

CIVIL ENGINEERING TECHNOLOGY

<http://www.rit.edu/~704www/>

PROGRAM OVERVIEW FOR EMPLOYERS

The Civil Engineering Technology program emphasizes the study and application of traditional technologies within the civil engineering field 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 construction management and principles, extensive laboratory activities and computer applications and provides a solid foundation in both 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 250 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:	\$13.38	\$8.50 - \$33.00
BS:	\$48,000	\$37,440 - \$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 the Accreditation Board for Engineering and Technology, 1 Market Place, Suite 1050, Baltimore, MD 21202, telephone 410-347-7700.

Student Skills & Capabilities

- Problem Solving
- Excel
- Word
- AutoCAD
- Primavera
- Drafting
- Interpersonal Communication
- Land Desk
- Timberline
- STAAD

Civil Engineering Technology

Course Sequence BS degree

First and Second Years:

Introduction to CET
Engineering Graphics w/CAD
Civil Engineering Graphics
Materials of Construction
Precalc
College Physics 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
Plane Surveying
Route Surveying
Differential Equations for Engineering Tech

Technical Electives:

Water Resources
Environmental Controls
Construction Management

Third through Fifth Years:

Calculus for Technologists II
Hydraulics, Lab
Structural Computer Applications
Land Dev. Computer Applications
Differential Equations for Engineering Tech
Applied Mechanics of Materials
Chemistry
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

Structures
Building and Heavy Construction
Other Electives

The program's requirements are based on an entire baccalaureate degree. Approximately half of the courses are in mathematics, physics, chemistry, communications and liberal arts. The core of the program consists of 106 credits of specified technical courses. These courses cover the disciplines of electricity, electronics, microprocessors, computer programming, mechanics, materials, engineering graphics, structures, hydraulics, water resources, water and waste treatment, geotechnical engineering, and economic analysis. Once a student completes the core, he/she may select a group of elective courses in a particular discipline. The student may use this concentration to tailor the degree to meet specific employment objectives. The remaining 90 credits must be appropriate technical mathematics, science and general education courses. This portion of the curriculum accommodates the diverse backgrounds of students entering the program.

Employers of Civil Engineering Technology Co-op and Graduating Students:

Allied Builders, Arnold Carmichael & Associates, Bergmann Associates, Clark Patterson, Clough, Harbour & Associates, CME Associates, DiDonato Associates, Erdmann & Anthony & Assoc., Fisher Associates, Hensel Phelps Construction, J.A. Jones Construction, John P. Picone Engineering, Joseph B. Fay Co., Kiewitt Construction Co., LaBella Associates, Le Chase Construction, MRB Group, Malcolm Pirnie, Monroe County Engineering, National Fuel, Niagara Mohawk, NYS DOT, Schnabel Engineering, Sear Brown Associates, Stetson-Harza, The Pike Co., Inc., Town of Brighton DPW, Town of Henrietta, XO Communications, William Schutt & Associates

Functions:

Field and/or office experiences: inspection, design/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.

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 George Crowley, 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>.

George E. Crowley, Program Coordinator, 585.475.5470, gcc0889@rit.edu
Office of Cooperative Education and Career Services
RIT . Bausch & Lomb Center . 57 Lomb Memorial Drive . Rochester NY 14623-5603