

Product Design Engineering Technology • Bachelor of Science

Why Choose Product Design Engineering Technology?

The Product Design Engineering Technology program at Ferris offers intensive 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 receive extensive hands-on experience through labs and internships to give them real-world experience.

Prepare for a Great Career

A product designer begins with a concept, 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. Employment opportunities exist across the spectrum of the product design field-wherever products are produced, designers will be found.

Specific job titles might include product designer, layout drafter, project manager, product developer, computer-aided designer, mechanical designer, project engineer, and design engineer.

Admission Requirements

Students entering the program must have completed a minimum of 60 transferrable semester hours with a minimum overall GPA of 2.5. The following specific courses are required for admission and may be included in the total transferable credit hours;

English Composition I & II
Basic Public Speaking
Mathematics through Pre-Calculus
General Physics I (with lab.)
Basic Material Science
Introductory Computer Aided Design

Admission counselors or program advisors should be consulted for an evaluation of transferability and course equivalency. Under special circumstances students with exceptional academic records can be admitted to the program before all pre-admission requirements are completed.

Graduation Requirements

The Product Design Engineering Technology program at Ferris leads to a bachelor of science degree. Graduation requires a minimum 2.0 GPA in core classes, in the major and overall. Students must complete all general education requirements as outlined on the General Education website.

Required Courses

	Credit Hours
General Education	
ARTS 101 Basic Art	3
CHEM 103 Preparatory Chemistry	3
ENGL 321 Advanced Composition	3
MATH 216 Applied Calculus	4
GEOG 100 Geography of World Regions	3
Elective: Social Awareness (200 level)	3
Elective: Cultural Enrichment (200 level)	3
Major	
COMM 336 Tech and Prof Presentation	3
EEET 201 Electrical Fundamentals	3
MATL 341 Material Selection Metals	3
MECH 340 Statics-Strength of Materials	4
MFGE 352 Design For Manufacturing	2
PDET 311 Seminar in Product Design	1
PDET 312 Advanced Tolerancing	2
PDET 321 Applied Mechanics-Kinematics	3
PDET 322 Model - Prototype Development	2
PLTS 342 Plastic Material Select-PDET	3
PDET 411 Machine Design	3
PDET 412 Statistics - Ergonomics	2
PDET 413 Applied Fluids - Thermodynam	3
PDET 415 Advanced Solid Modeling CAD	2
PDET 422 Advanced Machine Design	4
PDET 499 Product Design Project	3
Minimum credit hours required for B.S. degree (after completion of admission requirements)	65



More Information

College of Technology
Ferris State University
1009 Campus Drive/JOH 200
Big Rapids, MI 49307-2280
or call (231) 591-2890

FERRIS STATE UNIVERSITY

C O L L E G E O F E N G I N E E R I N G T E C H N O L O G Y