

# APPLIED ENGINEERING & TECHNOLOGY MANAGEMENT, B.S. - GENERAL TECHNOLOGY

The Bachelor of Science degree program prepares applied engineers, technologists and technical managers with qualifications in general education, technological literacy, a technical option and management. Technical concentrations are available in advanced manufacturing, CADD, construction, general technology, graphic communications, nanofabrication, and robotics and control systems. The Association of Technology, Management & Applied Engineering (ATMAE) has accredited this program.

Supervised technical and management-oriented internships in industry are elective in both the A.T. and B.S. programs to enable relevant work experiences and the transition into employment. Managers who represent the technical concentrations serve as an advisory committee for the program. Graduates are commonly employed in design, production, training, sales and service careers in business, industry, education and government.

An applied engineering and technology minor complements majors in art, business, speech communication, computer science, economics, physics and OSEH. This minor enables specialization in several of the baccalaureate-degree technical concentrations.

Applied Engineering & Technology Management - General Technology

## Major in Appl Engineering & Tech Mgt

Code	Title	Hours
<b>TECHNICAL OPTION</b>		
AENG 110	Communication and Information Systems	3
AENG 120	Energy Systems	3
AENG 130	Production Materials & Processes	3
AENG 241	Drafting Communications	3
Print Media Systems or Web Publishing Systems - Choose 1 of the following:		3
AENG 251	Print Media Systems	
AENG 252	Web Publishing Systems	
AENG 261	Electronic Systems	3
AENG 271	Processing Nonmetallic Materials	3
AENG 281	Processing Metallic Materials	3
Power Conversion Control or Fluid Power - Choose 1 of the following:		3
AENG 325	Power Conversion and Control	
AENG 326	Fluid Power	
Directed Electives - Choose 3 of the following:		9-10
AENG 325	Power Conversion and Control	
AENG 326	Fluid Power	
AENG 331	Construction Technology 1	
AENG 332	Construction Technology 2	
AENG 342	Computer-Aided Engineering Drawing	
AENG 344	Product Design	
AENG 345	Statics/Strength of Materials	
AENG 346	Architectural Drawing	
AENG 348	Green Building and Sustainable Systems	

AENG 351	Digital Imaging
AENG 355	Contemporary Printing
AENG 356	Desktop Publishing
AENG 357	Packaging Specialty Printing
AENG 364	Digital Electronics
AENG 375	Polymer and Ceramic Technology
AENG 376	Woodworking Technology
AENG 382	Automated Manufacturing
AENG 425	Industrial Robotic Systems
AENG 427	Programmable Logic Controllers
AENG 435	Manufacturing Enterprise
AENG 446	Advanced Applications in Drafting and Design
AENG 448	Machine Tool Design
AENG 455	R&D in Graphic Communications and Packaging
AENG 467	Mobile Robotics
AENG 498	Independent Study
AENG 515	Adv Prob:
AENG 525	Adv Prob:
AENG 535	Adv Prob:

### R D REQUIREMENT

undefined - Choose 1 of the following: 3-4

AENG 326	Fluid Power
AENG 344	Product Design
AENG 356	Desktop Publishing
AENG 425	Industrial Robotic Systems
AENG 427	Programmable Logic Controllers
AENG 455	R&D in Graphic Communications and Packaging
AENG 467	Mobile Robotics
AENG 498	Independent Study

This course may be used to fulfill another requirement in the major as applicable.

### TECHNOLOGY MANAGEMENT CORE

OSEH 120	Fundamentals of Safety, Health, Environmental Issues	3
BUAD 251	Principles of Management (C- minimum pre-req for MGMT 452)	3
MGMT 452	Operations and Supply Chain Management	3
AENG 492	Technical Entrepreneurship	3
AENG 494	Total Quality Management	3

### ELECTIVE COURSES IN TECHNOLOGY MANAGEMENT

A maximum of 6 internship credits (ITEC 300, 400) may be counted for this degree.

Technology Management Electives - Choose 3 of the following: 9-27

BUAD 161	Intro to Financial Accounting
BUAD 352	Human Resource Management
MGMT 357	International Management
AENG 300	Co-Op Ed Experience in AENG
AENG 392	Intro to Industrial Training
AENG 400	Co-Op Ed Experience in AENG
OSEH 221	Industrial Fire Prevention, Protection and Control
OSEH 320	Safety Engineering Principles
OSEH 323	Human Factors in OSEH
OSEH 333	Introduction to System Safety

PSYC 329	Industrial Psychology	
SOCY 318	Soc Of Complex Organizations	
<b>Total Hours</b>		<b>63-83</b>

### Req Related for Applied Engineering, Tech/Mgt

Code	Title	Hours
ECON 101	Principles of Macroeconomics	3
ECON 102	Principles of Microeconomics	3
MATH 130	Elements of Statistics 1	3
Calculus - Choose 1 of the following:		4
MATH 151	Calculus for Management	
MATH 160	Precalculus	
MATH 161	Calculus 1	
Directed Science - Choose 2 of the following:		6-8
CHEM 101	Chem!Better Things/Better Lvng	
CHEM 103	Gen Organic and Biochemistry 1	
CHEM 104	Gen Organic and Biochemistry 2	
PHYS 103	Elements of Physics	
PHYS 104	Applied Physics	
PHYS 131	Physics 1 with Algebra	
PHYS 132	Physics 2 with Algebra	
Can receive credit for either PHYS 103 or 104, but not both		
<b>Total Hours</b>		<b>19-21</b>