

2009-2010

# B.S. in Industrial Design

College of Sciences and Technology

## What Is the Study of Industrial Design?

Industrial Design students learn problem-solving methodologies, product research, drawing skills (both by hand and by computer), three dimensional model making techniques, materials, manufacturing processes, ergonomics, design theory, and marketing principles. These skills are applied in the design of many new and innovative products which eventually comprise the student's portfolio.

## Why Should I Consider This Major?

The Bachelor of Science Degree program in Industrial Design prepares graduates to begin working as practicing designers in corporate, consulting, or entrepreneurial positions. Industrial Design is the highly competitive, professional service of creating and developing concepts and specifications that optimize function, value, and appearance of products and systems for the mutual benefit of both the user and the manufacturer.

The Industrial Design program is accredited by the National Association of Schools of Art and Design (NASAD), 11250 Roger Bacon Drive, Suite 21, Reston, VA 20190; phone (703)437-0700.

## How to Declare:

Prospective Industrial Design majors must first successfully complete an entrance portfolio requirement before they can declare an Industrial Design major.

**\*Entrance Portfolio Requirement:** applicants must provide examples in the following five areas:

1. Sketching
2. 2-D design
3. 3-D design
4. Computer skills
5. Communication

Portfolios are reviewed by an Industrial Design Committee three times per year prior to the quarter of acceptance into the major. Submission deadlines are October 22 for winter quarter, February 14 for spring quarter, and June 10 for fall quarter. If applicants do not qualify for acceptance one quarter, they may apply for a following quarter after improving the content of their portfolio.

For information regarding the Entrance Portfolio submission format, contact the Department, or refer to the WWU Catalog or <http://www.wvu.edu/id/portfolio.html>

## Mid-Program Checkpoint:

Students must successfully complete their sophomore portfolio review (see requirements on reverse) at the end of their first two years of studies in order to continue on to their junior year of the I.D. program. Students intending to complete a Bachelor's of Science degree in Industrial Design within four years should complete the following courses by the start of their junior year. Students are expected to follow all prerequisite requirements for courses and seek early departmental advisement.

### Coursework:

ETEC 110, 111, 214, 215, 216, 231, 311, 312, 315

MATH 115 or 118

MGMT 271

PHYS 114, 115

ART 109, 110, 120, 130 or 140, 203, 220

A/HI 240 or 241

And other GURS

### Other Activities:

Attend IDSA Student Chapter meetings and go on the annual week-long out-of-state field trip to visit industrial design firms, meet with top designers, learn how design is used in the real world, and make networking contacts.

## Contact Information:

Engineering Technology  
Department Website:  
<http://www.etc.wvu.edu/>

Engineering Technology  
Program Advisor:  
Arunas Oslapas  
ET337; (360) 650-3425  
[Arunas.Oslapas@wwu.edu](mailto:Arunas.Oslapas@wwu.edu)

Engineering Technology  
Department Chair:  
Todd Morton  
ET209; (360) 650-3380  
[Todd.Morton@wwu.edu](mailto:Todd.Morton@wwu.edu)

## Sample Careers:

Staff Designer for a corporation that manufactures toys, electronics, furniture, outdoor gear, etc.

Design Consultant working in a small design firm that consults to a variety of manufacturers

Entrepreneur developing your own ideas



# Industrial Design Major Requirements: 135 Credits

## Industrial Design Core: 44 credits

ETEC 110 Engineering Design Graphics I (3)  
ETEC 111 Engineering Design Graphics II (3)  
ETEC 214 Sophomore Industrial Design I (5)  
ETEC 215 History of Industrial Design (3)  
ETEC 216 Sophomore Industrial Design II (5)  
ETEC 223 Machine Metal Processes (4)  
ETEC 231 Design Problems in Woodworking (4)  
ETEC 301 Materials for Design (5)  
ETEC 311 Perspective and Rendering I (4)  
ETEC 312 Industrial Design CAD Skills (4)  
ETEC 315 Perspective and Rendering II (4)

## Professional Practice Series: 30 credits

ETEC 314 Junior Industrial Design I (5)  
ETEC 316 Junior Industrial Design II (5)  
ETEC 318 Junior Industrial Design III (5)  
ETEC 414 Senior Industrial Design I (5)  
ETEC 416 Senior Industrial Design II (5)  
ETEC 418 Senior Industrial Design III (5)

## Supporting Courses: 61 credits

ART109 Visual Dialogue (3)  
ART110 Form and Content I: Drawing (3)  
ART120 Form and Content II: 2-D (3)  
ART130 Form and Content III: 3-D (3)  
Or ART 140 Form and Content: Special Topics (4)  
ART 203 Contemporary Studio Drawing (4)  
ART 220 Painting (4)  
ART 230 Beginning Sculpture (4)  
ART 290 Photography (4)  
A/HI 240 Visual Culture in Western Europe in the 19<sup>th</sup> Century (3)  
Or A/HI 241 Visual Culture in Western Europe and America in 20<sup>th</sup> Century (3)  
A/HI 270 Visual Culture in South and Southeast Asia (3)  
DSGN 270 Graphic Design I (4)  
MATH 115 Precalculus I/II (5)  
Or MATH 118: Accelerated Precalculus (5)  
PHYS 114 Principles of Physics (5)  
PHYS 115 Principles of Physics (5)  
MGMT 271 Law and the Business (4)  
MKTG 380 Principles of Marketing (4)

*Sophomore Portfolio Review Requirements* include the completion of the following classes: MATH 115 or 118; PHYS 115; ETEC 110, 214, 215, 216, 231, 311, 312, 315; a minimum of five studio Art courses (ART 110, 120, 130 or 140, 203 and 220 recommended); one Art History course (ART 109 recommended); a maximum of 90 credits remaining to graduate; a portfolio consisting of seven pieces or projects. Portfolio requirements are listed on the ID website and will be discussed in depth throughout the sophomore industrial design courses.

**These courses are offered within this major and may be used to satisfy GUR or Writing Proficiency requirements:**

**QSR:** MATH 115 or 118

**HUM:** ART 109, A/HI 240, 241

**SSC:** MGMT 271

**ACGM:** A/HI 270

**SCI:** PHYS 114

**LSCI:** PHYS 115

**WP:** Three Writing Proficiency points are required for graduation (they are noted as WP1, WP2, and WP3). Check [Classfinder](#) or [Online Timetable](#) for departmental offerings each quarter.

## *Other Engineering Technology options:*

B.S. Electronics Engineering Technology (149 credits)

B.S. Industrial Technology (110 credits)

B.S. Manufacturing Engineering Technology (144 credits)

B.S. Plastics Engineering Technology (139 credits)

B.S. Vehicle Engineering Technology Option in Plastics Engineering Technology (139 credits)

Minor in Manufacturing Engineering Technology (25-27 credits)

Minor in Embedded Systems (27 credits)

Minor in Sustainable Design (30-32 credits)

Minor in Industrial Technology-Vehicle Design (25 credits)