

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. Demonstrated competency in basic Computer Aided Design (mechanical), three semester credits of approved Cultural Enrichment and three semester credits of Social Awareness are also required. Financial aid is available for students who have earned an Associate degree or 48 semester hours.

The following courses (or FSU equivalents) must be completed with a "C" or higher: ENG 131 (ENGL 150), ENG 132 (ENGL 250), SPC 131 (COMM 121), ENGR 201 (MATL 240), PHYS 131 (PHYS 211), MATH 112 and MATH 115 (MATH 126) or MATH 175 (MATH 130) and one course in Computer Aided Design (CAD) for mechanical applications.

Course Requirements

| Henry Ford College | | | |
|---|---------------|--|-----------|
| HFC Course | Ferris Equiv. | Henry Ford College Course Titles | Cr. Hrs. |
| Pre-admission classes | | | |
| SPC 131 | COMM 121 | Public Speaking | 3 |
| ENG 131 | ENG 150 | English Composition I | 3 |
| ENG 132 | ENG 250 | English Composition II | 3 |
| ENGR 201 | MATL 240 | Material Science | 3 |
| MATH 112 | MATH 126 | Trigonometry | 4 |
| MATH 115 or MATH 175 | MATH 130 | College Algebra or Pre-Calculus | 3-4 |
| PHYS 131 | PHYS 211 | General Physics I | 4 |
| HFC | VARIABLES | FSU General Education – Self and Society Elective (100 level or higher)* | 3 |
| HFC | VARIABLES | FSU General Education - Culture Elective (100 level or higher)* | 3 |
| HFC | VARIABLES | CAD Graphics Class (mechanical) | |
| Other classes | | As needed to achieve a total of 60 credit hours | |
| Sub-Total (minimum) | | | 60 |
| Program Classes | | | |
| ART 102 | ARTS 101 | Drawing I | 3 |
| CHEM 131 | CHEM 114 | Introductory Chemistry | 4 |
| GEOG 132 | GEOG 100 | World Geography | 3 |
| MATH 180 | MATH 220 | Calculus | 5 |
| HFC | VARIABLES | FSU General Education – Self and Society Elective (200 level or higher)* | 3 |
| HFC | VARIABLES | FSU General Education - Culture Elective (200 level or higher)* | 3 |
| Total Henry Ford College Credits | | | 81 |

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.

| Ferris State University | | |
|--|---------------------------------------|------------|
| Course | Ferris Course Titles | Cr.Hrs. |
| PDET 311 | Seminar into Product Design | 1 |
| PDET 312 | Advanced Tolerancing | 2 |
| EEET 201 | Electrical Automation | 3 |
| MECH 340 | Statics & Strengths of Materials | 4 |
| PDET 321 | Applied Mechanics and Kinematic | 3 |
| PDET 322 | Solid Modeling & Prototyping | 2 |
| PDET 412 | Statistics & Ergonomics | 2 |
| PLTS 342 | Materials Selection Plastics | 3 |
| PDET 411 | Machine Design | 3 |
| PDET 413 | Applied Fluids and Thermodynamics | 3 |
| PDET 415 | Advanced Solid Modeling CAD | 3 |
| MATL 341 | Material Selection Metals | 3 |
| ENGL 321 | Advanced Composition | 3 |
| MFGE 352 | Design for Manufacturing | 2 |
| PDET 499 | Product Design Project | 3 |
| PDET 422 | Advanced Machine Design with FEA | 3 |
| COMM336 | Technical & Professional Presentation | 3 |
| Total Ferris Credits | | 46 |
| Credits Required for Degree (Minimum) | | 127 |

Please refer to FSU's General Education Requirements at:
<http://www.ferris.edu/htmls/academics/gened/index.htm>

Program Offered at:
Big Rapids Campus
Product Design Engineering Technology
<http://www.ferris.edu/pdet>
pdet@ferris.edu
231-591-2755
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.