Le Moyne College
Computer Science Major, *typical program* for **B.S.** With Concentration in **Pre-Engineering: Computer Engineering**

(as of 2015-16 Academic Year) Revised 01-02-2016		CREDIT	FIRST-YEAR		SOPHOMORE		JUNIOR		SENIOR	
			F	S	F	S	F	S	F	S
MAJOR REQUIREMENTS **COMPUTER SCIENCE**										
CSC 175	Intro. to Algorithms and Program Design	4	4							
CSC 176*	Object-oriented Programming	3		3						
CSC 181*	Bits, Nibbles and Bytes	3		3						
CSC 275*	Data Structures & Algorithms	3			3					
CSC 276*	Object-oriented Software Design	3				3				
CSC 281*	Discrete Mathematics	3			3					
CSC 346*	Software Operating Environments	3						3		
CSC 375	Design and Analysis of Algorithms	3				3				
CSC 441*	Secure Sw Dev. In Cloud Environment	3							3	
CSC 445*	Networks & Secure Software Development	3					3			
CSC 355 or CIS 352** or CSC 471 or CIS 473**	Programming Languages & Paradigms or Programming Languages:Theory & Practice or Models of Computation or Automata and Computability	3						3		
CSE 491,2**	Senior Design Project I, II	4							1	3
MAJOR SUPPORT **MATHEMATICS**										
MTH 145*	Calculus I	4	4							
Foreign Language		6							3	3
CORE REQUIREMENTS **ENGLISH/SOC SCI/HIST/RELIG/PHILOS**										
COR 100	First Year Seminar	3	3							
WRT 101	Critical Writing	3	3							
HST 110	History 1	3			3					
HST 111	History 2	3		3						
PHL 110	Philosophy 1	3			3					
PHL 210	Philosophy 2	3				3				
ENG 210	English 1	3					3			
ENG 310	English 2	3						3		
REL	Religion 1	3								3
THE	Theology 1	3						3		
Core IDS	Core Interdisciplinary	3								3
COR 400	Interdisciplinary Senior Capstone	3								3
Social Sci	Social Science	3				3				
VPA	Visual and Performing Arts	1							1	
*ADDITIONAL MASTERS PREREQUISITES** **SCIENCE/MATHEMATICS/ENGINEERING**										
CHM 151*	Chemical Principles I	4							4	
CSE 261**	Digital Logic Design	3				3				
CSE 262**	Digital Logic Design Lab	1				1				
CSE 381**	Computer Architecture	3					3			
CSE 384**	Systems Programming	3					3			
CSE 397**	Computer Laboratory I	3					3			
CSE 398**	Computer Laboratory II	3						3		
ELE 231**	Electrical Engineering Fundamentals I	3			3					
ELE 291**	Electrical Lab I	1			1					
MTH 146*	Calculus II	4		4						
MTH 245*	Calculus III	4				4				
MTH 311*	Introduction to Probability Theory	3							3	
PHY 103*	General Physics Lab I	1	1							
PHY 104*	General Physics Lab II	1		1						
PHY 105*	General Physics I	3	3							
PHY 106*	General Physics II	3		3						
TOTAL CREDITS		131	18	17	20	16	15	15	15	15

* Satisfies pre-requisites for admission to masters program. 3.0 GPA in math/science/engineering and overall also required.

** Taken at Syracuse University.

Additional Notes

- CSC 276 and all CSC courses numbered 300 and higher are taught once every two years. For these courses, this guide shows one sequence of course offerings. Depending on your first-year cohort, the order in which you take these courses may be different than what is shown.
- A student will have earned a minor in Mathematics (CSC program requires student to earn a minor).
- A student may elect to take the CSE capstone courses (491, 492) at SU or take the LMC CSC capstone course (496). The LMC capstone course is 3 credit hours and would be taken in the fall semester of their senior year.