

## Master Syllabus

### CAT 2401 - Engineering Technology Project Management

**Division:** Science, Mathematics and Engineering

**Department:** Civil Engineering Technology

**Credit Hour Total:** 3.0

**Lecture Hrs:** 2.0 **Lab Hrs:** 2.0

**Prerequisite(s):** CAT 1241OR CAT 1401

**Date Revised:** February 2016

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#### Course Description:

Practical planning and control of construction and engineering-based projects. Interrelationships and operations of project management and skills required for success in the current engineering environment. Theory, nomenclature and practical application of engineering management using computer software. Two classroom, two lab hours per week. Traditional testing (proctored or in Testing Center) is used in all online sections.

#### General Education Outcomes:

- ▣ Oral Communication Competency
- ▣ Written Communication Competency
- ▣ Critical Thinking/Problem Solving Competency
- ▣ Values/Citizenship/Community Competency
- ▣ Information Literacy Competency
- ▣ Computer Literacy Competency

#### Course Outcomes:

##### Project Management

Develop an understanding of managing an engineering project from beginning concept to successful close-out.

**Assessment Method:** Locally developed exams

**Performance Criteria:**

70% of available points

##### Project Management Software

Use software as a project management tool.

**Assessment Method:** Performance appraisals

**Performance Criteria:**

70% of available points.

##### Project Management Applications

Develop skills from theories to solve problems and apply critical-thinking techniques to solve complex engineering problems.

**Assessment Method:** Performance appraisals

**Performance Criteria:**

70% of available points.

##### Theories of Project Management

Demonstrate basic understanding of key project management concepts.

**Assessment Method:** Locally developed exams

**Performance Criteria:**

70% correct responses on exams.

##### Resource Planning Tools

Develop resource planning tools to manage an engineering project.

**Assessment Method:** Locally developed exams

**Performance Criteria:**

70% correct responses on exams.

#### Outline:

The Project TeamWork BreakdownLabor RelationsJobsite, Cost and Quality Control Changes and PaymentsCloseout