

**CONSTRUCTION & ENERGY MANAGEMENT**

**CEM 151 Construction Fundamentals: Principles and Practices**

Covers the sequence of events for residential construction from both an owner's and a builder's point of view. Recommended Preparation: Eligibility for MATH 154.

Section	Days	Times	Units	Instructor	Room
98053	M	6:00PM-9:05PM	3.00	C.Mornard	804

For hands-on practice in skills taught in CEM 151, enroll in CEM 151L as well.

**CEM 151L Construction Fundamentals: Principles and Practices Lab**

Covers the methodology and techniques for residential construction from a skills and vocational point of view. Corequisite: CEM 151. Recommended Preparation: Eligibility for MATH 154.

Section	Days	Times	Units	Instructor	Room
98056	S	11:20AM-2:25PM	1.00	M.Van Meter	WatD101/D104
98055	T	2:00PM-5:05PM	1.00	C.Mornard	WatD101/D104

**CEM 157 Construction Law**

Introduces complex legal principles and issues confronted in the construction profession in both the public and private sectors. Recommended Preparation: Eligibility for MATH 154.

Section	Days	Times	Units	Instructor	Room
98058	TH	6:00PM-9:05PM	3.00	J.Hall	806

**CEM 160 Construction Management**

Introduces construction management principles, practices, and associations. Recommended Preparation: Eligibility for MATH 154.

Section	Days	Times	Units	Instructor	Room
99517	T	6:00PM-9:05PM	3.00	Mornard/Narciso/Soik	806

**CEM 161 Construction Business and Related Topics**

Introduces business fundamentals, principles, practices, procedures, and topics related to construction. Recommended Preparation: Eligibility for MATH 154.

Section	Days	Times	Units	Instructor	Room
98059	W	6:00PM-9:05PM	3.00	C.Mornard	804

**CEM 162HR Home Energy Rating System**

Introduces the assessment process for compliance with adopted energy related standards and validates the energy efficiency of buildings through testing by scientific instruments. Prerequisite: CEM 162BS.

Section	Days	Times	Units	Instructor	Room
98061	T	6:00PM-8:20PM	1.00	M.Van Meter	1304

Meets 7 weeks 9/19-10/31.

**CEM 162LD Green Building and L.E.E.D.**

Introduces the US Green Building Council's Leadership in Energy and Environmental Design (LEED) building rating system as well as professional credentialing as they relate to construction, operation, and maintenance. Prerequisites: CEM 151, CEM 151L. Recommended Preparation: Eligibility for MATH 154.

Section	Days	Times	Units	Instructor	Room
98062	TH	6:00PM-9:05PM	3.00	M.Soik	WatC108

**CEM 162ST Solar Thermal Design and Installation**

Introduces solar thermal system requirements, design and configurations, installation techniques, operation, and their application in residential and commercial construction. National certification exam from NABCEP is an option. Prerequisites: CEM 151 and CEM 151L. Recommended Preparation: Eligibility for MATH 154.

Section	Days	Times	Units	Instructor	Room
98064	M	6:00PM-9:05PM	3.00	T.Umstead	WatD101

**CEM 169A Fundamentals of the 2015 Uniform Mechanical Code**

Provides training in the requirements of the 2015 Uniform Mechanical Code, including mechanical systems for heating and cooling systems, combustion air, venting, ducting, refrigeration, and commercial kitchen vent hood and is designed for contractors, architects, designers, and those seeking IAPMO Certification. Recommended Preparation: Eligibility for MATH 154.

Section	Days	Times	Units	Instructor	Room
99518	W	6:00PM-9:05PM	3.00	J.Heaney	711

**CEM 175C 2014 National Electrical Code (N.E.C.) Commercial**

Prepares students theoretically and practically for energy efficiency lighting and for optimizing building performance through controls, devices, and monitoring equipment.

Section	Days	Times	Units	Instructor	Room
99519	TH	6:00PM-9:05PM	3.00	S.Livingston	825

**CEM 178A Residential Construction Skills 1: "Front End"**

Introduces "front end" construction: foundation layout, framing fundamentals, rough plumbing, rough HVAC, and rough electrical basics typical of residential construction. Recommended Preparation: Eligibility for MATH 154.

Section	Days	Times	Units	Instructor	Room
98069	S	10:00AM-11:05AM	3.00	M.Van Meter	WatD101/D104
&	S	11:20AM-2:25PM		M.Van Meter	WatD101/D104