



# Cary High School Academy of Technology & Advanced Manufacturing (ATAM)

## Quick Facts



- Students apply in eighth grade and must be assigned to Cary High School as their base school.
- Students must be on grade level and **accept ATAM as a four-year commitment.**
- Up to 90 students may be accepted into the ATAM freshmen cohort. During the inaugural year current sophomores who have taken Drafting 1 will be eligible.
- Students follow an advanced manufacturing or technology/engineering track of courses. All students take Drafting 1. These courses are all Career and Technical Education (**CTE**) courses and taught by **CTE** teachers.

Grade	Advanced Manufacturing Sequence Each course is a pre-requisite for the next	Technology/Design Sequence Each course is a pre-requisite for the next
9	Drafting 1	Drafting 1
10	Advanced Manufacturing 1	Technology, Engineering and Design
11	Advanced Manufacturing 2	Technological Design
12	Advanced Manufacturing and Robotics	Engineering Design
	Electives – See suggested electives sheet.	Electives – See suggested electives sheet

- Students in the **Advanced Manufacturing Sequence** will have the opportunity to earn the following industry certifications to boost their earning power:
  - Advanced Manufacturing I – OSHA 10hr. General Industry Manufacturing
  - Advanced Manufacturing I – Certified Manufacturing Technician – Safety
  - Advanced Manufacturing I – Certified Manufacturing Technician – Maintenance
  - Advanced Manufacturing II – Certified Manufacturing Technician – Quality Practices and Measurements
  - Advanced Manufacturing II – Certified Manufacturing Technician – Manufacturing Processes and Production.
  - Advanced Manufacturing Robotics – Manufacturing Robotics FRC-01 FANUC Certified Robot operator 1
  - Drafting 1 -Autodesk Certified User AutoCAD
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- Students take **CTE** and academic courses in a cohort group. Grade level teams from **CTE** and academic courses collaborate weekly during common planning.
- Students participate in team building activities based on interdisciplinary projects that include carefully designed field trips and project based learning.
- Students participate in job-shadowing experiences.

- Students develop “soft skills” proficiency and are exposed to numerous professional experiences during their four years in the academy.
- Students write résumés, participate in mock interviews and networking.
- Course sequencing allows students to take college level courses(AP) if desired.
- Students complete a minimum 120-hour internship that relates to technology/engineering and/or advanced manufacturing.
- The academy will partner with local industry and higher education institutions to offer apprenticeship opportunities.
- Students prepare an internship/apprenticeship portfolio presentation based on their internship/apprenticeship experience.
- Students meet all NC high school graduation requirements and additionally complete the above components to graduate with ATAM distinction.

#### FUNDING –

- **CTE** funds all equipment and software for academy classes. This includes the robotics, power tools, hand tools, measurement tools, pneumatics, electric and electrical training equipment
- **CTE** funds substitute teachers and transportation for some field trips.
- **CTE** funds liability insurance for all work-based learning activities.
- ATAM intends to create a 501c3 booster group, the **Academy Support Team**, which will help fund additional equipment and teacher training/PD. Funds will also be used to help students who have a financial need pay for an academy shirt, fieldtrip, or other occasional expenses.