

General Industrial Technology

Degree Requirements - Emphasis Area Fall 2014
Bachelor of Science in Industrial Technology

Name: _____ ID #: _____ Date Prepared: _____

Catalog Year: _____ Transfer College Work: _____

Course Number	Course Title	Required Hours	Hours Taken	Hours To Take
English 1301	Rhetoric and Composition I	3		
English 1302	Rhetoric and Composition II	3		
Speech 1311, 1315, or 1321	Communications - Select from Approved List	3		
Math 1314	College Algebra	3		
Lab Science	Biology, Chemistry, Physics, or Geology	4		
Lab Science	Biology, Chemistry, Physics, or Geology	4		
English Literature or Philosophy 1301	Sophomore Literature or Introduction to Philosophy	3		
Visual or Performing Arts	Select from Approved List	3		
History 1301	United States History I	3		
History 1302	United States History II	3		
Government 2305	Federal Government	3		
Government 2306	Texas Government	3		
Social & Behavioral Science	Select from Approved List	3		
First Year Experience	FYS/ALF course or PSYC/EDUC 1100/1200/1300	1		
	Subtotal Core Curriculum	42		
ENGT 1305	Principles of Drafting	3		
ENGT 1306	Introduction to Mechanics	3		
ENGT 1317	Machining Fundamentals	3		
ENGT 2316	Introduction to Manufacturing Systems	3		
ENGT 2335	Solid Modeling	3		
ENGT 3303	Industrial Materials	3		
ENGT 3317	Machine Tool Technology	3		
ENGT 3318	Research & Reporting for Technologists	3		
ENGT 3320	Industrial Safety	3		
ENGT 3324	Thermoplastic Processing	3		
ENGT 3336	Industrial Controls	3		
ENGT 3345	Industrial Design	3		
ENGT 3350	Numerical Control Systems	3		
ENGT 4395	Engineering Technology Projects	3		
ENGT Advanced Elective	3000 or 4000 Level Course	3		
ENGT Advanced Elective	3000 or 4000 Level Course	3		
ENGT Advanced Elective	3000 or 4000 Level Course	3		
	Subtotal Major Curriculum	51		
MATH 1316	Plane Trigonometry	3		
GB 3311	Business Statistics	3		
Elective or Minor Course	Any Course from Any Discipline	3		
Elective or Minor Course	Any Course from Any Discipline	3		
Elective or Minor Course	Any Course from Any Discipline	3		
Elective or Minor Course	Any Course from Any Discipline	3		
Elective or Minor Course	Any Course from Any Discipline	3		
Advanced Elective or Minor Course	3000 or 4000 Level Course	3		
Advanced Elective or Minor Course	3000 or 4000 Level Course	3		
	Subtotal Other Curriculum	27		
	Total Hours Required	120		

Our Focus

Engineering Technology is primarily involved with the design, installation, management, and maintenance of technological systems. Technologists are not “desk” people. They not only know how to make things, but they will make them in the most efficient manner. People in this field are aware of the entire process. They can design the robot, build the robot, put the robot to use, and repair it. Engineering Technology majors know how to “think”, but they “do” as well. Our program focuses on providing our students with the skills and knowledge to be successful in the work force.

Program

Engineering technology programs will typically focus on application and practice. Emphasis is placed on laboratory experience. Generally speaking, engineering technology programs offer a 50/50 mix of theory and laboratory (hands-on) practices. Most programs will include specialized courses that rely on applying learned principals in order to find practical, cost effective solutions to technical problems.

Technology

Today’s engineering technology worker requires an educational background focused on the latest technologies available and their applications. The Department of Engineering Technology provides these opportunities to students and maintains a close relationship with local industry leaders.

Real Life Application

People in the engineering technology field will know why and how things work and will be able to apply this knowledge to solve real-life problems. Knowledge gained from higher education, experience and practice is used to create and enhance technologies that will benefit mankind. Companies depend on our unique, cost effective, and innovative implementations of technologies to meet business needs.

Teamwork

Teamwork is a necessity in today’s manufacturing industries. Engineers, technologists, and technicians, as part of an engineering team, are an integral part of any engineering effort.

Communication

Most programs will include specialized courses that rely on applying learned principals in order to find practical solutions to technical problems. Engineering technology graduates will need strong communication skills in order for them to describe and communicate their ideas to fellow workers. They will also be familiar with the humanities and social sciences, which will allow them to understand how their technical work will affect society.

Jobs

Graduates of the engineering technology program may get jobs similar to those obtained by engineering graduates. Engineering technology majors can design the robot, machine, or system needed, and they will direct the process by which time, people, and machinery are used to implement the system. They will coordinate the efforts involved in a plant expansion, including design the shop layout, determine structural needs, and organize “hands on” people who focus on product improvement, manufacturing, and process operations.



Tarleton State University

A member of The Texas A&M University System since 1917

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