



“Mechanized Design Application”

Department: Mechanical Engineering

Course Name : Advanced Manufacturing Processes

Final Year of Mechanical Engineering (2015 Course)

Course Code : 402050A

Course Objectives:

1. To analyze and identify applications of special forming processes
2. To analyze and identify applications of advanced joining processes
3. To understand and analyze the basic mechanisms of hybrid non-conventional machining techniques
4. To understand various applications and methods of micro and nano fabrication techniques
5. To understand advanced Additive Manufacturing (AM) technology for innovations in product development
6. To understand various material characterization techniques.

Course Outcomes:

On completion of the course, students will be able to -

CO1: Classify and analyze special forming processes

CO2: Analyze and identify applicability of advanced joining processes

CO3: Understand and analyze the basic mechanisms of hybrid non-conventional machining techniques

CO4: Select appropriate micro and nano fabrication techniques for engineering applications

CO5: Understand and apply various additive manufacturing technology for product development

CO6: Understand material characterization techniques to analyze effects of chemical composition, composition variation, crystal structure, etc.