

Earth and Space Exploration BS Course Prerequisites

Course prefix	Course Name	Hrs	Semester Offered	Prerequisites
SES121	Earth, Solar System and Universe I	3	F	
SES123	Earth, Solar System and Universe I-Lab	1	F	SES121 with C or better if completed
SES122	Earth, Solar System and Universe II	3	S	SES121 with C or better
SES124	Earth, Solar System and Universe II-Lab	1	S	Prerequisite(s): SES 123 with C or better; Pre- or corequisite(s): SES 122 with C or better if completed
SES 126	Exploration of the Universe	3	S	Prerequisite(s): Mathematics Placement Test with a score of 50% or higher, or ALEKS score of 61 or higher; SES 121 with C or better; Pre- or corequisite(s): MAT 170, 171, 210, 251, 265, or 270 with C or better if completed
SES 128	Exploration of the Universe Lab	1	S	Prerequisite(s): SES 123 with C or better; Pre- or corequisite(s): SES 126 with C or better if completed
SES130	Coding for Exploration	3	F	Prerequisite(s): SES 121 with C or better; Pre- or corequisite(s): MAT 265 or 270 with C or better if completed
SES350	Engineering Systems and Experimental Problem Solving	3	F	MAT 267, 272 or 275; PHY131/132 (or PHY 151); C or better
SES 401	SESE Colloquium	1	F,S	
SES410	Senior Exploration Project I	3	F	ENG 101, ENG 105 or ENG 107; Senior standing
SES411	Senior Exploration Project II	3	S	ENG 101, ENG 105 or ENG 107; SES410

SES electives (2)	Various options among GLG/SES/AST classes	6		Course must be upper division (300-400) level
SES branch (4)	See list on next page	12		
CHM114	General Chemistry for Engineers	4	F,S	CHM 101 with C or better OR Mathematics Placement Test score of 50% or higher OR Pre/Co-requisites: MAT 170 (or MAT 171, 210, 251, 265 or 270) with C or better if completed
MAT265/270	Calculus for Engineers I	3	F,S,SS	MAT 170 or 171 with C or better, OR Mathematics Placement Test with a score of 60% or higher; the Advanced Math Placement Test with a score of 38 or higher, OR ALEKS score of 76 or higher; Credit is allowed for only MAT 265 or MAT 270
MAT266/271	Calculus for Engineers II	3	F,S,SS	MAT 265 or 270 with C or better; Credit is allowed for only MAT 266 or 271
MAT267/272	Calculus for Engineers III	3	F,S,SS	MAT 266 or 271 with C or better; Credit is allowed for only MAT 267 or 272
MAT275	Modern Differential Equations	3	F,S	MAT 266 or MAT 271 with a C or better; Credit is allowed for only MAT 274 or 275
PHY121	University Physics I: mechanics	3	F,S,SS	MAT 265 or MAT 270 with a C or better; Pre or Co-req: MAT 266 or MAT 271 with C or better if completed
PHY122	University Physics Laboratory I	1	F,S,SS	Pre- or Co-requisite: PHY 121 with C or better if completed
PHY131	University Physics II: elec.&mag.	3	F,S,SS	MAT 266 or 271 with C or better; PHY 121 with C or better; Pre- or corequisite(s): MAT 267 or 272 with C or better if completed
PHY132	University Physics Laboratory II	1	F, S,SS	Pre or Co-req: PHY131 with C or better if completed

Select 4 of the following SES branch options:

AST321	Intro to Planetary and Stellar Astrophysics	3	F	MAT266 or MAT271 with C or better AND PHY121/122 or PHY150 with C or better
AST322	Intro to Galactic and Extragalactic Astrophysics	3	S	MAT266 or MAT271 with C or better AND PHY121/122 or PHY150 with C or better
GLG310	Structural Geology	3	F	GLG 101 or SES 121 with C or better; MAT 170, 171, 210, 251, 265 or 279 with C or better
GLG321	Mineralogy	3	S	CHM 113 (or both CHM 111 and 117 or 114) with C or better; MAT 170, 210, 265 or 270 with C or better
GLG418	Geophysics	3	F	MAT 272 (or MAT 267) with C or better; PHY 131/132 (or PHY151) with C or better
GLG424	Petrology	3	F	GLG321 w/ C or better
GLG471	Hydrology	3	F	CEE 341, MAE 340, or GLG 362; all with C or better)
GLG481	Geochemistry	3	S	BCH 341, CHM 341, CHM 346, or GLG 321 with C or better
GLG490	Special Topics: Remote Sensing	3	F	
SES311	Essentials of Astrobiology	3	S	BIO 181 (or 188), CHM 113 or PHY 121; MAT 265 or MAT 270
SES330	Electronics Instrumentation	4	F	EEE 202; MAE 201 or 212; PHY 131 and 132 (or PHY 151), all with C or better
SES405	Exploration Systems Engineering	3	S	MAT 266 or 271 with C or better; PHY 121 and 122 (or PHY 150) with C or better

Codes for semester offerings: F=fall, S=spring, SS=summer session

Special note: This handout is intended as a helpful tool for schedule planning. However, students and advisors should consult the course catalog for official course information as pre-requisites and course offerings are constantly evolving