

What Can I Do With This **Ohio State** Major?

Bachelor of Science

Industrial and Systems Engineering

College of Engineering

Industrial and systems engineering (ISE) is concerned with the design, operation, and improvement of integrated systems of people, material, information, equipment, and energy. Industrial engineers (IEs) address the overall performance of systems, responsiveness of systems to customer and user needs, and the quality of products or services produced. IEs also carefully evaluate and design the roles people play within work systems to ensure people can safely, effectively, and efficiently perform their tasks while maximizing work quality. In sum, industrial engineers are systems integrators and productivity enhancers.ⁱ

Career Areas/Job Titles:

Management and Industry

Operations Management
Consultant
Entrepreneur
Efficiency Expert
Strategic Planner
Sales Representative
Workplace Designer
Production Supervisor

Hospital Administrator

Health Professions

Medical Doctor
Veterinarian

Pharmacist

Science and Technology

Research and Design Specialist
Product Designer
Quality Engineer

Manufacturing Engineer

Information Specialist

Government/Politics

Intellectual Properties Lawyer

Education

K-12 Teacher
Professor

**Some careers may require licensure, certification, or further education. Talk to an advisor about specific requirements.*

Transferable Skills:

Basic Computer Skills
Engineering Fundamentals
Expressing Ideas
Persuasion
Provide/Respond to Feedback
Use Technology Effectively
Written Communication
Teaching/Instructing Others
Teamwork

Defining Needs
Forecasting/Predicting
Identifying Problems
Setting Goals
Adaptability/Flexibility
Attention to Detail
Judgment & Decision Making
Implementing Decisions
Administrative Skills

Organization Skills
Planning
Prioritizing Tasks
Strategic Planning/Visioning
Creating Innovative Solutions
Quantitative Reasoning
Data Analysis
Analytical/Critical Thinking
Problem Solving

**This is not an extensive list of transferable skills. See larger list of skills you might develop here:*

<http://ccss.osu.edu>

Professional Links:

American Society of Safety Engineers: <http://www.asse.org/>

Human Factors and Ergonomics Society: <https://www.hfes.org/web/Default.aspx>

Institute of Industrial Engineers: <http://www.iienet2.org/>

The American Society for Quality: <http://asq.org/index.aspx>