

The Product Design Engineering Technology program at Ferris offers instruction and practical experience in all facets of product design. Students are prepared to effectively participate in a design environment, generate conceptual design sketches and drawings, create complex design layouts, perform static and dynamic analysis, create models and prototypes, create and define complex surfaces and shapes, and understand and integrate manufacturing principles into design. Study also emphasizes communication, mathematics and analytical skills. Students also receive hands-on experience through labs that gives them real-world experience.

#### General Admission Criteria

To be admitted to this degree, students must have a minimum of 60 transferable semester credit hours of pre-admission coursework. A minimum 2.5 grade point average is required, and students will need to submit official transcripts from all accredited colleges/universities with their application.

The following courses (or FSU equivalents) must be completed with a "C" or higher prior to admission: COMM 101 (COMM 121), ENGL 101 (ENGL 150), ENGL 102 or ENGL 103 (ENGL 250), MATH 128 & MATH 130 (MATH 126) or MATH 135 (MATH 130), PHYS 211 (PHYS 211).

#### Course Requirements

Lake Michigan College			
Course	Ferris Equiv.	LMC Course Titles	Cr. Hrs.
<b>Pre-admission classes</b>			
COMM 101	COMM 121	Public Speaking	3
ENGL 101	ENGL 150	English Composition I	3
ENGL 102	ENGL 250	English Composition II	3
or	Or	Or	
ENGL 103	ENGL 211	Report Writing	
(MATH 128	MATH 130	Pre-Calc Algebra	7
and	And	And	
MATH 130)	MATH 120	Pre-Calc Trig	Or
or	or	Or	
MATH 135	MATH 130	Pre-Calc Algebra/Trig	4
PHYS 211	PHYS 211	General Physics I	
		FSU General Education - Self and Society Elective	3
		FSU General Education - Culture Elective	3
		CAD Graphics Class (mechanical)	
Other classes		As needed to achieve a total of 60 credit hours	
		<b>Sub-Total (minimum)</b>	<b>60</b>
<b>Program classes</b>			
		FSU General Education - Self and Society Elective (200 level or higher)*	3
		FSU General Education - Culture Elective (200 level or higher)*	3
ART 122	ARTS 101	Drawing I	3
CHEM 101	CHEM 103	Introductory Chemistry	3
GEOG 100	GEOG 100	World Geography	3
MATH 151	MATH 220	Calculus I	5
<b>Total Lake Michigan College Credits</b>			<b>80</b>

Ferris State University		
Course	Ferris Course Titles	Cr. Hrs.
COMM 336	Technical & Professional Presentation	3
EEET 201	Electrical Automation	3
ENGL 321	Advanced Composition	3
PDET 311	Seminar into Product Design	1
PDET 312	Advanced Tolerancing	2
PDET 321	Applied Mechanics and Kinematic	3
PDET 322	Solid Modeling & Prototyping	2
PDET 411	Machine Design	3
PDET 412	Statistics & Ergonomics	2
PDET 413	Applied Fluids and Thermodynamics	3
PDET 415	Advanced Solid Modeling CAD	3
PDET 422	Advanced Machine Design with FEA	3
PDET 499	Product Design Project	3
PLTS 342	Materials Selection Plastics	3
MATL 240	Material Science	4
MATL 341	Material Selection Metals	3
MECH 340	Statics & Strengths of Materials	4
MFGE 352	Design for Manufacturing	2
<b>Total Ferris Credits</b>		<b>50</b>

#### Credits Required for Degree (Minimum) 130

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 are encouraged to work with their Ferris advisor for selection of any electives, to ensure transferability and to minimize credits taken.

#### Please refer to FSU's General Education Requirements at:

<http://www.ferris.edu/htmls/academics/gened/index.htm>

#### Program Offered at:

**Main Campus, Big Rapids**  
Product Design Engineering Technology  
<http://www.ferris.edu/pdet>  
231-591-2755

[www.ferris.edu/transfer](http://www.ferris.edu/transfer)

**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.

**Online Learning**

Select courses 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). The "Online Readiness Tutorial" is required for students who register for an online *course* or are completing an online *degree*. Students must demonstrate competency in Blackboard skills. This may be done by taking a tutorial and quiz, or, for students who have already taken and passed online courses, they can submit a waiver request. Students should check with the department that offers the class to determine its particular needs and/or the Ferris advisor regarding registration for online course work.

**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.

**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.

**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 the effective and/or revised date on the bottom of the guide.