

MECHATRONICS ENGINEERING TECHNOLOGY



FAME Advanced Manufacturing Technician (AMT) Track

Associate in Applied Science - 75 Credit Hours

Accepting Applications August 1, 2024-March 31, 2025

Please read the contents of this packet carefully and in its entirety as some requirements are time-sensitive.

The Advanced Manufacturing Technician (AMT) program has a selective admissions process. Typically, 30-40 students are accepted with each fall admission. This packet will outline minimum criteria, program coursework, and the application/selection process. Before applying, it is recommended to review the <u>Technical Standards and Essential Functions</u> required for the program. Reading these standards carefully along with a realistic assessment of your own personality, interests, abilities, strengths, and weaknesses will ensure that you choose a program and career path that is a good fit for you.

As you read through this document keep in mind the program starts in June. The college portion (academic course work and other school-based activities) of the program starts in August.

PROGRAM ADMISSION REQUIREMENTS

- □ At least 18 years of age at the start of the program
- High school graduate, or equivalent, at the start of the program (cohorts begin each June)
- U.S. citizenship or eligibility to work in the United States
- Demonstrated academic success as measured by college readiness
- Submission of a written essay
- In person Employer Panel Interview

D Demonstrate "college readiness" for English <u>and</u> Mathematics.

- See page 3 to view options for meeting this requirement.
- ✓ Submit the 2025 Advanced Manufacturing Technician Program Application to FAME

Note: Meeting all criteria listed above does not guarantee acceptance to the program. However, all criteria must be met to apply and be considered for selection.

PROGRAM CURRICULUM OUTLINE

Mechatronics Engineering Technology – FAME Advanced Manufacturing Technician Program Courses

Catalog: 2024-2025 (A40350A2)

Fall 2025			
ELC 131	Circuit Analysis I		4
ELC 132	Electrical Drawings		2
ENG 111	Writing and Inquiry		3
HYD 110	Hydraulics/Pneumatics I		3
ISC 110	Workplace Safety		1
MAT 171	Pre-Calculus Algebra		4
	Work 24 hours/week at employer		0
		Total Credits	17
Spring 2026			
ELC 117	Motors and Controls		4
ISC 114	Visual Workplace Organization / 55		1
MEC 130	Mechanisms		3
PHY 131	Physics – Mechanics		4
CIS 110	Introduction to Computers		3
WBL 112	Work-Based Learning I		2
		Total Credits	17
Summer 2026			
ATR 112	Introduction to Automation		3
ISC 116	Lean Manufacturing Principles and Practices		1
MAC 118	Machine Shop Basic		2
PSY 150	General Psychology		3
WLD 112	Basic Welding Processes		2
	Work 24 hours/week at employer		0
		Total Credits	11
Fall 2026			
ELC 128	Introduction to Programmable Logic Controller		3
ELC 130	Advanced Motors and Controls		3
ELC 213	Instrumentation		4
HUM 115	Critical Thinking		3
HYD 180	Fluid Power in Automation		3
ISC 160	Problem-Solving Skills for Advanced Manufacturing Technicians		1
	Work 24 hours/week at employer		0
			-

Spring 2027				
ATR 114	Machine Reliability		1	
ATR 212	Industrial Robots		3	
COM 120 Introduction to Interpersonal Communications		3		
ELC 228	PLC Applications		4	
WBL 212	Work-Based Learning IV		2	
		Total Credits	13	
Total AMT Course Credits:			75 credits	
		TOTAL CREDITS REQUIRED FOR DEGREE:	75 credits	

GTCC FAME ADVANCED MANUFACTURING TECHNICIAN (AMT) PROGRAM COLLEGE ADMISSION REQUIREMENTS

Complete the GTCC General Admission Process (New and Returning Students)

- New and returning GTCC students must complete the GTCC general admission, including the North Carolina Residency Determination Service (RDS). To get started, visit <u>https://www.gtcc.edu/admissions-and-aid/apply-now.php</u>
 - **Returning students=** students previously admitted to GTCC and have been not enrolled in courses for more than 12 months please contact the Admissions Office <u>admissions@gtcc.edu.</u>
- Submit your <u>official</u> transcripts to the GTCC Admissions Office at <u>transcripts@gtcc.edu</u>. Once received, transcripts are evaluated by GTCC's Records Office. Approved transfer credits will be added to your academic record as appropriate.
 - <u>Please allow a minimum of TWO WEEKS for evaluation to occur.</u> This process takes longer near the beginning or end of a semester. Transfer credits from regionally accredited colleges/universities <u>must</u> appear on your GTCC Student Planning Account in order to be considered for meeting program requirements.

Demonstrate College Readiness for English AND Mathematics

You must be able to demonstrate that you have achieved the appropriate levels of college readiness in both subject areas. The chart below shows options for meeting these requirements.

COLLEGE ENGLISH READINESS	COLLEGE MATHEMATICS READINESS
Option 1: You have completed or received transfer credit for ENG 111.	Option 1: You have completed or received transfer credit for <u>one</u> of the following MAT 143, MAT 152, MAT 171 (or a higher-level math).
Option 2: You have completed or received waiver credit for <u>all</u> of the following: DRE 096, DRE 097, DRE 098	Option 2: You have completed or received waiver credit for all of the following: DMA 010, DMA 020, DMA 030, DMA 040, and DMA 050
 Option 3: You have completed or received waiver credit for ENG 002 with a minimum grade of <u>P2</u> Option 4: You have completed or received waiver 	Divid 040, and Divid 050 Option 3: You have completed or received waiver credit for MAT 003 with a minimum grade of P2
credit for ENG 011	Option 4: You have completed or received waiver credit for <u>one</u> of the following: MAT 043, MAT 052, or MAT 071
from an Institutionally Accredited College or University	Option 5: An earned Associate or Bachelor's degree from an Institutionally Accredited College or University
Option 6: Completion of placement test within the past 10 years and achievement of appropriate scores. If you took the placement test elsewhere, you MUST submit those scores to GTCC Admissions!	Option 6: Completion of placement test within the past 10 years and achievement of appropriate scores. If you took the placement test elsewhere, you MUST submit those scores to GTCC Admissions!
Option 7: Graduate of a US high school within the last 10 years, with an Unweighted GPA of 2.8 or higher	Option 7: Graduate of a US high school within the last 10 years, with an Unweighted GPA of 2.8 or higher

SUBMITTING YOUR FAME PROGRAM APPLICATION

Once students have completed and met all the college program admission requirements, it is time to submit the **FAME application through FAME USA**.

PROGRAM APPLICANT SELECTION AND NOTIFICATION PROCESS

Selection Process

The FAME Advanced Manufacturing Technician (AMT) track is a two-year Associate Degree that combines courses, additional learning, and other FAME AMT activities with paid working experience through a partnership with regional employers. Selection into the program requires a prospective student to apply GTCC and to the North Caroline FAME chapter. Companies in NCFAME will review applications and schedule interviews with selected candidates. Companies who are sponsoring AMT students will be present in the interview and each company will select which candidates that they wish to individually sponsor for the program.

Notification Process

All candidates will be notified of their application status 2-4 weeks after the application deadline. If you are offered a sponsorship by a FAME company, you will move forward with enrollment in the GTCC FAME AMT track.

If you are not offered a sponsorship, GTCC will reach out to you about other opportunities.

MANDATORY PROGRAM ORIENTATION, ADVISING/REGISTRATION, AND ENROLLMENT

Once an offer of sponsorship is accepted by the applicant, the applicant will then communicate with a FAME AMT college representative regarding all matters related to the college-side program orientation, advising/registration, and enrollment. Additionally, the 2025 AMT orientation will be held on July 7, 8, 9, 10, and 11 2025 and attendance is mandatory. Applicants will be contacted by FAME leaders and/or a FAME AMT college representative for details on the AMT Orientation.

The student is <u>required</u> to attend all program orientations, meetings, or other events scheduled prior to the start of classes. Failure to attend these meetings without prior approval from a FAME leader may result in removal from the program.

Please note: FAME AMT Program students will be automatically enrolled into classes by the college.

Important Notes to FAME Advanced Manufacturing Technician (AMT) Program Applicants

GTCC program administration, in coordination with the NCFAME – First in Flight Chapter, reserves the right to revise or change course requirements in accordance with applicable state laws, college requirements, accreditation standards, and/or at the discretion FAME AMT Program administration in concert with the NCFAME – First in Flight Chapter. By accepting sponsorship by a FAME employer and admission into the program, students agree to at all times abide by the program requirements and procedures as set forth in the FAME Handbook, the respective course syllabus issued at the beginning of each term for each course, and FAME AMT Program requirements and standards. The student is bound by such requirements and procedures regardless of whether they were established before or after the date of enrollment in the program. Changes made after the publication of the Handbook will be posted as a revision to the Handbook.

In addition, to complete the program, students are required to:

- Commit to remain absolutely free of illegal drugs
- Comply with FAME AMT program policies and the GTCC Student Code of Conduct
- Adhere to sponsoring FAME employer's policies, procedures, and expectations throughout the sponsorship
- Fulfill all GTCC associate degree requirements
- Maintain a minimum of "C" or higher in all courses throughout the program
- Achieve a minimum of "Satisfactory" on all work evaluations throughout the program
- Meet program expectations as outlined in the "AMT Program Expectations Acknowledgments form that will be distributed at AMT Orientation.

Also, offers of employment are contingent on FAME AMT employers pre-employment requirements for hiring which may include one or more of the following:

- Drug screen
- Criminal background check
- Medical assessment
- Competency test

Students must achieve a GPA of 2.0 or better in order to graduate (however, note that with a program requirement to attain a grade of 'C' or higher in every course, an AMT student's final GPA, if s/he completes the program, will be greater than 2.0). Students must pass all courses with a minimum grade of C and must pass all courses on the first attempt: no course withdrawals or repeat attempts are permitted. Students who do not meet these requirements will be dropped from the FAME AMT program.

The GTCC AMT Limited Entry Process is not to be regarded as a contract between GTCC and students. GTCC and/or the NCFAME-First in Flight Chapter reserves the right to change any provisions or requirements with adequate notice and minimum disruption to students.

If You Have Questions about the FAME Advanced Manufacturing Technician (AMT) Admission Process, Please Contact:

recruiting@gtcc.edu