



INNOVATION BY THE FACULTY IN TEACHING AND LEARNING

1. Flipped classroom

The flipped classroom is an innovative teaching model that reverses the traditional learning environment. In this approach, students are introduced to new concepts through pre-recorded lectures, videos, or reading materials before class. Classroom time is then used for interactive discussions, problem-solving activities, and collaborative work, allowing teachers to provide more personalized support. This method promotes active learning, increases student engagement, and helps learners develop a deeper understanding of the subject matter.



2. Project based learning

Project-Based Learning is a way of teaching where students learn by working on projects instead of just listening to lectures or reading textbooks. In this method, students are given a project and they work in groups find solutions. These projects often take days or weeks to complete and involve research, planning, and presentations. Project-Based Learning helps students understand topics better because they learn by doing. It also builds important life skills such as teamwork, communication, creativity, and time management. This method makes learning more fun, interesting, and connected to real life.



3. Industry Institute collaborative learning

a. Industry Projects

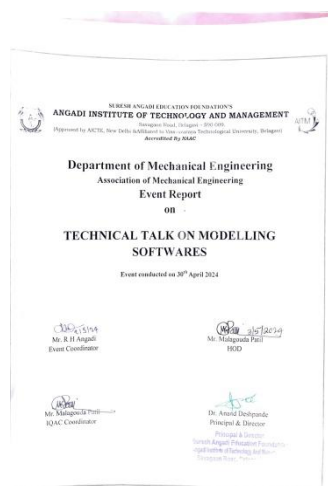
Industry projects are real-world tasks or assignments given by companies or organizations. These projects allow students to apply what they have learned in the classroom to solve actual problems faced by industries. Students work in teams, often under the guidance of both faculty and industry mentors. These projects help students gain practical experience, understand workplace expectations, and improve skills such as problem-solving, communication, and teamwork. They also help build connections with professionals, which can be useful for future job opportunities. Industry projects make learning more meaningful and prepare students for their careers.





b. Guest lectures

A guest lecture is conducted to provide students with valuable insights from an industry expert. The session offered a unique opportunity to gain practical knowledge beyond the regular



curriculum. This event was conducted through association of mechanical engineering (AME) with the assistance of college placement cell. These events are found to be useful for students in discovering different career opportunities. Modern mechanical software tools, such as CAD and CAM programs, have transformed the field of mechanical engineering, enabling precise design, simulation, and manufacturing processes that significantly improve efficiency and innovation

