

## Master Syllabus

### CAT 1840 - Construction Techniques IV (NCCER Level 3)

**Division:** Science, Mathematics and Engineering

**Department:** Civil Engineering Technology

**Credit Hour Total:** 3.0

**Lecture Hrs:** 1.0 **Lab Hrs:** 4.0

**Other Prerequisite(s):** Approval of Department

**Date Revised:** December 2016

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### Course Description:

Development of advanced skills for construction technicians including site layout, floor and roof systems and metal buildings. An introduction to welding, light equipment operation and project management. May be taken for two semesters. One classroom, four lab hours per week.

### General Education Outcomes:

- Critical Thinking/Problem Solving Competency

### Course Outcomes:

#### Skills of crew leader

Identify the skills of a crew leader.

**Assessment Method:** Locally developed exams

**Performance Criteria:**

70% or better on exams

#### Total station surveying

Use total station surveying equipment in site layout.

**Assessment Method:** Behavioral observations

**Performance Criteria:**

Score at least 70% of available points

**Assessment Method:** Locally developed exams

**Performance Criteria:**

70% or better on exams

#### Floor finishes

Install various floor finishes.

**Assessment Method:** Behavioral observations

**Performance Criteria:**

Score at least 70% of available points

**Assessment Method:** Locally developed exams

**Performance Criteria:**

70% or better on exams

### Outline:

Angular measurements  
Advanced roof systems  
Advanced floor systems  
Advanced wall systems  
Advanced stair systems  
Introduction to light equipment  
Welding  
Metal buildings  
Skills for the crew leader