Advanced Manufacturing @ Forsyth Tech

Gary M. Green
President
Advanced Manufacturing Capabilities

- Product and Industrial Design
- Advanced Manufacturing Production
- Emerging Technologies
- Advanced Manufacturing Service/Support
- Organizational Development
- Transportation and Distribution
Advanced Manufacturing Capabilities

Design

- Mechanical Engineering Technology
  - Rapid Prototyping
  - Additive Manufacturing
    - Siemens NX; AutoCAD; Catei, Pro-E

- Graphic Arts and Imaging

- Digital Effects and Animation
  - Digital Arts and Manufacturing
Advanced Manufacturing Capabilities

Production

- Computer Integrated Machining
  - Manual Milling and Lathe
  - CNC Milling and Lathe; Haas, Fanuc, Siemens Controls

- Welding
  - TIG, MIG
  - Heavy Plate Welding

- Industrial Systems

- Mechanical Engineering Technology
  - Robotics
Advanced Manufacturing Capabilities

Emerging Technologies

Biotechnology

Nanotechnology

R&D

Medical Devices

Bioprocessing/Biomanufacturing
Advanced Manufacturing Capabilities

Support/Service

Electronics Engineering Technology

Computer Engineering Technology

Biomedical Equipment Technology
Advanced Manufacturing Capabilities

Organizational Development

- Project Management
- Lean Manufacturing
- Leadership / Supervision
Advanced Manufacturing Capabilities

Distribution

- Global Logistics
- Business – Logistics Management
- Import/Export Compliance
## Advanced Manufacturing Enrollment

*Based on Fall 2013*

<table>
<thead>
<tr>
<th>Program</th>
<th>Enrollment</th>
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<tbody>
<tr>
<td>Mechanical Engineering</td>
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<tr>
<td>Graphic Arts &amp; Production</td>
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<td>Digital Effects and Animation</td>
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<tr>
<td>Computer Integrated Machining</td>
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<td>Welding</td>
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<td>Industrial Systems</td>
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<td>Nanotechnology</td>
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<td>Electronics Engineering</td>
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<td>Global Logistics</td>
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<tr>
<td>Business/Logistics Management</td>
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<tr>
<td>Import/Export Compliance</td>
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</table>
### Advanced Manufacturing Capabilities

#### 3rd Party Skill Certification

<table>
<thead>
<tr>
<th>NAM-Endorsed Skill Certification</th>
<th>Other</th>
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<tbody>
<tr>
<td>NCRC</td>
<td>CPM</td>
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<tr>
<td>AWS</td>
<td>APICS</td>
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<tr>
<td>NIMS</td>
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<tr>
<td>MSSC</td>
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</table>

Industry-Sector Technical Competencies
Skills Certifications Awarded

- 55 Bronze
- 246 Silver
- 81 Gold
- 2 Platinum

- 4 Milling
- 16 Drilling
- 80 Job Planning, Benchwork & Layout
- 129 Measurement Materials & Safety

- 6 SMAW D1.1
- 32 GMAW D1.1

- 13 Safety
- 17 Maintenance Awareness

- 384 CRC
- 229 NIMS
- 38 AWS
- 30 MSSC
Advanced Manufacturing Capabilities
Community-based Workforce Development Model/Ecosystem

Funding
- Federal
- State
- Local

Employment
Community College

University

Workforce Development Board
State Employment Services
Employers
K-12/ Adult Education

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