MEEN 4800/5800
Automotive Manufacturing Processes & Production Systems
Fall 2016


Prerequisite(s): consent of department.

2. Instructor’s Materials for Special Topics

Course objectives: After completing the course, the student will understand key scientific principles of overview of manufacturing processes, production systems, control systems, and computer integrated manufacturing and automation

Topics Covered:
- Overview of Materials and Manufacturing Processes
- Metal Forming Processes
- Metal Casting Processes
- Manufacturing Processes for Plastics, and Composite Materials
- Joining Methods
- Overview of Production Systems
- Automation of Manufacturing Processes and Operations
- Computer Integrated Manufacturing (CIM) Systems
- Product Design and Manufacturing
- Computer Numerical Control and Industrial Robotics
- Overview of Mfg Systems & Automated Assembly Systems
- Fundamentals of Group Technology, Cellular Manufacturing and Flexible Manufacturing Systems
- Manufacturing Metrics and Economics
- Process Control, Inspection Principles and Quality
- Design of Experiments (DOE) for manufacturing Processes
- Manufacturing Process Capability Studies
- Lean Six Sigma in Manufacturing
Instructor: Rama Koganti
Adjunct Professor
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Course format: 3 hours of lecture per week; Sat 9 am – 12 PM
Lecture Romm F175

Office hours: Sat 8 am to 9 am at F175

Grading: Class participation 10
% Homework 30

% Midterm exam I 15%
Midterm exam II 15%
Final exam 15%
Term project 15%

Total 100%

Disabilities accommodation: The University of North Texas complies with Section 504 of the 1973 Rehabilitation Act and with the Americans with Disabilities Act of 1990. The University of North Texas provides academic adjustments and auxiliary aids to individuals with disabilities, as defined under the law. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring accommodation, please see the instructor and/or contact the Office of Disability Accommodation at 940-565-4323 during the first week of class.