

Established in 1984, the nationally recognized Welding Engineering Technology program is the largest of its kind in the United States. The program is designed to produce plant-level welding engineering technology graduates who are involved in the concept, design and engineering of weldments and implementation of welding processes. This overall knowledge of weldments and the ability to engineer welding and joining systems produces graduates who are in great demand and highly compensated. As recognition of academic excellence and program quality, in August 2008 the Welding Engineering Technology program was granted TAC-ABET Accreditation from the Technology Accreditation Committee (TAC) of ABET.

Ferris provides several welding instructional areas including laboratories dedicated to inspection, mechanical testing, robotics, laser processing, resistance welding and material preparation/fabrication. In addition to core welding classes, courses in material science, computer aided design, electronics and machine tool disciplines are required and are taught by faculty specialists in those departments.

Ferris General Admissions Criteria for Transfer Students

Welding Engineering Technology Admission Requirements Transfer Students

- Application for admission submitted by January 15 prior to Fall term requested
- Associate degree in Welding Technology
- A minimum 3.0 honor point average overall
- Satisfy all pre-requisites to enter MATH 130
- Satisfy all pre-requisites to enter EEET 301
- FSU PHYS 211 or equivalent transfer course
- FSU ETEC 140 or equivalent transfer course
- FSU MATL 240 or equivalent transfer course
- Welding Engineering Technology applicants are required to achieve a minimum score of 70 on the NOCTI Job Readiness Assessment for Welding (Test Code 4172) in order to be admitted to welding engineering technology or pre-welding engineering technology bachelor degree.
- *Required for admission

Communication Competency Requirements

| FSU Course | FSU Course Title | FSU Cr. Hrs. | FVTC Equiv. | FVTC Course Title | FVTC Cr. Hrs. |
|----------------|---------------------------------|--------------|---------------|------------------------|---------------|
| ENGL 150* | English 1 | 3 | 801-195 | Written Communication | 3 |
| ENGL 250* | English 2 | 3 | No Equivalent | No Equivalent | |
| or ENGL 211 | Industrial and Career Writing | | or 801-197 | or Technical Report | 3 |
| ENGL 311 | Advanced Technical Writing | 3 | No Equivalent | No Equivalent | No Equivalent |
| COMM 121 | Fundamentals of Public Speaking | 3 | 801-198 | Speech | 3 |

Quantitative Literacy Requirements

| FSU Course | FSU Course Title | FSU Cr. Hrs. | FVTC Equiv. | FVTC Course Title | FVTC Cr. Hrs. |
|------------|--------------------------------------|--------------|-------------|-----------------------------------|---------------|
| MATH 115 | Intermediate Algebra | 4 | 804-195 | College Algebra with Applications | 5 |
| MATH 120 | Trigonometry | 4 | 804-196 | Trigonometry with Applications | 4 |
| MATH 130 | Adv. Algebra-Analytical Trigonometry | 4 | 804-197 | College Algebra/Trigonometry | 5 |
| MATH 220 | Calculus 1 | 4 | 804-198 | Calculus 1 | 4 |

Natural Sciences Competency Requirements

| FSU Course | FSU Course Title | FSU Cr. Hrs. | FVTC Equiv. | FVTC Course Title | FVTC Cr. Hrs. |
|------------|-----------------------------|--------------|---------------|-------------------|---------------|
| CHEM 114 | Intro. to General Chemistry | 4 | No Equivalent | No Equivalent | No Equivalent |
| PHYS 211* | Introductory Physics | 4 | 806-143 | College Physics 1 | 3 |

Self and Society Competency Requirements – Minimum 9 credits from 2 different disciplines with 1 course at 200 level or higher

| FSU Course | FSU Course Title | FSU Cr. Hrs. | FVTC Equiv. | FVTC Course Title | FVTC Cr. Hrs. |
|------------|--|--------------|-------------|-------------------|---------------|
| Varies* | FSU General Education – Self and Society Electives | 3 | Varies | Varies | 3 |
| Varies | FSU General Education – Self and Society Electives | 6 | Varies | Varies | 6 |

Culture Competency Requirements - Minimum 9 credits from 2 different disciplines with 1 course at 200 level or higher

| FSU Course | FSU Course Title | FSU Cr. Hrs. | FVTC Equiv. | FVTC Course Title | FVTC Cr. Hrs. |
|------------|---|--------------|-------------|-------------------|---------------|
| Varies* | FSU General Education - Culture Electives | 3 | Varies | Varies | 3 |
| Varies | FSU General Education - Culture Electives | 6 | Varies | Varies | 6 |

Ferris State University General Education Program

Students are encouraged to work with an advisor to select appropriate general education courses

Ferris State University and Fox Valley Technology College – Welding Engineering Technology - Transfer Guide

Effective Spring 2019

Ferris State University is an equal opportunity institution. For information on the University's Policy on Non-Discrimination, visit ferris.edu/non-discrimination.

Major Requirements

| FSU Course | FSU Course Title | FSU Cr. Hrs. | FVTC Equiv. | FVTC Course Title | FVTC Cr. Hrs. |
|------------|---------------------------------------|--------------|---------------|--------------------------------------|---------------|
| Varies | AAS Welding Technology* | Varies | Varies | Industrial Welding Technology AAS | 45 |
| WELD 212 | Quality Testing | 4 | No Equivalent | No Equivalent | No Equivalent |
| WELD 311 | Welding Automation & Robotics 1 | 4 | No Equivalent | No Equivalent | No Equivalent |
| WELD 312 | Design of Weldments | 3 | No Equivalent | No Equivalent | No Equivalent |
| WELD 321 | Welding Automation & Robotics 2 | 4 | No Equivalent | No Equivalent | No Equivalent |
| WELD 322 | Advanced Resistance Welding | 3 | No Equivalent | No Equivalent | No Equivalent |
| WELD 393 | Internship | 4 | No Equivalent | No Equivalent | No Equivalent |
| WELD 411 | Advanced Welding Processes | 3 | No Equivalent | No Equivalent | No Equivalent |
| WELD 412 | Computer Aided Weldment Design | 4 | No Equivalent | No Equivalent | No Equivalent |
| WELD 422 | Material Science | 3 | No Equivalent | No Equivalent | No Equivalent |
| WELD 499 | Project Engineering and Management | 3 | No Equivalent | No Equivalent | No Equivalent |

Technical Related

| FSU Course | FSU Course Title | FSU Cr. Hrs. | FVTC Equiv. | FVTC Course Title | FVTC Cr. Hrs. |
|------------|----------------------------------|--------------|---------------|--|---------------|
| EEET 201* | Electrical Fundamentals | 3 | 621-150 | Electrical Theory and Maintenance for Welding | 3 |
| MATL 240* | Introduction to Material Science | 4 | 621-116 | Welding Metallurgy | 3 |
| MFGT 150 | Manufacturing Processes | 2 | No Equivalent | No Equivalent | No Equivalent |
| ETEC 140* | Engr. Graphics Comprehensive | 3 | 606-113 | Technical Drafting | 3 |
| EEET 301 | Controls for Automation | 3 | No Equivalent | No Equivalent | No Equivalent |
| MECH 250 | Fluid Power with Controls | 2 | No Equivalent | No Equivalent | No Equivalent |
| MFGT 353 | Statistical Quality Control | 3 | No Equivalent | No Equivalent | No Equivalent |

Total Credits Required for Degree

129

Program Contact Information:

Main Campus, Big Rapids

College of Engineering Technology

(231) 591-2511 | [Welding Degrees Email](#) | [Welding Degrees Website](#) | [College of Engineering Technology Website](#)
[Transfer Partnerships Website](#)

Delivery Locations

This degree and the Ferris courses are offered at the following locations:

- Ferris State University, Big Rapids Campus, Big Rapids, MI
- Select courses may be delivered online and/or in a mixed delivery format (i.e. a mix of online and face-to-face instruction at the Ferris Main Campus or at an off-campus location).

Advising Notes

It is recommended that potential applicants meet with an advisor to review the degree, course schedule, and have any questions answered prior to completing an application. Students who are completing the MTA may have different general education course requirements for the particular degree selected. Meeting with a Ferris advisor prior to the selection of general education or elective course work may reduce the chance of completing a course that will not apply toward the selected degree. Once admitted, students must continue to meet with an advisor as they work toward graduation.

Transfer Student Orientation

All new students to Ferris State University are required to complete an orientation.

Online Learning

Select courses delivered online and/or in a mixed delivery format (i.e. a mix of online and face-to-face instruction at the Ferris Main Campus or at an off-campus location). The "Online Readiness Tutorial" is required for students who register for an online *course* or are completing an online *degree*. Students must demonstrate competency in Blackboard skills. This may be done by taking a tutorial and quiz, or, for students who have already taken and passed online courses, they can submit a waiver request. Students should check with the department that offers the class to determine its particular needs and/or the Ferris advisor regarding registration for online course work.

Reverse Transfer Agreement

The Community College and Ferris have entered into a partnership in order to work collaboratively and creatively to increase student completion of associate and bachelor degrees. The partners work together to provide a seamless transfer experience and increase student retention and completion at both the community college and Ferris.

Disclaimer

This is a guide for students who plan to transfer to Ferris State University. This guide is not intended to be a contract with Ferris. The information on this guide is subject to change. Students should contact their community college or Ferris to keep informed of changes. Final responsibility for verifying all transfer information lies with the student. Please refer to effective and/or revised date on the bottom of this guide.