The materials science and engineering (MSE) program at Ohio State is designed to train engineers to design, process, characterize, and manufacture all of the materials used today as well as those yet to be developed. Materials scientists and engineers are experts in the performance, specification, and manufacture of metals, ceramics, semiconductors, plastics, and composites. They must have broad knowledge of a variety of scientific and engineering fields to be competitive. The MSE program enjoys an international reputation and places its graduates in every facet of industry and academia. Students in MSE may focus their studies on ceramics, metallurgy, biomaterials, polymers, and electronic materials.

**Career Areas/Job Titles:**

**Management and Industry**
- General Manager
- Site Manager
- Project Coordinator
- Quality Control Auditor
- Consultant

**Science and Technology**
- Ceramic Engineer
- Composite Engineer
- Metallurgical Engineer
- Plastics Engineers
- Semiconductor Process Engineer

**Education**
- Professor
- Researcher

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

**Transferable Skills:**

- Engineering Fundamentals
- Mathematic Skills
- Physics Foundation
- Provide/Respond to Feedback
- Speaking Effectively
- Use Technology Effectively
- Written Communication
- Social Perceptiveness
- Teaching/Instructing Others
- Teamwork
- Conceptualization
- Developing Evaluation
- Strategies
- Experimental Design
- Forecasting/Predicting
- Research Skills
- Attention to Detail
- Judgment & Decision Making

*This is not an extensive list of transferable skills. See larger list of skills you might develop here: [http://ccss.osu.edu](http://ccss.osu.edu)

**Professional Links:**

- The Materials Research Society: [www.mrs.org](http://www.mrs.org)
- The Minerals, Metals & Materials Society: [www.tms.org](http://www.tms.org)
- ASM International: [www.asminternational.org/portal/site/www/](http://www.asminternational.org/portal/site/www/)
- American Chemical Society: [http://portal.acs.org/portal/acs/corg/content](http://portal.acs.org/portal/acs/corg/content)