The vision of the Department of Industrial Design is to empower the next generation of designers to identify and solve small to large scale problems in order to devise systemic, forward-thinking solutions, mindful of societal needs and ecological repercussions, fostering health and well-being for people and the environment.

We do this by providing students with the necessary tools and experiences, spanning across the product development timeline from the front-end of problem finding through design research and synthesis, to discovery of meaningful design solutions that can range from products to services and systems. The industrial design program offers opportunities to collaborate with diverse disciplines on campus and beyond to tackle a wide variety of local and global design challenges.

Degree offerings include the Bachelor of Industrial Design (B.I.D.) and the Master of Industrial Design (M.I.D.).

Undergraduate Program Structure
Students in this program take a carefully defined sequence of courses developed to give them exposure and practice in the areas of theory and skill required by industrial design. These include design sketching and visualization, form development, history, creative thinking, engineering principles, research, design methodology, human factors, computer-aided design, manufacturing techniques, commercial factors, management, strategic design development, service design, and user experience design. In their third year, students select electives within and outside of the department, defining current issues in the profession. The upper-level studio classes are reserved for study abroad programs connecting students to the global design community, internships, and industry-sponsored projects with students from other departments and colleges. The curriculum aims to develop the ability to cope with diverse problem areas in industrial design, without restricting them to specific fields in design.

An industrial design degree from Iowa State prepares students for creative careers in private and corporate practice, with design consulting companies, in-house design departments, and product manufacturers. Career choices with an industrial design degree include (but are not limited to):
- Product designer, packaging designer, advertising & experience designer, UX designer and researcher.

Student Learning Outcomes
Upon completion of the industrial design program students will be able to:

1. Analyze and address critically the needs of ALL stakeholders involved in the design process and avoid biases, through emphasizing critical thinking, empathy, compassion, and reflective practices. (DIVERSITY, EQUITY & INCLUSION)
2. Navigate and apply varying design methods and techniques commonly used to identify and solve small to large scale problems creatively and methodically. (CREATIVE DESIGN PROCESS)
3. Develop comprehensive products, services and systems solutions through situation and circumstance appropriate touchpoints and platforms. (PRODUCTS, SERVICES & SYSTEMS)
4. Understand and evaluate ethical, societal, environmental, and cultural short and long-term consequences of design solutions for all people and the planet. (SUSTAINABILITY & ETHICAL DESIGN - aka the designers’ dilemma of unintended consequences)
5. Communicate professionally and effectively with all stakeholders of the design process from peers and co-workers to clients and end users in both forms verbally and visually. (COLLABORATION, COMMUNICATION & PROFESSIONALISM)

Degree Requirements
The curriculum in Industrial Design leads to a 133-credit undergraduate Bachelor of Industrial Design including the first year Core Design Program.

Admission into the professional program depends upon available departmental resources. Updated information on admission criteria is announced yearly on the College of Design website.

Transfer students with studio credits from other programs, colleges, and universities must present a portfolio of work done in those courses, for departmental review, in order to have the credits apply toward studio. Students are required to present this portfolio upon admission and prior to registration for classes. Arrangements for this process must be made with department advisors.

A 60-credit post-professional graduate program is also offered leading to the terminal degree Master of Industrial Design.

Total Degree Requirements: 133 credits
Only 65 credits from a two-year institution may apply, which may include up to 16 technical credits; 9 P-NP credits of free electives; 2.00 minimum GPA.
### International Perspective: 3 credits
ENGL 1500 Critical Thinking and Communication (*) 3

### U.S. Diversity: 3 credits
ENGL 2500 Written, Oral, Visual, and Electronic Composition (*) 3

### Communications: 10 credits
LIB 1600 Introduction to College Level Research 1

One of the following: 3
- COMST 1010 Introduction to Communication Studies
- COMST 2110 Interpersonal Communication
- SPCM 1100 Listening
- SPCM 2120 Fundamentals of Public Speaking
- THTRE 2510 Acting Foundations

Total Credits 10

* With a C or better

### Humanities: 6 credits
6 credits from program curriculum sheet

### Social Sciences: 6 credits
6 credits from program curriculum sheet

### Math/Physics/Biol. Sciences: 6 credits
6 credits from program curriculum sheet

### General Education Courses: 9 credits
6 credits of course level 3000-4000 from program curriculum sheet: complete 3 credits from department curriculum sheet.

### College of Design Core: 13 credits
- DSNS 1020 Design Studio I 4
- DSNS 1150 Design Collaborative Seminar 1
  or DSNS 1100 Design Exchange Seminar I
- DSNS 1310 Drawing I 4
- DSNS 1320 Digital Design Literacy 1
- DSNS 1830 Design in Context 3

Total Credits 13

### History, Theory and Criticism: 15 credits
- INDD 2100 Fundamentals of Industrial Design 3
- INDD 2800 History of Industrial Design 3
- INDD 3800 History and Culture of Objects 3

Two courses from the approved course list; must include one 3000 level or higher. 6

Total Credits 15

### Industrial Design: 60 credits
- INDD 2010 Industrial Design Studio I 6
- INDD 2020 Industrial Design Studio II 6
- INDD 2200 Concepts of Sketching and Making I 3
- INDD 2500 Activity-Centered Industrial Design 3
- INDD 2600 Design Engineering: From Thought to Thing 3
- INDD 3010 Industrial Design Studio III 6
- INDD 3200 Design Research Methods 3
- INDD 3300 Creative Thinking in Design 3
- INDD 3400 Digital Design Technologies 3
- INDD 3600 Materials and Processes for Industrial Design 3
- INDD 3700 STEM literacy: How Things Work 3
- INDD 4400 Portfolio and Professional Practice 3
- INDD 4990 Senior Project 6

Total Credits 51

### Experiential Learning: 6 credits
6 credits from program curriculum sheet

### Electives: 11 credits
Electives should be assembled to support a focused area of study.

Suggested Departmental Electives:
- INDD 2400 Digital Tools For Industrial Design 3
- INDD 3500 Applied Human Factors Lab 1
- INDD 4350 Strategic Design: Project Management 3
- INDD 4600 Product Realization 3
- INDD 5200 Design Theory Methodology 3
- INDD 5300 Design Thinking 3
- INDD 5400 Design Communication 3
- INDD 5500 Human Factors: User Experience Design 3
- INDD 5600 Change by Design: Disruptive Innovation 3
- INDD 5700 Systems Thinking in Design 3
- INDD 5800 Material Culture and Values 3

Industrial Design, B.I.D.
## First Year

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### Graduate Program

**Master of Industrial Design | MID**

60 credit study | distributed across two consecutive years

What will (Industrial) Design look like in the future? Where is the field going? What new methods and methodologies will be needed to tackle current and emergent global issues? What will it mean to be human in the age of Artificial Intelligence? How will design disciplines answer to these new futures, new typologies of users, and constantly evolving technologies, and increasing environmental challenges?

These are just some of the questions we are concerned with in the MID program. Designing successfully during these times of uncertainty will require open minded designers, who, as connectors, are flexible, critical, empathetic and creative risk takers. Designers who are capable of working and collaborating in different contexts, under ever changing circumstances, across domains and most importantly in different roles.

### Description of the degree

The Master of Industrial Design (MID) program at the College of Design, Iowa State University, emphasizes a creative problem-solving based curriculum rooted in design thinking methodologies, that allows students to explore their interests in the broad and expanding field.

Industrial Design is a human-centered discipline that questions existing boundaries and makes connections among diverse domains. Therefore, the program challenges students to develop the ability to recognize and define problems in new ways, and then find opportunities others might have missed or undervalued. Through a strategic and creative problem-solving process, Industrial Design tries to reimagine how we should go about developing innovative, sustainable and durable solutions for people and society at large that genuinely lead to better quality of life and better futures. The MID program actively connects with other knowledge domains and disciplines, to research how things are with the drive to propose how they ought to be. This is achieved through the challenging balance between critical and creative ways of thinking [and working] when devising novel, useful and meaningful artifacts, services, experiences, and environments. Ultimately, the program integrates the design triad of people, business, and technology, in innovative ways, and is based on insightful research to create new value and competitive advantage in a variety of societal, economic, and environmental contexts.

### Details about the degree

The MID program is centralized on the creation and application of new knowledge through in-depth investigations of existing ‘gaps’ culminating in a graduation project, which includes a creative component.
(project based) or a written thesis (research focused). At the same time, students expand their design practice skills using different methodologies, collaboratively, throughout the entire design process. They explore, generate, transfer, and implement interdisciplinary insights into foundational knowledge for the discipline of Industrial Design.

The MID is accredited and recognized as a terminal degree in Industrial Design. This graduate program is designed to offer significant mix of skills and experiences, including students from different disciplinary backgrounds, faculty-directed research programs, internships, international study abroad, industry-sponsored coursework, and also teaching experience.

The MID program is positioned in one of the most comprehensive design colleges in the country, facilitating the integration of methodologies and skill sets from multiple disciplines. Additionally, the program has established curricular connections to the nationally ranked College of Engineering and its Human Computer Interaction Graduate Program, the Ivy College of Business, as well as to numerous industry collaborators and practitioners.

Degree requirements includes a completion of a 2-year, 60-credit program, including a required core (45 credits), focused electives (9-12 credits) and experiential learning credits (3-6 electives). The final MID Graduate Project includes one of the following: a) creative component with a design process report (6 credits) or b) research-focused written thesis (6 credits). Students and their supervisory team work collaboratively on the in-depth graduate project, adding to the body of knowledge of [industrial] design through investigating, exploring and solution finding of a complex [industrial] design problem.

**Curriculum Outline**

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**First Year**

**Fall**
- INDD 5010: 6 INDD 5020 or DSNS 5460: 6
- INDD 5200: 3 INDD 5400: 3
- INDD 5300: 3 INDD 5500: 3
- INDD 5700: 3 INDD 5800: 3
- Departmental Elective: 3 Departmental Elective: 3

**Credits Total:** 18

**Second Year**

**Fall**
- INDD 6010: 6 INDD 6400: 3
- Focused Elective: 3 INDD 5990X or INDD 6990: 6
- ISU or College Elective: 3 ISU or College elective: 3
- ISU or College Elective: 3 ISU or College Elective: 3

**Credits Total:** 15

Admission to the MID program is by application to the department and to the Graduate College. Information about our programs and how to apply can be obtained from the department’s web page at: https://www.design.iastate.edu/industrial-design/degrees/master-of-industrial-design/ or send an email directly to the Director of Graduate Studies.