LA ROCHE UNIVERSITY Engaging Minds. Embracing the World

La Roche University
COMPUTER SCIENCE PROGRAM GUIDE
Degree: Bachelor of Science Department: Computer Science

Student Name _____ ___ **First-Year Student** ___ **Transfer**
I.D. Number _____ ___ **Change of Major** ___ **Readmit**

*Unofficial Eval Completed by/date:*_____

This is the ***unofficial evaluation*** of your credits to date including transfer credits (if applicable) in your chosen major. ***This evaluation is official when all official transcripts for all previous college work are received, reviewed and approved for transferability by the Registrar's Office.*** Beginning with your first semester of enrollment, your Degree Audit Report in My.LaRoche will automatically track your progress toward your degree, and guide you in planning future class schedules. Review your updated Degree Audit Report with your advisor prior to registering each semester.

PURPOSE: A major in Computer Science is meant to prepare students for jobs and careers in the computer industry or for further study at the graduate level in computer science, telecommunications, or related fields, or to provide students with a background in a fundamental science.

REQUIREMENTS: To successfully complete the Computer science major, the following coursework is required:

- 59 Major Component credits (37 Computer Science, 14 Mathematics, 8 Physics)
- 9 Computer Science elective credits
- 37 Core credits
- 15 General Electives
- A minimum of 120 credits is required for degree, the last 30 of which, and 50% of the major, must be earned at La Roche University. (Developmental course work does not count toward the minimum number of required credits for graduation.)

COMPUTER SCIENCE COMPONENT: 37 CREDITS		**Credits**	**Transfer Course #/Comments**
_____ CSCI1002	Introduction to Computer Science	3	
_____ CSCI1010	Programming I	3	Prerequisite: CSCI1002 or SLSC1005
_____ CSCI1010L	Programming I Lab	1	Co-requisite CSCI101
_____ CSCI 2010	Programming II	3	Prerequisite: CSCI1010/L
_____ CSCI2010L	Programming II Lab	1	Co-requisite CSCI2010
_____ CSCI2020	Algorithm Analysis	3	Prerequisite: CSCI2010/L, MATH2050
_____ CSCI2025	Systems Programming	3	Prerequisite: CSCI2010/L
_____ CSCI2025L	Systems Programming Lab	1	Co-requisite: CSCI2025
_____ CSCI2035	Computer Organization & Design	3	Prerequisite: CSCI2025
_____ CSCI2035L	Computer Organization & Design Lab	1	Prerequisite: CSCI2025; Co-requisite CSCI2035
_____ CSCI2055	Database Systems Theory **OR**	3	Prerequisite: CSCI1010/L
_____ ISTC2045	Database Management Systems		Prerequisite: CSCI1002
_____ CSCI3040	Operating Systems	3	Prerequisite: CSCI2035
_____ CSCI3042	Computer Security	3	
_____ CSCI4098	CS Capstone Experience I	3	Prerequisite: Senior Status
_____ CSCI4099	CS Capstone Experience II	3	Prerequisite: CSCI4098 Capstone I

COMPUTER SCIENCE ELECTIVES: SELECT ANY 3 COURSES (9 CREDITS)			
_____ CRIM4030	Computer Forensics Investigation	3	
_____ CSCI4xxx	Any 4000-level CS course	3	
_____ ISTC3005	Intro to Intellectual Property	3	Prerequisite: Junior/Senior Status
_____ ISTC3008	Web Page Usability & Programming	3	Prerequisite: CSCI2010, CSCI2055
_____ ISTC3015	Human-Computer Interaction	3	Prerequisite: CSCI1010, CSCI2055 or ISTC2045
_____ CSCI4052	Internship	3	

MATHEMATICS COMPONENT: 14 CREDITS

_____	MATH1032	Analytical Geometry & Calculus I	4	Prerequisite: Math Placement Exam or MATH1010
_____	MATH1033	Analytical Geometry & Calculus II	4	Prerequisite: MATH1032
_____	MATH1040	Probability & Statistics	3	Prerequisite: MATH1010
_____	MATH2050	Discrete Mathematics **OR**	3	Prerequisite: MATH1032
_____	CSCI2017	Discrete Structures		Prerequisite: MATH1010

PHYSICS COMPONENT: 8 CREDITS

_____	PHYS1032	Physics I	3	
_____	PHYS1032L	Physics I Lab	1	Co-requisite PHYS1032
_____	PHYS1033	Physics II	3	
_____	PHYS1033L	Physics II Lab	1	Co-requisite PHYS1033

ACADEMIC CORE CURRICULUM – 37 Credits

		Credits	Transfer Course # / Comments
Foundations of Knowledge: 15 credits			
_____	ENGL1011 Academic Reading and Writing	3	
_____	ENGL1012 Academic Writing and Research	3	
_____	ISTC1010 Digital Literacy	3	
_____	MATH1010 College Algebra	3	
_____	SPCH1010 Oral Communication	3	
La Roche Experience: 4 credits			
_____	LRUX1001 LRX Foundations	1	
_____	LRUX2500 Investigating Social Problems	3	

Breadth of Knowledge: 12 credits

Courses in a variety of disciplines can fulfill these requirements. Students should use the course search in the My.LaRoche schedule of classes to find courses that fulfill each area students must complete. **PLEASE NOTE: Students are exempt from one area, based on their major.**

_____	Natural and Physical World		Fulfilled in Major
_____	Human Expression	3	
_____	Values and Ethics	3	
_____	Social Sciences	3	
_____	Global Perspectives	3	
Depth of Knowledge: 3 credits			
_____	INQU Interdisciplinary Inquiry	3	
Core Electives: 3 credits			
_____	Any Breath of Knowledge Area Course –**OR**– One additional Interdisciplinary Inquiry	3	

General Electives: 18 Credits: *Electives may be used to fulfill a second major, minor or certificate program. Recommended programs are: Accounting, Computer Information Technology, Computer Security and Forensics, Criminalistics, Criminal Justice, English, Information Technology, Management, Marketing, and Web Design and Development. A minor in Mathematics is highly recommended for graduate study in CS.*

Course #	Credits	Course #	Credits

NOTE TO TRANSFER STUDENTS: *Credits earned at technical schools may not be accepted for upper-level Computer Science courses. All transfer decisions will be determined by the Department Chair.*

FOR REGISTRAR USE ONLY	**TOTAL**	**Completed**	**Need**	**Comments:**
Major Component	59	_____	_____	_____
Major Electives	9	_____	_____	_____
CORE	37	_____	_____	_____
General Electives	15	_____	_____	_____
Accepted into transfer	_____	_____	_____	_____
La Roche University Credit	_____	_____	_____	_____
TOTAL	**120**	_____	_____	_____

Registrar's Signature _____ ***Date*** _____