Atlantic Technical College
Machining Technologies
Program Syllabus
2025-2026

Instructor Name: Mr. Kevin Finan
Department Name: Manufacturing
Office/Classroom Location: Bldg. 15 Room 260A
Phone Number: 754-321-5100
Email Address: kevin.finan@browardschools.com

Instructor Office Hours:
M-F: 1:50 PM – 3:50 PM
(By appointment only)

Student Hours:
Monday – Friday
7:05 AM – 1:50 PM
(Adults)

7:05 AM – 10:10 AM
(High School 11th Graders)

Lunch
10:10 am – 10:40 pm
Break
10:40 am – 10:50 pm

10:50 AM – 1:50 PM
(High School 12th Graders)

NOTE: All students are expected to be present during their entire scheduled class time(s). All classroom breaks will occur on an "as needed" basis. The wall clock in the classroom will serve as the official time.

Program Name: Machining Technologies
Career Cluster: Manufacturing

OCPs	Course Number / Title	Course Length
A	PMT0020 / Machinist Helper	300 hours
B	PMT0022 / Machinist Operator	300 hours
C	PMT0024 / Machinist Setup Operator	600 hours
D	PMT0025 / Machinist	300 hours
		1500 total hours (full-time, including summer)

Technical College Policy/Adult Student Attendance:

- A student must be withdrawn after being absent for six (6) consecutive days.
- Two (2) additional absences may be allowed under certain circumstance with appropriate documentation.
- Please refer to the Broward Technical College Student Handbook for postsecondary students:
  http://www.atlantictechnicalcollege.edu/atc-student-handbook/

Magnet High School/Attendance Policy:
A student who has had at least five unexcused absences, or absences for which the reasons are unknown, within a calendar month, or 10 unexcused absences, or absences for which the reasons are unknown, within a 90-calendar-day period, may be exhibiting a pattern of non-attendance (F.S.1003.26 (1) (b)) and the School Board of Broward County, Policy 5.5.

Required Book(s) and/or Online Access	Required Materials/Supplies
Available for purchase at the ATC Bookstore: • ToolingU On-Line - Access Code (Adult Students) • Immerse-to-Learn (Adult Students)	Purchased from ATC Bookstore: • Safety Glasses (Adult & High School Students) • USB Drive / 8 GB (Adult & High School Students) Not Purchased from ATC Bookstore: • 6” Rule (Adult Students) • 6” Dial Caliper (Adult Students) • 0-1 Micrometer (Adult Students)

All required books & most materials/supplies can be purchased from the school bookstore. Stop by during operational hours for pricing & purchasing information.

***ADULT STUDENTS**: All required books and some materials/supplies can be purchased from the school bookstore. Stop by during operational hours for pricing & purchasing information. All other required materials / retail supplies not available at the bookstore need to be purchased elsewhere. All required books and required materials/retail supplies need to be obtained prior to the start of the program.*

***HIGH SCHOOL STUDENTS:** Students receive all required material listed above with the exception of safety glasses and USB Drive / 8GB.High School students are responsible for the care and return of all of the required books and required materials/supplies on loan and will be issued an obligation for damaged or missing books and/or materials/supplies. Some of the required materials/supplies can be purchased from the school bookstore. Stop by during operational hours for pricing & purchasing information.*

Grading System:	Additional Program Specific Grading Information:
A 90 - 100% B 80 - 89% C 70 - 79% D 60 - 69% F 0 - 59% I Incomplete	• Theory 40% • Projects 35% • Professional Development 25%

Online Course Grading Policy:

The student’s final grade will combine (1) ToolingU (Online) (2) Projects (3) Professional Development (ROAR) - **R**eady to Work, **O**n-Time, **A**ttentive, **R**espectful

View Your Grades:

Grades can be viewed online by following the directions below:

1. Go to https://browardfocus.com (access FOCUS using Chrome, Firefox or Safari)
2. Student ID which is on your student schedule.
3. Passcode: Student’s date of birth formatted as PMM/DD/YYYY.
   Two digits for the month, two digits for the day and Four digits for the year.

Classroom/ Lab Rules:

1. Students are expected to be in their seats and ready to work when the bell rings.

2. Students are to remain in their assigned seats, unless given permission to relocate.
3. Students are required to always adhere to the Code of Conduct, as set forth by the School Administration and the Student Handbook.
4. Students are to always show respect to other students and the teacher.
5. Good manners are necessary for a pleasant classroom environment. Please raise your hand to be recognized. Do not speak when someone else is speaking. Rudeness, bullying or disruptive behavior will **NOT** be tolerated.
6. Students are responsible to always keep their personal belongings with them.
7. All electronic devices must be silent and out of sight during instructional time. This includes cell phones, earbuds, smartwatches, headphones, mp3 players, etc. The school and/or teacher are not responsible for lost or stolen devices/personal belongings of any kind.
8. Computer use is a privilege and should only be used for researching machining-related information and to complete required assignments/classwork.
9. No food and/or drinks are permitted in the classroom.
10. Students are not allowed to chew gum in class.
11. Students are expected to always maintain a clean and neat work area.
12. Log off computer and turn off monitor before leaving class each day (except on Thursdays, when updates occur).
13. Remain seated, when the bell rings, until you are dismissed.
14. Students must notify teacher, in advance, if planning to miss a portion of class time(s) for ANY reason.
15. Students shall familiarize themselves and adhere to all safety rules and procedures as noted in the Machine Shop Safety Rules and Procedures Handout.

Industry Certification & State Credential Exam Costs:

- Mastercam Associate Certification Mill Design and Toolpaths Certification - No extra cost
- SolidWorks Associate – No extra cost
- Occupational Safety and Health Administration (OSHA) 10 Hour Construction Safety Outreach Course - $40

You may qualify for certification reimbursement of your exam cost(s) upon passing. Credential fees are subject to change.

Outstanding Student Recognition Information:

A gold seal will be applied to a Program Completion Certificate or an Applied Technology Diploma if the student has earned a 3.5 GPA or higher in their Career and Technical Education (CTE) classes.

Program Name: Machining Technologies

Course Number: PMT0020
Course Name: Machinist Helper

Occupational Completion Point: A

Intended Outcomes:

01.0 Demonstrate an understanding of workplace safety and workplace organization.
02.0 Solve basic job-related math problems**.**
03.0 Interpret basic blueprint information.
04.0 Perform basic measuring operations.
05.0 Perform benchwork skills.
06.0 Demonstrate basic knowledge of manufacturing history and primary manufacturing processes.
07.0 Demonstrate basic knowledge of secondary manufacturing processes and manufacturing systems.
08.0 Demonstrate an understanding of graphic design by generating and interpreting computer-aided drawings.
09.0 Perform basic precision measuring operations.
10.0 Sharpen machining tools.
11.0 Set up and operate power saws.
12.0 Set up and operate pedestal grinders.
13.0 Set up and operate drill presses.
14.0 Explain the importance of employability and entrepreneurship skills.

Course Number: PMT0022
Course Name: Machinist Operator
Occupational Completion Point: B

Intended Outcomes:

15.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives.
16.0 Solve problems using critical thinking skills, creativity and innovation.
17.0 Solve advanced job-related math problems.
18.0 Demonstrate inspection methods.
19.0 Plan lathe machining operations.
20.0 Interpret and apply blueprint for lathe machine operations.
21.0 Operate lathes.
22.0 Use computer-aided design/computer-aided manufacturing (CAD/CAM) processes for lathe operations.
23.0 Set up and operate a computerized-numerical-control (CNC) machine for lathe operations.
24.0 Plan milling machining operations.
25.0 Interpret and apply blueprint for milling machine operations.
26.0 Operate milling machines.
27.0 Use computer-aided design/computer-aided manufacturing (CAD/CAM) processes for milling operations.
28.0 Set up and operate a computerized-numerical-control (CNC) machine for milling operations.

Course Number: PMT0024
Course Name: Machinist Setup Operator
Occupational Completion Point: C

Intended Outcomes:

29.0 Perform advanced milling operations.
30.0 Perform advanced lathe operations.
31.0 Use advance techniques to operate a computerized-numerical-control (CNC) machine.
32.0 Perform advanced set up and operation of a computerized-numerical-control (CNC) machine.

Course Number: PMT0025
Course Name: Machinist
Occupational Completion Point: D

Intended Outcomes:

33.0 Operate grinding machines.
34.0 Operate and set up electrical discharge machine (EDM).
35.0 Set up and operate heat-treating furnaces.
36.0 Perform advanced grinding operations.