Bachelor of Science in Engineering Technology

Student Learning Outcomes

Students will:

1. be able to design and conduct experiments and analyze and interpret data.
2. be able to apply knowledge and skills learned in mathematics, science, and engineering to solve problems related to engineering and other fields.
3. be able to design a system, component, or process to meet desired needs while meeting economic, political, ethical, health and safety, environmental, manufacturability, and sustainability constraints.
4. be adaptable problem solvers and critical thinkers with strong oral and written communication skills.
5. be able to work both independently and in team environments.
6. be life-long and self-directed learners.
7.

Requirements for the Bachelor of Science in Engineering Technology

Code	Title	Hours
Core Curriculum		**60**
Core Curriculum Areas A-E (see VSU Core Curriculum)		42
Engineering Technology majors are required to take MATH 1113 or MATH 1112 in Area A and MATH 2261 in Area D.2		
Area F		**18**
ENGT 2010	Introduction to Engineering Technology	3
ENGT 2500	Engineering Graphics for Design	3
CS 1340	Computing for Scientists [2]	3
or CS 1301	Principles of Programming I	
PHYS 1111K	Introductory Physics I	4
PHYS 1112K	Introductory Physics II	4
If PHYS 1111K and PHYS 1112K are taken in Area D.2., an additional lab sequences is needed. Choose from BIOL 1107/BIOL 1107L, BIOL 1108/BIOL 1108L, CHEM 1211/CHEM 1211L, or CHEM 1212/CHEM 1212L		
MATH 2261	Analytic Geometry and Calculus I (1 hour left over from Area D.2)	1
Senior College Curriculum		**60**
Required Courses		
ENGT 3510	Advanced Statistics in Engineering Technology	3
ENGT 3520	Industrial Safety Engineering	3
ENGT 3530	Introduction to Manufacturing Systems	3
ENGT 4510	Basic Electricity and Electronics	3
ENGT 4520	Applied Thermodynamics	3
Capstone Project		
ENGT 4500 & ENGT 4550	Technical Project Proposal and Technical Project Lab	3
OR		
ENGT 4950	Directed Study in Engineering Technology	1-3
Additional Electives in Concentration		21
ENGT 3100	Six Sigma and Lean Manufacturing	3
ENGT 3120	Plant Layout and Material Handling	3
ENGT 3130	Industrial Cost Control	3
ENGT 3140	Simulation Modeling of Industrial Systems	3
ENGT 3150	Supply Chain and Logistics Concepts	3
ENGT 3500	Engineering Graphics for Design II	3
ENGT 4100	Motion and Time Study	3
ENGT 4110	Industrial Automation	3
ENGT 4120	Project Management	3
Other Supporting Courses		12

ENGT 2510	Statistics in Engineering Technology	3
ENGT 2520	Engineering Economics	3
ENGT 2530	Statics	3
ENGL 3020	Technical Writing and Editing	3
Guided Electives [2]		9
Total hours required for the degree		**120**