**Structural Engineering**

**Degree Requirements**

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| **Master of Science** | **Ph.D.** |
| Non-Thesis: 30 cr. hrs. course work Thesis: 21 cr. hrs. course work 9 cr. hrs. research Thesis Oral thesis defense | 90 cr. hrs. (min)Preliminary oral examDissertationOral dissertation defense |

**Course Offerings**

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| **Fall Semester** | **Spring Semester** |
| CE 57000 *Adv. Structural Mechanics*CE 57300 *Structural Dynamics*CE 57600 *Adv. Reinforced Concrete Design*CE 58400 *Foundation Analysis and Design*CE 59100 *Adv. Structural Steel Design*CE 67600 *Behavior of Reinforced Concrete Members* | CE 57100 *Earthquake Engineering*CE 57200 *Prestressed Concrete Design*CE 57900 *Structural Stability*CE 59500 *Finite Elements in Elasticity* |

Note: CE69100 *Seminar – Structures* is required every semester of attendance

**Offered Occasionally:**

CE 57500 *Experimental Methods in Structural Engineering*

CE 57700 *Analysis of Plates and Shells*

CE 57800 *Plasticity in Structural Engineering*

CE 59200 *Plastic Design of Steel Structures*

CE 67100 *Behavior of Metal Structures*

CE 67300 *Advanced Structural Dynamics*

CE 67500 *Finite Element Analysis*

CE 69700 *Bridge Engineering*

CE 69700 *Seismic Design of Steel Structures*

**Other Courses to Consider**

CE 53000 *Properties and Production of Concrete*

CE 58000 *Advanced Geotechnical Engineering*

CE 58300 *Slopes and Retaining Structures*

A&AE 55400 *Fatigue of Structures and Materials*

A&AE 55500 *Mechanics of Composite Materials*

A&AE 55800 *Finite Element Methods in Aerospace Structures*

A&AE 65400 *Fracture Mechanics*