

Mastercam Certification User Guide

Certification Overview

CNC programming and machining is a very complex and diverse skill set. The career path requires a vision for lifelong learning. What was considered "state of the art" just a few years ago is not enough to stay competitive in today's market. This career field is never boring and there is always room for innovation. Top dollar employers require knowledge of materials, software, and very expensive complex machinery. This is not a trade for "good enough" thinking.

Because of this complexity, CNC Software, Inc. offers many different curricula, baseline testing and Certifications for each product. The Certifications are typically classed into modules based on the number of axis used to complete the scope of work. The tests are not specific to an industry or application type such as injection molds or furniture.

Within curricula sets there are two testing and Certification levels. The Associate Certification is strictly comprehensive testing based on the latest technologies. The Professional Certification includes the comprehensive testing combined with a practical application component.

Mastercam Associate Level Certification

The Mastercam Associate Certification is a reliable validation of your skills and knowledge in the use of Mastercam Software. It is the first benchmark and an integral step toward a Mastercam Professional Certification. To be considered for the Associate level, students must score an 80% or above on each comprehensive online post exams, and an 80% or above on the final comprehensive online exam. The Associate level certification is available only online at www.mastercamu.com.

Mastercam Professional Level Certification

The Mastercam Professional Certification is a reliable validation of your skills, knowledge, and the application of Mastercam functionality within a set amount of time. A student must attain the Mastercam Associate Certification before taking the practical application skills exam. The skills exam will be administered by a certified Mastercam professional.

Academic Versions of Certification

The academic versions of Mastercam Certification require passing the same level of rigorous testing and standards as the industrial versions of certification. The Academic version is available only from a Mastercam Certified Instructor or from an authorized test administrator as part of their program. A person who receives this level of certification has also passed the appropriate Mastercam University™ Curriculum as part of their training and certification. All academic tests are administered in a proctored test environment.

Resources

Students develop the knowledge and practical application skills by completing the Mastercam U[™] online curriculum. It is recommended that anyone pursuing a Mastercam certification should complete the Mastercam online curriculum and meet all requirements established by the Mastercam Certification Advisory Committee. This requirement allows Mastercam to maintain the highest level of integrity and standards for the Mastercam Professional Certification.



Implementation

The following steps provide direction for implementing Mastercam U online curriculum into the educational classroom and industry training centers.

- Purchase an instructor copy of Mastercam software.
- Start with the Mastercam Certified Instructor class at Mastercam U. (\$375.00)
 - Review all course materials before implementing them into the classroom.
- Elect to use Mastercam U as the vehicle to deliver instructional content in pursuit of both Mastercam Associate and Professional level certifications.
 - o Administrative approval, if required.
 - o Advisory committee approval, if required.
- Contact the Regional Mastercam Educational Center for help with implementing Mastercam U and any concerns during the implementation process.
- Attend a Mastercam teacher training session, sponsored by Mastercam Educational Division or a Regional Mastercam Educational Center, and instructed by a Mastercam Certified Professional.

Classroom Recommendations and Considerations

- Develop a system for tracking and assigning Mastercam U subscription codes to students.
- Computers with speakers or headsets are required for Mastercam U.
- Dual monitors are recommended but not necessary for success. Dual monitors will allow students to view curriculum on one screen, and construct geometry or toolpaths on the other as video or lectures are viewed online.
- Allow time in class to cover student questions over assigned Mastercam U online curriculum.

Classroom Management and Curriculum Expectations

Try not to cover assigned Mastercam U online curriculum in its entirety. The intent is for students to review at home, and then ask relevant questions during class. The time needed to answer questions in class will decrease as you develop an understanding on how to utilize Mastercam U, allowing for more hands-on time with practical applications.

It's important for students to stay on task and complete on-line curriculum assignments in a timely manner. Establish completion dates for each learning module. Assign the pre-test to students and reinforce that they take pretest. The pretest establishes a knowledge base of topics and learning outcomes for learning modules.

Students must complete all online components of each Mastercam U learning module prior to taking the post test.

Administer post tests during class and immediately following completion of each Mastercam U learning module. The post tests are password protected. Make sure you have the password key before testing. Passwords are *not* to be given to students.

Require students to print weekly progress reports. This will allow the instructor to monitor student progress, provide opportunities to praise and engage students, assure that students are on task, and that they are completing all parts of the Mastercam U learning modules.

Students can continue to the next Mastercam U learning module without completing the post test.

Each Mastercam U learning module and session has additional supporting resources that are easily missed. Many Post tests questions are referenced from the Recommended Help topics. Students should be encouraged to study the system while performing exercises within the courses.