[Proposed catalog copy]

Environmental Science Systems with a Concentration in Pre-Engineering

The environmental science systems B.S. can be taken with a possible pre-engineering concentrations as the foundation for the Bachelor's in Environmental Science Sy either the Master's in Environmental Engineering or the Master's in Environmental Engineering Sciences degree program at Syracuse University. Your advisor can give you more information.

Bachelor of Science in Environmental Science Systems – Pre-Engineering Concentration for Master of Science in Environmental Engineering

Major Requirements	*Hours*
General Biology (BIO 191-192)	8
Global Resources or Ecosystems (ESS 121, 127, 128 or 129)	3
Physical Geology (ESS 205)	4
General Ecology (BIO 230)	4
Biodiversity (BIO/ESS 335)	3
Earth's Surface (ESS 320)	4
Global Systems Science (ESS 458)	3
Research in Environmental Science (ESS 499) or Internship (ESS 490)	3

Major Support	*Hours*
General Chemistry I (CHM 151)	4
General Chemistry II (CHM 152)	4
General Physics I-II (PHY105-106)	8
Statistics I (MTH 110/111)	3/4
Calculus I-III (MTH 145, MTH 146, MTH 245)	12
Differential Equations	3

Bridge Courses (to be taken at SU)	*Hours*
Statics SYRE (ECS) 221	3
Environ. Engineering SYRE (CEE) 341	3
Water Resources SYRE (CEE) 352	4
Fluid Mechanics SYRE (CEE) 327 or SYRE (MAE) 341	4

B.S. Environmental Science Systems – Pre-Engineering Concentration for Master of Science in Environmental Engineering: Typical Course Sequence

First Year

FALL		SPRING	
BIO 191	4 credits	BIO 192	4 credits
MTH 145	4 credits	MTH 146	4 credits
WRT 1	3 credits	PHL 1	3 credits
HST 1	3 credits	HST 2	3 credits
COR 1	3 credits	ESS 121	3 credits
	17 credits		17 credits

Second Year

FALL		SPRING	
PHY 105-103	4 credits	PHY 106-104	4 credits
MTH 245	4 credits	MTH 303	3 credits
ENG 1	3 credits	THE	3 credits
PHL 2	3 credits	ESS 205	4 credits
COR-EAC 1	3 credits	COR-EAC 2	3 credits
	17 credits		17 credits

Third Year

FALL		SPRING	
BIO 230	4 credits	BIO/ESS 335	3 credits
CHM 151+Lab	4 credits	CHM 152 + Lab	4 credits
ESS 320	4 credits	Social Science	3 credits
ESS 499	3 credits	*SYRE 221**	3 credits
ENG 2	3 credits		
	18 credits		13 credits

Fourth Year

FALL		SPRING	
MTH 110/111	3-4 credits	BIO/ESS 458	3 credits
COR-INS/ISS/IM	3 credits	COR 4	3 credits
VPA	1 credit	REL	3 credits
*SYRE 327**	4 credits	*SYRE 352**	4 credits
*SYRE 341E**	3 credits	Free elective	3 credits
	14-15 credits		16 credits

**SYRE Engineering courses at Syracuse University*

Bachelor of Science in Environmental Science Systems – Pre-Engineering Concentration for Master of Science in Environmental Engineering Sciences

Major Requirements	*Hours*
General Biology (BIO 191)	4
Global Resources (ESS 121)	3
Global Environment or Ecosystems (ESS 127, 128 or 129)	3
Physical Geology (ESS 205)	4
General Ecology (BIO 230)	4
Biodiversity (BIO/ESS 335)	3
Earth's Surface (ESS 320)	4
Global Systems Science (ESS 458)	3
Research in Biology (ESS 499)	3
or Internship (ESS 490)	
ESS/BIO elective (BIO 192 recommended)	3/4
Upper level BIO/ESS elective	4
Upper level elective *(ECS 221@ SU recommended)*	3/4
Upper level elective *(CEE 341@ SU recommended)*	3/4

Major support	*Hours*
General Chemistry I (CHM 151)	4
General Chemistry II (CHM 152)	4
General Physics I (PHY101/105)	4
General Physics II (PHY 102/106)	4
General Statistics (MTH 110/111)	3/4
Calculus (MTH 145 and MTH 146)	8

B.S. Environmental Science Systems – Pre-Engineering Concentration for Master of Science in Environmental Engineering Sciences: Typical Course Sequence

First Year

FALL		SPRING	
BIO 191	4 credits	BIO 192	4 credits
MTH 145	4 credits	MTH 146	4 credits
WRT 1	3 credits	PHL 1	3 credits
HST 1	3 credits	HST 2	3 credits
COR 1	3 credits	ESS 121	3 credits
	17 credits		17 credits

Second Year

FALL		SPRING	
PHY 105-103	4 credits	PHY 106-104	4 credits
MTH 110/111	3-4 credits	ESS 128	3 credits
ENG 1	3 credits	THE	3 credits
PHL 2	3 credits	ESS 205	4 credits
COR-EAC 1	3 credits	COR-EAC 2	3 credits
	16-17 credits		17 credits

Third Year

FALL		SPRING	
BIO 230	4 credits	BIO/ESS 335	3 credits
CHM 151+Lab	4 credits	CHM 152 + Lab	4 credits
ESS 320	4 credits	BIO/ESS elective	4 credits
ESS 499	3 credits	*SYRE 221**	3 credits
ENG 2	3 credits		
	18 credits		14 credits

Fourth Year

FALL		SPRING	
Free elective	3 credits	BIO/ESS 458	3 credits
COR-INS/ISS/IM	3 credits	COR 4	3 credits
VPA	1 credit	REL	3 credits
Free elective	3 credits	Social Science	3 credits
*SYRE 341E**	3 credits	Free elective	3 credits
	13 credits		15 credits

**SYRE Engineering courses at Syracuse University*