Mechanical Engineering Technology

Associate of Applied Science Degree (292001AAS)

Accredited by the Engineering Technology Accreditation Commission of ABET, http://www.abet.org

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 1 Fall	Prerequisite
2020:121 English (3)	*Placement by Advisor*
2030:154 Technical Mathematics IV (3)	2030:153 or equivalent with grade of C- or better
2920:100 Survey of Mechanical Engineering Technology (2) (Note a)	2030:154 corequisite
2820:160 Technical Physics: Mechanics (4) (Sch. Lab)	*2030:154 corequisite*
2920:121 Fundamentals of Engineering Drawing (3) (Sch. Lab)	
Total Credits = 15	

Year 1 Spring	Prerequisite
2420:263 Professional Communications and Presentations (3)	Prerequisite or corequisite: 2020:121 or 3300:111
2820:163 Technical Physics: Electricity and Magnetism (2) (Sch. Lab)	*2820:160 and 2030:154 (C- or better in both)*
2820:164 Technical Physics: Heat and Light (2) (Sch. Lab)	*2820:160 and 2030:154 with a C- or better for 2820:160*
2820:131 Software Applications for Technology (1) (Sch. Lab)	2030:151
2020:222 Technical Report Writing (3)	*2020:121 or 3300:111 or equivalent*
2990:125 Statics (3)	2820:160, 2030:153
Total Credits = 14	

Year 2 Fall	Prerequisite
2920:101 Introduction to Mechanical Design (3) (Sch. Lab) (Note a)	2920:121 or 2880:140 prerequisite; 2030:154 & 2920:100 or 2030:154 & 2880:230 corequisite
2030:255 Technical Calculus I (3)	2030:154 or equivalent with grade of C- or better
2880:248 Introduction to CNC and Additive Manufacturing	2030:153 and [2880:140 or 2920:121] or permission
2920:243 Kinematics (3) (Note a)	2990:125 prerequisite 2920:101 corequisite
2920:251 Fluid Power (2) (Note a)	2820:160, 2820:164
2990:225 Strength of Materials (3)	2990:125
Total Credits = 17	

Year 2 Spring	Prerequisite
2040:243 Contemporary Global Issues (3)	
2040:244 Death and Dying (3) ***-OR-** 2040:256 Diversity in American Society (3)* ***-OR-** 3850:100 Introduction to Sociology (3)*	*2020:121, or 3300:112 or equivalent*
2920:245 Mechanical Design II (5) (Sch. Lab) (Note b)	2920:101, 2920:243, and 2990:225 prerequisites 2920:142 corequisite
2920:249 Applied Thermal Energy I (2) (Note b)	2030:255; 2820:164
2920:252 Thermo-Fluids Lab (1) (Note b)	2920:251; 2920:249 corequisite
2920:142 Introduction to Material Technology (3) (Sch. Lab) (Note b)	
Total Credits = 17	

Total Credits for Degree = 63

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:

a) Traditionally Fall only (See Program Contact)

b) Traditionally Spring only (See Program Contact)

Contact Information

Program Director, Scott Dilling, Schrank Hall South 123G, 330-972-6232 or sd53@uakron.edu

Program Information

Mechanical Engineering Technology is concerned with the design of products and the machines required to manufacture them. Mechanical technicians are needed in all industries, from steelmaking to consumer products such as tires, cars, and home appliances. Mechanical technicians work along with engineers in design, testing, manufacturing, and servicing of the mechanical components and systems found everywhere in industry. The associate degree holder is well qualified to begin working in the various areas of mechanical technology. To guarantee proper sequence and completion of all requirements for graduation, scheduling for the second year of this program should be done through the College of Applied Science & Technology Advising Office, Polsky 301, 330-972-7220.

Career Information

- Junior or Assistant Designer – Designs machine elements and/or systems.
- Engineering Aid - Assists the mechanical engineer, a good beginning for the inexperienced graduate.
- Laboratory Technician – Primarily responsible for evaluation of product or process diagnosis. May do field testing (tires, cars, etc.). Specifying materials from the design and processing standpoints.
- Customer Service Technician – Installs and maintains equipment on site. May also serve as sales representative in recommending a machine for a particular application.
- Plant Engineer – Establishes maintenance schedules and applies tool and machine design production process.
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Co-op is available on an optional basis in the academic program. To obtain addition information on program benefits, eligibility requirements, or to apply for the program, contact the Career Center at 330-972-7747 no later than the beginning of the second semester of school.

A student is encouraged to check with his/her major department and with the Career Center regarding employment opportunities in the field.

For additional information visit the Bureau of Labor Statistics at www.bls.gov or the Career Center at the Student Union, room 211 http://www.uakron.edu/career.

Bachelor Degree Programs
Upon completion of the Mechanical Engineering Technology Associate of Applied Science Degree, a student may proceed to the Mechanical Engineering Technology Bachelor of Science Degree. Please refer to the Mechanical 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 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.