General Education: Science, Technology, Engineering and Mathematics (STEM)

15 credits required: 4 credits (minimum) from Mathematics & 7 credits (minimum) from Science 2025-26

Students must take a minimum of 15 credits in STEM following these requirements:

- A minimum of 4 credits are required from the Mathematics list
- Complete at least two courses in two different disciplines (different course prefixes) from the Science list
 - Minimum of 7 Science credits required
 - at least one of the Science courses must include or be taken with the accompanying laboratory
- No more than 4 credits from the Restricted STEM list may be counted toward the STEM requirement
- Some courses are on the STEM list and the HASS list, but each course can satisfy only one requirement

Some degree programs specify some or all STEM requirements; students should check with their academic advisor for specific requirements

Mathematics

Minimum of 4 credits required

Quantitative Problem Solving	3
Quantitative Literacy	4
College Algebra I and	
College Algebra II with Trigonometry	6
Precalculus	4
Single-Variable Calculus with Integrated	
Precalculus I	4
Calculus for Life Sciences	4
Calculus with Technology I	4
Calculus Plus with Technology I	5
Statistical Methods	4
Statistics for the Behavioral Sciences	4
Statistics for Social Sciences	4
	Quantitative Literacy College Algebra I and College Algebra II with Trigonometry Precalculus Single-Variable Calculus with Integrated Precalculus I Calculus for Life Sciences Calculus with Technology I Calculus Plus with Technology I Statistical Methods Statistics for the Behavioral Sciences

Science

- At least two courses in two different disciplines are required; at least one must include or be taken with the accompanying laboratory
- Courses or course-groups satisfying the laboratory requirement are designated by an asterisk (*)
- Minimum of 7 credits required

BL1010*	General Biology I	4
BL1020*	General Biology II	4
BL1040*	Principles of Biology	4
BL1100*	General Biology I (plus BL1110**)	4
BL1200*	General Biology II (plus BL1210**)	4
BL1400*	Principles of Biology (plus BL1410**)	4
BL2010*	Anatomy & Physiology I (plus BL2011)	4
BL2160*	Botany	4
BL2940	Human Nutrition	3
BL3970	Current Health Issues	3
BL4090	Tropical Island Biology	2

Science cont'd

CH1000	Introductory Chemistry	3
CH1112*	University Chemistry – Studio Lab I	5
CH1150*	University Chemistry I (plus CH1151/1153)	4/5
FW1035*	Wood Anatomy and Properties	3
FW2060	Fundamentals of Environmental Sustainability	3
FW3075	Introduction to Biotechnology	3
FW3330*	Soil Science	4
FW3610*	Ornithology	4
FW3620	Field Ornithology	1
FW4120	Tree Physiology	3
FW4128	Conservation Genetics	3
FW4240*	Mammalogy	4
GE2000*	Understanding the Earth	3
KIP3100*	Exercise Assessment and Prescription	3
KIP3700*	Lifetime Fitness	3
PH1090*	The Physics Behind Music (plus PH1091**)	4
PH1110*	College Physics I (plus PH1111)	4
PH1140*	Applied College Physics I (plus PH1141)	4
PH1160*	Honors Physics I-Mechanics (plus PH1161 or PH1100)	5
PH1600*	Introductory Astronomy (plus PH1610**)	3
PH2100*	University Physics I-Mechanics (plus PH1100)	4
SS3221*	Archaeological Sciences (plus SS3222)	4

**This laboratory is optional with the associated course. If the laboratory is not taken, the associated course can count as a Science course, but it will not satisfy the laboratory portion of the requirement.

Restricted STEM

BL1020

No more than 4 credits

General Biology II

 No course may count in a degree audit toward both STEM and HASS requirements

BL1200	General Biology II	3
BL3001	Emergency Medical Technician I	5
CH1122	University Chemistry Studio Laboratory II ***	5
CH1160	University Chemistry II (plus CH1161/1163) ***	4/5
CH2590	Color Chemistry	3
CMG1000	Introduction to Construction Management	3
CS1121	Introduction to Programming I	3
CS1122	Introduction to Programming II	3
CS1131	Accelerated Introduction to Programming ***	5
CS1142	Programming at the Hardware Software Interface	3
EC3002	Microeconomic Theory	3
EC4050	Game Theory/Strategic Behavior	3
EC4100	Mathematical Economics	3
EC4200	Econometrics	3
EET1120	Circuits I	4
EET1411	Basic Electronics	4
ENG1001	Engineering Problem Solving	2
ENG1003	Introduction to Computer Aided Drafting	1
ENG1100	Engineering Analysis	2

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Restricted STEM cont'

ENG1101	Engineering Analysis and Problem Solving	3
ENG1102	Engineering Modeling and Design	3
HU3700	Philosophy of Science	3 3
HU3701	Philosophy of Technology	3
KIP1500	Foundations of Kinesiology	3
MIS2100	Introduction to Business Programming	3
PH1210	College Physics II (plus PH1200)	4
PH1360	Honors Physics II (plus PH1361)	3
PSY3060	Physiological Psychology	3 3 3
SAT1700	Cyber Ethics	3
SND4120	Transducer Theory	3
SND4121	Transducer Theory Lab	1
SS2050	Fundamentals of GIS	3
SS2200	Introduction to Archaeology	3
SS3210	Field Archaeology	var
SS3230	Archaeology of Industry	3
SS3250	Biological Anthropology	3
SS3510	History of American Technology	3 3 3
SS3511	History of Science in America	3
SS3580	Technology and Society in History	3
SS3581	History of Science	3
SS3820	Ethical, Legal, and Societal Implications (ELSI)	
	of Nanotechnology	3
SS4009	Survey Methods	3
SS4050	GIS Applications for Social Science	3 3
THEA2310	Drafting for the Entertainment Industry	3

***A maximum of 4 credits will count toward STEM requirements

Any course at the 2000-level or higher in the following STEM disciplines (with the exceptions of BE2100, CM3410, ENG2060, ENG3060, ENG4060, and ENG4070):
Biological Sciences (BL), Chemistry (CH), Computer Science (CS), Engineering (BE, CE, CEE, CM, EE, ENG, ENVE, GE, MEEM, MY, MSE, SSE), Forest Resources and Environmental Science (FW), Geological Sciences (GE), Kinesiology (KIP), Mathematics (MA), Physics (PH), Technology (EET, MET, SAT, SU, TE)

STEM APPROVED TRANSFER COURSES

The following courses are available ONLY by transfer.

Mathematics

MA1XXX	Approved Transfer STEM Math Elective
<u>Science</u>	
BL1XXX	Approved Transfer Science-Biology
BL2XXX	Approved Transfer Science-Biology
BLL1XXX*	Approved Transfer Lab Science-Biology
BLL2XXX*	Approved Transfer Lab Science-Biology
CH1XXX	Approved Transfer Science-Chemistry
CH2XXX	Approved Transfer Science-Chemistry
CHL1XXX*	Approved Transfer Lab Science-Chemistry
CHL2XXX*	Approved Transfer Lab Science-Chemistry)
FW1XXX	Approved Transfer Science-Forestry
FW2XXX	Approved Transfer Science-Forestry
FWL1XXX*	Approved Transfer Lab Science-Forestry
FWL2XXX*	Approved Transfer Lab Science-Forestry
GE1XXX	Approved Transfer Science-Geology/Mining
GE2XXX	Approved Transfer Science-Geology/Mining
GEL1XXX*	Approved Transfer Lab Science-Geology/Mining
GEL2XXX*	Approved Transfer-Lab Science-Geology/Mining
KIP1XXX	Approved Transfer Science-Kinesiology
KIP2XXX	Approved Transfer Science-Kinesiology
KIPL1XXX*	Approved Transfer Lab Science-Kinesiology
KIPL2XXX*	Approved Transfer Lab Science-Kinesiology
PH1XXX	Approved Transfer Science-Physics
PH2XXX	Approved Transfer Science-Physics
PHL1XXX*	Approved Transfer Lab Science-Physics
PHL2XXX*	Approved Transfer Lab Science-Physics
SCI1XXX	Approved Transfer Science
SCI2XXX	Approved Transfer Science
SCIL1XXX*	Approved Transfer Lab Science
SCIL2XXX*	Approved Transfer Lab Science