



Industrial Machinery Maintenance 1

Industrial machinery mechanics, also called maintenance machinists, perform preventive maintenance and troubleshooting in industrial production and manufacturing systems. They keep machines in working order, run diagnostic tests, install new parts and systems, and help keep manufacturing moving forward.



APPLY NOW

About the Program

This certificate program prepares students for entry into the Industrial Machinery Maintenance and Repair industry.

High School Dual Enrollment Students can enroll part time or full time.



750 Clock Hour Certificate

TERM #1 (Fall or Spring)

- **ETI 0301** - Industrial Machinery Maintenance Assistant I (150 Hrs)
- **ETI 0302** - Industrial Machinery Maintenance Assistant II (150 Hrs)

TERM #2 (Fall or Spring)

- **ETI 0303** - Industrial Machinery Maintenance Assistant III (150 Hrs)
 - Student completes FDOE curriculum frameworks OCP A (ETI 0450) at this point
- **ETI 0310** - Machinery Maintenance Mechanic 1 (150 Hours)

TERM #3 (Fall or Spring)

- **ETI 0311** - Machinery Maintenance Mechanic II (150 Hrs)
 - Student completes FDOE curriculum frameworks OCP B (ETI 0456) at this point



Program Graduates can continue to the Industrial Machinery Maintenance 2 Certificate (600 Clock Hours)

Industry Certifications

Manufacturing Skill Standards Council (MSSC) assessments/certifications in:

1. Safety
2. Quality Practices and Measurements Occupational Safety and Health Administration (OSHA) Certification

DE Entry Requirements

- High school approval to enroll
- Must be at least 16 years of age
- Minimum 2.0 Unweighted GPA

**A basic skills assessment must be completed within the first six (6) weeks of program admission. Students must meet the basic skills requirement through required scores or an exemption to receive a certificate of completion at the end of the program.*



Estimated Hourly Wages

Florida: \$21.69-\$30.19

16.8% Anticipated Job Growth Rate by 2033

floridajobs.org - 2025-26 Florida Statewide Demand Occupations List; 2025-2033 Occupational Employment Projections

Related Jobs/Careers

Industrial Machinery Mechanics, Machinery Maintenance Workers, Millwrights, Helpers - Installation, Maintenance/Repair Workers, Control and Valve Installers/Repairers, Elevator and Escalator Installers/Repairers, First-Line Supervisors of Mechanics, Installers and Repairers

FDOE Program # J590100 | CIP 47.0303





NORTH FLORIDA
COLLEGE

Dual Enrollment Pathway Planner

Industrial Machinery Maintenance I

Program Type: Career Certificate

Total Hours: 750

Location: NFC Main Campus

Estimated Completion Time: 3 Terms (Part Time - MTWRF)

Part Time Pathway

Term 1: 300 Hours (Fall -or- Spring)

ETI 0301 _____ Record Course Reference Number (CRN) Here

Industrial Machinery Maintenance Assistant I

__ Morning (8:30 am - 11:30 pm)

-or-

ETI 0302 _____

Industrial Machinery Maintenance Assistant II

__ Afternoon (12:30 pm - 3:30 pm)

Term 2: 300 Hours (Fall -or- Spring)

ETI 0303 _____

Industrial Machinery Maintenance Assistant III

__ Morning (8:30 am - 11:30 pm)

-or-

ETI 0310 _____

Machinery Maintenance Mechanic I

__ Afternoon (12:30 pm - 3:30 pm)

Term 3: 150 -or- 300* Hours (Fall -or- Spring)

ETI 0311 _____

Machinery Maintenance Mechanic II

__ Morning (8:30 am - 11:30 pm)

-or-

__ Afternoon (12:30 pm - 3:30 pm)

*Students planning to continue into the **Industrial Machinery Maintenance II Program** may, with Special Permission, elect to register for the first course in the sequence, provided they indicate their intent at the start of the term.

ETI 0457 _____

Machinery Maintenance Technician

Full Time Pathway

Term 1: 450 Hours (Fall -or- Spring)

ETI 0304 _____

Industrial Machinery Maintenance Assistant Combined

__ Full Day (8:30 am - 3:30 pm)

Term 2: 300 -or- 450* Hours (Fall -or- Spring)

ETI 0456 _____

Machinery Maintenance Mechanic

__ Full Day (8:30 am - 3:30 pm)

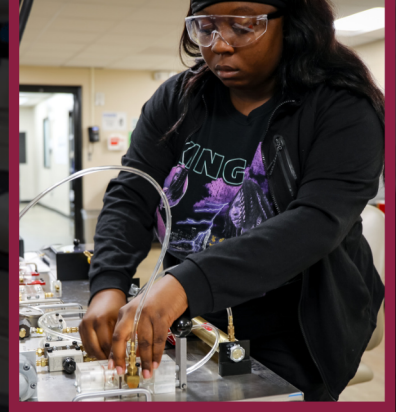
*Students planning to continue into the **Industrial Machinery Maintenance II Program** may, with Special Permission, elect to register for the first course in the sequence, provided they indicate their intent at the start of the term.

ETI 0457 _____

Machinery Maintenance Technician

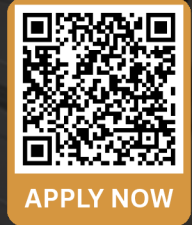
**Submit Your
Registration Requests**
Using the Course Reference Numbers (CRNs) you recorded, submit your course requests using the Dual Enrollment Online Registration Request Form. Your requests will be reviewed and approved by your High School Guidance Counselor.





Industrial Machinery Maintenance 2

Industrial machinery mechanics, also called maintenance machinists, perform preventive maintenance and troubleshooting in industrial production and manufacturing systems. They keep machines in working order, run diagnostic tests, install new parts and systems, and help keep manufacturing moving forward.



About the Program

Students build on the basics by learning how to plan routine maintenance, fix problems before machines break down, and work with hydraulic and robotic systems. They also gain hands-on experience and develop important job skills needed to be successful in the workplace.

High School Dual Enrollment Students can enroll part time or full time.



600 Clock Hour Certificate

TERM #1 (Fall or Spring)

- **ETI 0457** - Industrial Maintenance Technician (150 Hrs)
 - Student completes FDOE curriculum frameworks OCP A (ETI0457 at this point.
- **ETI 0470** - Industrial Maintenance Specialist I (150 Hours)

TERM #2 (Fall or Spring)

- **ETI 0471** - Industrial Maintenance Specialist II (150 Hours)
- **ETI 0472** - Industrial Maintenance Specialist III (150 Hours)
 - Student completes FDOE curriculum frameworks OCP B (ETI 0458) at this point



Program Graduates can articulate 15 credit hours into an A.S. in Engineering Technology degree at any Florida College System (FCS) institution that offers degree.

Industry Certifications

Manufacturing Skill Standards Council (MSSC) assessments/certifications in:

1. Manufacturing Processes & Production
2. Maintenance Awareness

Occupational Safety and Health Administration (OSHA) Certification

DE Entry Requirements

- Complete Industrial Machinery Maintenance 1 Certificate
- High school approval to enroll
- Must be at least 16 years of age
- Minimum 2.0 Unweighted GPA



Estimated Hourly Wages Florida: \$21.69-\$30.19

16.8% Anticipated Job Growth Rate by 2033

floridajobs.org - 2025-26 Florida Statewide Demand Occupations List; 2025-2033 Occupational Employment Projections

Related Jobs/Careers

Industrial Machinery Mechanics, Machinery Maintenance Workers, Millwrights, Helpers - Installation, Maintenance/Repair Workers, Control and Valve Installers/Repairers, Elevator and Escalator Installers/Repairers, First-Line Supervisors of Mechanics, Installers and Repairers

FDOE Program # J590200 | CIP 47.0303





Dual Enrollment Pathway Planner

Industrial Machinery Maintenance II

Program Type: Career Certificate

Total Hours: 600

Location: NFC Main Campus

Estimated Completion Time: 2 Terms (Part Time - MTWRF)

Part Time Pathway

Term 1: 300 Hours (Fall -or- Spring)

ETI 0457 Record Course Reference Number (CRN) Here _____

Machinery Maintenance Technician

Morning (8:30 am - 11:30 pm)

-or-

ETI 0470 _____

Industrial Maintenance Specialist I

Afternoon (12:30 pm - 3:30 pm)

Term 2: 300 Hours (Fall -or- Spring)

ETI 0471 _____

Industrial Maintenance Specialist II

Morning (8:30 am - 11:30 pm)

-or-

ETI 0472 _____

Industrial Maintenance Specialist III

Afternoon (12:30 pm - 3:30 pm)

Full Time Pathway

Term 1: 150 Hours (Fall -or- Spring)

ETI 0457 _____

Machinery Maintenance Technician

Morning (8:30 am - 11:30 pm)

-or-

Afternoon (12:30 pm - 3:30 pm)

Term 2: 450 Hours (Fall -or- Spring)

ETI 0473 _____

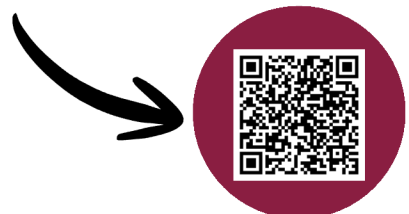
Industrial Maintenance Specialist IV

Full Day (8:30 am - 3:30 pm)

NOTES:

Submit Your Registration Requests

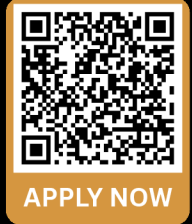
Using the Course Reference Numbers (CRNs) you recorded, submit your course requests using the Dual Enrollment Online Registration Request Form. Your requests will be reviewed and approved by your High School Guidance Counselor.





Welding Technology

Welders play a critical role in manufacturing, construction, transportation, and infrastructure by joining, repairing, and cutting metal parts using specialized equipment. Welders work in a wide range of settings, from fabrication shops and factories to construction sites, and most work full time, with opportunities for overtime in many industries.



About the Program

This certificate program prepares students for entry into the welding industry. Students explore career opportunities and the requirements of becoming a professional welder.

High School Dual Enrollment Students may enroll part time or full time.



1050 Clock Hour Certificate

TERM #1 (Fall or Spring)

- **PMT 0070C** - Welder Assistant 1 (150Hrs)
- **PMT 0071C** - Welder Assistant 2 (150Hrs)
 - Student completes FDOE curriculum frameworks OCP A at this point.

TERM #2 (Fall or Spring)

- **PMT 0072C** - Welder SMAW 1 (150 Hrs)
- **PMT 0073C** - Welder SMAW 2 (150 Hrs)
 - Student completes FDOE curriculum frameworks OCP B at this point.

TERM #3 (Fall or Spring)

- **PMT 0080C** - Welder I (150 Hrs)
- **PMT 0081C** - Welder II (150 Hrs)

TERM #4 (Fall or Spring)

- **PMT 0082C** - Welder III (150 Hrs)
 - Student completes FDOE curriculum frameworks OCP C at this point.



Program Graduates can continue to the Welding Technology - Advanced Certificate (750 Clock Hours)

Industry Certifications

American Welding Society (AWS) Certified Welder certifications offered in FCAW, GMAW, SMAW, and GTAW for plate and pipe applications, including carbon steel, stainless steel, chrome alloys, and dissimilar metals.

DE Entry Requirements

- High school approval to enroll
- Must be at least 16 years of age
- Minimum 2.0 Unweighted GPA

**A basic skills assessment must be completed within the first six (6) weeks of program admission. Students must meet the basic skills requirement through required scores or an exemption to receive a certificate of completion at the end of the program.*



Estimated Hourly Wages

Florida: \$21.69-\$30.19

16.8% Anticipated Job Growth Rate by 2033

floridajobs.org - 2025-26 Florida Statewide Demand Occupations List; 2025-2033 Occupational Employment Projections

Related Jobs/Careers

- Welder
- Structural Iron and Steel Worker
- Boilermaker
- Welding Inspector

FDOE Program # J590100 | CIP 48.0508



Dual Enrollment Pathway Planner

Welding Technology

Program Type: Career Certificate
Location: NFC Main Campus

Total Clock Hours: 1050
Estimated Completion Time: 4 Terms (Part Time - MTWRF)

Part Time Pathway

Term 1: 300 Hours (Fall -or- Spring)

Record Course Reference Number (CRN) Here

PMT 0070C

Welder Assistant 1 _____

__ Morning (8:30 am - 11:30 pm)

-or-

__ Afternoon (12:30 pm - 3:30 pm)

PMT 0071C

Welder Assistant 2 _____

-or-

__ Evening (5:30 pm - 9:30 pm)

Term 2: 300 Hours (Fall -or- Spring)

PMT 0072C

Welder SMAW 1 _____

__ Morning (8:30 am - 11:30 pm)

-or-

__ Afternoon (12:30 pm - 3:30 pm)

PMT 0073C

Welder SMAW 2 _____

-or-

__ Evening (5:30 pm - 9:30 pm)

Term 3: 300 Hours (Fall -or- Spring)

PMT 0080C

Welder I _____

__ Morning (8:30 am - 11:30 pm)

-or-

__ Afternoon (12:30 pm - 3:30 pm)

PMT 0081C

Welder II _____

-or-

__ Evening (5:30 pm - 9:30 pm)

Term 4: 150 -or- 300* Hours (Fall -or- Spring)

PMT 0082C

Welder III _____

__ Morning (8:30 am - 11:30 pm)

-or-

__ Afternoon (12:30 pm - 3:30 pm)

-or-

__ Evening (5:30 pm - 9:30 pm)

*Students planning to continue into the **Welding Technology - Advanced Certificate** may, with Special Permission, elect to register for the first course in the sequence, provided they indicate their intent at the start of the term.

PMT 0176C _____

Advanced Shielded Metal Arc Pipe Welding



Full Time Pathways Available

8:30 am - 3:30 pm -or- 12:30 pm - 9:30 pm

Students who are able to transition to full-time attendance may enroll in up to three courses (450 clock hours) during the Fall or Spring term, or up to two courses (300 clock hours) in the summer.*

*See course schedule for details

Submit Your Registration Requests

Using the Course Reference Numbers (CRNs) you recorded, submit your course requests using the Dual Enrollment Online Registration Request Form. Your requests will be reviewed and approved by your High School Guidance Counselor.





Heating, Ventilation, Air-Conditioning/Refrigeration

HVAC/R technicians and installers troubleshoot, repair and install heating and air systems in a variety of residential, business and commercial settings. They are an integral part of the workforce and help keep climate-control and refrigeration systems in optimal condition year round.



APPLY NOW

About the Program

CLASS MEETS AT NFC PERRY LOCATION

This certificate program prepares students for entry-level employment or advanced training in the heating, ventilation, air-conditioning, and refrigeration (HVAC/R) industry.

High School Dual Enrollment Students can enroll part time or full time.



1350 Clock Hour Certificate

TERM #1 and #2 (Fall or Spring)*

- **ACR 0000C** - Fundamentals of Refrigeration (225 Hrs)
- **ACR 0102C** - Basic Electricity Systems and Controls (225 Hrs)

*Students can begin with either course above.

TERM #3 (Fall or Spring)

- **ACR 0609C** - Refrigeration: Trouble Analysis (225 Hrs)

TERM #4 (Fall or Spring)

- **ACR 0600C** - Heating Systems (225 Hrs)

TERM #5 (Fall or Spring)

- **ACR 0930C** - Selected Topics in Air Conditioning (225 Hours)

TERM #6 (Fall or Spring)

- **ACR 0060C** - Indoor Air Quality and System Design (225 Hours)



Vocational Internships/Co-op options may be available after Semester 2; after 450 Hrs

Program Graduates can articulate three college credit hours into an A.S. in Building Construction Technology at a Florida College System institution offering the degree.

Industry Certifications

- **EPA:** Environmental Protection Agency 608 Certification (for employment in any job that requires work with refrigerants)
- **NATE:** North American Technician Excellence Certification

DE Entry Requirements

- High school approval to enroll
- Must be at least 16 years of age
- Minimum 2.0 Unweighted GPA

**A basic skills assessment must be completed within the first six (6) weeks of program admission. Students must meet the basic skills requirement through required scores or an exemption to receive a certificate of completion at the end of the program.*



Estimated Hourly Wages

Florida: \$19.64-\$26.49

14.3% Anticipated Job Growth Rate by 2033

floridajobs.org - 2025-26 Florida Statewide Demand Occupations List; 2025-2033 Occupational Employment Projections

Related Jobs/Careers

Heating, Air Conditioning, and Refrigeration Mechanics and Installers; Home Appliance Repairers; Stationary Engineers and Boiler Operators; First-Line Supervisors of Mechanics, Installers, and Repairers.

FDOE Program # C400400 | CIP 15.0501





Dual Enrollment Pathway Planner

Heating, Ventilation, Air-Conditioning and Refrigeration

Program Type: Career Certificate

Total Hours: 1350

Location: NFC Perry Location

Estimated Completion Time: 6 Terms (Part Time - MTWRF)

Part Time Pathway

Term 1: 225 Hours (Fall -or- Spring)

ACR 0000C or ACR 0102C Record Course Reference Number (CRN) Here _____ Morning (8:30 am - 11:30 am)
 Fundamentals of Refrigeration -OR- Afternoon (12:30 pm - 3:30 pm)
 Basic Electricity Systems and Controls _____ Afternoon (12:30 pm - 3:30 pm)

Term 2: 225 Hours (Fall -or- Spring)

ACR 0000C or ACR 0102C _____ Morning (8:30 am - 11:30 am)
 Fundamentals of Refrigeration -OR- Afternoon (12:30 pm - 3:30 pm)
 Basic Electricity Systems and Controls _____ Afternoon (12:30 pm - 3:30 pm)

Term 3: 225 Hours (Fall -or- Spring)

ACR 0609C _____ Morning (8:30 am - 11:30 am)
 Refrigeration: Trouble Analysis _____ Afternoon (12:30 pm - 3:30 pm)

Term 4: 225 Hours (Fall -or- Spring)

ACR 0600C _____ Morning (8:30 am - 11:30 am)
 Heating Systems _____ Afternoon (12:30 pm - 3:30 pm)

Term 5: 225 Hours (Fall -or- Spring)

ACR 0930C _____ Morning (8:30 am - 11:30 am)
 Selected Topics in Air Conditioning _____ Afternoon (12:30 pm - 3:30 pm)

Term 6: 225 Hours (Fall -or- Spring)

ACR 0060C _____ Morning (8:30 am - 11:30 am)
 Indoor Air Quality and System Design _____ Afternoon (12:30 pm - 3:30 pm)



Full Time Pathways Available

8:30 am - 3:30 pm (Morning & Afternoon)

Students who are able to transition to full-time attendance may enroll in up to two courses (450 clock hours) during the Fall or Spring term*.

*See course schedule for details



Submit Your Registration Requests

Using the Course Reference Numbers (CRNs) you recorded, submit your course requests using the Dual Enrollment Online Registration Request Form. Your requests will be reviewed and approved by your High School Guidance Counselor.





Early Childhood Professional Certificate (ECPC)

The Early Childhood Professional Certificate (ECPC) program focuses on broad, transferable skills for the Early Childhood industry including planning, management, finance, and technology skills; understanding of labor, community, health, safety, and environmental issues; and developmentally appropriate practices for children (Ages Birth-8 Years).



APPLY NOW

About the Program

The Early Childhood Professional Certificate (ECPC) is a 600-hour program with four occupational completion points. Each level consists of classroom instruction and direct work with children.

On-Demand Program - This program is not regularly scheduled; offered on demand for high schools. Please contact NFC well in advance to plan a class for your school.


600 Clock Hour Certificate

TERM #1 (Fall)

- **HEV 0870 Child Care Worker I** (150 Hrs)
 - Students who complete this level and pass the required Department of Children and Families (DCF) exams with a score of 70 or better will have completed the DCF 40-hour Mandated Introductory Child Care Training (Parts I and II).
 - *Student completes FDOE curriculum frameworks OCP A at this point.*
- **HEV 0871 Child Care Worker 2** (150 Hrs)
 - *Student completes FDOE curriculum frameworks OCP B at this point.*

TERM #2 (Spring)

- **HEV 0872 Teacher Aide-Preschool** (150 Hrs)
 - *Student completes FDOE curriculum frameworks OCP C at this point.*
- **HEV 0873 Preschool Teacher** (150 Hrs)
 - *Student completes FDOE curriculum frameworks OCP D at this point.*
 - *Completion of all four levels of the ECPC program meets the staff credential requirement for the Florida Department of Children and Families (DCF). In Florida, this program is aligned with the National Child Development Associate (CDA).*

 **Program Graduates** have one year after finishing HEV 0873 to complete DCF requirements for ECPC certification.

Industry Certifications

- FL Department of Children and Families:
- Early Childhood Professional Certificate
 - DCF Staff Credential Requirement

DE Entry Requirements

- High school approval to enroll
- Must be entering junior or senior year of high school
- Minimum 2.0 Unweighted GPA

*A basic skills assessment must be completed within the first six (6) weeks of program admission. Students must meet the basic skills requirement through required scores or an exemption to receive a certificate of completion at the end of the program.

***Additional DCF Requirements:** Please see NFC College Catalog for details (portfolio, observation, CPR, etc.)



Estimated Hourly Wages

Florida: \$14.81-\$16.48

10.4% Anticipated Job Growth Rate by 2033

www.bls.gov - Occupational Employment and Wage Statistics, May 2023; floridajobs.org - 2025-2033 Occupational Employment Projections

Related Jobs/Careers

Entry-level preschool teachers, childcare workers; excludes special education

FDOE Program # E300100 | CIP # 19.0709





NORTH FLORIDA COLLEGE

Dual Enrollment Pathway Planner

Early Childhood Professional Certificate (ECPC)

Program Type: Career Certificate

Total Hours: 600

Location: Contact NFC

Estimated Completion Time: 2 Terms (MTWRF)

TERM 1

300 Hours (Classroom Instruction: 60 Hours | Site Fieldwork: 240 Hours)

Record Course Reference Number (CRN) Here

HEV 0870

Child Care Worker 1 _____

HEV 0871

Child Care Worker 2 _____

**Students may need to spend extra time at their fieldwork site to complete the required fieldwork hours.*

TERM 2

300 Hours (Classroom Instruction: 60 Hours | Site Fieldwork: 240 Hours)

HEV 0872

Teacher Aide - Preschool _____

HEV 0873

Preschool Teacher _____

**Students may need to spend extra time at their fieldwork site to complete the required fieldwork hours.*

To complete the program, students must:

- Earn a grade of “C” or higher in all program courses.
- Meet Basic Skills Requirements.
- Pass all DCF-mandated competency exams with a score of 70 or higher.
- Complete a DCF-approved 5-hour literacy course.
- Provide proof of current Infant/Child CPR and First Aid certification.
- Complete 480 hours of direct work experience with young children in an approved child care setting.
- Participate in a documented observation conducted by a qualified observer.
- Complete the Professional Resource File (Portfolio).
- Submit the NFC Application for Graduation.

NOTES:

Submit Your Registration Requests

Using the Course Reference Numbers (CRNs) you recorded, submit your course requests using the Dual Enrollment Online Registration Request Form. Your requests will be reviewed and approved by your High School Guidance Counselor.

