

CIVIL ENGINEERING TECHNOLOGY

PROGRAM OVERVIEW FOR EMPLOYERS

The Civil Engineering Technology program emphasizes the study and application of traditional fields within civil engineering and construction management including construction techniques and equipment, surveying, hydraulics, structural steel and concrete design, soil mechanics/analysis, and environmental controls/treatment. The curriculum includes an introduction to civil engineering design concepts, construction management and principles, extensive laboratory activities and computer applications. The curriculum provides a solid foundation in civil design, construction, and environmental studies. Graduates are prepared to perform particularly well in the application of existing technologies to most aspects of the civil engineering field.

Degree(s) Awarded

Bachelor of Science Degree (5 year)

Enrollment

Approximately 220 students enrolled

Cooperative Education Component

Students are required to complete 5 co-op work assignments.

Students are available for two 6-month and one 3-month assignments.

Salary Information (Avg/Range)

Co-op:	\$13.14	\$8.50 - \$25.00
BS:	\$45,000	\$31,200 - \$70,000

Equipment & Facilities

In LEED building state-of-the-art equipment in laboratories for soil mechanics, environmental controls, hydraulics, and mechanics.

Use of PCs & and technical software to meet computer literacy requirements.

Training on CAD equipment & software.

Concentrations & Specialization

Water Resources, Building and Heavy Construction, Construction Management, Environmental Controls, Structures.

Accreditation

The Civil Engineering Technology program is accredited by the Technology Accreditation Commission of ABET, Inc., 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone 410-347-7700.

Student Skills & Capabilities

- Problem Solving
- Excel
- AutoCAD
- Drafting
- Interpersonal Communication
- STAAD
- Civil 3D

Functions

Field and/or office experiences: civil engineering design, inspection, modeling/drafting, estimating, report writing, surveying, scheduling, data collection and analysis, vendor and subcontractor liaison, quantity take-offs, waste/wastewater/soils and other site planning projects, field supervision.

Civil Engineering Technology

First and Second Years:

Introduction to CET
Engineering Graphics w/CAD
Civil Engineering Graphics
Materials of Construction
Precalc
College Physics I, II, III, Labs
Writing
Introduction to Statics
Surveying I and II
Effective Technical Communication
Strength of Materials
Elementary Soil Mechanics
Elements of Building Construction
Calculus for Engineering Tech
Liberal Arts
Elementary Structures
Problem Solving & Communication w/computers
Wellness Education
First Year Enrichment

Technical Electives:

Water Resources

Stormwater Management
Hydraulic Structures
Groundwater Hydraulics

Environmental Controls

Design of Water Treatment Facilities
Land Use Planning
Design of Wastewater Treatment Facilities
Resource Recovery/Waste Management

Construction Management

Labor Relations
Cost Estimating
Construction Project Management
Contracts and Specifications

Course Sequence BS degree

Third through Fifth Years:

Professional Principles & Practice
Hydraulics, Lab
Structural Computer Applications
Land Dev. Computer Applications
Differential Equations for Engineering Tech
Applied Mechanics of Materials
Chemistry, Lab
Co-op Preparation Course
Water & Wastewater Transport Systems
Structural Analysis and Design
Structural Loads and Systems
Chemistry of Water and Wastewater
Principles of Treatment of Water and Sewage
Soil Mechanics and Foundations
Engineering Economics
Transportation Engineering
Electronic Measurement
Principles of Dynamics
Technical and Free Electives
Liberal Arts
Intro to Civil Engineering Technology
Math Elective
Cooperative Education
Structural Design – Steel or Concrete

Structures

Timber Design
Reinforced Concrete Design
Structural Steel Design

Building and Heavy Construction

Construction Equipment
Construction Safety
Pavement Design
Mechanical Equipment

Other Electives

Data Analysis
Applied Thermodynamics
372 Environmental Geology, Lab

Selected Employers of Civil Engineering Technology Co-op & Graduating Students:

Arnold Carmichael & Associates, Bergmann Associates, Clark Patterson Lee, Clough, Harbour & Associates, CME Associates, Environmental Engineering Design and Analysis, Erdmann & Anthony & Assoc., Granite Construction Northeast, Hensel Phelps Construction, J.A. Jones Construction, Kiewitt Construction Co., LaBella Associates, Le Chase Construction, MRB Group, Malcolm Pirnie, Monroe County Engineering, National Fuel, NYS DOT, Schnabel Engineering, Sear Brown Associates, Stormwater Management, Structural Design, The Pike Co., Inc., Town of Brighton DPW, Town of Henrietta, XO Communications, Wegmans Food & Market, Whiting-Turner Construction Co., William Schutt & Associates

Contact Us:

We appreciate your interest in hiring RIT co-op, graduating students or alumni. We will make every effort to make your recruiting endeavor a success. Call our office and ask to speak with Lynne Perry, the program coordinator who works with the Civil Engineering Technology program. For your convenience, you can access information and services through our web site at <http://www.rit.edu/recruit>.

Lynne Perry, Program Coordinator

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