

SUPERVISION-MANAGEMENT (455)

455-103. CM Materials and Methods. (2 Credits)

Explore building components and systems following the CSI MasterFormat divisions. Analyze materials in terms of mechanical properties, manufacturing processes and sustainability. Apply and interact with various materials and common construction techniques. See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=455&num=103>)

455-106. Foundations & Enclosures. (3 Credits)

Investigate various types of foundation, floor, wall and roof systems. Evaluate systems in terms of durability and environmental performance. Develop details to ensure that temperature and moisture are managed and to consider the sequence of construction.

Prerequisites: 455-103 (may be taken concurrently) with a minimum grade of C

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=455&num=106>)

455-109. CM MEP Systems. (3 Credits)

Explore materials, methods and equipment used in mechanical, electrical, plumbing, fire protection, communications and security systems. Learn to interpret codes, drawings and specifications pertinent to MEP systems.

Prerequisites: 475-103 (may be taken concurrently) with a minimum grade of C

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=455&num=109>)

455-112. CM Electronic Drafting. (3 Credits)

Gain an introduction to AutoCAD and Autodesk's Revit software. Explore construction documents for a small residential building according to industry standards. Apply basic AutoCAD commands while learning simple construction techniques. Use building information modeling (BIM) examples in Autodesk's Revit software.

Prerequisites: 455-106 with a minimum grade of C

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=455&num=112>)

455-115. Site Layout and Construction. (2 Credits)

Explore materials, methods and equipment used in site construction. Topics include soil characteristics, survey practices, building layout, excavation and shoring, utility placement, engineered fill and water management. Learn to interpret codes, drawings and specifications pertinent to site construction.

Prerequisites: 455-106 with a minimum grade of C

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=455&num=115>)

455-118. Construction Safety Mgmt. (1 Credit)

Train in Occupational Safety and Health Administration (OSHA) standards. Learn strategies for creating a successful safety management plan. You will receive an OSHA Ten-Hour Construction Safety Card upon successful completion.

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=455&num=118>)

455-124. Construction Scheduling. (2 Credits)

Learn to plan and schedule construction projects by establishing a schedule of activities including consideration of durations and critical paths. Produce Gantt charts to graphically demonstrate construction time and sequence.

Prerequisites: 455-109 with a minimum grade of C or 455-106 with a minimum grade of C

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=455&num=124>)

455-127. Construction Estimating. (2 Credits)

Learn the basics of construction estimating with an emphasis on quantity takeoff procedures for both detailed and conceptual estimates. Explore types of estimates, types of contracts and evaluation of subcontractors. Create detailed estimates from a set of working drawings.

Prerequisites: 455-112 with a minimum grade of C and 455-115 with a minimum grade of C

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=455&num=127>)

455-130. Construction Financial Mgmt. (2 Credits)

Learn the principles of financial management used by construction companies, including budget management and cash flow. Learn about the construction manager's role in project profitability. Analyze construction economic factors through cost, schedule and productivity management. Explore project cash flow, billing, budget status reports, true profit and value engineering studies.

Prerequisites: 101-105 with a minimum grade of C

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=455&num=130>)

455-133. Construction Contracts & Law. (2 Credits)

Explore the legal aspects of construction. Topics include types of contracts, contract procedures and documents, responsibilities of contractors and owners, reporting requirements, insurance, bonds and change order management.

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=455&num=133>)

455-136. Construction Project Mgmt. (2 Credits)

Learn to manage the day-to-day activities of a construction project with an emphasis on the importance of communication skills. Topics include progress meetings, submittals, field contracts, requests for information (RFIs), change orders and project inspection.

Prerequisites: 455-127 with a minimum grade of C and 455-124 with a minimum grade of C and 455-112 with a minimum grade of C and 455-130 (may be taken concurrently) with a minimum grade of C

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=455&num=136>)

455-139. Computer Integrated Const. (2 Credits)

Gain an introduction to database technologies as a construction management tool. Prepare estimates, create schedules and perform project controls using leading construction software.

Prerequisites: 455-127 with a minimum grade of C and 455-124 with a minimum grade of C and 455-112 with a minimum grade of C

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=455&num=139>)

455-150. Internship - CM. (1 Credit)

Receive on-the-job experience in a construction management role while working for a residential, commercial or industrial contractor, developer or consultant. You are responsible for securing your own employment with assistance from the college. If you are currently employed in the construction industry, you may receive credit for prior learning.

Prerequisites: (Approval of Co-op Ed Office)

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=455&num=150>)

455-455. Transition to Trainer. (0.8 Credits)

This required eight-hour course provides guidance for soon to be journey level workers to be effective job site trainers allowing them to pass on their knowledge and skills to future apprentices.

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=455&num=455>)