



## Program & Technical Standards for Computer-Integrated Machining Technology Majors

### Concerns with a Course

*Haywood Community College reserves the right to implement technical standards to protect the safety and health of all students and any clients/patients served in clinics, labs, and shops, and further, to prepare students for employment in the program of study.* Please check with the academic advisor prior to enrolling to review specific technical standards based on job requirements for the program of study.

If a student believes that he or she cannot meet one or more of the technical standards without accommodations or modifications, the College must determine, on an individual basis, whether or not the necessary accommodations or modifications can be reasonably made.

Haywood Community College is committed to providing equal educational opportunities for students with documented disabilities. The College complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 which stipulate that no student shall be denied the benefits of an education “solely by reason of a disability.” Disabilities covered by law include, but are not limited to, learning disabilities, psychological disabilities, and hearing, sight, or mobility impairments.

**Students with a disability are encouraged to disclose their disability to a Student Wellness Counselor.** Reasonable accommodations can be provided after the submission of appropriate documentation. For more information, please contact Student Wellness in Student Services at (828) 627-4504/or by email at [HCC-Wellness@haywood.edu](mailto:HCC-Wellness@haywood.edu).

### Program Outcomes

*The Computer-Integrated Machining Technology degree program is designed to facilitate development of the following program outcomes:*

1. Properly set graphic user interface, construction, and tool planes. Navigate through MasterCam X9.
2. Use the machine definition dialogue box to determine to the proper CNC machine tool for the job.
3. Create basic geometry using tools specified in tutorial #1.
4. Design a 2-dimensional by following instructions laid in tutorial#2 and #3.
5. Setup toolpath for rough and finish canned cycles: grooving and plunge rough.
6. Set-up 2D geometry: face rough and finish & threading. Tutorial #5 &#6.
7. Create 3D geometry: face contour and C-axis contour. Tutorial #7.
8. Customize toolbars to utilize default keys (HOT KEYS). General information pg C-3.
9. Create a lathe tool library utilizing the tutorial series for MasterCam X7.

EXAMPLES ARE NOT ALL INCLUSIVE.

documented disabilities of individuals who are eligible to receive or participate in college programs, services and/or activities. Student Services provides a disability counselor to assist students in requesting disability related accommodations. If a student believes that he/she cannot meet one or more of the essential functions without accommodations, the student is encouraged to disclose the disability to the disability counselor as soon as possible. Students must certify the ability to *meet essential functions of the curriculum by a signed statement in the beginning of the program.*



### Clinical and Lab Activity Information

**Program of Study:** Computer-Integrated Machining Technology

Job Requirements	Occasional	Frequent	Constant
<b>Activity:</b>			
(List # of lbs.) <b>50</b>			
Lifting			
Static Knuckle Height	✓		
Bench Height	✓		
Ankle Height	✓		
Shoulder Height	✓		
Dynamic Bench Height ( <b>3 feet</b> )			
To the Left	✓		
From the Center	✓		
To the Right	✓		
Carrying	✓		
Cart Height ( <b>3 feet</b> )			
Pushing	✓		
Pulling	✓		
List Frequency Only:			
Sitting	✓		
Standing/Walking			✓
Climbing			
Stairs	✓		
Ladder	✓		
Balance			
Stooping			✓
Kneeling	✓		
Crouching	✓		
Crawling	✓		
Reaching			
Forward			✓
Overhead			✓
Bending Reach			✓
Other			✓
Handling			
Fingering			✓
Feeling			✓
Hearing			✓
Seeing			
Near			✓
Distance			✓
Reading			✓
Calculating			✓
Compiling			✓

**Lifting Frequencies:**

Occasional      1 lift every 30 minutes  
 Frequent        1 lift every 2 minutes  
 Constant        1 lift every 15 seconds

**Other Activities:**

Occasional      0-33% (1-20 min per hour)  
 Frequent        34-66% (21-40 min per hour)  
 Constant        67-100% (41-60 min per hour)

Other Notes: Students will be in contact with a water soluble coolant, oils, and cutting fluids.