COLLEGE OF SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

APPLIED TECHNOLOGY

Associate of Applied Science (AAS)

This is a guide based on the 2023-2024 Undergraduate Bulletin and is subject to change. The time it takes to earn a degree will vary based on several factors such as dual enrollment, remediation, and summer enrollment. Students will meet with an academic advisor each semester and use Degree Works to monitor their individual progress.

CURRICULUM CHECKLIST

58-63 Hour Program

___ EN100 English Composition I (3)
___ IM300 Technical Communications (3)
___ IM301 Industrial Safety Supervision (3)
___ IM311 Statistical Process Control (3)
___ MN220 Engineering Economic Analysis (3)
___ PS103 U.S. Political Systems (3)

Choose 3 hours:
___ SC105 Fundamentals of Oral Communications (3)
___ SC107 Online Oral Presentations (3)

Choose 3-5 hours:
___ MA115 Precalculus A with Integrated Review (5)
___ MA116 Precalculus A (3)

Choose 3 hours:
___ CM260 Computer Methods of Const Managers (3)
___ CS101 Computer Science (3)
___ MN260 Technical Computer Programming (3)

Physical Science- Choose 8-10 hours of the following: **
___ CH180 Chemistry in our World (3)
___ CH181 Basic Principles of Chemistry (5)
___ PH106 Physical Concepts (3)
___ PH120 Introductory Physics I 5)
___ PH121 Introductory Physics II (5)
___ PH230 General Physics I (5)
___ PH231 General Physics II (5)

** Many programs require the 5-hour lab classes. Please work with an advisor to determine which are appropriate for you.

CHOOSE ONE TRACK – 23-24 Hours

CUSTOMIZED:
___ Technical Elective Courses as Approved by the Advisor and Department (24)

CONSTRUCTION:
___ CM126 Computer-Aided Architectural Drafting (3)
___ CM143 Construction Methods & Materials I (3)
___ CM226 Residential Architectural Drafting & Design (3)
___ CM243 Construction Methods and Materials II (3)
___ CM260 Computer Methods of Construction Managers (3)
___ CM310 Construction Building Codes (3)
___ CM320 Construction Cost Estimating (3)
___ CM330 Construction Planning and Scheduling (3)

ELECTRICAL CONTROLS:
___ ET160 Basic Electrical Circuits (3)
___ ET164 AC Principles & Circuits (3)
___ ET245 Logic Circuits (3)
___ ET304 Programmable Logic Controllers (3)
___ MA117 Precalculus B (3)
___ MA140 Analytic Geometry & Calculus I (5)
___ TN255 Microcomputer Maintenance (3)

INDUSTRIAL SUPERVISION:
___ IM309 Science, Technology, and Society (3)
___ IM313 Facilities Planning (3)
___ IM411 Total Quality Assurance (3)
___ IM417 Manufacturing Resource Analysis (3)
___ IM419 Industrial Supervision (3)
___ MN120 Fundamentals of Engineering Design Processes (3)
___ MN170 Industrial Materials & Testing (3)
___ MN203 Industrial Materials & Process I (3)

MACHINING & MANUFACTURING:
___ ET160 Basic Electrical Circuits (3)
___ MA117 Precalculus B (3)
___ MA140 Analytic Geometry & Calculus I (5)
___ MN120 Fundamentals of Engineering Design Processes (3)
___ MN170 Industrial Materials & Testing (3)
___ MN203 Industrial Materials & Processes I (3)
___ MN221 Solid Modeling & Rapid Prototyping (3)

NETWORKING:
___ ET160 Basic Electrical Circuits (3)
___ ET245 Logic Circuits (3)
___ TN255 Microcomputer Maintenance & Troubleshooting (3)
___ TN275 Introduction to Networks (3)
___ TN295 Firewall Management (3)
___ TN375 Routing and Switching Essentials (3)
___ TN395 Server Maintenance & Troubleshooting (3)
___ TN435 Network Security (3)

UNMANNED AIRCRAFT SYSTEMS
___ ET160 Basic Electrical Circuits (3)
___ ET245 Digital Systems (3)
___ ET380 Vision & Sensor Systems (3)
___ ET381 Fundamentals of Aviation in UAS (3)
___ ET382 UAS Fundamentals (3)
___ ET385 UAS Mission Planning & Applications (3)
___ MN120 Fundamentals of Engineering Design Processes (3)
___ TN255 Microcomputer Maintenance & Troubleshooting (3)

SAMPLE FOUR-YEAR PLAN

	Fall Semester		Spring Semester	
	Course #	*Hrs*	*Course #*	*Hrs*
FIRST YEAR	EN100	3	CM260/CS101/MN260	3
	MA115/116	3-5	IM301	3
	Physical Science Lab	5	Physical Science	3-5
	Track Course 1	3	Track Course 2	3
			Track Course 3	3
	Total	**14-16**	**Total**	**15-17**
SECOND YEAR	IM311	3	IM300	3
	MN220	3	PS103	3
	Track Course 4	3	SC105/SC107	3
	Track Course 5	3	Track Course 7	3
	Track Course 6	3	Track Course 8	3
	Total	**15**	**Total**	**15**

*Many major courses are on a set rotation and dependent on when prerequisites are completed. The actual semester a course is taken may vary based on the rotation.

Degree requirements for all students: a minimum of 60 credit hours. Refer to the Undergraduate Bulletin or Degree Works for additional graduation requirements (i.e., minimum GPA and course work) for your program of study.

FASTTRACK WORKFORCE INCENTIVE GRANT

Revised 5/10/2023

2023-2024 degree map