

Grand Rapids Community College (GRCC)
Articulation Agreement and Transfer Guide

After completing the Plastics Engineering Technology degree, students are immediately employable by the plastics industry. There is consistent, virtually 100 percent placement of our graduates. B.S. graduates usually start in engineering positions such as process, product or project engineer, quality control engineer or technical sales representative. Many of our graduates have attained management positions throughout the plastics industry.

General Admission Criteria

Transfer Students

- AAS in Plastics and Polymer Engineering Technology or equivalent
- Minimum GPA of 2.75

Communication Competency Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	GRCC Equiv.	GRCC Course Title	GRCC Cr. Hrs.
COMM 121	Fundamentals of Public Speaking	3	COM 131	Fundamentals of Public Speaking	3
ENGL 150	English 1	3	EN 101	English Composition	3
ENGL 250	English 2	3	EN 102	English Composition 2	3
ENGL 311	Advanced Technical Writing	3	EN 249	Technical Writing	3

Quantitative Literacy Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	GRCC Equiv.	GRCC Course Title	GRCC Cr. Hrs.
MATH 1-Q or MATH 130 or MATH 220	MATH 100 Lvl Gen Cr Quant. Or Adv. Algebra & Analytical Trig. or Analytical Geometry – Calculus 1	3	MA 110 or MA 131 or MA 133	College Algebra or Pre-Calculus or Calc/Analytic Geometry	4

Natural Sciences Competency Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	GRCC Equiv.	GRCC Course Title	GRCC Cr. Hrs.
CHEM 114	Intro to General Chemistry	5	CHM 120	Survey of General Chemistry	5
CHEM 214	Fund. Of Organic Chemistry	4	CHM 240	Survey of Organic Chemistry	4

Self and Society Competency Requirements – 9 credits, courses in this category must come from 2 different disciplines; 1 course at 200+ level or higher

FSU Course	FSU Course Title	FSU Cr. Hrs.	GRCC Equiv.	GRCC Course Title	GRCC Cr. Hrs.
Varies	Varies	9	Varies	Varies	9

Culture Competency Requirements – 9 credits, courses in this category must come from 2 different disciplines; 1 course at 200+ level or higher

FSU Course	FSU Course Title	FSU Cr. Hrs.	GRCC Equiv.	GRCC Course Title	GRCC Cr. Hrs.
Varies	Varies	9	Varies	Varies	9

Additional General Education Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	GRCC Equiv.	GRCC Course Title	GRCC Cr. Hrs.
PHYS 211	Introductory Physics 1	4	PH 125	General Physics 1	5

[Ferris State University General Education Program](#). Students are encouraged to work with an advisor to select appropriate general education courses.

All FSU General Education – Self and Society and Culture Electives may be completed at GRCC; however, students should consult with a Ferris Faculty Advisor prior to completing the courses due to the timeline and sequencing needed to complete the degree.

Major Requirements – 60 Credits Required

FSU Course	FSU Course Title	FSU Cr. Hrs.	GRCC Equiv.	GRCC Course Title	GRCC Cr. Hrs.
PPET 100 and PPET 115 and PPET 222	Survey of Plastics and Elastomer Technology and Plastics Product Manufacturing and Plastics and Polymer Material Selection	2 and 2 and 3	MN 219 and MN 220	Survey of Polymer Technology and Basic Plastic Process	7
PPET 127	Introduction to Processing	4	MN 244	Advanced Plastics Processes	4
PPET 193	Industrial Internship	4	TE 282	Manufacturing & Technology Internship	3

Major Requirements continued on page 2

Major Requirements continued

FSU Course	FSU Course Title	FSU Cr. Hrs.	GRCC Equiv.	GRCC Course Title	GRCC Cr. Hrs.
PPET 211	Introduction to Injection Molding	5	MN 242	Applied Injection Molding (pre-requisite MN 223)	4
PPET 212	Plastics Product Development	4	DR 241	Mold Design and Theory	3
PPET 223	Plastics Testing	4	MN 165	Plastics Testing	4
PPET 280	Introduction to Rubber	2	No Equivalent	No Equivalent	No Equivalent
PLTS 300	Plastics Engineer Management System	3	No Equivalent	No Equivalent	No Equivalent
PLTS 312	Plastics Product and Tool Design 2	4	No Equivalent	No Equivalent	No Equivalent
PLTS 320	Plastics and Elastic Materials	3	No Equivalent	No Equivalent	No Equivalent
PLTS 321	Advanced Injection Molding	4	No Equivalent	No Equivalent	No Equivalent
PLTS 393	Industrial Internship 2	4	No Equivalent	No Equivalent	No Equivalent
PLTS 410	Plastics Costing, Pkng, and Econ Issues	3	No Equivalent	No Equivalent	No Equivalent
PLTS 411	Plastics Decorating and Assembly	4	No Equivalent	No Equivalent	No Equivalent
PLTS 499	Capstone Project – PLTS Seminar	1	No Equivalent	No Equivalent	No Equivalent
PLTS/RUBR	Major Elective (consult advisor)	2	No Equivalent	No Equivalent	No Equivalent
PPET 131	Introduction to Robotics	2	No Equivalent	No Equivalent	No Equivalent

Technical Related – 21 Credits Required

FSU Course	FSU Course Title	FSU Cr. Hrs.	GRCC Equiv.	GRCC Course Title	GRCC Cr. Hrs.
EEET 201	Electrical Fundamentals	3	EL 144	Basic Elect & Electronics	4
ETEC 140	Engineering Graphics	3	EG 110	Industrial Graphics w/ CAD	3
MECH 250	Fluid Power w/ Controls	2	MN 217	Hydraulics	4
MECH 340	Statics and Strengths of Materials	4	No Equivalent	No Equivalent	No Equivalent
MFGE 3xx	MFGE Directed Elective	3	No Equivalent	No Equivalent	No Equivalent
MFGE 3xx	MFGE Directed Elective	3	No Equivalent	No Equivalent	No Equivalent
MFGE 3xx	MFGE Directed Elective	3	No Equivalent	No Equivalent	No Equivalent

Business Elective – 3 Credits Required – consult with advisor

FSU Course	FSU Course Title	FSU Cr. Hrs.	GRCC Equiv.	GRCC Course Title	GRCC Cr. Hrs.
Varies	Business Directed Elective	3	No Equivalent	No Equivalent	No Equivalent

Directed Elective – 2 Credits Required – consult with advisor

FSU Course	FSU Course Title	FSU Cr. Hrs.	GRCC Equiv.	GRCC Course Title	GRCC Cr. Hrs.
Varies	Directed Elective	2	No Equivalent	No Equivalent	No Equivalent

Total Credits Required for Degree**132****Program Contact Information:****Main Campus, Big Rapids****College of Engineering Technology**(231) 591-3773 | [College of Engineering Technology Website](#)[Transfer Partnerships Website](#)**Delivery Locations**

This degree and the Ferris courses are offered at the following locations:

- Ferris State University, Main Campus, Big Rapids
- 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.

Ferris State University and Community College – Plastics Engineering Technology – Articulation Agreement and Transfer Guide

Effective September 1, 2019 – September 1, 2023

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

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.

Students must work with their Ferris advisor to declare a Minor or Concentration and for selection of Directed Electives.

Original Signed Articulation Agreement

The original, signed document is kept on file in the Office of Transfer and Secondary School Partnerships. To obtain a copy of the original, signed document, contact the Office of Transfer and Secondary School Partnerships at 231/591-5983 or email your request to transfercenter@ferris.edu.

This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed to be one and the same agreement. A signed copy of this Agreement delivered by facsimile, e-mail, or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Agreement.

Indemnification

To the extent permitted by law, Ferris State University and the Community College agree to indemnify and hold one another harmless from any and all claims initiated by student participants, their parents, survivors, or agents, arising from any negligent acts or omission on the part of either institution or any of their employees.

Articulation Agreement

Effective Dates: September 1, 2019 – September 1, 2023

This Agreement shall commence as September 1, 2019 and shall be for an initial term of three years. Minor updates to the agreement may be made during this time. This agreement may be renewed at the end of three years. Either party may terminate this agreement by providing the other party with written notice of the intent to terminate the agreement. The agreement shall terminate not less than one hundred eighty (180) days from the date of the termination notice, unless otherwise agreed in writing by both parties.

Signatures

Ferris State University
1201 S. State Street
Big Rapids, MI 49307
Phone: (231) 591-2000

Grand Rapids Community College
143 Bostwick Avenue N.E.
Grand Rapids, MI 49503
Phone: (616) 234-4000

September 1, 2019

Rich Goosen
Interim Dean
College of Engineering Technology

September 1, 2019

Amy Mansfield
Dean
School of Workforce Development

September 1, 2019

Robert Speirs
Program Coordinator
Plastics / Rubber Engineering Technology

September 1, 2019

Nate Spahn
Department Head
Manufacturing