

CURRICULUM GUIDE

Engineering Technology Management, B.S. (Technology) + Technology Management (Engineering Operations), M.S.

2023-2024

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The schedule below is an **EXAMPLE** of how you can arrange your class schedule. Please consult your advisor for specific changes that may need to be made.

	Fall Semester		Spring Semester		Course Number	Course Name
Freshman Year	Approved Technical Elective	3	Approved Technical Elective	3	GENERAL EDUCATION & UNIVERSITY REQUIREMENTS (36-37)	
	Approved Technical Elective	3	Approved Technical Elective	3	SCO 100 Student Success Seminar (1)	
	Approved Technical Elective	3	Approved Technical Elective	3	(not required of transfer students)	
	Approved Technical Elective	3	Approved Technical Elective	3	CORE COURSE REQUIREMENTS (37-38)	
	Approved Technical Elective	3	Approved Technical Elective	3	AEM 195 Computer Aided Drafting (3)	
	Approved Technical Elective	3	Approved Technical Elective	3	AEM 202 Introduction to Quality (3)	
	Free Elective	3	Free Elective	3	AEM 308 Methods of Lean Operations (3) (fall only)	
Sophomore Year	TOTAL	18	TOTAL	18	AEM 310 Technical Communication (3)	
	AEM 195	3	AEM 202	3	AEM 332 Process Control and Auditing (3)	
	⁶ ECO 120 <u>or</u> ⁶ ECO 230 (fulfills Gen. Ed. 5B)	3	MAT 211 (or higher)	3	AEM 349 Applied Learning I Industrial Technology (1)	
	⁶ MAT 120 (or higher) (fulfills Gen. Ed. 2)	3	Gen. Ed. 1B (ENG 102)	3	AEM 408 Human Resource Development (3)	
	STA 215 <u>or</u> STA 270	3-4	Gen. Ed. 1C (Oral Comm.)	3	AEM 499 Senior Capstone Project (3) (spring only)	
	TEC 161	3	Gen. Ed. 3B (Humanities)	3	AEM 706 Six Sigma Quality (3)	
	Gen. Ed. 1A (ENG 101)	3	Free Elective	3	AEM 801 Economics for Lean Operations (3)	
Junior Year	TOTAL	18-19	TOTAL	18	AEM 804 Project Management (3)	
	AEM 308 (fall only)	3	AEM 332 (spring only)	3	STA 215 <u>or</u> STA 270 Introduction to Statistical Reasoning (3)	
	AEM 310	3	AEM 408	3	TEC 161 Applied Statistics (4)	
	AEM 349	1	AEM 467	0	TEC 161 Computer Applications in Technology (3)	
	AEM 804 (also fulfills MS requirement)	3	AEM 499 (spring only)	3	TECHNOLOGY CONCENTRATION REQUIREMENTS (30)	
	⁶ PHY 131 (fulfills Gen. Ed. 4)	5	AEM 801 (also fulfills MS requirement)	3	THIRTY (30) HOURS of approved technical electives. (Transfer students with an associate degree in an industrial related field should consult with an advisor to ensure that the upper division requirement is met.)	
	Free Elective	1-2	Gen. Ed. 6 (Diversity)	3	TECHNOLOGY SUPPORTING COURSE REQUIREMENTS (6-9)	
Senior Year	TOTAL	16-17	TOTAL	15	¹ ⁶ CHE 101 <u>AND</u> ⁶ CHE 101L <u>or</u> ⁶ CHE 111 <u>AND</u> ⁶ CHE 111L	
	AEM 706 (fall only) (also fulfills MS requirement)	3	AEM 802	3	⁶ ECO 120 <u>or</u> ⁶ ECO 230 <u>or</u> ⁶ ACC 200	
	⁶ CHE 101/101L <u>or</u> 111/111L (fulfills Gen. Ed 4)	4	TEC 860 <u>or</u> AEM 839	3	⁶ MAT 120 <u>AND</u> ⁶ MATH 211 <u>or</u> 6 hours of higher	
	Gen. Ed. 3A (Arts)	3	AEM Supporting Course Elective	3	⁶ PHY 131	
	Gen. Ed. 5A (History)	3			College Physics I (5)	
	Gen. Ed. 6 (Diversity)	3			Bracketed items must be taken concurrently	
	<u>(Undergraduate Complete = 120 hrs)</u>				FREE ELECTIVES (7-11)	
Graduate SUMMER SEMESTER					EXIT EXAM REQUIREMENT (0 – Credit Only)	
	TEC 830	3			AEM 467 Comprehensive Exam for BS in ETM (credit only)	
	AEM Supporting Course Elective	3			M.S. TECHNOLOGY MANAGEMENT REQUIREMENTS	
	TOTAL	6			CORE COURSE REQUIREMENTS (15) (30 total; Nine (9) credits from AEM 706, AEM 801, and AEM 804 are counted in the undergraduate program)	
Graduate Fall	AEM 805	3			AEM 801 Economics for Lean Operations (3)	
	AEM 821 <u>or</u> AEM 839	3			AEM 804 Project Management (3)	
	GRD 867C <u>or</u> GRD 868b	0			TEC 830 Creative Problem Solving (3)	
	TOTAL	6			PLUS SIX (6) HOURS Selected from (Synthesis Experience):	
TOTAL HOURS TO DEGREE COMPLETION					TEC 860 <u>or</u> Research in Technology (3)	
					AEM 821 <u>AND</u> Industrial Technology Project (3)	
					AEM 821 <u>or</u> Industrial Technology Project (3)	
					AEM 839 Applied Learning in Tech Management (3)	
					ENGINEERING OPERATIONS CONCENTRATION REQUIREMENTS (9)	
					AEM 706 Six Sigma Quality (3)	
					AEM 802 Productivity Assessment and Analysis (3)	
					AEM 805 Industrial Operations Research (3)	
					SUPPORTING COURSE REQUIREMENTS	
					SIX (6) HOURS of additional course work to fulfill requirements.	
					EXIT REQUIREMENT	
					GRD 867C <u>or</u> MS Applied Engineering and Technology Management Written Comprehensive Exam	
					GRD 868B MS Applied Engineering and Technology Management Oral Comprehensive Exam	

* **PREREQUISITES:** Consult with your advisor and/or the University catalog regarding prerequisites for upper division AEM, EET, NET, and TEC courses.

A preparatory course in mathematics may be required before admittance into MAT 120.

Prerequisites are marked for supporting courses only.

Upper division courses: All students are required to have a minimum of 42 hrs. upper division (300 level or above) courses distributed throughout Major/Supporting/Gen Ed/Free Electives categories).

Refer to the University Catalog at <http://www.catalogs.eku.edu/> regarding University and General Education Requirements.

⁶ Denotes that 3 credit hours from this course are/can be applied to fulfill a Gen. Ed. requirement.

* Denotes that a prerequisite is required to be admitted into the course.