

Slippery Rock University of Pennsylvania – Curriculum Guide

Bachelor of Science in Mathematics – Computer Science Track

LIBERAL STUDIES REQUIREMENTS (48-49 credits)				
See Liberal Studies Guide for Goal and Enrichment choices				
GOAL COURSE REQUIREMENTS				
Complete Goal requirements as indicated below (39-40 credits)				
✓	Course	Title	Cr	Gr
Basic Requirements - ENGL101&103 required if student entered SRU prior to Fall 2011. ENGL102 required if student entered SRU Fall 2011 forward.				
	ENGL 101 <u>and</u>	College Writing I	3	
	ENGL 103 <u>or</u>	College Writing II	3	
	ENGL 102	College Writing	3	
	ENGL 103	College Writing II ★	3	
	COMM 200	Public Speaking ★	3	
	ENGL 210	Interpreting Literature ★	3	
The Arts				
	Goal		3	
Global Community (see Liberal Studies Guide for details)				
	Goal – Non-US		3	
	Goal – Non – US		3	
	Goal – US		3	
Human Institutions/Interpersonal Relationships				
	Goal		3	
Science, Technology & Math				
	Goal – Sci		◇ 3	
	Goal – Sci		◇ 3	
	Lab – Sci		◇ 0-1	
	Goal – Math		◇ 3	
Challenges of the Modern Age				
	Goal		3	
ENRICHMENT COURSE REQUIREMENTS				
Choose one course from three of the following Enrichment areas. (9 credits)				
The Arts				
Global Community				
Human Institutions/Interpersonal Relationships				
Science, Technology & Math				

OTHER BASIC REQUIREMENTS				
Check with your advisor or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.				
	ACSD 110	Beginning Algebra	3	

COMPUTER COMPETENCY (for students entering Fall 2008 and after)				
Students must demonstrate "computer competency" by:				
	Passed Exam	Pass Computer Competency Exam at SRU Orientation		
OR	CPSC _____	Complete one of the following courses: CPSC 100, 110, 130, 210 or PE 202 at SRU or another post-secondary institution	1-3	

IMPORTANT CURRICULUM GUIDE NOTES

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisors to ensure accurate progress towards degree completion. *The information on this guide is current as of the date below. Students are responsible for curriculum requirements at the time of enrollment at the University.*

- ★ Indicates this course may have a prerequisite. Please refer to the Undergraduate Online Catalog.
- ◇ Indicates this course may count as a Major Requirement and a Liberal Studies Requirement, **but you will only receive credit once towards your 120 credit total.**
- + Students must have a 'C' or better to register for any 300 Level or above Mathematics course

Student's Name: _____ Date: _____

Advisor's Name: _____

MAJOR REQUIREMENTS (58 credits)				
✓	Course	Title	Cr	Gr
Students must have a 'C' or better in the following three courses to register for any 300 Level or above Mathematics course (10 credits)				
	MATH 131	Discrete Math ★	3	
	MATH 230	Calculus II ★	4	
	MATH 235	Modern Concepts of Mathematics ★	3	
Required Mathematics Courses (19 credits)				
	MATH 231	Calculus III ★	4	
	MATH 240	Linear Algebra & Differential Eq ★	3	
	MATH 309	Linear Algebra ★	3	
	MATH 313	Introductory Analysis I ★	3	
	MATH 314	Introductory Analysis II ★	3	
	MATH 325	Abstract Algebra I ★	3	
Required Mathematics Course (2 credits)				
	MATH 491	Mathematics Seminar ★	1	
	MATH 491	Mathematics Seminar ★	1	
Choose at least two of the following courses (6 credits)				
	MATH 301	Differential Equations I ★	3	
	MATH 315	Numerical Analysis ★	3	
	MATH 325	Abstract Algebra ★	3	
	MATH 335	Mathematical Modeling ★	3	
	MATH 352	Mathematical Statistics I ★	3	
Required Electives – 300 level and above courses (6 credits) (Except for MATH 310)				
	MATH _____			
	MATH _____			
Computer Science Interest Area (3 credits)				
	CPSC 150	Advanced Programming Principles ★	4	
Computer Science Interest Area (12 credits)				
	CPSC 207	System Software and Architecture for End Users	3	
	CPSC 323	Data Base Systems ★	3	
	CPSC 358	Simulation ★	3	
	CPSC 374	Algorithms and Data Structures ★	3	
	CPSC 376	Programming Languages ★	3	
	CPSC 378	Theory of Computation ★	3	
	CPSC 456	Introduction to Computer Graphics ★	3	
	CPSC 476	Artificial Intelligence ★	3	

COMPETENCY IN AN APPROVED COMPUTER PROGRAMMING LANGUAGE IS REQUIRED				
	COMPSCI			

NATURAL SCIENCE AND MATH COLLEGE-WIDE REQUIREMENTS				
Students must take the following four courses (12 credits)				
	CHEM 107	General Chemistry I ★◇	3	
	CHEM 111	General Chemistry I Lab ★◇	1	
	MATH 225	Calculus I ★◇+	4	
	PHYS 211	General Physics I/Lab ★◇	4	

ELECTIVES (1-2 credits)				

QPA REQUIREMENT
2.00 or higher Major QPA
2.00 or higher Overall QPA



MATHEMATICS – COMPUTER SCIENCE TRACK- BS
 Effective Spring 2010 to present
 Enrollment Services
 Revised 11-2011