

Industrial Design (Bachelor)

The Industrial Design Program offers a four-year professional bachelor degree. Industrial Design is concerned with all human aspects of products/technologies/systems and their relationship to people. The industrial designer is responsible for product safety, aesthetics, usability, maintenance, and cost. Industrial designers deal with consumer and industrial products. In order to achieve these ends, designers must be involved in major design and research areas such as human behavior, human-machine relationships, the environment, and the product itself. In addition, the designer's responsibility extends into sustainability, product liability, and cross-cultural issues.

Areas of study in the Bachelor of Industrial Design include:

- furniture
- textiles, house wares
- appliances
- transportation
- tools
- farm equipment
- medical instruments
- electronics
- human-computer interfaces
- recreational support equipment

The goal of the Industrial Design curriculum is to teach the design and development of products or product systems and their relationship to human beings and the environment.

Graduates of the Bachelor of Industrial Design program have career opportunities in three general types of practice: corporate design offices in manufacturing companies, independent consulting offices, and governmental agencies.

Plan Requirements

Code	Title	Hours
Writing		
ENG 101	Academic Writing and Research ¹	4
Core Requirements		
ID 110	Introduction to Digital Techniques ¹	3
ID 210	Intermediate Digital Techniques ¹	3
ID 310	Advanced Digital Techniques ¹	3
ID 216	Visualization I ¹	3
ID 316	Visualization II ¹	3
ID 255	Contemporary Manufacturing Processes I ¹	3
ID 244	History of Industrial Design ¹	3
ID 240	Human-Centered Design ¹	3
ID 340	Research Methods in Industrial Design ¹	3
ID 440	Experience Design for ID ¹	3
Design Electives (p. 1) ¹		6
Studios		
D 104	First Year Studio I	6
ID 102	Basic Industrial Design Studio ¹	6

ID 201	Industrial Design Studio I ¹	6
ID 202	Industrial Design Studio II ¹	6
ID 301	Industrial Design Studio III ¹	6
ID 302	Industrial Design Studio IV ¹	6
ID 401	Advanced Industrial Design Studio I ¹	6
ID 402	Advanced Industrial Design Studio II ¹	6

International Experience

International Experience (S Allowed, Verify requirement) ²	0
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General Education Program (GEP) Courses

GEP Humanities (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-humanities/)	3
GEP Social Sciences (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-social-sciences/)	6
GEP Mathematical Sciences (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-mathematical-sciences/)	6
GEP Natural Sciences (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-natural-sciences/)	7
GEP Health and Exercise Studies (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-health-exercise-studies/)	2
GEP Elective (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/)	3
GEP Global Knowledge (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-global-knowledge/) (verify requirement)	
GEP Foundations of American Democracy (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-fad/) (verify requirement)	
World Language Proficiency (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/world-language-proficiency/) (verify requirement)	

Free Electives

Free Electives (12 Hr S/U Lmt) ³	5
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Total Hours	120
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¹ A grade of C- or higher is required.

² Students should consult their academic advisors to determine how to complete this requirement.

³ Students should consult their academic advisors to determine which courses fill this requirement.

Design Electives

Code	Title	Hours
ADN 212	Photography I	3
ADN 219	Digital Imaging I	3
ADN 272	Introduction to Printing and Surface Design	3
ADN 273	Fibers Materials and Processes	3
ADN 281	Drawing I	3
ADN 312	Photography II	3
ADN 319	Animation I	3
ADN 384	Painting I	3
ADN 386	Sculpture I	3
ADN 414	Color and Light	3
ADN 419	Creative Technology Studio II	3
ADN 472	Advanced Surface Design	3

ADN 481	Drawing II	3
ADN 486	Sculpture II	3
ARC 162	An Introduction to Architecture	3
GD 492	Special Topics in Graphic Design	3
GD 494	Internship in Graphic Design	3
GD 495	Independent Study in Graphic Design	1-3
GD 510	Imaging for Graphic Design IV	3
GD 517	Type IV	3
ID 256	Contemporary Manufacturing Processes II	3
ID 262	Professional Practice in Industrial Design	3
ID 494	Internship in Industrial Design	1-6
ID 495	Independent Study in Industrial Design	1-3

Notes

1. Students who major in Industrial Design may elect one (1) six-credit-hour studio outside the major to fulfill one (1) 200 or 300 level studio requirement.
2. Declaration of intent to enroll in studios other than Industrial Design during any semester must be made during the pre-registration period prior to enrollment. No more than one (1) six credit studio may be taken in any given semester.

Semester Sequence

This is a sample.

First Year

Fall Semester		Hours
ID 110	Introduction to Digital Techniques	3
D 104	First Year Studio I	6
ID 244	History of Industrial Design	3
GEP Health and Exercise Studies (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-health-exercise-studies/)		1
Hours		13

Spring Semester		
ID 102	Basic Industrial Design Studio	6
ID 210	Intermediate Digital Techniques	3
ID 216	Visualization I	3
ENG 101	Academic Writing and Research	4
Hours		16

Second Year

Fall Semester		
ID 201	Industrial Design Studio I	6
ID 310	Advanced Digital Techniques	3
ID 316	Visualization II	3
GEP Social Sciences (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-social-sciences/)		3
Hours		15

Spring Semester		
ID 202	Industrial Design Studio II	6
ID 240	Human-Centered Design	3
GEP Mathematical Sciences (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-mathematical-sciences/)		3

ID 255	Contemporary Manufacturing Processes I	3
Hours		15

Third Year

Fall Semester		
ID 301	Industrial Design Studio III	6
ID 340	Research Methods in Industrial Design	3
ID 256	Contemporary Manufacturing Processes II	3
GEP Humanities (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-humanities/)		3
Hours		15

Spring Semester

ID 302	Industrial Design Studio IV	6
ID 440	Experience Design for ID	3
GEP Natural Sciences (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-natural-sciences/)		3
GEP Mathematical Sciences (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-mathematical-sciences/)		3
Hours		15

Fourth Year

Fall Semester		
ID 401	Advanced Industrial Design Studio I	6
Design Elective (p. 1)		2
Free Elective		3
GEP Natural Sciences (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-natural-sciences/)		4
Hours		15

Spring Semester

ID 402	Advanced Industrial Design Studio II	6
Free Elective		3
GEP Social Sciences (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-social-sciences/)		3
GEP Elective (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/)		3
GEP Health and Exercise Studies (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-health-exercise-studies/)		1
Hours		16
Total Hours		120

Career Opportunities

Career opportunities for graduates of the Department of Graphic and Industrial Design span the range from industrial design to virtual design. Graduates of this department are currently working in fields such as product development, furniture design, recreational product design, toy design, exhibition design, textile design, fashion design, photography, film making, special effects, set design, ergonomics and human factors.

Career Titles

- Art, Drama, & Music Professors
- Commercial Designer
- Furniture Designer
- Graphic Designer
- Industrial Designer

- Interior Designer
- Ornamental-Metalwork Designer
- Package Designer
- Product Planner
- Textile Designer
- Toy Designer
- Web Art Director

Learn More About Careers

NCcareers.org (<https://nccareers.org/>)

Explore North Carolina's central online resource for students, parents, educators, job seekers and career counselors looking for high quality job and career information.

Occupational Outlook Handbook (<https://www.bls.gov/ooh/>)

Browse the Occupational Outlook Handbook published by the Bureau of Labor Statistics to view state and area employment and wage statistics. You can also identify and compare similar occupations based on your interests.

Career One Stop Videos (<https://www.careeronestop.org/>)

View videos that provide career details and information on wages, employment trends, skills needed, and more for any occupation. Sponsored by the U.S. Department of Labor.

Focus 2 Career Assessment (<https://careers.dasa.ncsu.edu/explore-careers/career-assessments/>) (NC State student email address required)

This career, major and education planning system is available to current NC State students to learn about how your values, interests, competencies, and personality fit into the NC State majors and your future career. An NC State email address is required to create an account. Make an appointment with your career counselor (<https://careers.dasa.ncsu.edu/about/hours-appointments/>) to discuss the results.

Focus 2 Apply Assessment (<https://www.focus2career.com/Portal/Register.cfm?SID=1929>) (Available to prospective students)

A career assessment tool designed to support prospective students in exploring and choosing the right major and career path based on your unique personality, interests, skills and values. Get started with Focus 2 Apply and see how it can guide your journey at NC State.

Industrial Designers Society of America (<http://www.idsa.org/>)