

# CORE IMPACTS - TECHNOLOGY, MATHEMATICS & SCIENCES

## Technology, Mathematics & Sciences (STEM)

The Learning Outcomes for the Technology, Mathematics & Sciences IMPACTS area:

Students will use the scientific method and laboratory procedures or mathematical and computational methods to analyze data, solve problems, and explain natural phenomena.

Students will select 8 credit hours of lab sciences and 4-6 credit hours of Mathematics from the course lists below.

### Sciences

Code	Title	Credit Hours
CHEM 1211K	Principles of Chemistry I	4
CHEM 1212K	Principles of Chemistry II	4
CHEM 1310	Principles of General Chemistry for Engineers	4
BIOS 1220	Biology of Sex & Death	4
BIOS 1107 & 1107L	Principles of Biology I and Principles of Biology I Laboratory <sup>1</sup>	4
BIOS 1108 & 1108L	Principles of Biology II and Principles of Biology II Laboratory <sup>2</sup>	4
EAS 1600	Introduction to Environmental Science	4
EAS 1601	Habitable Planet	4
EAS 2600	Earth Processes	4
PHYS 2211	Principles of Physics I	4
PHYS 2212	Principles of Physics II	4

<sup>1</sup> All Biology majors should take BIOS 1207 and BIOS 1207L

<sup>2</sup> All Biology majors should take BIOS 1208 and BIOS 1208L

### Mathematics

All students with majors in the Colleges of Architecture, Engineering and Sciences

Code	Title	Credit Hours
MATH 1551	Differential Calculus	2
MATH 1553	Introduction to Linear Algebra	2

All students with majors in the College of Computing and Electrical Engineering

Code	Title	Credit Hours
MATH 1551	Differential Calculus	2
MATH 1554	Linear Algebra	4

All other majors<sup>1</sup>

Code	Title	Credit Hours
Select one of the following:		
MATH 1711	Finite Mathematics	4
MATH 1551 & MATH 1553	Differential Calculus and Introduction to Linear Algebra	4

<sup>1</sup> In the case of a degree (major) that is jointly offered and the Colleges' requirements in this area are different, the student must complete the course that is specified in the curriculum for the degree, regardless of which college is the declared "home" of the student. This area of the Core Curriculum is driven by the requirements of the specific degree program, not by the general requirements of the College, if a degree is offered jointly.