Machinist Technology

Associate in Applied Science in Technical Studies

Program Description:
The Machinist Technology Program at the Robert C. Byrd Institute for Advanced Flexible Manufacturing (RCBI) is an industry-driven, hands-on program that prepares individuals to meet the rigorous demands of the manufacturing sector. An element of the RCBI program enables students to earn an Associate in Applied Science degree in Technical Studies by completing additional course work through Mountwest Community & Technical College.

Adhering to standards set by the National Institute for Metalworking Skills (NIMS), the RCBI program provides individuals the technical skills they need to enter a shop floor setting and begin work immediately upon graduation. Placement opportunities are excellent according to the Bureau of Labor Statistics which reports that 30,000 jobs go unfilled each year.

Participants in the Machinist Technology program receive technical skills training to work in industrial machining. Course work includes manual machine operation and technical support, introductory CNC (computer-numerical-control) machine operation and technical support, industrial communications and organizational skills, mathematics for machinists, and safety issues.

Working closely with an 11-member industry-based advisory board, RCBI designed the program’s core technical components so they meet the manufacturing sector’s needs.

Comprehensive full- and part-time programs are available, thus enabling current workforce members to improve their technical skills and develop professionally while helping their employers become more competitive.

Career Outlook:
Despite projected slower-than-average employment growth, job opportunities for machinists should continue to be excellent. The number of workers obtaining the skills and knowledge necessary to fill machinist jobs is expected to be less than the number of job openings arising each year from employment growth and from the need to replace experienced machinists who transfer to other occupations or retire.

Salary Forecast:
Median hourly earnings of machinists were $16.33 in 2004. The middle 50 percent earned between $12.84 and $20.33. The lowest 10 percent earned less than $10.08, while the top 10 percent earned more than $24.34. Median hourly earnings in the manufacturing industries employing the largest number of machinists in 2004 were:

- Metalworking machinery manufacturing: $17.06
- Machine shops: turned product; and screw, nut, and bolt manufacturing: $15.87
- Motor vehicle parts manufacturing: $17.46
- Employment services: $11.09

Program Admission Requirements:
The Machinist Technology Program has admission and candidacy requirements in addition to the Mountwest Community & Technical College admission guidelines.

Tech Prep Affiliation:
The Machinist Technology Program is aligned with the West Virginia Tech Prep Engineering/Technical Cluster.
# Major Code - CT20 • Concentration Code - CT21

## FIRST YEAR

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<th>First Semester</th>
<th>Second Semester</th>
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<tr>
<td>IT 101</td>
<td>COM 112</td>
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<tr>
<td>MAT 135</td>
<td>ENL 231</td>
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<td>MT 105</td>
<td>MT 215</td>
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<td>MT 121</td>
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## SECOND YEAR

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<tr>
<th>Third Semester</th>
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<tr>
<td>MFE 220</td>
<td>MT 289</td>
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<td>MT 223</td>
<td>MT 215</td>
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<td>MT 233</td>
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<td>ISM 133</td>
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## HOURS REQUIRED FOR GRADUATION: 67

### Employment Opportunities:
Entry-level positions for which graduates will compete include:

- Manual machinist
- CNC machinist
- Industrial sales representative
- Auto plant
- Machinist shop
- Fabricator

### Earn a Degree Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Ed Black  
304-781-1672 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: black@rcbi.org

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1. MAT 135, MT 121, MT 215, MT 223, and MT 289 have a prerequisite of instructor permission.
2. ENL 231 has a prerequisite of ENL 111 or COM 111. This prerequisite may be waived for Machinist Technology majors. See advisor for information.
3. MT 223 has a prerequisite of MT 215.
4. NIMS Credentialing (National Institute for Metalworking Skills) students must be certified in at least three different skill areas as recognized by NIMS.
5. SS 201 may be substituted for ISM 133.
6. Choose at least one of the following: on campus: EC 102, SS 210, or SS 215; online: EC 102, HST 102, HST 103, HST 230, PSC 104, PSY 201, SOC 200, SS 201.