



Associate in Applied Science Degree

Engineering Technology (Construction)

Wentworth Institute of Technology and The Sheet Metal Workers-Local 17

Through this degree program, you will earn an Associate of Applied Science in Engineering Technology. Graduates of the Apprenticeship Training will earn 27 credits towards this degree program. The balance of 33 credits of general elective and technical courses will be offered over a 2-year period. Graduates may continue their education at Wentworth upon the completion of this Associate Degree. Possible programs of study include a Bachelor in Facility Management, or Bachelor in Project Management.

Program Requirements: Graduates of CORE Apprenticeship Training will earn **27 credits** for the following courses:

- Applied Math (1 credit)
- Environmental Health & Safety (2 credits)
- Basic Electricity (1 credit)
- Blue Print Reading & Building Codes (3 credits)
- HVAC Installation Techniques (1 credit)
- HVAC Fundamentals (2 credits)
- Heat Loads & Psychrometrics (2 credits)
- Sheet Metal Layout (3 credits)
- Sheet Metal Fabrication (4 credits)
- Technical Drawing (4 credits)
- Field Experience (4 credits)

Application Requirements:

- Online application
- Official high school or GED transcript
- Official transcript(s) from any college(s) you have attended
- Copy of Union Membership card
- Letter of verification from training director
- Online math placement test, if applicable

Curriculum Requirements:

Semester One

English Composition
Math A

Semester Three

Construction Methods
Math C

Semester Five

Basic Building Services
Economics

Semester Two

Literature and Composition
Math B

Semester Four

Physics A
Construction Graphics

Degree Total: 60 credits (27 transfer)

Note: Wentworth Institute of Technology is accredited by the New England Association of Schools and Colleges, INC. (NEASC)

Curriculum Requirements:

ENGL1050 English Composition (3 credits):

A short review of English basics is provided. Emphasis is on writing coherent paragraphs and short essays, basic rhetorical strategies and techniques of rewriting and editing. **Prerequisite: 4 units of high school English.**

ENGL2050 Literature and Composition (3 credits):

This course introduces students to the study of literature and literary themes in the genres of short story, poetry, drama, and novel. While the emphasis is on critical reading and thinking, the course also encourages the continued development of effective writing skills through frequent writing assignments. **Prerequisite: ENGL1050 English Composition.**

MATH1005 Math A (3 credits):

Topics in college algebra and trigonometry including the trigonometric functions, inverse trigonometric functions, trigonometric identities, trigonometric equations, and applications. **Prerequisite: MATH1035 College Math B.**

MATH1035 Math B (3 credits):

Topics in college algebra including functions and their graphs, composite and inverse functions, applied functions and variation, quadratic functions, exponential functions, logarithmic functions, systems of equations, and applications. **Prerequisite: MATH1005 College Math A.**

MATH1065 Math C (3 credits):

Topics in college algebra and trigonometry including the trigonometric functions, inverse trigonometric functions, trigonometric identities, trigonometric equations, and applications. **Prerequisite: MATH1035 College Math B.**

PHYS1005 Physics A (3 credits):

General introduction to mechanics, including Newton's Laws, equilibrium, work, energy, and momentum. The laboratory work will support the concepts studied in class. **Prerequisite: MATH1005 College Mathematics A.**

BLDG1100 Construction Methods (4 credits):

A detailed study of current methods and equipment used in timber, masonry, and steel construction. Lab exercises emphasize plan reading.

BLDG1015 Construction Graphics (4 credits):

The development and interpretation of civil, architectural, structural, and electrical drawings; freehand sketching of construction details and sections; computer-aided construction drafting.

BLDG1900 Basic Building Services (4 credits):

Examines the basic building services, including heating, water, plumbing, drainage, ventilation, air-conditioning, vertical transportation, acoustical control, electrical controls, and associated building code requirements.