Associate of Science in Engineering Studies

The Associate of Science in Engineering Studies degree is designed to provide students with a two-year degree, preparing them to transfer to a 4-year degree in Engineering at another institution or to find employment in an engineering industry. The program prepares students to continue their studies in areas such as aerospace engineering, civil engineering, computer engineering, electrical engineering, industrial engineering, and mechanical engineering. Students can also transfer their course work to alternative fields such as biomedical engineering, chemical engineering, environmental engineering, and materials science and engineering.

Student Learning Outcomes:

Students will be able to:

1. demonstrate understanding of fundamental sciences through application to problem solving and experimental laboratory analysis.
2. demonstrate understanding of mathematics through application to mathematical analysis and problem solving.
3. apply scientific and mathematical principles to solve engineering problems.
4. demonstrate the effective use of computers through application packages, programming, scientific calculations, and graphical applications.

Requirements for the Associate of Science in Engineering Studies

Code	Title	Hours
Core Curriculum		**60**
Core IMPACTS (See VSU Core Curriculum)		42
Majors in Engineering Studies are advised to take MATH 1112 or MATH 1113 or MATH 2261 in Mathematics and Quantitative Skills and MATH 2261 or MATH 2262 and PHYS 2211K and PHYS 2212K in Technology, Mathematics, and Sciences. Any "extra" hours will count in Core Field of Study.		
Core Field of Study		**18**
Any "extra" hours from Mathematics and Quantitative Skills and from Technology, Mathematics, and Sciences		1-2
MATH 2262	Analytic Geometry and Calculus II	4
PHYS 2212K	Principles of Physics II	4
Select one of the following:		
CHEM 1211 & 1211L	Principles of Chemistry I and Principles of Chemistry Laboratory I	
BIOL 1107 & 1107L	Principles of Biology I and Principles of Biology Laboratory I	
Select one of the following if MATH 2261 taken in Mathematics and Quantitative Skills:		
CS 1301	Principles of Programming I	
CS 1340	Computing for Scientists	
Select at least three of the following:		
ENGR 2010	Introduction to Engineering	
ENGR 2200	Statics	
ENGR 2310	Introduction to Signal Processing	
ENGR 2320	Introduction to Computer Engineering	
ENGR 2500	Engineering Graphics for Design	
Total Hours Required for the Degree		**60**