

# Automated Manufacturing Engineering Technology

## Bachelor of Science Degree (287103BS)

A completed Associate of Applied Science Degree in Manufacturing Engineering Technology is a requirement of the Automated Manufacturing Engineering Technology Bachelor of Science Degree. Please refer to the Manufacturing Engineering Technology, Associate of Applied Science Curriculum Guide for further information.

The following information has official approval of The University of Akron's College of Applied Science and Technology but is intended only as a guide. Official degree requirements are established at the time of transfer and admission to the degree-granting college. Completion of this degree within the identified time frame below is contingent upon many factors, including but not limited to class availability, total number of required credits, work schedule, finances, family, course drops/withdrawals, successfully passing courses, and prerequisites, among others. The transfer process is completed through an appointment with your Academic Advisor.

*Italicized* courses fulfill General Education requirements. If a course is not specified, refer to the General Education webpage at <http://www.uakron.edu/cast/gened>. The College of Applied Science and Technology recommends that students take the General Education courses listed in this curriculum guide. Transfer students should consult their Advisor to identify courses that are equivalent.

Year 3 Fall	Prerequisite
2030:255 Technical Calculus I (3) <i>Fulfills Critical Thinking Tag</i>	2030:153 or equivalent with grade of C- or better or placement by Advisor
2870:348 CNC Programming I (3) (Sch. Lab)	[2030:154 and 2920:121] or [2030:154 and 2880:248] or permission
2860:370 Survey of Electronics I (3) (Note a)	2820:163
2880:230 3-D Modeling and Design (3) (Lecture) (Note b)	2880:140
3400:210 <i>Humanities in the Western Tradition I (4)</i> -OR- 3400:221 <i>Humanities in the World Since 1300 (4)</i> -OR- <i>Humanities Requirement (4) (Note f)</i>	32 credits and completion of 3300:112 or 3300:114 or 2020:222 or permission
<b>Total Credits = 16</b>	

Year 3 Spring	Prerequisite
3300:252 <i>Shakespeare and His World (3)</i> -OR- 3600:101 <i>Introduction to Philosophy (3)</i> -OR- <i>Arts or Humanities Requirement (3) (Note f)</i>	<i>For 3300:252 only: 3300:111 and 3300:112 or their equivalents (2020:121 and 2020:222), and 3400:210 or 3400:221</i>
2820:111 <i>Introductory Chemistry (3) (Note a)</i>	2030:152 <i>corequisite</i>
2870:301 Computer Control of Automated Systems (3) (Note b)	
2870:311 Facilities Planning (3) (Note b)	2940:210 or 2940:180
2920:310 Economics of Technology (3)	64 credits or permission
2870:332 Management of Technology Based Operations (3)	
<b>Total Credits = 18</b>	

Year 4 Fall	Prerequisite
2920:101 Introduction to Mechanical Design (3) (Note a)	Prerequisite: 2940:121; Corequisite: 2030:154
2870:470 Simulation of Manufacturing Systems (3) (Note a)	2880:211 or permission
2870:448 CNC Programming II (3) (Note a)	2870:348
2920:370 Plastics Design and Process (3) (Note a)	2820:111 or permission
2870:441 Advanced Quality Practices (3) (Note a)	2880:241 or permission
7100:210 <i>Visual Arts Awareness (3)</i> -OR- 7500:201 <i>Exploring Music, Bach to Rock (3)</i> -OR- 7900:200 <i>Viewing Dance (3)</i> -OR- <i>Arts Requirement (3) (Note f)</i>	3400:210 or 3400:221 3400:210 or 3400:221 3400:210 or 3400:221
<b>Total Credits = 18</b>	

Year 4 Spring	Prerequisite
Technical Elective (3) (Note d)	
2870:480 Automated Production (3) (Note b)	2880:211 or Senior status
2870:490 Manufacturing Project (2) (Note b)	Senior status
2920:347 Production Machinery and Processes (3) (Note b)	2030:255 and permission
Technical Elective (3) (Note d)	
<i>Complex Systems Tag Requirement (3)</i>	
<b>Total Credits = 17</b>	

**Total Credits for Degree = 129 minimum**  
**(3<sup>rd</sup> and 4<sup>th</sup> Year Credits = 69; Associate Degree Credits = 60)**

**Policy Alert: By the end of your first 48 credit hours attempted, you must have completed your REQUIRED General Education English, Mathematics, and Communications (Speech) requirements.**

**You must have a minimum cumulative GPA of a 2.0 to graduate with this degree.**

Notes:

- Fall course offering only
- Spring course offering only
- Course must be part of the Ohio Transfer Module.
- Technical Electives (see table below)

2030:356 Technical Calculus II (3)	2030:255 or equivalent with a grade of C- or better, or placement test
2040:247 Survey of Basic Economics (3)	
2040:251 Human Behavior at Work (3)	
2420:202 Elements of Human Resource Management (3)	2420:103 or permission
2420:211 Basic Accounting I (3)	
2420:212 Basic Accounting II (3)	2420:211
2420:280 Essentials of Business Law (3)	
2820:310 Programming for Technologists (2)	2820:131 and 2030:255
2920:142 Introduction to Material Technology (3)	
2920:251 Fluid Power (2)	2820:162, 164
2920:252 Thermo Fluids Lab (1)	2920:251; corequisite: 249
2920:470 Plastics Processing and Testing (3)	2920:370 or permission.
2990:125 Statics (3)	2820:162 and 2030:153
3470:261 Introductory Statistics I (2)	Placement determined by advisor
3470:262 Introductory Statistics II (2)	3470:261
2520:101 Essentials of Marketing Technology (3)	

### Program Contact

Program Director, Mr. Daniel E. Kandray, [Schrank Hall \(South\) 221](#), 330/972-7073, or [kandray@uakron.edu](mailto:kandray@uakron.edu)

The student is urged to consult The University of Akron Bulletin and the University College General Education requirements to insure that all requirements for graduation are met. Students enter the Bachelor of Science AMET program from different associate degree programs, and therefore may have different General Education requirements remaining.

### Automated Manufacturing Engineering Technology – Bachelor of Science

#### Required Bridgework

- Completion of an associate degree program in engineering, science, or business technology (or related) or the first two years of a bachelor degree program with a minimum grade point average of 2.0.
- Completed with a minimum grade of "C" 2880:241, Introduction to Quality Assurance or equivalent.
- Completed with a minimum grade of "C" 2880:110, Manufacturing Processes or equivalent.
- Completed with a minimum grade of "C" 2870:348, CNC Programming I or equivalent.

#### Transfer to the College of Applied Science and Technology

To be admitted to the College of Applied Science and Technology, a student must have a GPA of 2.0. A student can complete the transfer process through an appointment with an Academic Advisor in the college in which they reside.