an overview of ENOVIA Project Management.

Glimpses of the Faculty Development Programme

