

# FERRIS STATE UNIVERSITY/COLLEGE OF TECHNOLOGY

Transfer Guide for

## NORTHWESTERN MICHIGAN COLLEGE

Associate Degree - CAD Detailer-Mechanical  
Into Product Design Engineering Technology

Home Page	Contact	Phone
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*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 (see "contact" above). Final responsibility for verifying all transfer information lies with the student.*

### CAREER PATH

A product designer begins with a concept, and then transforms it into a working design that specifies the size, shape, style, dimensions, and materials needed. Because this skill is needed for the production of millions of industrial and consumer goods, designers are in great demand. Their knowledge of design, engineering analysis manufacturing processes and communication techniques are valued in industries across the United States.

### ADMISSION REQUIREMENTS FOR TRANSFER STUDENTS

1. Associate degree in Mechanical Engineering, CAD Drafting, Pre-Engineering or similar approved programs.
2. 2.75 GPA in major coursework
3. 2.5 GPA in Math
4. MTH 121/122 or MTH 140 required

For assistance with the admission process, contact your transfer counselor at the community college or the transfer admissions officer at Ferris State University, Shari Chamberlain, at 1-800-4-FERRIS, [chambers@ferris.edu](mailto:chambers@ferris.edu)

### APPLICATION DEADLINES

It is recommended that students submit applications by January 15<sup>th</sup> prior to fall entry.

### TRANSFER GUIDE

- Coursework in PDET Major – In addition to the courses completed for the Associate Degree listed above, there may be other courses that can be completed at your college or another accredited college/university prior to transfer to Ferris that will meet requirements for the B.S. major. NOTE: ***First, check with a Ferris Faculty Advisor or the Department Chair (listed above) for academic advising prior to completing these courses.***
- General Education Requirements – All students earning a B.S. degree at Ferris State University must complete the Ferris State University *General Education Requirements*. Some of these general education requirements may have been completed as part of your associate degree, while others may be completed in addition to the associate degree at your college or another accredited college/university prior to transfer to Ferris, and others can be completed after transferring to Ferris. ***We suggest you first check with a Ferris Faculty Advisor or the Department Chair (listed above) for academic advising prior to completing these courses.***
- Students must complete a minimum of 30 credit hours at Ferris to meet graduation requirements.

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## Recommended courses to take in preparation for transfer into Product Design Engineering Technology Degree

FSU Course	Northwestern Michigan College	FSU Course Title	Cr. Hrs.
Major Courses for AAS Degree	Associates Degree in CAD Detailer-Mechanical	AAS Degree courses in the major and related technical areas.	
ENGL 150	ENG 111	<b>Communications Competence:</b> English I	3
ENGL 250	ENG 112	English 2	3
COMM 121	COM 111	Public Speaking	3
MATH 126 or Math 130	MTH 121/122 OR MTH 140	<b>Quantitative Skills:</b>	6
PHYS 211	PHY 121	<b>*1 Scientific Understanding:</b> Complete one lab science course from the following subject areas: Biology, Chemistry, Geography, Physics, Physical Science, etc.	4
Gen. Ed. Elective		<b>*2 Cultural Enrichment:</b> Complete one course from the following subject areas: Art, History, Humanities, Literature, Music, Foreign Language, etc.	3
Gen. Ed. Electives		<b>*3 Social Awareness:</b> Complete one course from the following subject areas: Anthropology, Economics, Political Science, Psychology, Sociology, etc.	3
MATL 240		Material Science	4

\*Contact the College of Technology educational counselor at Ferris State University if you have questions on specific transfer requirements. Email: [nelsonv@ferris.edu](mailto:nelsonv@ferris.edu), or call 231-591-2890.

REQUIRED DEGREE COURSE WORK				FSU Prerequisites
Course	Cr. Hrs.	FSU Course Title	Northwestern Michigan Equivalent	
<b>Fall</b>				
PDET 311	1	Seminar into Product Design		
PDET 312	2	Advanced Tolerancing		
EEET 201	3	Electrical Automation		
MECH 340	4	Statics and Strengths of Materials		PHYS 211
ARTS 101	3	Basic Art	ART 121	
CHEM 103	3	Chemistry	CHM 101	
<b>Winter</b>				
PDET 321	3	Applied Mechanics and Kinematic		
PDET 322	2	Model and Prototype		CAD Competency
MFGE 352	2	Design for Manufacturing		
PLTS 342	3	Materials Selection Plastics		
MATH 216	4	Applied Calculus		MATH 126
PSYC 150	3	Intro to Psychology *3	PSY 101	
<b>Fall</b>				
PDET 411	3	Machine Design		
PDET 412	2	Statistics and Ergonomics		
PDET 413	3	Applied Fluids and Thermodynamics		
MATL 341	3	Material Selection Metals		MATL 240
PDET 415	2	Advanced Solid Modeling CAD		PDET 322
ENGL 321	3	Advanced Composition		ENGL 211 or 250
<b>Winter</b>				
PDET 499	3	Product Design Project (Capstone Assessment)		
PDET 422	4	Advanced Machine Design with FEA		
PSYC 326	3	Industrial/Organizational Psychology		PSYC 150
ELECTIVE	3	Global Consciousness (200)		
COMM 336	3	Technical and Professional Presentation		COMM 121

You may visit the Ferris Transfer Equivalency website at: <http://www.ferris.edu/admissions/transfer/webpages>