



Degree Plan

Mathematics (BS) (Pre-Engineering)

Student: _____ Student ID: _____ Phone #: _____ Email: _____

Address: _____ City: _____ State: _____ Zip: _____

Beginning Term: _____ Anticipated Completion: _____

Estimated Transfer Credits: _____	Estimated Webster Credits: _____	Total Credit Hours: _____ <ul style="list-style-type: none"> • Transfer Credits + Webster Credits • Minimum of 120 hours
core requirements: _____	core requirements: _____	
GCP courses: _____	GCP courses: _____	
electives: _____	electives: _____	

REQUIRED CORE COURSES (48 hours) ** Please see catalog for complete description of requirements**						
Course	Hrs	Pre-requisite	Term	Year	Grade	Transfer
MATH 1610 Calculus I	5 sh	HS Trig, Precalc, or MATH 1480 with grade of B or better.				
MATH 1620 Calculus II	5 sh	MATH 1610				
MATH 2450 Introduction to Abstract Math	3 sh	MATH 1620				
MATH 3000 Calculus III	5 sh	MATH 1620				
MATH 2410 Discrete Mathematics	3 sh	COSC 1550				
MATH 3040 Differential Equations	3 sh	MATH 3000				
MATH 3160 Linear Algebra	3 sh	Jr. standing				
MATH 2200 Statistics	3 sh	Soph. standing				
MATH 3610 Probability	3 sh	MATH 1620				
The following courses are required to complete the pre-engineering transfer requirements						
CHEM 1100 General Chemistry I	3 sh					
CHEM 1101 General Chemistry Lab I	1 sh					
COSC 1550 Computer Programming I	3 sh					
PHYS 2030 University Physics I	3 sh	MATH 1610				
PHYS 2031 University Physics I: Lab	1 sh					
PHYS 2040 University Physics II	3 sh	PHYS 2030				
PHYS 2041 University Physics II: Lab	1 sh					
Depending on the selected engineering major, the following electives are additionally required to support transfer to the engineering school						
For chemical engineering and biomedical engineering majors only:						
BIOL 1550 Essentials of Biology I	4 sh					
BIOL 1551 Essential of Biology I: Lab	1 sh					

CHEM 1110 General Chemistry II	3 sh	CHEM 1100				
CHEM 1111 General Chemistry II: Lab	1 sh					
CHEM 2100 Organic Chemistry I	3 sh	CHEM 1110				
CHEM 2101 Organic Chemistry I: lab	1 sh					
CHEM 2110 Organic Chemistry II	3 sh	CHEM 2100				
CHEM 2111 Organic Chemistry II: Lab	1 sh					
In addition, there are some department-specific requirements:						
Biomedical Engineering						
BIOL 1560 Essentials of Biology II	4 sh					
BIOL 1561 Essentials of Biology II: Lab	1 sh					
Computer Science and Computer Engineering						
COSC 1560 Computer Programming II	3 sh	COSC 1550				

GLOBAL CITIZENSHIP PROGRAM (minimum 30 hours)										
FIRST YEAR SEMINAR (3 hours)	Hrs	Term	Year	Grade	Transfer					
	3sh	--								
KNOWLEDGE AREAS (24 hours)	SKILLS AREAS*									
	WCOM	OCOM	CRI	INTC	ETH	Hrs	Term	Year	Grade	Transfer
Roots of Cultures**	--	--	--	--	--					
	--	--	--	--	--	3sh	--			
	--	--	--	--	--	3sh	--			
Social Systems & Human Behaviors**										
	--	--	--	--	--	3sh	--			
	--	--	--	--	--	3sh	--			
Physical & Natural World										
	--	--	--	--	--	3sh	--			
Global Understanding										
	--	--	--	--	--	3sh	--			
Arts Appreciation										
	--	--	--	--	--	3sh	--			
Quantitative Literacy										
	--	--	--	--	--	3sh	--			
Skills Courses not associated with Knowledge Areas (optional)										
	--	--	--	--	--	3sh	--			
	--	--	--	--	--	3sh	--			

	--	--	--	--	--	3sh	--			
	--	--	--	--	--	3sh	--			
KEYSTONE SEMINAR (3 hours)	Hrs	Term	Year	Grade	Transfer					
	3sh	--								

NOTE: In addition to the First Year and Keystone Seminars, students must complete *all 5 Skills Requirements within or in addition* to fulfilling each Knowledge Area. Courses with a grade of C- or better will satisfy GCP requirements.

Skills Areas: WCOM = Written Communication OCOM = Oral Communication ETH = Ethical Reasoning
 CRI = Critical Thinking INTC = Intercultural Competence

****NOTE:** Courses must have two different prefixes.

ELECTIVE COURSES					
TOTAL ELECTIVE TRANSFER HOURS					
REMAINING ELECTIVE HOURS					
Course	Hrs	Pre-Requisite	Term	Year	Grade
			--		
			--		
			--		
			--		
			--		
			--		
			--		
			--		
			--		
			--		

COMMENTS:

- Pending official transcripts, course descriptions and administrative approval.
- You may change the recommended course sequence as needed as long as you do not take any course before or with its prerequisite(s).
- Not all courses are offered at all sites each term. Check with the site for the current rotation schedule as course schedules are subject to change.
- Transfer credit may apply as general education courses, elective courses or core course substitutions (if the courses are substantively the same as Webster core courses).
- This program plan is not a substitute for application, registration, transfer of credit or core course substitution requests. All other required forms must be filed in addition to this program plan.
- Signature on this program plan does not imply commitment for application or registration.

Advisor _____ Student _____

Phone:
 Fax: 314-968-7166
 Email:

Date Advised: