Welding engineering employs science and engineering in joining components made of metals, ceramics, plastics, and other materials. Welding engineering includes design of the joints to be welded, development of the detailed joining procedures to be used, selection of the materials incorporated in the joint, joint inspection, and quality control for the final product. Welding engineering can also involve research in these areas, such as developing new welding processes or procedures for new materials. Welding engineers work with design engineers to develop efficient welding designs and fabrication procedures.

**Career Areas/Job Titles:**

**Management and Industry**
- Consultant
- Entrepreneur
- Operations Manager
- Sales Representative
- Welding Engineer
- Weld Inspector

**Science and Technology**
- Research and Design Specialist
- **Non-Profit/Advocacy**
  - Peace Corps Volunteer
- **Government/Politics**
  - Naturalist
  - Lawyer

**Lobbyist**

**Education**
- K-12 Teacher
- Professor

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

**Transferable Skills:**

- Building and Construction
- Chemistry Focus
- Engineering Fundamentals
- Mathematic Skills
- Physics Foundation
- Persuasion
- Provide/Respond to Feedback
- Use Technology Effectively
- Conceptualization
- Defining Needs
- Developing Evaluation
- Strategies
- Forecasting/Predicting
- Identifying Problems
- Attention to Detail
- Judgment & Decision Making
- Implementing Decisions
- Organization Skills
- Strategic Planning/Visioning
- Creating Innovative Solutions
- Analytical/Critical Thinking
- Problem Solving

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

**Professional Links:**