## Module F: Lesson Plan 17: Career and Education Planning

### Topic:
How It’s Made...A Career

### Standard(s): Students will:

<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
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<tr>
<td>2.0</td>
<td>Develop skills to locate, evaluate, and interpret career information.</td>
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<tr>
<td>4.0</td>
<td>Demonstrate employability skills such as working in a group, problem-solving and organizational skills, and the importance of entrepreneurship.</td>
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<tr>
<td>8.0</td>
<td>Demonstrate knowledge of technology and its application in career fields/clusters.</td>
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### Length:
One - Two class periods

### Objective: Students will:

- Identify various items in their classroom that were manufactured.
- Describe what types of careers would be found in a manufacturing company.
- Research career opportunities.
- Identify educational requirements for careers in manufacturing.

### Materials:
- Made in Florida website - [www.madeinflorida.org](http://www.madeinflorida.org)
- Handout - What is Manufacturing? created by FLATE
- Handout - Careers in Manufacturing created by FLATE
- Sticky note pads

### Description of Activity:

1. Divide students into teams of 2 or 3 students.
2. Have students look around the room, from their seats, and come up with a list of at least 3 items in the classroom that were manufactured and 3 items that were not manufactured.
3. Have one member of the team label the items they chose with sticky notes (have each team put their names on the sticky notes).
4. Have the teams explain the items they selected and discuss how they think the items were made.
5. Have each team select 1 item from their list.
6. Give each student a copy of *What is Manufacturing?* and *Careers in Manufacturing* created by FLATE.
7. Give teams 10-15 minutes to come up with, a) steps to make their items, for example, idea – design – put together (fabricate) – test – market – sell/distribute, b) what types of careers are available, and c) what type of companies they could work for.
8. Have students individually write down two or more careers, from the handout(s), that they would like to know more about.

9. The homework assignment is to research the careers they chose. Select one career and complete a project. Students can find career information on the Made in Florida website (www.madeinflorida.org), under Career Pathways and Links.

- The project must include:
  - Job Title
  - Companies they could work for
  - Educational requirements – High School, Associate’s Degree, Bachelor’s, etc.
  - Diagram showing their career path (see What is Manufacturing? handout, page 2).

**Evaluation:**

Students will be evaluated on quality and creativity of their career project, research ability, and demonstration of teamwork skills.
Discovering great careers in Florida

Manufacturing is the process of changing raw or processed materials into products people can use. Many COOL careers that use your imagination and skills with the HOTTEST technologies to make better things for our world!

Statewide over 16,000 manufacturing companies and 400,000 Floridians make products you use everyday. Manufacturers make almost every product you use, from the rims you buy, to the jeans you wear, to musical instruments you play.

If you get satisfaction by making something, get excited about using new technology, or you work well with teams of people, then the manufacturing industry may be the place for you.

These are some manufacturing sectors:

- Aviation and Aerospace
- Medical Devices
- Electronic Devices
- Food, Paper, Beverage & Cosmetics
- Printing
- Leisure & Entertainment
- Metals and Plastics
- Mining
- Systems Engineering
- Transportation
Which aspects of the manufacturing process might interest you?

Sample careers:
- Design
- Fabricate
- Test
- Market
- Distribute

Product design
- Production process and tool design
- Manufacturing operations
- Engineering
- Facilities Maintenance
- Automation and controls
- Robotics
- Materials Handling
- Quality assurance
- Packaging Design
- Information technology (IT)
- Sales and Marketing
- Finances
- Customer service

Academic paths leading to careers in manufacturing:

Visit [www.madeinflorida.org](http://www.madeinflorida.org) to learn more about careers in manufacturing!
# Careers in Manufacturing

<table>
<thead>
<tr>
<th>Industry</th>
<th>Companies</th>
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<tbody>
<tr>
<td><strong>Aviation &amp; Aerospace</strong></td>
<td>CAE USA&lt;br&gt;Technology Research Consultants&lt;br&gt;Pall Aeropower&lt;br&gt;Module F: Exploring Careers&lt;br&gt;Lockheed Martin Aeronautics</td>
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<tr>
<td><strong>Medical Devices</strong></td>
<td>Lorenz Surgical&lt;br&gt;Baxter Healthcare Corporation&lt;br&gt;Promedica&lt;br&gt;Boston Scientific</td>
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<tr>
<td><strong>Transportation</strong></td>
<td>Chris-Craft Industries&lt;br&gt;Featherlite&lt;br&gt;Mercury Marine&lt;br&gt;Sensor Systems/Fisher Motors&lt;br&gt;Cooper Tire and Rubber</td>
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<tr>
<td><strong>Electronics &amp; Electrical</strong></td>
<td>Tampa Armature Works&lt;br&gt;Universal Microwave&lt;br&gt;Cypress Semiconductor&lt;br&gt;Jabil Circuit, Inc.&lt;br&gt;VLOC</td>
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<tr>
<td><strong>Food, Beverage &amp; Packaging</strong></td>
<td>Florida's Natural&lt;br&gt;Packaging Corporation of America&lt;br&gt;Tropicana&lt;br&gt;Ven-Tel Plastics</td>
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<tr>
<td><strong>Metal Machining &amp; Product Fabrication</strong></td>
<td>Sun Hydraulics&lt;br&gt;Norris Precision Manufacturing&lt;br&gt;Vulcan Machine&lt;br&gt;Hunter-Douglas</td>
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<tr>
<td><strong>Leisure &amp; Entertainment</strong></td>
<td>Aladdin Equipment Company&lt;br&gt;Walt Disney Companies&lt;br&gt;Busch Gardens&lt;br&gt;Tervis Tumblers&lt;br&gt;Universal Studios</td>
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<tr>
<td><strong>Product Design &amp; Integration</strong></td>
<td>Sims Machine and Controls&lt;br&gt;L-3 Communications&lt;br&gt;New England Machinery&lt;br&gt;Poly Pack</td>
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