

CONSTRUCTION AND 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
58009	M	06:00PM-09:10PM	3.00	C.Mornard	825

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
58011	T	02:00PM-05:10PM	1.00	V.Milrod	1304
58010	S	11:20AM-02:30PM	1.00	C.Mornard	1304

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
58012	W	06:00PM-09:10PM	4.00	C.Mornard	828
& Arr.	Arr.			C.Mornard	1400

+ 3 hr 10 min open computer lab per week.

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
58013	T	06:00PM-09:10PM	3.00	J.Hall	828

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
58014	TH	06:00PM-09:10PM	4.00	C.Mornard	828
& Arr.	Arr.			C.Mornard	1400

+ 3 hr 10 min open computer lab per week.

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
59624	T	06:00PM-08:10PM	3.00	Sonsino/Murphy	1301
&	T	08:10PM-10:15PM		L.Sonsino	1304
& Arr.	Arr.			L.Sonsino	1304

+ 1 hr 5 min arranged per week in computer lab.

CEM 163 Fundamentals of Renewable Energy Systems

Introduces renewable and alternative energy sources including grid interactive, stand-alone systems, wind, active and passive solar energy collection, site evaluation, design analysis of various systems and materials and methods of construction. Recommended preparation: Eligibility for MATH 154.

Section	Days	Times	Units	Instructor	Room
58015	TH	06:00PM-09:10PM	3.00	J.Jordan Jr.	615

CEM 167 Fundamentals of the International Building Code II

Provides training in the non-structural design portions of the International Building Code, including occupancy classification, types of construction and exiting. Repeatability: May be taken 2 times. Recommended Preparation: Eligibility for MATH 154.

Section	Days	Times	Units	Instructor	Room
58016	M	06:00PM-09:10PM	3.00	J.Heaney	711

CEM 169 Fundamentals of the Uniform Mechanical Code

Provides training in the requirements of the 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 ICBO Certification. Repeatability: May be taken 2 times. Recommended Preparation: Eligibility for MATH 154.

Section	Days	Times	Units	Instructor	Room
59906	W	06:00PM-09:10PM	3.00	J.Heaney	711

CEM 175A Electric Code and Materials 1: Residential

Provides training in the selection and installation of various electrical wiring systems as specified by the National Electric Code (NEC) for residential construction. Repeatability: May be taken 2 times. Recommended Preparation: Eligibility for MATH 154.

Section	Days	Times	Units	Instructor	Room
58018	TH	06:00PM-09:10PM	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 construct Recommended Preparation: Eligibility for MATH 154.

Section	Days	Times	Units	Instructor	Room
58019	S	09:00AM-11:10AM	3.00	C.Mornard	1301
&	S	11:20AM-02:30PM		C.Mornard	1304