

INSULATING TECHNOLOGY, ASSOCIATE OF APPLIED SCIENCE (APPRENTICESHIP PROGRAM)



Students must be currently working in a registered apprenticeship program in conjunction with the U.S. Department of Labor, Bureau of Apprenticeship and Training. A four-year apprenticeship prepares students to work in the Heat and Frost Insulating industry. Students will have the opportunity to learn the latest techniques and the time-proven methods of the insulating industry through computer-based learning, hands-on practice, theory-based lessons, thermodynamic experiments, and other innovative learning experiences. Safety is a critical focus and students will learn how to properly recognize and address hazards in the workplace.

Program contact: Learn more

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify the Office of the Registrar at RegistrarOffice@tri-c.edu.

Learn more about how certificate credits apply to the related degree and about related training programs.

Related Degrees and Certificates

Insulating, Certificate of Proficiency

Program Admissions Requirements

- HS Diploma/GED recommended
- 18 years old
- Valid drivers license
- Application to Joint Apprenticeship Training Committee/Intent to Hire agreement with participating contractor.

Program Learning Outcomes:

1. Apply fire barriers to ductwork and piping in commercial and industrial facilities.
2. Properly recognize and address hazards in the workplace in accordance with OSHA guidelines.
3. Utilize mathematical formulas into field applications for fabricating and installing insulation materials.

4. Fabricate and apply various types of insulation and protective jacketing systems used in the commercial and industrial mechanical insulation industry.
5. Identify and recuperate faulty and failing insulation systems and upgrade them properly.
6. Complete Firestop Technician certification and Infection Control Risk Assessment (ICRA) certification.
7. Explain the importance of organized labor to the modern work force.

Suggested Semester Sequence

First Semester		Credit Hours
ENG-1010	College Composition I	3
ATIN-1010	Applied Insulators Math	3
ATIN-1020	Fundamental Insulation I - Insulation Theory	2
ATIN-1030	Fundamental Insulation II - Fiberglass Insulation	2
IT-1090	Computer Applications	3
BADM-XXXX/ CNST-XXXX	Business or Construction Engineering Technology elective	3
Credit Hours		16
Second Semester		
ATIN-2000	Vapor Barriers	2
ATIN-2020	Fundamental Insulation III - Mechanical Systems	3
ATIN-XXXX	Insulators Elective ¹	2
BADM-XXXX/ CNST-XXXX	Business or Construction Engineering Technology elective	3
DEGR-XXXX	Any Approved Ohio Transfer 36 Mathematics course	3
DEGR-XXXX	Arts and Humanities Requirement	3
Credit Hours		16
Third Semester		
ATIN-2110	Advanced Metal Jacketing I	3
ATIN-2130	Fundamental Insulation IV - Tanks and Equipment	2
ATIN-XXXX	Insulators Elective ¹	2
ATIN-XXXX	Insulators Elective ¹	2
Communications Requirement		3
BADM-XXXX/ FIN-XXXX/CNST-XXXX	Business or Construction Engineering Technology Elective	3
Credit Hours		15
Fourth Semester		
ATIN-2200	Blueprints and Specifications	2
ATIN-2790	Effective Supervision and Journeyman Certification	2
AIT-2990	Contracting in a Diverse World	3
DEGR-XXXX	Natural Science/Social and Behavioral Science Requirement	3
ATIN-XXXX	Insulators Elective ¹	2
ATIN-XXXX	Insulators Elective ¹	2

BADM-XXXX/ CNST-XXXX	Business or Construction Engineering Technology elective	3
Credit Hours		17
Total Credit Hours		64

¹ A total of 10 credits of Insulators Electives is required. Courses can be a mix of 1, 2 or 3 credit electives to fulfill the Insulators Elective requirement.