

## North Central Michigan College Transfer Guide

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: COM 111 (COMM 121), ENG 101 (ENGL 150), ENG 102 (ENGL 250) COM 111 (COMM 121), MTH 119 & MTH 123 (MATH 126 OR MATH 130), PHY 210 (PHYS 211).

### Course Requirements

North Central Michigan College			
Course	Ferris Equiv.	NCMC Course Titles	Cr. Hrs.
<b>Pre-admission classes</b>			
COM 111	COMM 121	Speech	3
ENG 101	ENGL 150	English Composition I	3
ENG 102	ENGL 250	English Composition II	3
MTH 119 & MTH 123	MATH 130 or MATH 120	College Algebra  Trig & Applications	3  4
PHY 210	PHYS 211	General Physics I	3
		Social Awareness Elective (100 level or higher)*	3
		Cultural Enrichment Elective (100 level or higher)*	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>			
		Social Awareness Elective (200 level or higher)*	3
		Cultural Enrichment Elective (200 level or higher)*	3
ART 100	ARTS 101	Two Dimensional Design	3
CEM 101	CHEM 103	General Chemistry	3
GEO 121	GEOG 100	World Geography	3
MTH 122	MATH 220	Analytic Geom & Calculus I	5
<b>Total North Central Michigan College Credits</b>			<b>80</b>

\*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 requirements. Students should contact their advisor regarding classes that meet the MTA.

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>
<b>Credits Required for Degree (Minimum)</b>		<b>130</b>

### Contact Information

Big Rapids Campus  
 Product Design Engineering Technology  
<http://www.ferris.edu/pdet>  
[pdet@ferris.edu](mailto:pdet@ferris.edu)  
 231-591-2755  
[www.ferris.edu/transferservices](http://www.ferris.edu/transferservices)

## Delivery Locations

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

- Grand Rapids Community College, Grand Rapids MI
- Ferris State University, Big Rapids MI

## Transfer Student Orientation

All new students to Ferris State University are required to complete an orientation. Orientation for incoming freshmen is a one-day session that occurs on campus and includes class registration. Eligible transfer students have the option of completing an online orientation or attending an on campus session.

## Advising Notes

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.

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. Once admitted, students must continue to meet with an advisor as they work towards graduation.

## Online Learning

An “Online Readiness Tutorial” is required for students who register for an online *course* or are completing an online *degree*. Students must demonstrate competency in FerrisConnect 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.

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## 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 Ferris to keep informed of changes. Final responsibility for verifying all transfer information lies with the student.*