

Two year **PRE-ENGINEERING** program for students
Transferring to an appropriate engineering institution

Eng
2-2
2011-2012

FIRST YEAR (FREDONIA)

<u>First Semester</u>				<u>Second Semester</u>			
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
-----	----	Elective NTE *	<u>3</u>	-----	----	Elective NTE	3
			14	PHED	----	Physical Ed. **	<u>1</u>
							17

SECOND YEAR (FREDONIA)

<u>First Semester</u>				<u>Second Semester</u>			
MATH	223	Univ. Calculus III	4	MATH	224	Differential Equations	3
PHYS	231-233	Univ. Physics II w/Lab	5	PHYS	234	Modern Physics ***	4
PHYS	321	Engineering Statics	3	PHYS	322	Mechanics of Solids ****	4
PHYS	329	Engineering Dynamics	3				
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			18	PHED	----	Physical Ed **	<u>1</u>
							15

(See Director)

* Electives NTE (Non-Technical Electives). Three to six credit hours in Economics are strongly recommended (ECON 101, 201, 202); other courses are: HIST 105, 106, 115 or 116; PHIL 115 or 116; POLI 120 or 150; PSY 129; SOC 116.

** Optional. Check requirements of engineering school.

*** Required at some of the engineering institutions.

**** Required for non-electrical engineering areas.

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

Students interested in Electrical Engineering must take six hours of Circuit Analysis. Circuit Analysis I is required for Mechanical Engineering. (There are Junior-year courses – taken at Fredonia only if a third year is taken there).

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