NEW HORIZON
COLLEGE OF ENGINEERING

Autonomous College, Permanently Affiliated to Visvesvaraya Technological University, Belagavi
Approved by AICTE & UGC, Accredited by NAAC with 'A' Grade, Accredited by NBA

AICTE IDEALab

A Report

AICTE IDEA Lab – Open day Program

A Open day Program was successfully organized at New Horizon College of Engineering under the initiative of the AICTE IDEA LAB and the Department of Research and Development.

Chief Mentor : Dr. Manjunatha, Principal
Faculty Coordinator : Dr. Revathi V, Dean R&D
Faculty Co Coordinator : Dr. A. Sujin Jose, Associate Professor- R&D/Mech
Date : 03 March 2026
Participants : B.com Students
Trainers : Dr. A. Sujin Jose, Mr. Thanuj Kumar N, Mr. Amrit Das

Objectives

- The main objective of the program was to create awareness among the degree students about the importance of innovation, creativity, and experiential learning in the modern era of education. During their visit, the students were introduced to the IDEA Lab's objectives and functioning, which emphasized the importance of the IDEA Lab in promoting inter-disciplinary learning and the practical implementation of ideas.
- The students were introduced to the different high-tech equipment available at the IDEA Lab, which includes equipment such as 3D printers, laser cutters, and PCB machines, which aid in the implementation of ideas generated through creativity.
- The session also encouraged the students to discover their potential in creativity, learn about the principles of design thinking, and get inspired to create innovative solutions to real-life problems.

Overview

- The main objective of the program is to motivate the degree students to discover their creative potential, understand the design thinking process, and find inspiration to come up with innovative ideas to solve problems in their daily lives.
- The students participated actively in the program and interacted with the mentors and lab coordinators, who explained to them the ways in which creative ideas could be converted into practical realities through modern tools and technology available in the market.
- During the program, the students were made familiar with the working of modern machines such as 3D printing machines, laser cutting machines, and PCB machines, and the safety precautions to be taken while using these machines, which is essential in the development of innovative ideas.

The session started with an introduction to the AICTE IDEA Lab. The trainers explained its vision, goals, and importance in promoting creativity, innovation, and hands-on learning for degree students. They described the lab as a lively space that allows students to turn their ideas into real results using modern technology and equipment.

The trainers presented an overview of the equipment in the lab, including 3D printers, laser cutting machines, and PCB fabrication machines. They stressed how important these tools are for product design, development, and manufacturing. The IDEA Lab also acts as a platform that merges concepts from Science, Engineering, and Design, creating a well-rounded learning space.

Next, the trainers provided a clear, step-by-step explanation of how to use each machine and their applications in today's engineering and product development. During the 3D printing session, students learned how digital 3D models are made into physical objects through additive manufacturing technology.

The demonstration of the heavy-duty laser cutting machine showed how to create precise shapes from materials like acrylic, using specific design software. In the PCB fabrication session, students were introduced to designing and developing electronic circuits. They also learned about software tools

Outcome

- The extent to which the degree students developed an appreciation for how creative ideas could be transformed into practical products through the use of advanced facilities provided in the AICTE IDEA Lab.
- The extent to which the degree students were introduced to the importance of Design Thinking and its applicability in developing user-centric and problem-oriented ideas.
- The extent to which the degree students were motivated to integrate innovative ideas into their future academic projects.
- The extent to which the degree students developed an appreciation for advanced prototyping machines such as the PCB Fabrication Machine and the Heavy-Duty Laser Cutting Machine, and their applications.

Conclusion

The Open Day program conducted for the degree students was a success and was highly impactful. The students got good exposure to the concepts of innovation, creativity, and experiential learning. During the visit to the AICTE IDEA Lab, the students got a good understanding of the potential of the latest technologies in converting ideas into real-world applications. During the visit to the IDEA Lab, the students got exposed to the latest prototyping tools, Design Thinking concepts, and product development principles through live demonstrations. The program was highly effective in promoting the students to think creatively and explore the latest technologies and develop a scientific and innovative mindset among them.