

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 (EEET 201)
- FSU PHYS 211 or equivalent transfer course
- FSU ETEC 140 or equivalent transfer course
- FSU MATL 240 or equivalent transfer course
- FSU ENGL 150 and ENGL 250 or ENGL 211 or equivalent transfer courses
- 3 credits of an FSU Culture Competency course or equivalent transfer course.
- 3 credits of an FSU Self and Society course 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.

#### Communication Competency Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	ECC Equiv.	ECC Course Title	ECC Cr. Hrs.
COMM 121	Fundamentals of Public Speaking	3	CMS 102	Public Speaking	3
ENGL 150	English 1	3	ENG 101	English Composition 1	3
ENGL 250 or ENGL 211	English 2 or Industrial & Career Writing	3	ENG 102 or BUS 142	English Composition 2 or Report Writing	3
ENGL 311	Advanced Technical Writing	3	No Equivalent	No Equivalent	No Equivalent

#### Quantitative Literacy Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	ECC Equiv.	ECC Course Title	ECC Cr. Hrs.
MATH 130 + MATH 1-Q	Advanced Algebra – Analytical Trigonometry	4	MTH 112 + MTH 114	College Algebra + Trigonometry	4

#### Natural Sciences Competency Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	ECC Equiv.	ECC Course Title	ECC Cr. Hrs.
CHEM 114 + CHEM 1-Z	Intro. to General Chemistry + CHEM General Credit	5	CHM 112	Elements of Chemistry	5
PHYS 211	Introductory Physics	4	PHY 101	General Physics	4

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

FSU Course	FSU Course Title	FSU Cr. Hrs.	ECC Equiv.	ECC Course Title	ECC Cr. Hrs.
Varies	FSU General Education – Self and Society Electives	6	Varies	Varies	6
GEOG 112	Cultural Geography	3	GEO 116	Human Geography	3

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

FSU Course	FSU Course Title	FSU Cr. Hrs.	ECC Equiv.	ECC Course Title	ECC Cr. Hrs.
Varies	FSU General Education - Culture Electives	6	Varies	Varies	6
HIST 152	Western Civilization 1500 to Present		HIS 102	History – Western Civilization	3

#### Additional General Education Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	ECC Equiv.	ECC Course Title	ECC Cr. Hrs.
MATH 220	Analytical Geometry – Calculus 1	4	MTH 190	Calculus with Analytic Geometry	4

**Ferris State University General Education Program** Students are encouraged to work with an advisor to select appropriate general education courses

#### Ferris State University and Elgin Community College – Welding Engineering Technology - Transfer Guide

Effective Fall 2019

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

**Major Requirements- 35 credits required**

FSU Course	FSU Course Title	FSU Cr. Hrs.	ECC Equiv.	ECC Course Title	ECC Cr. Hrs.
Varies	AAS Welding Technology	Varies	Varies	AAS in Welding Fabrication & Robotics	Varies
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.	ECC Equiv.	ECC Course Title	ECC Cr. Hrs.
EEET 201	Electrical Fundamentals	3	No Equivalent	No Equivalent	No Equivalent
MATL 240	Introduction to Material Science	4	No Equivalent	No Equivalent	No Equivalent
MFGT 150	Manufacturing Processes	2	IMT 103	Industrial Manufacturing Tech 1	3
ETEC 140 + ETE ---	Engr.Graphics Comprehensive	4	EGR 101	Engineering Design Graphics / CAD	4
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
MFGE 353	Statistical Quality Control	3	No Equivalent	No Equivalent	No Equivalent
<b>Total Credits Required for Degree</b>					<b>129</b>

**Program Delivery Locations and 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](#)

*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)*

**Graduation Requirements**

In addition to meeting all the programmatic requirements, students must:

1. Meet University General Education requirements.
2. Earn a minimum of 120 credits.
3. Maintain a 2.00 or higher cumulative FSU GPA.
4. Earn 30 credits from FSU (Residency).
5. Earn 40 credits of 300 level or higher courses.

**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.

**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.