

VILLANOVA UNIVERSITY
DEPARTMENT OF CIVIL & ENVIRONMENTAL ENGINEERING
PLANNED GRADUATE COURSE OFFERINGS
STRUCTURAL ENGINEERING DEGREE PROGRAM

	Required Courses	Core Electives	Other Electives *
Spring 2010		CEE 8436: Prestressed Concrete CEE 8442: Advanced Structural Mechanics	CEE 7002: Management for Engineers CEE 8103: Geosynthetics
Summer 2010		CEE 8438: Structural Connections	CEE 8206: Construction Project Management CEE 8311: Environmental Geology
Fall 2010	CEE 7412: Modern Structural Analysis CEE 8437: Structural Steel	CEE 8440: Advanced Cementitious Materials	CEE 7001: Business Basics for Engineers
Spring 2011	CEE 8434: Structural Dynamics	CEE 8420: Composites for Infrastructure CEE 8436: Prestressed Concrete	CEE 7002: Management for Engineers CEE 8105: Advanced Soil Mechanics
Summer 2011		CEE 7401: Wood & Masonry Structures CEE 7402: Forensic Engineering	CEE 8207: Sustainable Transportation Systems CEE 8311: Environmental Geology
Fall 2011	CEE 7412: Modern Structural Analysis CEE 8439: Civil Engineering Materials	CEE 7400: Design of Bridges CEE 8102: Foundation Engineering	CEE 7001: Business Basics for Engineers CEE 7303: Pavement Design & Dynamic Response
Spring 2012	CEE 8435: Reinforced Concrete	CEE 8442: Advanced Structural Mechanics CEE 8424: Seismic Design & Retrofit	CEE 7002: Management for Engineers CEE 8103: Geosynthetics
Summer 2012		CEE 7403: Green Building Design CEE 8438: Structural Connections	CEE 8206: Construction Project Management CEE 8311: Environmental Geology
Fall 2012	CEE 7412: Modern Structural Analysis CEE 8437: Structural Steel	CEE 8440: Advanced Cementitious Materials	CEE 7001: Business Basics for Engineers
Spring 2013	CEE 8434: Structural Dynamics	CEE 8420: Composites for Infrastructure CEE 8436: Prestressed Concrete	CEE 7002: Management for Engineers CEE 8105: Advanced Soil Mechanics
Summer 2013		CEE 7401: Wood & Masonry Structures CEE 7402: Forensic Engineering	CEE 8207: Sustainable Transportation Systems CEE 8311: Environmental Geology
Fall 2013	CEE 7412: Modern Structural Analysis CEE 8439: Civil Engineering Materials	CEE 7400: Design of Bridges CEE 8102: Foundation Engineering	CEE 7001: Business Basics for Engineers CEE 7303: Pavement Design & Dynamic Response
Spring 2014	CEE 8435: Reinforced Concrete	CEE 8442: Advanced Structural Mechanics CEE 8424: Seismic Design & Retrofit	CEE 7002: Management for Engineers CEE 8103: Geosynthetics
Summer 2014		CEE 7403: Green Building Design CEE 8438: Structural Connections	CEE 8206: Construction Project Management CEE 8311: Environmental Geology
Fall 2014	CEE 7412: Modern Structural Analysis CEE 8437: Structural Steel	CEE 8440: Advanced Cementitious Materials	CEE 7001: Business Basics for Engineers
Spring 2015	CEE 8434: Structural Dynamics	CEE 8420: Composites for Infrastructure CEE 8436: Prestressed Concrete	CEE 7002: Management for Engineers CEE 8105: Advanced Soil Mechanics
Summer 2015		CEE 7401: Wood & Masonry Structures CEE 7402: Forensic Engineering	CEE 8207: Sustainable Transportation Systems CEE 8311: Environmental Geology

* Selected courses in Mathematics and other Engineering disciplines may be counted with consent of the advisor.

Students entering the program in Summer 2010 or later must complete ten courses including all five of the required courses identified below, as well as five electives:

REQUIRED COURSES:

- 1) CEE 7412: Modern Structural Analysis
- 2) CEE 8434: Structural Dynamics
- 3) CEE 8435: Reinforced Concrete
- 4) CEE 8436: Structural Steel
- 5) CEE 8439: Civil Engineering Materials

Students entering the program prior to Summer 2010 must complete ten courses and must satisfy the following five requirements:

REQUIRED COURSES:

- 1) CEE 8434: Structural Dynamics
- 2) CEE 8435: Reinforced Concrete OR CEE 8436: Structural Steel
- 3) One additional course from the following list of Design courses:
 - CEE 7400: Design of Bridges
 - CEE 7401: Wood & Masonry Structures
 - CEE 8435: Reinforced Concrete
 - CEE 8436: Prestressed Concrete
 - CEE 8437: Structural Steel
 - CEE 8438: Structural Connections
- 4) CEE 7412: Modern Structural Analysis OR CEE 8442: Advanced Structural Mechanics OR CEE 8443: Advanced Structural Analysis
- 5) One additional course from the following list of Mechanics/Analysis courses:
 - CEE 7400: Design of Bridges
 - CEE 7412: Modern Structural Analysis
 - CEE 8420: Composites for Infrastructure
 - CEE 8442: Advanced Structural Mechanics
 - CEE 8443: Advanced Structural Analysis

Note that no individual course may be counted toward satisfying more than a single requirement above.