### BIR is a private, postsecondary school for technical, business, and language learning. BIR has been educating students since 1993 and enjoys the reputation of a small, friendly institution serving the needs of Chicagoland students.

Low tuition and no-interest payment plans.

Federal and state financial aid and institutional scholarships are available for qualified students.

BIR is authorized under Federal law to enroll non-immigrat

Call BIR and speak with a counselor about your future 773-866-0111 or email: contact@birtraining.edu

Three Chicago Locations
Main 3601 W. Devon Ave., Suite 210 Chicago, IL 60659
828 S. Wabash Ave., Suite 295 Chicago, IL 60605
6240 W. Belmont Ave., Chicago, IL 60634

*Not all programs available at all campuses

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### Employment

#### CNC INDUSTRY EMPLOYMENT GUIDE

<table>
<thead>
<tr>
<th>JOB TITLE</th>
<th>DUTIES</th>
<th>SKILLS</th>
<th>EDUCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>MACHINE OPERATOR</td>
<td>Load and unload work pieces, monitor machining in process, inspect finished parts, Statistical Process Control charting.</td>
<td>Regular check up of operation, general knowledge of machining</td>
<td>Training at a vocational/technical school, or community college</td>
</tr>
<tr>
<td>MACHINE SET-UP</td>
<td>Set-up fixture and cutting tools, coordinate the machine, determine and enter offset and compensation values, correct errors in tooling and programming, test the program.</td>
<td>Solid knowledge of machining and tooling, understanding of part processing, CAM and machine functions</td>
<td>Training at a vocational/technical school, or community college</td>
</tr>
<tr>
<td>TOOL MAKER</td>
<td>Assemble and preset standard tooling, make special purpose tooling, repair damaged tooling.</td>
<td>High machining skills, knowledge of CNC, and blueprint reading</td>
<td>Specialized vocational training or an apprenticeship program</td>
</tr>
<tr>
<td>PART PROGRAMMER</td>
<td>Prepare part programs, CNC documents, and set-up instructions.</td>
<td>Command of geometry/trigonometry, sound knowledge of machining, blueprints, use of CAD/CAM software, hands on experience</td>
<td>Training at vocational school or college, CNC and computer software</td>
</tr>
<tr>
<td>PROCESS PLANNER</td>
<td>Determine what machining processes/sequences to use and with what machines; select cutting tools and work holders/fixtures; prepare operation sheets.</td>
<td>Overall knowledge of machining, and tooling; strong background in manufacturing and CNC</td>
<td>4 years college degree in Manufacturing is preferred</td>
</tr>
<tr>
<td>CNC MANAGER or SUPERVISOR</td>
<td>Oversee CNC operations, personnel hiring/training and job assignment, coordination with other departments, evaluation and acquisition of new CNC machine tools and CAD/CAM software.</td>
<td>Management skills, machining knowledge, CNC programming, and manufacturing experience</td>
<td>4 years college or advanced degree</td>
</tr>
</tbody>
</table>

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### Computerized Manufacturing

#### Effective Date: July 6, 2009

Education that WORKS!

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**comprehensive training in manufacturing industries**

BIR is NCA ACCREDITED and ISBE APPROVED

Effective Date: July 6, 2009
Computerized Manufacturing

What is Computerized Manufacturing?
Computer controlled machines create the vast majority of consumer products, from cars and iPods, to toothbrushes and televisions. Computer Numerical Control. Examples of machines utilizing CNC include milling and turning centers, EDMs, laser machines, and others.

BIR: A Leader in CNC Training
Since 1993 the Computerized Manufacturing program at BIR has evolved into one of the best in Chicagoland and across the nation. Employers prefer to hire workers with hands-on CNC machine experience, which BIR students receive from training in partnering machine shops. BIR has become a valuable resource in the Chicago manufacturing community and as a result, thousands of BIR CNC graduates work in Chicago area machine shops. When local manufacturers are looking to fill new CNC positions, they turn to BIR. BIR offers three certificate programs in Computerized Manufacturing:

- Machine Tool Operations (M3) has a machine specific focus
- Machine Tool Technology (M2) is a well balanced program with advanced skills
- Comprehensive CNC (M1) combines features of the other certificate programs and includes training in a wider variety of machines

Careers in Computerized Manufacturing
The demand for programmers and operators of Computer Numerical Controlled (CNC) machines is strong today and is expected to grow. BIR's CNC programs prepare students for employment as Machine Operators, Set-up Personnel, and Part Programmers. Computerized manufacturing provides attractive career opportunities for both women and men. You do not need any computer or manual machining skills to learn CNC Programming and Operations. You do need the desire to learn and the drive to succeed. BIR will provide the rest.

Certificate Programs in Computerized Manufacturing

<table>
<thead>
<tr>
<th>Program</th>
<th>Description</th>
<th>Length</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>M1: Comprehensive CNC</strong></td>
<td>Program Length 14 Months, 34 Credits</td>
<td>14 Months</td>
<td>34 Credits</td>
</tr>
<tr>
<td><strong>M2: Machine Tool Technology</strong></td>
<td>Program Length 10 Months, 26 Credits</td>
<td>10 Months</td>
<td>26 Credits</td>
</tr>
<tr>
<td><strong>M3: Machine Tool Operations</strong></td>
<td>Program Length 5 Months, 14 Credits</td>
<td>5 Months</td>
<td>14 Credits</td>
</tr>
</tbody>
</table>

**Program Info**

- **Hands-on Training**: Machine shop sessions are conducted using real CNC machines in operational shops.
- **Available Schedule**: Full-time - 4 sessions a week, Part-time - 2 sessions a week.
- **Class Size**: Classroom Training: 18 students, Machine Shop: 9 Students
- **Support**: Additional help with math, English as a second language, and computer skills is available.
- **Financial Information**: Low tuition and no-interest payment plans. Federal and State Financial Aid and institutional scholarships are available for qualified students.

**Call BIR today 773.866.0111**
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Walk into one of our three Chicago locations

**BIR Training Center**
Education that works!