FERRIS STATE UNIVERSITY

SURVEYING ENGINEERING TRANSFER GUIDE FOR HENRY FORD COLLEGE

Ferris Program: Surveying Engineering
Degree Type: Bachelor of Applied Science
Ferris College: College of Engineering Technology
Transfer School: Henry Ford College (HFC)
Consortium Eligible: No
Total Credits Required: 143
Catalog Year: 2024-2025

GENERAL EDUCATION REQUIREMENTS — *68 Credits Required*

Students are encouraged to work with an advisor to select appropriate general education courses. Diversity Competency - 2 Courses Required. If not met by courses taken for Culture, Self and Society, or MTA, a student must meet the following: 1 course with the Global Diversity attribute and 1 course with the U.S. Diversity attribute.
Visit the Ferris State general education page for more information.

Communication Competency

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
COMM 121	Fundamentals of Public Speaking	3	SPC 131
ENGL 150	English 1	3	ENG 131
* ENGL 250	English 2	3	ENG 132

* SURE 365, 420, and 465 are Major Courses that are also considered Writing Intensive Courses (WICs) and satisfy the upper-level English requirement.

Quantitative Literacy Competency

Requirements for Quantitative Literary Competency can be met with the following:

- Official Pre-2016 Math SAT Score of 560 or Higher
- Official Post-2016 Math SAT Score of 580 or Higher
- Official Math ACT Score of 24 or Higher

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
MATH 220	Analytical Geometry and Calculus 1	4	MATH 180

Natural Sciences Competency

Two courses are required with a minimum of 6 credits: must have at least one lab course.

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
CHEM 121	General Chemistry 1	5	CHEM 141
GEOL 131	Geology and Land Use Management	3	No Equivalent

Culture Competency

Three courses are required with a minimum of 9 credits: must be from two different disciplines and have at least one 200 level or higher course.

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
SURE 331	Ethics and Professionalism in Engineering Technology	3	No Equivalent
Varies	Cultural Electives	6	Varies

Self and Society Competency

Three courses are required with a minimum of 9 credits: must be from two different disciplines, have at least one 200 level or higher course, and at least one Self and Society Foundation course.

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
Varies	Self and Society Electives	9	Varies

Additional General Education Requirements

These courses are additional General Education courses to meet the requirements for this specific program.

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
MATH 230	Analytical Geometry and Calculus 2	4	MATH 183
PHYS 241	General Physics 1	5	PHYS 231
PHYS 242	General Physics 2	5	PHYS 232
MATH 322	Linear Algebra	3	MATH 283
MATH 330	Differential Equations	3	No Equivalent

COLLEGE REQUIREMENTS — *75 Credits Required*

Major Courses

75 Credits Required. These courses are used to calculate the major 2.00 GPA requirement.

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
SURE 110	Fundamentals of Surveying	4	No Equivalent
SURE 115	Introduction to Computer Mapping	2	No Equivalent
CONM 121	Materials Properties and Testing	3	No Equivalent

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
SURE 215	Surveying Computations	3	No Equivalent
CENG 220	Engineering Surveying	3	No Equivalent
GISC 225	Principles of Geographic Information Systems	3	No Equivalent
CENG 240	Engineering Statistics	3	No Equivalent
SURE 230	Advanced Surveying	3	No Equivalent
GISC 239	Remote Sensing	3	No Equivalent
SURE 272	Programming Applications in Geomatics	2	No Equivalent
CENG 321	Hydraulics Engineering	4	No Equivalent
SURE 340	Photogrammetry	3	No Equivalent
SURE 365	Legal Aspects of Surveying 1	3	No Equivalent
SURE 366	Evidence and Procedure for Boundary Locations	3	No Equivalent
SURE 372	Adjustment Computations 1	2	No Equivalent
SURE 373	Adjustment Computations 2	3	No Equivalent
SURE 420	Professional Practice of Surveying	3	No Equivalent
CENG 421	Soils Engineering	4	No Equivalent
GISC 425	Technical Issues in Geographic Information Systems and Cartography	3	No Equivalent
SURE 440	Advanced Photogrammetry	3	No Equivalent
SURE 452	Geodesy 1	4	No Equivalent
SURE 453	Geodesy 2	4	No Equivalent
SURE 465	Legal Aspects of Surveying 2	3	No Equivalent
CENG 499	Applied Research in Surveying Engineering	4	No Equivalent

PROGRAM CONTACT INFORMATION

College of Engineering Technology

Ferris State University

Survey Engineering Technology Programs
(231) 591-2633
Surveying@Ferris.edu

ADMISSION REQUIREMENTS

New Student Admission Requirements

- 2.75 High School GPA (on a 4.00 scale) (2.50 -2.74 with college approval)
- Minimum Composite Score of ACT 18/SAT 950, Math Score of ACT 26/SAT 620,
- Placement into MATH 220

Transfer Student Admission Requirements

- 2.50 College GPA (on a 4.00 scale)
- Placement into MATH 120 or higher

MORE INFORMATION

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 a statewide location).

To fulfill the residency requirement for a bachelor's degree a student must earn a minimum of 30 credits from Ferris State University.

Steps to Apply

- Complete your free application.
- Submit official transcripts
  - Submit official transcripts from every school attended to Transfer@Ferris.edu
  - Or mail to:
    Ferris State University Admissions Office
    1201 S. State St., CSS 201
    Big Rapids, MI 49307
- Submit test scores (if required)
  - ACT Scores; go to the ACT website - Ferris State University School Code: 1994
  - SAT, CLEP and AP Sores; go to the College Board website - Ferris State University School Code: 1222

Advising Notes

It is recommended that potential applicants meet with an advisor to review the degree, course schedule, transfer policies and have any questions answered prior to completing an application. Ferris accepts transfer courses in which the student earned a letter grade of "C" or better. Additional policies such as the Ferris Sunset and Residency Requirement should be discussed with a Ferris advisor. 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 coursework may reduce the chance of completing a course that will not apply toward the selected degree. Students must work with their Ferris advisor to declare a Minor or Concentration and for the selection of Directed Electives.

Once admitted, students are required to complete an orientation and should continue to meet with an advisor as they work toward graduation.

To schedule an appointment or for additional transfer resources and policies see our Transfer Resource page.

*Indicates an approved Ferris course substitution

Reverse Transfer Agreement

Ferris has reverse transfer agreements with several Michigan Community Colleges. Under such agreement, Ferris will provide your official University transcript to a partner school you have attended, so that they may grant you an associate or bachelor's degree upon completion of sufficient and appropriate credit hours from both institutions. In turn, the degree-granting institution will provide Ferris with an updated transcript reflecting the newly earned credential.

Michigan Transfer Agreement (MTA)

Ferris participates in the Michigan Transfer Agreement (MTA). This agreement will facilitate the transfer of general education requirements from one Michigan institution to another. Students may complete the MTA as part of a degree program or as a stand-alone package. The MTA consists of a minimum of 30 general education credit hours as identified by the college or university.

Students transferring to Ferris with the Michigan Transfer Agreement (MTA) and entering a degree program will have met a 30-hour block of lower-level general education courses. However, this does not exempt students from completing program-specific prerequisites or higher-level general education course requirements. Students should contact their advisor regarding classes that meet the MTA.

Transfer Equivalencies Tools

The transfer equivalencies link is located in the Transfer Resources section at transfer.ferris.edu.

Disclaimer

Transfer guides are not intended to be a contract with Ferris. The information in this guide is subject to change and is aligned with the catalog year listed above. Students should contact their community college and/or Ferris to keep informed of changes. Students' final responsibility for verifying all transfer information lies with the student. Please refer to the Ferris catalog for the most current curriculum.
Partners may contact the Office of Transfer and Secondary School Partnerships with questions or updates at TransferGuidesArticulations@Ferris.edu.