TRANSPORTATION, DISTRIBUTION AND LOGISTICS

ADVANCED MANUFACTURING TECHNOLOGIES
A NEW NSF-ATE GRANT

- **Transportation, Distribution, and Logistics**
  - The backbone of the supply chain
  - Planning, management and movement of people and goods
  - Facilitate the operation of the supply chain

- **Mechatronics**
  - Electronics, mechanics, robotics, and information systems
  - Manufacture goods in the supply chain
  - Guarantee the smooth operation of the supply chain

“Multidisciplinary Simulation: Educating Advanced Manufacturing and Transportation, Distribution, and Logistics Technicians for a 21st Century Workplace” Funded by The National Science Foundation’s Advanced Technological Education Program
Advanced manufacturing doesn’t happen in a vacuum.

There are business processes running behind the scenes:

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<tr>
<th>Supply chain management</th>
<th>Operations management</th>
<th>Shipping and Receiving</th>
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<tbody>
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<td></td>
<td>Planning, execution and control</td>
<td>Receiving raw materials and shipping finished goods</td>
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This project is unique in that it exposes the student to more than TDL and Advanced Manufacturing. The student will learn that manufacturing is a part of a larger supply chain.

**WHAT STUDENTS WILL LEARN**

- Logistics/Supply Chain Technologies
  - Oracle NetSuite
  - Geographic Information Systems (GIS)
- Advanced Manufacturing Technologies
  - Mechatronics
  - Robotics
  - Graphic Design
  - Machine Tool
Advanced Manufacturing students will be able to collaborate with students in other areas: business management and logistics. Students in Business and TDL will collaborate with students in Advanced Manufacturing.

- **BUSINESS MANAGEMENT**
- **QUALITY MANAGEMENT**
- **PRODUCT DEVELOPMENT**

Everyone involved in this project will learn how their work affects each other, and how they fit into the enterprise that employs them.
SUPPLY CHAIN MANAGEMENT
TRANSPORTATION, DISTRIBUTION, AND LOGISTICS
Mechatronics
CNC Plasma Cutting
TRANSPORTATION, DISTRIBUTION AND LOGISTICS

ADVANCED MANUFACTURING TECHNOLOGIES

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