Transfer Pathway Map for Physics or Pre-Engineering

Students who complete this program are prepared to pursue the bachelor's degree in physics or engineering. Through systematic observation and experimentation, physicists describe in mathematical terms the structure of the universe and the interaction of matter and energy. Physicists develop theories that describe the fundamental forces of nature. Most physicists work in research and development. Some do basic research to increase scientific knowledge while others do applied research and help develop new products.

TOTAL: 60 hours (Not including SGSC 1000, support courses or PE)

First Year

Fall Semester	Hrs
ENGL 1101 - Composition I	3
MATH 1113 - Pre-Calculus	4
Area D Sequence Course 1	4
PHED Course	1
SGSC 1000 - South Georgia State College Orientation and Success	1
Area B/C/E Course	3
TOTAL	16

Spring Semester	Hrs
ENGL 1102 - Composition II	3
HLTH 1103-Contemporary Health Issues	2
MATH 2253 - <mark>Calculus I</mark>	4
Area D Sequence Course 2	4
PHED Course	1
Area B/C/E Course	3
TOTAL	17

Milestones:

Math and English courses require a grade of "C" or better and must be finished within the first 30 hours. First-year overall GPA should be 2.0 or higher.

Milestone Classes MATH 1113 and MATH 2253 (need a C or higher to do well in the program).

Focus courses are taken within the first 30 hours to give a feel of the chosen pathway

Required for all First Time, Full Time Students

Second Year

Fall Semester	
PHYS 2211K - Principles of Physics I	4
MATH 2254 - Calculus II	4
Area D option	4
POLS 1101- American Government	3
DVRS 1101-Topics in Diversity	1
TOTAL	16

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Spring Semester	
PHYS 2212K - Principles of Physics II	4
HIST 2111/2112	3
Area B/C/E Course	3
Area C ENGL or HUMN	3
Area B/C/E Course	3
TOTAL	16

Milestones:

GPA should be 2.5 or higher, if less, consult an academic advisor for other major options. If GPA is less than 2.75, a student is no longer competitive for transfer to a four-year program.

Milestone Classes PHYS 2211K/PHYS 2212K (need a C or higher to do well in the program). Sequence Alert!! PHYS 2211K is only offered in Fall, and PHYS 2212K is only offered in Spring.

Possible career opportunities after additional education include: astronomers, acoustical physicists, astrophysicists, biophysicists, geophysicists, health/medical physicists, nuclear physicists, optical physicists, and science educators in addition to numerous engineering disciplines (aerospace, biomedical, chemical and biomolecular, civil, computer, electrical, mechanical, etc). Please see mynextmove.org for more information on possible career options with salary information.

Name	ID Number	Date

ASSOCIATE OF SCIENCE: Physics/Engineering Pathway Checklist

Area A – Essentia	ıl Skills	
ENGL 1101	required	
ENGL 1102	required 10hrs	
MATH 1113	required	
*Extra hour used		
Extra floar asca	marca i incaritotal modis	
Area B – Instituti	·	
DVRS 1101	required	
Select one of the	-	
ANTH 1102	HIST 1111	
ANTH 1104	HIST 1112	
COMM 1100	POLS 2401	
COMM 1110	SOCI 2501	
COMM 2000	SABR 2001 4hrs	
COMM 2010		
	Area B total hours	
Area C – Humani	ties/ Fine Arts	
Select one of the	•	
ENGL 2111	ENGL 2121	
ENGL 2111	ENGL 2122	
HUMN 2111	ENGL 2131	
HUMN 2111	ENGL 2131 ENGL 2131	
TIOIVIIV 2112		
Select one of the	following:	
ARTS 2205		
ENGL 2111		
ENGL 2112		
ENGL 2121		
ENGL 2121 ENGL 2122		
ENGL 2122 ENGL 2131	Any 2 hour foreign	
	Any 3 hour foreign	
ENGL 2132	Language	
HUMN 2111		
HUMN 2112		
MUSI 1100	6hrs	
THEA 1100		
PHIL 2010	Area C total hours	
Physical Education	on Requirements	
HLTH 1103	required 4hrs	
Physical Ed		
	Physical Ed. total hours	

Area D – Science, Mathematics, Technology Choose one of the two series:		
BIOL 2107K	& BIOL 2108K	
CHEM 1211 K	& CHEM 1212 K	
Select one of the following:		
ASTR 1010/1010L	MATH 2253	
ASTR 1020/1020L	MATH 2254	
BIOL 2000/2000L	MATH 2255	
CHEM 1211K	SCIE 1111/1111L	
CHEM 1212K	SCIE 1121/1121L	
PHSC 1011/1011L		12 hrs
*Extra hour used in area F	Area D tota	al hours

Area E –Social Studies				
POLS 1101	re	quired		
Select one of the f	ollowing:			
HIST 2111				
HIST 2112				
Select two of the f	ollowing:			
ECON 2105		POLS 2200		
ECON 2106		POLS 2401		
HIST 1121		PSYC 1101		
HIST 1122		PSYC 2101		
HIST 2100		PSYC 2201		
HIST 2111		PSYC 2103		
HIST 2112		SOCI 1101		
HIST 2200		SOCI 1160		
HIST 2220		SOCI 2293		
POLS 2100				12hrs
		Area E t	otal hours	

required

required

required

required

Area F total hours

18hrs

Area F-Courses Related to the Program of Study

Two excess hours from Area A and Area D = 2 hours

PHYS 2211K

PHYS 2212K

MATH 2253 or MATH 2254

MATH 2254 or MATH 2255

Completed Areas	
Area A (Must have C's or better)	
Area B	
Area C	
Area D	
Area E	
Area F (Must have C's or better)	
Phys Ed	

GA History Requirement	GA Gov't Requirement
HIST 2111 or 2112	POLS 1101

If HIST 2111/2112 or POLS
1101 is taken at a non-USG
institution, Georgia history and
government exams must be
taken to fulfill requirements.

Comments: PHYS 2211K is only offered in fall, and PHYS 2212K is only offered in spring.