# FERRIS STATE UNIVERSITY PLASTICS ENGINEERING TECHNOLOGY TRANSFER GUIDE FOR MUSKEGON COMMUNITY COLLEGE

Ferris Program: Plastics Engineering Technology Degree Type: Bachelor of Applied Science Ferris College: College of Engineering Technology Transfer School: Muskegon Community College (MUSKCC) Consortium Eligible: No Total Credits Required: 132 Catalog Year: 2024-2025

### **GENERAL EDUCATION REQUIREMENTS –** 46 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<br>Speaking | 3                   | COM 102               |
| ENGL 150      | English 1                          | 3                   | ENG 101               |
| ENGL 250      | English 2                          | 3                   | ENG 102 or<br>ENG 221 |
| ENGL 311      | Advanced Technical<br>Writing      | 3                   | No Equivalent         |

#### 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 120      | Trigonometry        | 3                   | MATH 112 or<br>TMAT 201 |

#### **Natural Sciences Competency**

Two courses are required with a minimum of 6 credits: must have at least one lab course. The courses depend on chosen minor, please see your advisor prior to registering for courses.

| Ferris Course | Ferris Course Title | Ferris Credit Hours | Transfer Course |
|---------------|---------------------|---------------------|-----------------|
| CHEM 121      | General Chemistry 1 | 5                   | CHEM 101        |

| Ferris Course | Ferris Course Title                           | Ferris Credit Hours | Transfer Course |
|---------------|---|---------------------|-----------------|
| CHEM 211      | Fundamentals of Organic and Polymer Chemistry | 4                   | No Equivalent   |

#### **Culture 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.

| Ferris Course | Ferris Course Title | Ferris Credit Hours | Transfer Course |
|---------------|---------------------|---------------------|-----------------|
| Varies        | Culture Electives   | 9                   | 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 |
|---------------|------------------------|---------------------|-----------------|
| PHYS 211      | Introductory Physics 1 | 4                   | PHYS 201        |

### **COLLEGE REQUIREMENTS** – 86 Credits Required

#### **Major Courses**

60 Credits Required.

| Ferris Course | Ferris Course Title                            | Ferris Credit Hours | Transfer Course |
|---------------|--|---------------------|-----------------|
| PPET 100      | Survey of Plastics and<br>Elastomer Technology | 2                   | No Equivalent   |
| PPET 115      | Plastics Product<br>Manufacturing              | 2                   | No Equivalent   |
| PPET 127      | Introduction to<br>Processing                  | 4                   | No Equivalent   |
| PPET 131      | Introduction to Robotics                       | 2                   | ELTC 104        |
| PPET 193      | Industrial Internship                          | 4                   | No Equivalent   |
| PPET 211      | Introduction to Injection<br>Molding           | 5                   | No Equivalent   |

| Ferris Course | Ferris Course Title   | Ferris Credit Hours | Transfer Course |
|---------------|---|---------------------|-----------------|
| PPET 212      | Plastics Product<br>Development 1                                       | 4                   | No Equivalent   |
| PPET 222      | Plastics and Polymer<br>Material Selection 1                            | 3                   | No Equivalent   |
| PPET 223      | Plastics Testing  | 4                   | No Equivalent   |
| PPET 280      | Introduction to Rubber  | 2                   | No Equivalent   |
| PLTS 300      | Plastics Engineer<br>Management System                                  | 3                   | No Equivalent   |
| PLTS 312      | Plastics Product and Tool<br>Design 2                                   | 4                   | No Equivalent   |
| PLTS 320      | Plastics and Elastic<br>Materials                                       | 3                   | No Equivalent   |
| PLTS 321      | Advanced Injection<br>Molding   | 4                   | No Equivalent   |
| PLTS 393      | Industrial Internship 2   | 4                   | No Equivalent   |
| PLTS 410      | Plastics Costing,<br>Packaging and Economic<br>Issues                   | 3                   | No Equivalent   |
| PLTS 411      | Plastics Decorating and<br>Assembly                                     | 4                   | No Equivalent   |
| PLTS 499      | Capstone Project Plastics<br>Seminar                                    | 1                   | No Equivalent   |
| Varies        | Plastics (PLTS) or Rubber<br>(RUBR) Major Elective<br>(Consult Advisor) | 2                   | Varies          |

### **Technical Related Courses**

21 Credits Required.

| Ferris Course | Ferris Course Title                   | Ferris Credit Hours | Transfer Course         |
|---------------|---------------------------------------|---------------------|-------------------------|
| ETEC 140      | Engineering Graphics<br>Comprehensive | 3                   | No Equivalent           |
| EAET 201      | Electrical Fundamentals               | 3                   | ELTR 101 or<br>ELTC 101 |
| MECH 250      | Fluid Power with<br>Controls          | 2                   | No Equivalent           |
| MECH 340      | Statics and Strengths of<br>Materials | 4                   | No Equivalent           |

| Ferris Course | Ferris Course Title  | Ferris Credit Hours | Transfer Course |
|---------------|--|---------------------|-----------------|
| Varies        | Manufacturing<br>Engineering Technology<br>(MFGE) Directed<br>Electives - 300 Level or<br>Higher (Consult Advisor) | 9                   | Varies          |

#### **Business Elective**

| Ferris Course | Ferris Course Title                    | Ferris Credit Hours | Transfer Course |
|---------------|--|---------------------|-----------------|
| Varies        | Business Elective<br>(Consult Advisor) | 3                   | Varies          |

#### **Directed Elective**

| Ferris Course | Ferris Course Title                    | Ferris Credit Hours | Transfer Course |
|---------------|--|---------------------|-----------------|
| Varies        | Directed Elective<br>(Consult Advisor) | 2                   | Varies          |

### **PROGRAM CONTACT INFORMATION**

College of Engineering Technology Plastics and Rubber Engineering Technology Programs (231) 591-2640 PlasticsAndRubber@Ferris.edu

Ferris Statewide - Muskegon Community College (616) 451-4777 FerrisMuskegon@Ferris.edu

### **ADMISSION REQUIREMENTS**

#### **New Student Admission Requirements**

- The Plastics Engineering Technology, BS degree is only open to students who meet the Transfer Student Admission Requirements below.
- High school students interested in this program may apply to the Plastics/Polymer Technology, AAS program.

#### **Transfer Student Admission Requirements**

- Must have completed an Associate of Applied Science degree in Plastics/Polymer Technology
- 2.75 College GPA (on a 4.00 scale)
- Competency in MATH 120

### **MORE INFORMATION**

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.
- 4 Ferris State University

• 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 Scores; 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.