The University of Texas at Tyler
Master of Science in Mechanical Engineering

MENG 5324 – Engineering Project Management

Syllabus

Catalog Description:
Project planning; task definition; work breakdown structure; CPM, PERT, Gantt charts; cost analysis; resource allocation; project tracking; information sources; completion projections. Use of commercial project management computer codes. Three hours of lecture per week with integrated computer assignments.

Prerequisites: Graduate Standing.

Credits: (3 hours lecture, 0 hours laboratory per week)


Additional Material: Class handouts

Course Coordinator: Mechanical Engineering Faculty

Topics Covered: (paragraph of topics separated by semicolons)
Alignment of projects with organization strategy; project definition; work breakdown structures; estimating project times and costs; task sequencing; developing a project plan; managing risk; scheduling resources; reducing project duration; progress performance and evaluation; project audit and closure; managing project teams; managing interorganizational relations.

Evaluation Methods: (only items in dark print apply):
1. Examinations / Quizzes
2. Homework
3. Report
4. Computer Programming
5. Project
6. Presentation
7. Course Participation
8. Peer Review

Course Objectives
By the end of the course, students should have a holistic view of projects and their role in the organization, detailed skills in the use of project tools and systems found in practice, and sensitivity to the behavioral issues all project managers must deal with in practice.

To this end, specific course objectives are:
1. To provide experience in using the concepts, techniques, and decision tools available to project managers.
2. To emphasize the importance of system and organizational culture to ensure an integrative project management approach.
3. To enlarge a basic understanding of the importance of work breakdown
structures and networks to planning, scheduling, and controlling projects.
4. To identify different types of organizational structures and the success project managers have had using them.
5. To create an awareness of potential resource conflicts and their importance to meeting project cost and schedule objectives.
6. To demonstrate the importance of strategy and prioritizing projects for effective resource allocation and for balancing a portfolio of projects.
7. To provide a framework for a complete computer-based information system for managing projects.

Prepared By:  ME Faculty  
Date:  7/28/09