2026-27 Academic Year

WAYNE STATE COLLEGE

INDUSTRIAL TECHNOLOGY >

DRAFTING AND DESIGN

The field of drafting offers the opportunity to become a key player in the design and construction industries. Drafters translate creative ideas and technical concepts into precise drawings and blueprints used in architecture, engineering, and manufacturing. In the Drafting and Design degree program at Wayne State College, you'll study mechanical and architectural drafting, project estimating, site surveying, and much more. With a strong foundation in computer-aided design (CAD) software, you'll learn to create detailed plans that guide the development of everything from buildings and machinery to consumer products. Whether you're interested in creating industrial prototypes with 3D printing, or mastering residential and commercial building codes, Wayne State's Drafting and Design program will prepare you for a dynamic career.

fast facts

Credit hours: 63-78

Students must also take 30 credit hours of General Studies courses. A total of 120 credit hours are needed to graduate from WSC. Additional majors or minors can be added to help meet graduation requirements.

Degree options: B.A. or B.S.

Department: Technology and Applied Science

School: Business and Technology

Popular pairings: Business Administration, Construction Management, Interior Design, Manufacturing Management, Safety Management

focus on results

Skills Learned

- Residential drawing
- Technical drawing and solid modeling
- Architectural design
- Construction estimating and scheduling
- 3-D modeling, rendering, and design
- Surveying and print reading
- Occupational and environmental safety
- Manufacturing processes and systems
- Welding and fabrication
- Construction systems and technology

Possible Careers

- Mechanical drafter
- Residential designer
- Architectural drafter
- CAD technician
- 3-D designer / renderer
- Product designer
- Industrial designer
- Estimator
- Project manager
- Building inspector
- Educator / trainer

Types of Employers

- Construction companies
- Architectural firms
- Home manufacturers
- Infrastructure companies
- Interior design firms
- Manufacturing companies
- Aircraft, marine, and vehicle companies
- Machine shops
- Graphic companies
- Government / federal agencies

outside the classroom

Visit www.wsc.edu/clubs to learn more about clubs and organizations on campus.

Activities / Opportunities

- Career Scholars Program
- Peer tutoring and mentoring
- Service-Learning

Clubs / Organizations

- Associated General Contractors (AGC)
- Drafting and Design Club
- Epsilon Pi Tau
- SkillsUSA

Courses and outcomes

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The following courses are required for the program of study described on this sheet. Every effort is made to ensure this information is current, but please be aware that some content may have changed. To develop a plan for registering and taking these courses, please consult the current academic catalog and your advisor.

Program courses

For CAT 3, take one of the following: MAT 110 Contemporary Applications of Mathematics, MAT 121 College Algebra, MAT 130 Precalculus, MAT 140 Calculus I, or MAT 180. Take PHS 102 Physical Science Today for CAT 7.

Industrial Technology Core Courses

BIO 104 Environmental Concerns for General Studies 3
BUS 208 Business Communications 3
BUS 471 Principles of Supervision 3
CIS 477 Project Management 3
ITE 111 Introduction to Safety 3
ITE 114 Introduction to Applied Engineering and Technology 3
ITE 202 Construction Systems 3
ITE 205 Introduction to Manufacturing Technology 3
MAT 118 College Mathematics for Industrial Technology 3

Drafting and Design Concentration Courses

ITE 214 Residential Drawing 3
ITE 219 Mechanical and Engineering Drafting 3
ITE 304 Surveying and Print Reading 3
ITE 309 Parametric Modeling and Industrial Design 3
ITE 314 Architectural Design 3
ITE 322 Fundamentals of CNC Machining 3
ITE 330 Welding Theory and Fabrication 3
ITE 367 Building Climate, Energy Control and Sustainability 3
ITE 390 Project Bidding and Estimating 3
ITE 404 Commercial and Structural Design 3
ITE 412 Industrial Prototypes and Manufacturing Design 3
Select one of the following 3-18
ITE 494 Coop Ed Program (18)
ITE 497 Internship (3)

Student learning outcomes

1. Demonstrate effective skills in written, oral, and graphical communication
2. Apply current technologies and tools to identify and solve problems in industrial settings
3. Implement occupational and personal safety, health, and well-being principle
4. Apply management and leadership skills in industrial technology

industrial technology faculty

Visit www.wsc.edu/technology-applied-science-department to learn more about the Department of Technology and Applied Science.

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