

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.

Communication Competency Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	JJC Equiv.	JJC Course Title	JJC Cr. Hrs.
ENGL 150	English 1	3	ENG 101	Rhetoric	3
ENGL 250	English 2	3	ENG 102 or ENGL 130	Rhetoric or Technical Writing & Communication	3
ENGL 311	Advanced Technical Writing	3	No Equivalent	No Equivalent	No Equivalent
COMM 121	Fundamentals of Public Speaking	3	No Equivalent	No Equivalent	No Equivalent

Quantitative Literacy Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	JJC Equiv.	JJC Course Title	JJC Cr. Hrs.
MATH 130 + MATH 1-Q	Advanced Algebra – Analytical Trigonometry + MATH Gen Cr	5	MATH 142	Accelerated Trigonometry / Pre-Calculus	5

Natural Sciences Competency Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	JJC Equiv.	JJC Course Title	JJC Cr. Hrs.
CHEM 114 + CHEM 1-Z	Intro. to General Chemistry + CHEM General Credit	5	No Equivalent	No Equivalent	No Equivalent
PHYS 211* + PHYS 2ZL	Introductory Physics + PHYS General Credit	5	PHYS 101	General Physics	5

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.	JJC Equiv.	JJC Course Title	JJC Cr. Hrs.
Varies	FSU General Education - Culture Electives	9	Varies	Varies	9

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.	JJC Equiv.	JJC Course Title	JJC Cr. Hrs.
Varies	FSU General Education – Self and Society Electives	9	Varies	Varies	9

Additional General Education Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	JJC Equiv.	JJC Course Title	JJC Cr. Hrs.
MATH 220 + MATH 2--	Analytical Geometry – Calculus 1 + MATH General Credit	5	MATH 170	Calculus w/analytic Geometry	5

Ferris State University General Education Program

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

*Required for admission to the Welding Engineering Technology Bachelor of Science program.

Major Requirements- 35 credits required

FSU Course	FSU Course Title	FSU Cr. Hrs.	JJC Equiv.	JJC Course Title	JJC 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.	JJC Equiv.	JJC Course Title	JJC 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	No Equivalent	No Equivalent	No Equivalent
ETEC 140*	Engr.Graphics Comprehensive	3	No Equivalent	No Equivalent	No Equivalent
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
Total Credits Required for Degree					129

* Required for admission to the Welding Engineering Technology Bachelor of Science program.

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](#)

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.