

# Industrial Technology (ITEC)

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## Courses

### ITEC A101 Hazwoper 24 Hour 1.5 Credit

Designed to provide the classroom requirements for students trained at the Hazardous Waste Site worker level as described in 29 CFR 1910.120.

### ITEC A102 Core Curriculum for Skilled Trades 2 Credits

Introduces foundational skills for skilled craft trades. Covers materials and equipment handling, basic safety for hand and power tools, tool use, and relevant mathematics and communication skills for the trades.

**Registration Restrictions:** Recommendation of placement into MATH A055 or higher.

### ITEC A103 Hazwoper 40 Hour 2 Credits

Designed to provide classroom requirements of 29 CFR 1910.120 (a) (b-o) for training a hazardous waste site worker.

### ITEC A105 Properties of Hazardous Materials 3 Credits

Applies basic concepts of chemistry and physics fundamentals to the characterization and management of chemical hazards. Recognition of dangers in firefighting, storing and handling of hazardous materials is presented. Terminology used to identify hazards in Material Safety Data Sheets (MSDS), labeling and transportation will be developed.

### ITEC A111 Millwright Level I 4 Credits

Consists of six modules and the core NCCER curriculum. Provides students with knowledge in basic safety, basic math, hand tools, power tools, blueprints and basic rigging. Provides hands-on and classroom instruction to help students master the skills required in the millwright profession.

**Registration Restrictions:** At least one high school math class completed at a 10th-grade level, reading and writing at 10th-grade level.

### ITEC A112 Millwright Level II 4 Credits

Consists of nine modules of instruction. Provides hands-on and classroom instruction to help students master the skills required for the millwright profession. Classes will be conducted with the cooperation of industry partnership. Skilled millwrights will participate in instruction of modules and the on-the-job training and skill development.

**Prerequisites:** ITEC A111 with a minimum grade of D.

### ITEC A123 Safety Laws and Standards 4 Credits

Explores the U.S. Occupational Safety and Health Administration (OSHA) regulations protecting workers from exposure to occupational hazards. Students concentrate on researching, interpreting, summarizing and applying OSHA regulations. Students are introduced to a "proactive" philosophy of company compliance with OSHA regulations, with an emphasis on using eight specific approaches to providing a safe and healthful working environment. Helps students develop and implement a hazard communication program for employees. Learning activities will include interviewing safety professionals, analyzing case studies, writing reports, researching and interpreting OSHA standards in the Code of Federal Regulations, conducting a chemical inventory, interpreting material safety data sheets, and developing a written hazard communication program.

### ITEC A125 Confined Space Awareness 0.5 Credits

Designed to give students the training that is required in the federal Confined Space Entry Regulations, 29 CFR 1910.146, for supervisors, attendants and entrants.

### ITEC A130 Introduction to Framing 1 Credit

Introduces basic framing skills used in residential and small facility construction.

### ITEC A131 Handyman Walls and Stairs 1 Credit

Introduces techniques to install insulation, wallboard, windows, doors, and stairs in residential and small facility construction.

**Special Note:** This course covers skills that a State of Alaska Handyman (2015 SB 193) needs to perform basic residential or small facility improvements and repairs.

### ITEC A132 Handyman Interior Finishing 1 Credit

Introduces cabinet installation, trim carpentry, installing flooring, and tile work.

**Special Note:** This course covers skills that a State of Alaska Handyman (2015 SB 193) needs to perform basic residential or small facility improvements and repairs.

### ITEC A134 Siding Installation 1 Credit

Introduces principles and practices for the installation, maintenance, and repair of siding.

### ITEC A135 Insulation Systems 1 Credit

Introduces material selection and insulation methods.

### ITEC A136 Floor Coverings 1 Credit

Introduces students to the various types and practical applications of floor coverings.

### ITEC A137 Drywall Installation and Finishing 1 Credit

Introduces drywall installation and repair.

### ITEC A138 Roofing Installation 1 Credit

Introduces materials and installation techniques for basic types of roofing.

### ITEC A139 Door and Window Installation 1 Credit

Introduces the installation of windows and doors. Includes weather stripping and lock set installation.

**ITEC A140 Handyman Rough Plumbing 1 Credit**

Introduces basic rough plumbing systems used in residential and small facility improvements and repairs.

**Special Note:** This course covers skills that a State of Alaska Handyman (2015 SB 193) needs to perform basic residential or small facility improvements and repairs.

**ITEC A141 Kitchen and Bathroom Fixtures 1 Credit**

Introduces the installation of kitchen and bathroom fixtures.

**ITEC A142 Handyman Outdoor and Hot Water Plumbing 1 Credit**

Introduces basic installation and maintenance of hot water heaters and outdoor water systems used in residential and small facility improvements and repairs.

**Special Note:** This course covers skills that a State of Alaska Handyman (2015 SB 193) needs to perform basic residential or small facility improvements and repairs.

**ITEC A150 Handyman Basic Electrical 1 Credit**

Introduces basic electrical knowledge used in residential and small facility improvements and repairs.

**Special Note:** This course covers skills that a State of Alaska Handyman (2015 SB 193) needs to perform basic residential or small facility improvements and repairs.

**ITEC A151 Handyman Electrical Wiring and Outlets 1 Credit**

Introduces basic electrical wiring and fixture installation used in residential and small facility improvements and repairs.

**Special Note:** This course covers skills that a State of Alaska Handyman (2015 SB 193) needs to perform basic residential or small facility improvements and repairs.

**Prerequisites:** ITEC A150 with a minimum grade of C.

**ITEC A152 Electrical Fixtures 1 Credit**

Introduces the installation of basic electrical fixtures used in residential and small facilities.

**ITEC A166 Introduction to Environmental Technology 3 Credits**

Designed to introduce the student to the potential hazards and governing regulations of chemicals, to safe practices in the management of hazardous materials and waste, and to essential skills, coupled with the basic knowledge that will help the student who is pursuing a role as an environmental technician or environmental health and safety professional.

**ITEC A183 Sustainable Construction Practices 3 Credits**

An introductory course focused on describing the concept of environmentally appropriate building design and construction. The actions of workers in the construction industry affect the environment and an understanding of these impacts will assist students in the choices they must make every day. Clarifies the student's effect on a project's carbon footprint and how to reduce it.

**ITEC A211 Millwright Level III 5 Credits**

Consists of 12 modules of instruction. Provides hands-on and classroom instruction to help students master the skills required for the millwright profession. Classes will be conducted with the cooperation of industry partnership. Skilled millwrights will participate in instruction of modules and on-the-job training and skill development.

**Prerequisites:** ITEC A111 with a minimum grade of D and ITEC A112 with a minimum grade of D.

**ITEC A212 Millwright Level IV 5 Credits**

Consists of 12 modules of instruction. Provides hands-on and classroom instruction to help students master the skills required for the millwright profession. Conducted with the cooperation of industry partnership. Skilled millwrights will participate in instruction of modules and on-the-job training and skill development.

**ITEC A213 Millwright Level V 5 Credits**

Consists of nine modules of instruction. Students will perform written and manual proficiency in each module. Provides hands-on and classroom instruction to help students master the skills required for the millwright profession. Classes will be conducted with cooperation of industry partnerships. Skilled millwrights will participate in instruction of modules and on-the-job training and skill development.

**ITEC A221 Safety Equipment and Operations 3 Credits**

Covers the operation, testing and maintenance of safety equipment, and the implementation of safe operating procedures in a variety of workplace situations.

**ITEC A225 Contingency Plans 3 Credits**

Designed to teach students the requirements for emergency contingency plans for facilities, vessels and communities. Students will review federal and state regulations and develop an emergency response plan for oil and hazardous substances discharges and releases.

**ITEC A227 Process Safety Management 3 Credits**

Presents an in-depth overview of the Process Safety Management (PSM) of Highly Hazardous Chemicals regulation (29CFR 1910.119). There will be an increased focus on case histories of industrial accidents and how proper implementation of PSM systems could have prevented catastrophe.

**Special Note:** Prior safety experience or safety classes are highly recommended, but not required.

**ITEC A295 Industrial Technology Internship 1-6 Credits**

Provides students with practical experience under the direction of field supervisors.

**Special Note:** While the college has internship partnerships in place and will make every effort to place students with a sponsoring organization, internship opportunities are not guaranteed; it is ultimately the responsibility of the student to secure an internship.