

## The Difference between Engineering Technology and Engineering:

### An undergraduate engineering technology program at SUNY Canton:

- ◆ Introduces and integrates math and sciences as needed in the curricula
- ◆ Contains technical courses that occur in virtually every quarter of the program
- ◆ Has an intensive laboratory and applications focus
- ◆ Has a moderate emphasis on theory and the design process
- ◆ Appeals to the student who learns best in an experientially based (hands-on) environment
- ◆ Culminates in a senior project experience

### Undergraduate engineering programs:

- ◆ Begin with an emphasis on calculus and calculus-based sciences
- ◆ Have engineering courses later in the curricula that build on the calculus/sciences base
- ◆ Integrate design and applications into engineering lecture and laboratory course work
- ◆ Have a stronger emphasis on theory and engineering design
- ◆ Culminate in a major senior design experience



## For More Information

Admissions & Financial Aid	1-800-388-7123 or 315-386-7123
Athletics & Recreation	315-386-7335
Educational Opportunity Program	315-386-7226
Accommodative Services	315-386-7121
TDD Information Line	315-386-7901
Orientation Programs	315-386-7018

Cultivating the minds of tomorrow as Northern New York's four and two-year college for technology, health, management and public service.



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## Alternative and Renewable Energy Systems Bachelor of Technology

*"If you can explain why there is pollution in the world, you should be a student in this program."*

—Assistant Professor Michael J. Newtown,  
ARES Director



### 🌿 Mission of the Alternative and Renewable Energy Systems:

Our mission is to provide research and education in alternative and renewable energy technologies, focusing on practical energy conversion to meet the evolving demand for sustainable development.

### 🌿 Innovative New Technologies:

Research and learn alternative and renewable energy technologies focusing on practical energy conversion to meet the constantly evolving demand for sustainable development. Students research solutions that will replace conventional energy systems. Each student's research has the potential to help solve the global energy problem.

Students will embark upon research-driven projects on the college's anaerobic digester, which will convert farm-grade waste from the teRiele Brothers' Farm in Canton to create heat and power for the College and the teRieles' use. It will also reduce the farm's environmental impact on its surroundings.

### 🌿 Great career opportunities:

Qualified graduates from this program stand to be in a prime position for high-demand careers around the world.

They will ultimately work with architects and engineers to create viable renewable energy solutions for commercial and residential facilities. They will be looking at all different forms of energy and combining them to come up with sustainable, environmentally-friendly solutions.

- ◆ Designers for engineering firms
- ◆ Manufacturers' representatives
- ◆ Field managers for contracting firms
- ◆ Contractors
- ◆ Sales representatives

### 🌿 Examples of alternative energy systems include:

- ◆ Wind turbine or wind power
- ◆ Hydro-electric
- ◆ Fuel cell technologies
- ◆ Geothermal power
- ◆ Solar power
- ◆ Biofuel and biodiesel applications

### 🌿 Who's Enrolling?

About 50 percent of current students joined the program because they are in-

terested in conserving the environment and natural resources.

The other half of ARES students wanted to apply their technical backgrounds to the emerging global market in renewable energy technologies.

### 🌿 Green Light for Green Standards:

Recent state and federal laws are creating a need for trained professionals to meet "green" standards in buildings. According to industry professionals and noted educational leaders, this will spur a growing demand for qualified technologists to work hand-in-hand with engineers to bring the practical applications of alternative energy to life.

### 🌿 Join the Solar Boat Team

Students build a solar-rechargeable battery-powered racing boat to compete against colleges and universities from across the nation.

