

ENGINEERING TECHNOLOGY MANAGEMENT, BACHELOR OF SCIENCE WITH A CONCENTRATION IN MANUFACTURING (B.S.)

Graduates must have an overall GPA at or above 2.00, and 2.25 in the major with no major grade below a "C". Transfer students will be treated on an individual basis. The Engineering Technology Management program is accredited by the Association of Technology, Management, and Applied Engineering.

Program Requirements

CIP Code: 15.1501

Summary Checklist for General Education

Code	Title	Hours
Element 1		
A:	Written Communication (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/)	3
B:	Written Communication (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/)	3
C:	Oral Communication (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/)	3
Element 2		
	Quantitative Reasoning (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-2/)	3
Element 3		
A:	Arts (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/)	3
B:	Humanities (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/)	3
Element 4		
	Natural Sciences (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-4/)	6
Element 5		
A:	Historical Science (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/)	3
B:	Social Behavioral Science (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/)	3
Element 6		
	Diversity of Perspectives Experiences (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-6/)	6
Total Hours		36

Students are expected to complete Elements 1 and 2 within their first 60 hours of college credit.

Major

Code	Title	Hours
University Graduation Requirements		
General Education		36
<i>Student Success Seminar</i>		
SCO 100	Student Success Seminar (waived for transfers with 30+ hours)	1
Upper division courses (42 hours distributed throughout Major/Supporting/Gen Ed/Free Electives categories)		
Major Requirements		
<i>Core Courses</i>		
AEM 195	Computer Aided Drafting	3
AEM 202	Introduction to Quality	3
AEM 308	Methods of Lean Operations	3
AEM 310W	Technical Communication	3
AEM 332	Process Control and Auditing	3
AEM 349	Applied Learning in Industrial Technology	1
AEM 407	Fundamentals of Project Management	3
AEM 408	Human Resource Development	3
AEM 499	Senior Capstone Project	3
CON 420	Engineering Economy	3
STA 215	Introduction to Statistical Reasoning	3-4
or STA 270	Applied Statistics	
TEC 161	Computer Applications in Technology	3
Concentrations		
Students must select one of the following Concentrations:		
Manufacturing		33
Technology		
<i>Supporting Course Requirements</i>		
Choose from one of the following:		
CHE 101 & 101L	Introductory Chemistry and Introductory Chemistry Lab (Element 4) ^G	
CHE 111 & 111L	General Chemistry and General Chemistry Lab I (Element 4) ^G	
Choose from 0-3 hours of the following:		0-3
ECO 120	Economic Reasoning and Issues (Element 5B) ^G	
ECO 230	Fundamentals of Microeconomics (Element 5B) ^G	
ACC 200	Survey of Accounting	
Choose from 3-6 hours of the following:		3-6
MAT 120	Trigonometry (Element 2) ^G	
MAT 211	Applied Calculus	
Or choose from six hours of higher-level MAT courses		
PHY 131	College Physics I (Element 4) ^G	
<i>Exit Requirements</i>		
Students must take an AEM assessment examination before graduation (CR only, no hours). An exam fee is required.		
AEM 467	Comprehensive Exam for BS in ETM	0
<i>Free Electives</i>		
Choose from 6-10 hours of free electives		6-10
Total Hours		120

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Course also satisfies a General Education element. Hours are included within the 36 hr. General Education requirement above. A maximum of 6 hours can apply toward Element 4.

Concentration

Code	Title	Hours
Concentration Courses		
AEM 201	Metallic Material Processes	3
AEM 301	Non-Metallic Material Processes	3
AEM 330	Material Testing and Metrology	3
AEM 352	Robotics and Automated Systems	3
AEM 371	Hydraulics and Pneumatics	3
AEM 390	3-D Parametric Solid Modeling	3
EET 251	Electricity and Electronics	3
<i>Technical Electives</i>		
Choose from 12 hours of the following. Note that 9 hours must be upper division: ¹		12
AEM 336	Reliability and Sampling	
AEM 382	Advanced Material Processing	
AEM 383	CAD/CAM Integration	
AEM 392	Computer Aided Machine Drawing	
AEM 397	Advanced Machine Drawing	
AEM 506	Six Sigma Quality	
AEM 530	Design of Experiments	
or STA 585	Experimental Design	
CON 303	Statics and Strength of Materials	
EET 252	Digital Electronics	
EET 257	Electronic Devices and Circuits	
EET 351	Programmable Logic Controllers	
NET 303	LANs & PC Communications	
NET 440	Wired/Wireless Communications	
Total Hours		33

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Transfer students with an associate degree in a technical related field may not need to take these 12 hours of electives if upper division requirement can be completed.