

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.

General Admission Criteria

To be eligible for the Welding Engineering Technology, the following requirements must be met:

- 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 prerequisites to enter MATH 130 (MATH 120)
- Satisfy all prerequisites to enter EEET 301 (EEET 201)
- FSU PHYS 211 - Introductory Physics I or equivalent transfer course
- FSU ETEC 140 - Engineering Graphics Comprehensive or equivalent transfer course
- FSU MATL 240 - Introduction to Material Science 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 Course Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	NTC Equiv.	NTC Course Title	NTC Cr. Hrs.
ENGL 150*	English 1	3	COMM 10801136 or COMM 10801195	English Composition 1 or Written Communication	3
ENGL 250*	English 2	3	COMM 10801197	Technical Reporting	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 Course Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	NTC Equiv.	NTC Course Title	NTC Cr. Hrs.
MATH 115*	Intermediate Algebra	3	MATH 10804118	Intermediate Algebra	
MATH 120*	Trigonometry	3	MATH 10804196	Trigonometry with Applications	

Natural Sciences Competency Course Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	NTC Equiv.	NTC Course Title	NTC Cr. Hrs.
CHEM 114	Intro. to General Chemistry	4	No Equivalent	No Equivalent	No Equivalent
PHYS 211*	Introductory Physics	4	SCIENCE 10806154	General Physics 1	4

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

FSU Course	FSU Course Title	FSU Cr. Hrs.	NTC Equiv.	NTC Equiv. Title	NTC 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 Course Requirements - Minimum 9 credits from 2 different disciplines with 1 at 200 level or higher

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

Additional General Education Course Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	NTC Equiv.	NTC Course Title	NTC Cr. Hrs.
MATH 130	Adv. Algebra – Analytical Trigonometry	4	MATH 10804197	College Algebra and Trigonometry with Applications	
MATH 220	Analytical Geometry-Calculus	4	No Equivalent	No Equivalent	No Equivalent

*Required for admission

Ferris State University General Education Program

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

Major Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	NTC Equiv.	NTC Course Title	NTC 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.	NTC Equiv.	NTC Course Title	NTC 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
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

Program Contact Information:

Main Campus, Big Rapids

College of Engineering Technology

(231) 591-2511 | [Ferris State University Welding Degrees Email](mailto:ferris@ferris.edu) |

www.ferris.edu/transfer

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.

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.