



Russ College of Engineering and Technology

The Department of Engineering Technology & Management (ETM) in the Russ College of Engineering & Technology offers a baccalaureate degree which combines engineering theory with applications in technology while keeping sound business / management principles in mind. This program prepares a “technical generalist” who is competent in assessing problems and developing and implementing solutions in many technical areas including: product specifications & documentation, materials & processes, control systems & automation, and managing operations. Graduates typically begin their careers with job title of manufacturing engineer, quality engineer, sales engineer, operations manager, etc.

The curriculum outlined below is a semester by semester plan of study for the ETM major in adherence to section 3333.71 of the Revised Code for three-year baccalaureate degrees. This degree is accredited by the Association of Technology, Management, and Applied Engineering (ATMAE)

The scheduling scenario below is intended to present an example pattern by which this major can be completed in three years. Those interested in pursuing this option need to work with an academic advisor to develop a specific plan to earn the 120 credit hours required for graduation.

BS7256: Engineering Technology and Management

Semester 1: Fall

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
ET 1100 Engineering Graphics Fundamentals	2		
ET 1500 Career Orientation	0.5		
ETM 1000 Introduction to Engineering Technology & Mgt.	0.5		
ETM 1030 Enterprise Computer Methods	3		
ETM 1120 Intro. To Manufacturing Operations	3		
CHEM 1210 Principles of Chemistry (T2NS)	4		
ENG 1510 Freshman Composition (T1E)	3		
Total hours for semester	16		

Semester 2: Spring

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
ETM 2080 Industrial Plastics	3		
ETM 2180 Metal Fabrication & Casting	3		
ETM 2310 Database Application & Analytics	3		
PHYS 2001 Introduction to Physics (T2NS)	4		
COMS 1030 Fundamentals of Public Speaking (T2HL)	3		
Total hours for semester	16		

Semester 3: Summer

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
ACCT 1010 Foundations of Accounting	3		
MGT 2000 Introduction to Management	3		
General Elective	6		
Total hours for semester	12		

Semester 4: Fall

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
ETM 2210 Power Transmission	3		
ETM 3010 Engineering Graphics Applications	3	Yes	
ETM 3030 Applications of Object Oriented Programming	3	Yes	
MATH 1300 Pre-Calculus (T2A)	3		
ENG 309J Junior English (T1J)	3	Yes	
Tier 2 Cross Cultural Perspective (T2CP)	2		
Total hours for semester	17		

Semester 5: Spring

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
ETM 3200 Hydraulics & Pneumatics	3	Yes	
ETM 3320 Electronics	3	Yes	
ETM 3510 Metal Machining, CNC & Production Tooling	4	Yes	
ISE 3040 Fundamentals of Statistics	3	Yes	
BUSL 2000 Corp. Responsibility in Legal Environment	3		
Total hours for semester	16		

Semester 6: Summer

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
MKT 2021 Marketing Principles	3		
General Elective	8.5		
Total hours for semester	11.5		

Semester 7: Fall

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
ETM 3620 Supervision & Leadership	3	Yes	
ETM 3630 Quality Assurance & Documentation	3	Yes	
ETM 4000 Senior Seminar	0.5	Yes	
ETM Elective	3	Yes	
FIN 2020 Foundations of Financial Management	3		
PSY 1010 (T2SS)	3		
Total hours for semester	15.5		

Semester 8: Spring

Course Subject and Title (Or General Tier/Major Requirement)	Credit Hours	Upper Division	Minimum Grade
ETM 4350 Automation, Robotics & Control Systems	3	Yes	
ETM 4620 Operations & Production Capstone	5	Yes	
ETM Elective	3	Yes	
MIS 2021 Business Information Systems Non-Majors	3		
Tier 2 Fine Arts (T2FA)	2		
Total hours for semester	16		

General Elective courses may be taken from any department. It is recommended that these be related to the ETM major. Business Minor requirements determined.