

## Civil Engineering Technology

As a civil engineering technology graduate, you will engage in that branch of engineering which specializes in public works, including structures of all types, highways, bridges and tunnels, transportation including airports and rapid transit systems, environmental considerations including water supply, sewerage and drainage, urban development projects and construction in general.

As a civil engineering technician with an associate degree, you will use surveying equipment, apparatus designed to test construction materials such as concrete, soil and rock, with a heavy emphasis on computer applications. You will make use of this equipment to perform interesting tasks such as designing structural steel and reinforced concrete elements, testing and analyzing soil and rock samples or other engineering materials, preparing drawings, laying out highway curves and right-of-way, and analyzing hydraulic systems for water supply and sewerage disposal.

As a graduate with a baccalaureate degree you will be working as a civil engineering technologist using sophisticated structural, hydraulic, route surveying and other software to design steel and reinforced concrete structures, to design water supply and sewerage facilities, and to oversee and maintain all sorts of public works for the day to day benefit of the public. You will be eligible in New York State and many other states to take the professional examination for licensure as a professional engineer.



## Associate Degree or Civil Engineering Technician

As a graduate with a two year degree such as an Associate in Applied Science (A.A.S.) degree, you will be employed as a civil engineering technician. These degree programs are available at many two year colleges and community colleges near your home or at a college of technology in your region.

To enter an A.A.S. program you should plan to take:

Sequential Mathematics I and II

Four years of English

One year of laboratory science.

As you consider A.A.S. programs you should see if they are accredited by the Technology Accreditation Commission of the Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC of ABET).

Look for more information on ABET at [www.abet.org](http://www.abet.org).



## **Many interesting jobs are available to technicians!**

A civil engineering technician has many very interesting career paths available to them. These career paths might include one of the following job titles:

Civil Engineering Technician - Structural Designer
Civil Engineering Technician - Surveyor
Civil Engineering Technician - Field Inspector
Civil Engineering Technician - Treatment Plant Operator
Civil Engineering Technician - Concrete Plant Inspector
Civil Engineering Technician - Hydraulics Analyst/Designer

And many other fine jobs.

## **Baccalaureate degree or civil engineering technologist.**

As a graduate with a Bachelor of Science or Bachelor of Technology degree, you will be called a civil engineering technologist. These programs are available at several four year colleges, either as combined four year degree programs or as upper division programs. Either program allows transfer from a community or two year technology college.

Preparation for an baccalaureate degree would include the following high school subjects:

Mathematics I, II and III  
Four years of English  
Two years of laboratory science.

Many of these programs are accredited by the Technology Accreditation Commission of the Accreditation Commission of the Accreditation Commission for Engineering and Technology (TAC of ABET), which can be found at [www.abet.org](http://www.abet.org).

## **Many exciting careers are available to civil engineering technologists!**

**Civil Engineering technologists have been hired into the following careers:**

Construction Engineer
Structural Engineer
Environmental Engineer
Hydraulics Engineer
Transportation Engineer