

ONLINE - STRUCTURAL DESIGN AND CONSTRUCTION

Administered by: Department of Civil and Environmental Engineering
Graduate Advisor: Taha F. Marhaba
(973) 642-4599,
Marhaba@njit.edu
Degrees Offered: Master of Science in Civil Engineering

Master of Science in Civil Engineering

Intended for engineering students who want broad technical competence in structural engineering and construction.

Admission Requirements

Students are expected to have an undergraduate degree in engineering or its equivalent.

Bridge Program - Students who lack an appropriate background are asked to make up deficiencies by taking a program of courses that is designed in consultation with the graduate advisor. These courses are taken in addition to the degree requirements. Please note that the prerequisites for bridge courses must also be met.

CE 333	Reinforced Concrete Design
CE 341	Soil Mechanics
CE 341A	Soil Mechanics Laboratory
CE 432	Structural Steel Design
CIS 101	Computer Programming and Problem Solving
MATH 322	Differential Equations
MECH 236	Dynamics

Degree Requirements

A minimum of 30 degree credits, not including any bridge courses, is required. Candidates must consult with the online graduate advisor for advising. Students must attain a minimum GPA of 3.0 in the core courses listed below, and a minimum overall GPA of 3.0.

Structural Core Courses

9 credits as follows:

CE 632	Prestressed Concrete Design (SUMMER)
CE 634	Structural Dynamics (SPRING)
CE 636	Stability of Structures (FALL)

Construction Engineering Core Courses

9 credits as follows:

CE 610	Construction Management
CE 615	Infrastructure and Facilities Remediation
CE 616	Construction Cost Estimating

General Technical Electives Courses

6 credits from below:

CE 611	Project Planning and Control
CE 620	Open Channel Flow
CE 617	Historic Preservation
CE 621	Hydrology
CE 711	Methods Improvement in Construction
TRAN 603	Intro to Urban Transportation Planning
TRAN 752	Traffic Control

Management/Leadership Electives

6 credits from below:

EM 602	Management Science
EM 632	Legal Aspects in Construction
HRM 601	Organizational Behavior