

## Master Syllabus

### CAT 1820 - Construction Techniques II (NCCER Level 1)

**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:

Construction of concrete structures including forming, placing and finishing. May be taken for two semesters. One classroom, four lab hours per week.

### General Education Outcomes:

- Critical Thinking/Problem Solving Competency

### Course Outcomes:

#### Site layout

Create a site layout plan.

**Assessment Method:** Locally developed exams  
**Performance Criteria:**

70% or better on exams

**Assessment Method:** Portfolios  
**Performance Criteria:**

70% or more of available points

#### Concrete forming

Construct concrete forms and place and finish concrete.

**Assessment Method:** Behavioral observations  
**Performance Criteria:**

70% or more of available points

**Assessment Method:** Locally developed exams  
**Performance Criteria:**

70% or better on exams

#### Portland cement concrete

Describe portland cement concrete use and reinforcing steel applications.

**Assessment Method:** Locally developed exams  
**Performance Criteria:**

70% or better on all exams

### Outline:

Site layout

Introduction to concrete

Introduction to reinforcing steel

Foundations and flatwork

Concrete forms

Reinforcing concrete

Handling and placing concrete

Manufactured forms