APR 215C : CARPENTER VII

Transcript title
Carpenter VII

Credits
3

Grading mode
Standard letter grades

Total contact hours
55

Lecture hours
22

Lab hours
33

Prerequisites
APR 122C.

Course Description
Differentiates types of concrete forms, their applications, and proper assembly for horizontal, vertical, slip, and climbing forms. Covers tilt-up wall-forming process and procedure for erecting and bracing tilt-up wall panels.

Course learning outcomes
1. Apply various concrete applications and formwork.
2. Construct and deconstruct concrete forms for walls, columns, and stairs.
3. Install rebar and various embedments for concrete panels.
4. Identify architectural and decorative concrete treatments.

Content outline
1. Vertical formwork, applications and construction methods for concrete forms, form hardware systems as applied to walls, columns, stairs
2. Slip and climbing forms
3. Tilt-up concrete construction, form process, erection, bracing
4. Installation of rebar and embedments
5. Methods of creating architectural and decorative concrete elements
6. Horizontal formwork, elevated decks, joist, pan, beam and slab, flat slab, composite slab, specialty form systems
7. Roof trusses, construction, installation, sheathing
8. Estimating roof materials, creating a roofing takeoff

Required materials
Textbook is required.