Cooperative 3-2 Program for students majoring in **BIOLOGY** at Fredonia and an appropriate curriculum at an affiliated **engineering** institution.

Eng Biology 2016-2018

REQUIREMENTS LISTED IN CATALOG MUST BE FULFILLED FOR GRADUATION

FIRST YEAR (FREDONIA)

First Semester				Second Semester			
CHEM	115-125	Gen. Chemistry I w/Lab	4	CHEM	116-126	Gen Chemistry II w/Lab	4
MATH	122	Univ. Calculus I	4	MATH	123	Univ. Calculus II	4
ENGL	100	English Composition	3	PHYS	230-232	Univ. Physics I w/Lab	5
BIOL	131-132	Intro to Ecology & Evolution w/Lab	4	BIOL	133-134	Intro to Cell & Molecular Biology w/Lab	4
			15				17

SECOND YEAR (FREDONIA)

First Semester				Second Semester			
MATH	223	Univ. Calculus III	4	MATH	224	Differential Equations	3
PHYS	231-233	Univ. Physics II w/Lab	5	BIOL	243-244	Organismal Biology w/Lab	4
BIOL	237-238	Genetics	4	CHEM	216-226	Org. Chemistry w/Lab	4
CHEM	215-225	Org. Chemistry w/Lab	4	CSIT	121	Computer Science I *	3
			17	--------	-----	CCC ▪	3
							17

(If transcript does not list Biology as major, see Director to declare Biology)

THIRD YEAR (FREDONIA)

First Semester				Second Semester			
BIOL	333-334	Biochemistry w/Lab	4	BIOL	-----	Biology Electives (300 - 400 level)	9
BIOL	330-331	General Ecology w/Lab	4				
PHYS	321	Engineering Statics	3	PHYS	322	Mechanics of Solids **	4
PHYS	329	Engineering Dynamics**	3				
-------	-----	CCC ▪	3	-------	-----	CCC ▪	3
			17				16

(See Director for transfer interview)

(See Biology Chair for transfer letter)

FOURTH AND FIFTH YEARS (AFFILIATED INSTITUTION)

BIOL	------	------		Biology Electives (300 - 400 level)	3
	------	------	------	CCC's ▪	6

▪ Must complete the College Core Curriculum (CCC) either at Fredonia or engineering institution. Upper level is not required for 3-2 students. Also not required for 3-2: second social science course, second speaking intensive course, foreign language if earn 70 or better on Regent's Checkpoint B, and American History category if earn 85 or better on Regent's exam. See the current undergraduate Catalog for details regarding the CCC.

* For students transferring to Syracuse, additional CSIT courses are required.

** Students interested in electrical or computer engineering must take Circuit Analysis. Electrical, computer and chemical engineers may, in most cases, omit PHYS 322 and 329.

Probability and Statistics (STAT 350) is required at some affiliated institutions for students interested in Electrical or Industrial Engineering. Also, Linear Algebra (MATH 231) is strongly recommended.

Physics 234, Modern Physics, is required at some institutions, particularly Columbia and UB Electrical Engineering (spring semester).