

**B.A. BIOLOGICAL SCIENCES** (129 credits)

NAME: \_\_\_\_\_

**I. COLLEGE CORE** (17 courses + VPA [52 cr]; 46 cr not incl MTH and BIO)

___ First Year Seminar (Core 100)	3	Le Moyne Hrs ___	Courses ___
___ Writing 101	3		
___ Philosophy 110	3	Transfer Hrs ___	Courses ___
___ Philosophy 210	3		
___ Religious Studies	3		
___ Theology	3		
___ English 210	3		
___ English 310	3		
___ History 110	3		
___ History 111	3		
___ Mathematics (fulfilled by major req.)	3		
___ Encountering Another Culture/Language	6 <sup>1</sup>		
___ Social Science	3		
___ Natural Science (fulfilled by major requirements)	3		
___ IDS: Interdisciplinary Nat. Sci./Soc. Sci./Mathematics	3		
___ Interdisciplinary Senior Capstone (Core 400)	3		
___ Visual & Performing Arts	1 <sup>2</sup>		
___ Diversity	0 <sup>3</sup>		

**II. MAJOR REQUIREMENTS**

**Biology** (8 courses; 30-31 credits) A minimum of 6 must be classroom courses (as opposed to research). At least 4 BIO courses must be taken at Le Moyne College.

BIO 191	___ 4 credits, fulfills Nat. Sci. Core requirement
BIO 192	___ 4 credits
BIO 225 (Poison.Planet)	___ 3 credits
BIO 218 (Cell & Molec.)	___ 4 credits

4 additional BIO courses, at least one taken from each of the areas listed below. **At least 3 of these courses must have lab components** (i.e. be 4 credit courses).

Molec.&Cell.Bio: ___	___ 3/4 credits	<u>Math-Science Distribution</u> (12 courses; 42 cr)
Organismal Bio ___	___ 3/4 credits	CHM 151-152 ___ 8 credits
Ecol/Popul Bio ___	___ 3/4 credits	PHY 105-106 + Labs ___ 8 credits
[BEN 481 (Bioinstrumentation) ___	___ 3 credits]*	MTH 145-146 (Calc I&II) ___ 8 credits
		MTH 245 (Calc III) ___ 4 credits
		MTH 303/4 (Diff. Equations) ___ 4 credits
		MTH 311 (Probability) ___ 3 credits
		MTH 312 (Math. Statistics) ___ 3 credits
		CHM 223 + Lab ___ 4 credits

**III. OTHER COURSES** - SU (4 courses; 12 credits)

[ECS 221 (Statics)	___ 3 credits]*
[ELE 231 (Electrical Eng. Fundamentals I)	___ 3 credits]*
[ELE 251 (Fundamentals of Linear System)	___ 3 credits]*
[ECS 104 (Eng. Computational Tools)	___ 3 credits]*
[BEN 481 (Bioinstrumentation)	(listed in II.)

\* Courses in brackets taken at **Syracuse University**.

<sup>1</sup> Typical number of credits to fulfill requirement. However, students may also fulfill this requirement with a semester of study abroad or by demonstrating intermediate language proficiency in an examination accepted by the Department of Foreign Languages.

<sup>2</sup> Students may fulfill this requirement by taking any approved 3-credit course in the appreciation or creation of visual, creative or performing arts; by taking any college course with a "VPA" designation, indicating that it includes 1-credit worth of VPA content; or, by taking an approved 1-credit independent study or special topics in performance or appreciation.

<sup>3</sup> While this is a non-credit-bearing requirement, all students must take one course listed with a "DIV" designation from the list of such courses offered throughout the College.

## Typical Program for B.A. with Pre-Engineering Concentration\*\* 2016 (new core)

### First Year

<u>FALL</u>		<u>SPRING</u>	
BIO 191	4 credits	BIO 192	4 credits
CHM 151 + Lab	4 credits	CHM 152 + Lab	4 credits
WRT 101	3 credits	PHL 110	3 credits
MTH 145	4 credits	MTH 146	4 credits
COR 100	<u>3 credits</u>	Social Science	<u>3 credits</u>
	18 credits		18 credits

### Second Year

<u>FALL</u>		<u>SPRING</u>	
BIO 218	4 credits	BIO	3-4 credits
PHY 105 + Lab	4 credits	PHY 106 + Lab	4 credits
MTH 245	4 credits	MTH 303/4	3 credits
HST 110	<u>3 credits</u>	HST 111	3 credits
	15 credits	ENG 210	<u>3 credits</u>
			16-17 credits

### Third Year

<u>FALL</u>		<u>SPRING</u>	
BIO 225	3 credits	BIO	3-4 credits
MTH 311	3 credits	MTH 312	3 credits
ENG 310	3 credits	PHL 210	3 credits
CHM 223 + Lab	4 credits	ECS 221*	3 credits
ELE 231*	<u>3 credits</u>	ELE 251*	<u>3 credits</u>
	16 credits		15-16 credits

### Fourth Year

<u>FALL</u>		<u>SPRING</u>	
EAC/Language	3 credits	EAC/Language	3 credits
IDS	3 credits	CORE 400	3 credits
REL	3 credits	THE	3 credits
BIO	3-4 credits	ESC 104*	3 credits
BEN 481*	<u>3 credits</u>	VPA	<u>1 credit</u>
	15-16 credits		13 credits

\* Taken at [Syracuse University](#).

\*\* For more details on the five year dual bachelor's/master's degree in engineering program offered in affiliation with Syracuse University, please refer to the Undergraduate Transfer Programs portion of this catalog.