ENGINEERING PATHWAY, A.S.

School of Science, Technology, Engineering & Mathematics

The Associate of Science degree in Engineering introduces students to fundamental principles underlying the field of engineering.   Students will gain foundational and prerequisite knowledge in Mathematics and Physics. This degree pathway prepares students to succeed in bachelor's degree programs in various engineering fields and qualifies students for the Regents Engineering Pathway (https://www.usg.edu/academic_affairs_handbook/section2/C774/).

To qualify for graduation, students must meet all graduation requirements (http://catalog.highlands.edu/academic-information/#graduationrequirements).

Code	Title	Hours	Completed
A. Essential Skills			_____
ENGL 1101	English Composition I	3	_____
ENGL 1102	English Composition II	3	_____
Select one of the following or a mathematics course for which one of the following is a prerequisite:		4	_____
MATH 2261	Calculus I		_____
B. Institutional Options			_____
COMM 1100	Human Communication	2-3	_____
or COMM 1110	Public Speaking		_____
Select one of the following:		2	_____
GHHU 2901	Special Topics: Humanities		_____
GHMA 2901	Special Topics: Mathematics		_____
GHSC 2901	Special Topics:Science		_____
GHSS 2901	Special Topics: Social Science		_____
C. Humanities/Fine Arts			_____
Select one of the following:		3	_____
ENGL 2111	World Literature I		_____
ENGL 2112	World Literature II		_____
ENGL 2121	British Literature I		_____
ENGL 2122	British Literature II		_____
ENGL 2131	American Literature I		_____
ENGL 2132	American Literature II		_____
ENGL 2135	Latino Literature		_____
ENGL 2140	African-American Literature		_____
Select one of the following:		3	_____
ARTS 1100	Art Appreciation		_____
ARTS 1111	Art History to Renaissance		_____
ARTS 1112	Art History Renaissance to Pre		_____
ENGL 2010	Humanities in Drama		_____
ENGL 2111	World Literature I		_____
ENGL 2112	World Literature II		_____
ENGL 2121	British Literature I		_____
ENGL 2122	British Literature II		_____
ENGL 2131	American Literature I		_____
ENGL 2132	American Literature II		_____
ENGL 2135	Latino Literature		_____
ENGL 2140	African-American Literature		_____
FILM 1100	Film Appreciation		_____
FILM 2700	History of Motion Pictures		_____
HUMS 2011	Studies In Humanities		_____
MUSC 1100	Music Appreciation		_____
PHIL 2010	Introduction to Philosophy		_____
RELI 1116	Intro to Religion		_____
SPAN 1001	Elementary Spanish I		_____
SPAN 1002	Elementary Spanish II		_____
SPAN 2001	Intermediate Spanish I		_____
SPAN 2002	Intermediate Spanish II		_____
THEA 1100	Theater Appreciation		_____
D. Science, Mathematics, and Technology			_____
Select a two-course science sequence of the following:		8	_____
BIOL 1107K & BIOL 1108K	Principles of Biology I and Principles of Biology II		_____
CHEM 1211 & 1211L & CHEM 1212 & CHEM 1212L	Principles of Chemistry I and Principles of Chemistry I Lab and Principles of Chemistry II and Principles of Chemistry II Lab		_____

Code	Title	Hours	
PHYS 2211K & PHYS 2212K	Principles of Physics I and Principles of Physics II (Strongly recommended)		_____
MATH 2262	Calculus II	4	_____
E. Social Sciences			_____
POLS 1101	American Government	3	_____
HIST 2111	American History I	3	_____
or HIST 2112	American History II		_____
Select one of the following:		3	_____
HIST 1111	World Civilization to 1500		_____
HIST 1112	World Civ Since 1500		_____
HIST 1121	Western Civilization I		_____
HIST 1122	Western Civilization II		_____
Select one of the following:		3	_____
ECON 2105	Principles of Macroeconomics		_____
HIST 1111	World Civilization to 1500		_____
HIST 1112	World Civ Since 1500		_____
HIST 1121	Western Civilization I		_____
HIST 1122	Western Civilization II		_____
HIST 2111	American History I		_____
HIST 2112	American History II		_____
HIST 2154	Minorities in U.S. History		_____
HIST 2400	Economic History		_____
POLS 2401	Intro to Global Issues		_____
POLS 2501	Intro to Domestic Issues		_____
PSYC 1101	Intro to General Psychology		_____
RELI 1116	Intro to Religion		_____
SOCI 1101	Introductory Sociology		_____
SOCI 1160	Intro to Social Problems		_____
F. Courses Related to the Pathway			_____
Select a two-course science sequence of the following:		8	_____
PHYS 2211K & PHYS 2212K	Principles of Physics I and Principles of Physics II [1]		_____
CHEM 1211 & 1211L & CHEM 1212 & CHEM 1212L	Principles of Chemistry I and Principles of Chemistry I Lab and Principles of Chemistry II and Principles of Chemistry II Lab		_____
Select eight hours from the following: [2]		7-8	_____
MATH 2263	Calculus III		_____
MATH 2280	Discrete Mathematics		_____
MATH 2285	Linear Algebra		_____
MATH 2310	Differential Equations		_____
Area A and Area D Excess Hours		*2*	_____
Institutional Requirements Outside the Core			_____
PHED 1010	Concepts of Fitness/Health	2	_____
Additional two credit hours of physical education		2	_____
Total Hours		**64-65**	_____

[1]

Required if not taken in Area D

[2]

Students should consult with an advisor when choosing mathematics classes.