

MEE309 Manufacturing Technology (2 Units)

- Definition of manufacturing technology, Casting Processes, pattern design and other foundry work, Forming processes (rolling, forging, extrusion, wire drawing, deep drawing, sheet metal operations, etc.), Fabrication processes (welding methods, brazing, soldering, diffusion and adhesive bonding, Mechanical joining), metal removal processes (sawing, turning, milling, drilling, shaping and planing, grinding, broaching, etc), Finishing operations (honing, lapping, polishing, burnishing, etc),
- break even analysis, design process and concurrent engineering, processing of plastics, ceramics and composites, introduction to some modern manufacturing technologies: rapid prototyping, powder metallurgy, lean and agile engineering, flexible manufacturing, computer numerical control machining,
- Micro-electronics processing, Virtual Manufacturing, Just In Time Manufacturing. etc