Effective: May 2013 **Last Updated: 5/22/13**

MANUFACTURING ENGINEERING TECHNOLOGY, COMPUTER AIDED MANUFACTURING 288006AAS

Associate of Applied Science Degree

http://www.uakron.edu/summitcollege/engineering_tech/automated-manufacturing-technology/

The following information has official approval of Summit College, 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, prerequisites, among others.*

Italicized courses fulfill General Education requirements. Unless a course is specified, refer to the General Education guide at http://www.uakron.edu/advising/docs/GEN-EDUC.pdf.

1st Year	**Fall Semester**	Credit Hours	Prerequisites
2020:121	*English*	3	Placement by Advisor
2030:151	Technical Mathematics I (Note c.)	2	Placement by Advisor
2030:152	Technical Mathematics II (Note c.)	2	2030:151 with grade of C- or better
2420:263 7600:105 7600:106	*Professional Communications & Presentations* ***-OR-*** *Introduction to Public Speaking* ***-OR-*** *Effective Oral Communications*	3	
2880:100	Basic Principles of Manufacturing Management (Notes a and c.)	4	
2880:110	Manufacturing Processes (Notes a and c)	3	
Total		**17**	

1st Year	**Spring Semester**		
2020:222 3300:112	*Technical Report Writing* ***-OR-*** *English Comp II*	3	2020:121 or equivalent 3300:111 or equivalent
2030:153	*Technical Mathematics III*	2	2030:152 or equivalent with grade of C- or better
2820:161	*Technical Physics: Mechanics I (Sch. Lab)*	2	2030:153 co-requisite
2820:162	*Technical Physics: Mechanics II (Sch. Lab)*	2	2820:161 2030:153
2820:131	Software Applications for Technology	1	2030:151
2880:130	Work Measurem't & Cost Estimating (Note b.)	3	2880:100
2940:210	Computer Aided Drawing I	3	
Total		**16**	

2nd Year	**Fall Semester**		
2880:151	Ind.Safety & Environmental Protection (Note c.)	2	
2880:211	Computerized Manufacturing Control (Note a.)	3	2880:100
2920:130	Introduction to Hydraulics and Pneumatics (Notes a and c.)	3	
2820:163	Technical Physics: Electricity & Magnetism (Sch. Lab) (Note c.)	**2**	2820:161 prerequisite, 2030:153 co-requisite
2870:348	CNC Programming I (Sch. Lab) (Note c.)	3	2940:121, 2030:154 or permission
2040:240 3750:100	*Human Relations* ***-OR-*** *Introduction to Psychology*	3	
Total		**16**	

2nd Year	Spring Semester		
2880:201	Robotics & Automated Manufacturing (Sch. Lab), (Note b.)	3	2880:100 or permission
2880:232	Labor Management Relations (Note b.)	3	2880:100
2880:241	Introduction to Quality Assurance (Sch. Lab)	3	2880:100, 2030:152
	Physical Education/Wellness Requirement	1	
	Technical Elective (Note d.)	3	
	General Education Elective (Note e.)	3	
Total		**16**	
	Total Credits for Associate Degree	**65**	

POLICY ALERT: By the end of your first 48 credit hours attempted, you must have completed your REQUIRED General Education English, Math, and Communications (Speech) requirements.

YOU MUST HAVE A MINIMUM GPA OF 2.0 TO GRADUATE WITH THIS DEGREE

NOTES

Note a. Traditionally Fall only (See Program Director)
Note b. Traditionally Spring only (See Program Director)
Note c. Students completing NTMA Journeyman's Machinist Program receive block credit for these courses. Students who have not completed the entire program or who have completed the program prior to 1/1/96, see an advisor.

Note d. Technical Electives

2420:211	Basic Accounting I	3	
2420:212	Basic Accounting II	3	2420:211
2420:280	Essentials of Business Law	3	
2520:101	Essentials of Marketing Technology	3	
2820:164	Technical Physics: Heat & Light	2	2820:161 and 2030:153
2920:101	Introduction to Mechanical Design	3	2940:121; Co-requisite: 2030:154
2920:142	Introduction to Material Technology	3	
3450:138	Mathematics of Finance	1	

Note e. General Electives Credit Hours

2040:241	Technology and Human Values	2	
2040:242	American Urban Society	3	
2040:247	Survey of Basic Economics	3	

PROGRAM CONTACT

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

PROGRAM INFORMATION

Manufacturing Engineering Technology is concerned with the analysis, design, and management of all the resources, facilities, and people involved in manufacturing processes. Manufacturing Engineering Technology requires a back-ground in basic technical subjects, management techniques, work measurement, safety procedures, plant layout, quality control, maintenance, production control, economics, and computer applications such as CAD, CNC, and CAM.

CAREER INFORMATION

A graduate of this program finds employment in manufacturing supervision and control. Duties involve the design modification, installation, and operation of integrated systems of people, materials, machines, and methods used to produce a product at a profit.

Specific career opportunities may be found in the following functional areas:

Manufacturing Engineering Technician
Manufacturing Supervision

Methods - production, planning, methods and engineering
Work Measurements - time study, motion study, and standards
Wage Payment - wage incentives, job evaluation
Controls - production control, quality control, inventory control
Plant Facilities and Design - plant layout, material handling, product design, storage facilities, and maintenance of plant equipment
Industrial Relations - management-union relations, workers' compensation
Purchasing
Safety and Industrial Hygiene
Estimating
Profit and Cost Analysis
Quality Assurance

For additional information visit the Bureau of Labor Statistics at www.bls.gov or the Career Center at Simmons Hall Room 301 http://www.uakron.edu/career

Cooperative Education is available on an optional basis in this academic program. To obtain additional information on program benefits, eligibility requirements, or to apply for the program, contact the Career Center at 330-972-7747 or at http://www.uakron.edu/career/ no later than the beginning of the second semester.

BACHELOR DEGREE PROGRAMS
Upon completion of the Manufacturing Engineering Technology Associate of Applied Science Degree, a student may proceed to the Automated Manufacturing Engineering Technology Bachelor of Science Degree. Please refer to the Automated Manufacturing Engineering Technology Bachelor of Science Degree Curriculum Guide for further information

An additional degree option is to proceed to the Bachelor of Organization Supervision Degree.

TRANSFER
A student can complete the transfer process by meeting with an Academic Advisor in the College in which they reside.

(Thorman/Kandray)