

## Master Syllabus

### CAT 1161 - Introduction to Civil & Architectural Technology

**Division:** Science, Mathematics and Engineering

**Department:** Civil Engineering Technology

**Credit Hour Total:** 2.0

**Lecture Hrs:** 1.0 **Lab Hrs:** 2.0

**Date Revised:** May 2013

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#### Course Description:

An introduction to career fields of Architecture and Civil Engineering Technology. Equivalent to Project Lead the Way CEA. One classroom, two lab hours per week.

#### General Education Outcomes:

- Critical Thinking/Problem Solving Competency

#### Course Outcomes:

##### Careers

Describe careers in architecture, civil engineering and construction management technology.

**Assessment Method:** Locally developed exams

**Performance Criteria:**

Passing with 70% score or better.

##### Planning Concepts

Apply basic project planning concepts.

**Assessment Method:** Locally developed exams

**Performance Criteria:**

Passing with 70% score or better.

##### Principles

Demonstrate principles of architecture, site design, structural engineering and project management.

**Assessment Method:** Locally developed exams

**Performance Criteria:**

Passing with 70% score or better.

#### Outline:

Introduction and concept mapping

Bubble diagrams and floor plans

Architectural styles

Soil mechanics

Mechanical systems

Plumbing systems

Structural analysis

Surveying

Midterm

Energy systems

Major project