Align4NCWorks

Developing an Effective k-20+ Pipeline
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Where “we” started: Decades of relationship building

- Huskins/Dual enrollment
- Career and College Promise
- CTE showcase
- On site admission
- Job Fair
- Engineering week
The Skills Gap

President Obama

- 3 million jobs, but...
  - Needed training
  - Education related to skills
  - Stackable and latticed credentials
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**Industry**

Calvin Balance: Cummins RMEP

- Need for skilled employees
  - Now
  - Next year
  - The next 5 years
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**K-12 Education**

Dr. Anthony Jackson: NRMPS

- Career and Technical Education
- Exploratory education
- STEM programs
- Technology: right now, on time
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Higher Education

Dr. Bill Carver: NCC

- State-of-the-art, industry ready equipment
- Qualified and certified instructors
- Accredited programs
- Industry credentials
- 2+ agreements
Building a Workforce Pipeline

Future Labor

Creates Competitive Advantage
How it all began!

Then.....
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Advanced Manufacturing Partnership

AMP

Wendy Marlowe, Associate Vice President
Nash Community College
ADVANCED MANUFACTURING

THIS IS NOT YOUR GRANDFATHER’S JOB.

THINK THIS IS MANUFACTURING?
THINK AGAIN.

MANUFACTURING IS CHANGING...

ADVANCED MANUFACTURING TODAY
Computer technology has revolutionized manufacturing jobs.

The United States still leads the world’s manufacturing economy, contributing 18.2% of manufactured products worldwide - more than any other country.

Have you visited a factory lately? Repetitive manual tasks in the workplace have been replaced with high-tech automation robotics and computer numerical controlled (CNC) machines. Manufacturing jobs are safer, cleaner and more productive than ever before.

1st IN MANUFACTURING WORLDWIDE
U.S. manufacturing is the world's 10th LARGEST ECONOMY

HIGH-TECH, HIGH SALARY, UNLIMITED POSSIBILITIES.
ADVANCE YOUR MANUFACTURING PERCEPTION GOALS CAREER.

MANUFACTURING IN NORTH CAROLINA
There is a growing need for skilled employees in the manufacturing industry.

Manufacturing is North Carolina's largest industry, employing over 430,000 people.

MANUFACTURING SALARIES ARE higher than the national average salary in North Carolina.

...but by the year 2030, as much as 77% of the current workforce will retire.

$63,457 AVERAGE ANNUAL SALARY
North Carolina is the 4th LARGEST manufacturing state.

MANUFACTURING CAREERS IN NASH COUNTY

HONEYWELL
PRODUCT MANUFACTURING, QA, PRODUCT DESIGN, FINANCE

CUMMINS-ROCKY MOUNT ENGINE PLANT
TECHNICAL, ASSEMBLY, MACHINE OPERATOR TECHNICIANS

HOSPIRA INC
PRODUCTION SUPERVISOR, ENGINEERING, PRODUCT DESIGN

NEW STANDARD CORPORATION
TOOLMAKER, MACHINE OPERATOR, ASSEMBLY

THESE COMPANIES REPRESENT JUST A FEW OF NASH COUNTY’S MANUFACTURING EMPLOYERS.

NASH COUNTY MANUFACTURING SALARIES:
$22,800 - $99,200

BUILD YOUR FUTURE.

www.nashcc.edu/iam
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A Stronger Partnership

Advanced Manufacturing Partnership
AMP

Industrial and Advanced Manufacturing Academy
IAM Academy
Align4NCWorks

IAM Academy Pathways

• Computer engineering Technology
• Computer Integrated Machining Technology
• Electronics engineering Technology
• Industrial Systems Technology
• Mechatronics Engineering Technology
• Welding Technology
# High School Career Cluster: Manufacturing

Community College AAS Degree: Industrial & Advanced Manufacturing
Industrial Systems Technology (A5240)

The Manufacturing career cluster is focused around planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.

<table>
<thead>
<tr>
<th>Grade</th>
<th>English</th>
<th>Math</th>
<th>Science</th>
<th>SS</th>
<th>Required or Recommended Electives</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>English I</td>
<td>Math I</td>
<td>Earth/Environmental Sci.</td>
<td>Elective</td>
<td>Health/PE, Microsoft IT Word/PP/Pub, Drafting I, Elective</td>
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<tr>
<td>10</td>
<td>English II</td>
<td>Math II</td>
<td>Biology</td>
<td>World History</td>
<td>Principles of Business and Finance, Microsoft IT Excel/Access, Drafting II, Elective</td>
</tr>
<tr>
<td>12</td>
<td>English IV</td>
<td>Math IV or MAT 121 Algebra &amp; Trigonometry</td>
<td>Career Management</td>
<td>Civics &amp; Econ.</td>
<td>ELC 131 Circuit Analysis I (Evening), ELC131A Circuit Analysis I Lab (Evening), EGR 125 Applied Software for Tech</td>
</tr>
</tbody>
</table>

## Future Ready Core Requirements:
- English – 4 Units
- Math – 4 Units
- Science – 3 Units
- Social Studies – 4 Units
- Health/ PE – 1 Unit
- Electives – 6 Units

## NCC Credits: 12-19 credit hours
- MAC 141 (4), MAC 121 (2), MAC 141A (2), MAT 121 (3), MAC 171 (1), ELC 131 (4), ELC131A (1), EGR 125 (2)

## Recommended Electives
- Principals of Business and Finance
- Microsoft IT Word/PP/Pub
- Microsoft IT Excel/Access
- Drafting I
- Drafting II
- Career Management

* NIMS (National Institute of Metalworking Skills) certification available.