

**CONSTRUCTION & ENERGY MANAGEMENTT**

**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
1	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 or CEM 151EL, CEM 151PL, and CEM 151FC.

**CEM 151EL Electrical Basics for Construction Technology**

Prepares students theoretically and practically in electrical basics for construction technology.

Section	Days	Times	Units	Instructor	Room
1	S	9:00AM-1:15PM	1.00	M.Van Meter	WatD101

Meets 4 weeks 2/3, 2/10, 2/24, and 3/3.

**CEM 151FC Basic Finish Carpentry**

Prepares students theoretically and practically for the basic finish carpentry skills necessary for residential construction.

Section	Days	Times	Units	Instructor	Room
1	S	9:00AM-12:20PM	1.00	M.Van Meter	WatD101
&	S	12:30PM-3:50PM		M.Van Meter	WatD101

Meets 5 weeks 4/28-5/26.

**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
1	S	9:00AM-1:15PM	1.00	M.Van Meter	WatD101

Meets 12 weeks 2/3, 2/10, 2/24, 3/3, 3/17, 3/24, 4/7, 4/14, 4/28, 5/5, 5/12, and 5/19.

Section	Days	Times	Units	Instructor	Room
2	T	2:00PM-5:05PM	1.00	C.Mornard	WatD101

**CEM 151PL Plumbing Basics for Construction Technology**

Prepares students theoretically and practically in plumbing basics for construction technology.

Section	Days	Times	Units	Instructor	Room
1	S	9:00AM-1:15PM	1.00	M.Van Meter	WatD101

Meets 4 weeks 3/17-4/14. Holiday 3/31.

**CEM 154 Construction Estimating**

Covers basic methods of construction estimating and cost preparation for material, labor, overhead, and equipment costs and its relationship to project budgets and management. Recommended Preparation: Eligibility for MATH 154.

Section	Days	Times	Units	Instructor	Room
1	T	6:00PM-9:05PM	3.00	C.Mornard/C.Day	806

**CEM 155 Blueprint Reading**

Teaches the analysis and interpretation of construction drawings. Recommended Preparation: Eligibility for MATH 154.

Section	Days	Times	Units	Instructor	Room
1	TH	6:00PM-9:05PM	3.00	R.Woodman	HORT5005

**CEM 162 Sustainable Buildings, Home Performance, and the Environment**

Introduces sustainable building resources and applications, LEED certification requirements, home performance concepts, California energy codes, green building, and their relationships to the environment and residential construction. Recommended Preparation: Eligibility for MATH 154.

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

**CEM 162SP Solar Photovoltaic Design and Installation**

Introduces solar photovoltaic system requirements, design and configurations, installation techniques, and their application in residential and commercial construction. Recommended Preparation: Eligibility for MATH 154.

Section	Days	Times	Units	Instructor	Room
1	M	6:00PM-9:05PM	3.00	B.Valentine	WatD101

**CEM 168A Fundamentals of the 2012 Uniform Plumbing Code**

Provides training in the requirements of the 2012 Uniform Plumbing Code including plumbing systems for waste, indirect and special wastes, venting, fresh water, gasses, fuels, solar, fire protection, and water heaters and is designed for contractors, architects, designers, and those seeking IAPMO Certification. Recommended Preparation: Eligibility for MATH 154.

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

**CEM 175R 2014 National Electrical Code (NEC) Residential**

Provides training in wiring systems as specified by the 2014 National Electric Code (NEC) for residential construction.

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