

## La Roche College COMPUTER SCIENCE PROGRAM GUIDE

Degree: Bachelor of Science Department: Computer Science

I.D. Number	Change of Major	Readmit
Unofficial Eval Comp	leted by/date:	
•	including transfer credits (if applicable) in your chosen maj	

when all official transcripts for all previous college work are received; and 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:** 

Student Name

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.

First-Year Student

Transfer

**REQUIREMENTS:** 

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

- 55 Major Component credits (33 Computer Science, 14 Mathematics, 8 Physics)
- 9 Computer Science elective credits
- 37 Core credits
- 19 General Electives
- A <u>minimum</u> of 120 credits is required for degree, the last 30 of which, and 50% of the major must be earned at La Roche College. (Developmental course work does not count toward the minimum number of required credits for graduation.)

COMPUTER SCIENC	CE COMPONENT: 34 CREDITS C	redits	Transfer Course #/Comments
CSCI1002	Introduction to Computer Science	3	
CSCI1010	Programming I	3	Prerequisite: CSCI 1002 or SLSC1005
CSCI1010L	Programming I Lab	1	Co-requisite CSCI 1010
CSCI 2010	Programming II	3	Prerequisite: CSCI1010/L
CSCI2010L	Programming II Lab	1	Co-requisite CSCI2010
CSCI2020	Algorithm Analysis	3	Prerequisite: CSCI 2010/L, MATH 2050
CSCI2025	Systems Programming	3	Prerequisite: CSCI 2010/L
CSCI2025L	Systems Programming Lab	1	Co-requisite: CSCI 2025
CSCI2035	Computer Organization & Design	3	Prerequisite: CSCI 2025
CSCI2035L	Computer Organization & Design Lab	1	Prerequisite: CSCI 2025; Co-requisite CSCI2035
CSCI2055	Database Systems Theory <b>OR</b>	3	Prerequisite: CSCI 1010/L
ISTC2045	Database Management Systems		Prerequisite: CSCI 1002
CSCI3040	Operating Systems	3	Prerequisite: CSCI 2035
CSCI4098	CS Capstone Experience I	3	Prerequisite: Junior/Senior Status
CSCI4099	CS Capstone Experience II	3	Prerequisite: CSCI4098 Capstone I
COMPUTER SCIENCE	CE ELECTIVES: SELECT ANY 3 COUR	SES (9	CREDITS)
CSCI3042	Intro to Computer Security	3	
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: CSCI 2010, CSCI 2055
ISTC3015	Human-Computer Interaction	3	Prerequisite: CSCI1010, CSCI 2055 or ISTC 2045
CSCI4051	Internship	3	

MATH1030 Analytical Geometry & Calculus II 4 Prerequisite: MATH 1030 MATH2050 OR Discrete Mathematics I 3 Prerequisite: MATH 1010 MATH2050 OR Discrete Mathematics I 3 Prerequisite: MATH 1032 CSCI2017 Discrete Structures  PHYSIG32 Physics I 3 Physics I 3 Prerequisite: MATH1010  PHYSIG32 Physics I 3 1 Co-requisite PHYS 1032 PHYSIG32 Physics I B 1 Co-requisite PHYS 1032 PHYSIG33 Physics II B 1 Co-requisite PHYS 1033 PHYSIG33 Physics II B 1 Co-requisite PHYS 1033 PHYSIG33 Physics II B 1 CO-requisite PHYS 1033  ACADEMIC CORE COURSES – 37 CREDITS  Fundamentals: 12 credits IISTC1005 PATCAL Computer Applications 3 Physics II College Writing II 3 Percequisite: PHYS 1033  MATH1010 College Writing II 3 Physics II College Writing II 3 Percequisite: PHYS 1033  La Roche Experience: 4 credits IIRCX1001 Intro & History I Percequisite: LRCX 1001 ILRCX2002 Economic Justice I Prerequisite: LRCX 1001 ILRCX2001 Regions of Conflict I Prerequisite: LRCX 1001 ILRCX2002 Economic Justice I Prerequisite: LRCX 1001 ILRCX2001 Regions of Conflict I Prerequisite: LRCX 1001 ILRCX2002 Economic Justice I Presequisite: LRCX 1001 ILRCX2001 Regions of Conflict I Prerequisite: LRCX 1001 ILRCX2001 Regions of Conflict I Prerequisite: LRCX 1001 ILRCX2002 Economic Justice I Presequisite: LRCX 1001 ILRCX2001 Regions of Conflict I Prerequisite: LRCX 1001 ILRCX2002 Economic Justice I Presequisite: LRCX 1001 ILRCX2003 Regions of Conflict I Presequisite: LRCX 1001 ILRCX2004 Regions of Conflict I Presequisite: LRCX 1001 ILRCX2005 Regions of Conflict I Presequisite: LRCX 1001 ILRCX2006 Regions of Conflict I Presequisite: LRCX 1001 ILRCX2001 Regions of Conflict II Presequisit				
MATH2050 OR Discrete Mathematics   3   Prerequisite: MATH 1032   CSCI2017 Discrete Structures   Prerequisite: MATH 1032   PHYSIG32 Physics   3   3   PHYSIG32 Physics   1   3   PHYSIG32 Physics   1   3   PHYSIG32 Physics   1   3   PHYSIG33 Physics   1   3   PHYSIG33 Physics   1   1   Co-requisite PHYS 1032   PHYSIG33 Physics   1   3   PHYSIG33 Physics   1   3   PHYSIG33 Physics   1   1   Co-requisite PHYS 1033   PHYSIG33 Physics   1   3   PHYSIG33 Physics   1   3   PHYSIG33 Physics   1   3   PHYSIG33 Physics   1   3   PHYSIG34 Physics   1   1   Co-requisite PHYS 1033    **CADEMIC CORE COURSES - 37 CREDITS**  Fundamentals: 12 credits  ISTC1005 Practical Computer Applications   3   ENGL 1011 College Writing   3   ENGL 1012 College Writing   3   ENGL 1012 College Algebra   3    **La Roche Experience: 4 credits  IRCX1001 Intro & History   1   LRCX1002 Diversity/Discrimination   1   Prerequisite: LRCX 1001   LRCX2001 Regions of Conflict   1   Prerequisite: LRCX 1001   LRCX2001 Regions of Conflict   1   Prerequisite: LRCX 1001   LRCX2002 Economic Justice   1   Prerequisite: LRCX 1001   They will be expected to complete the remainder of the LRC Experience series of courses  **SELECT: The Select courses are designed to introduce students to different disciplines of study. Students select courses within each of the domains below. Computer Science majors are exempt from the Select Science requirement as this domain is fulfilled by the major. Note: The remaining five domains can be fulfilled with only four courses (earning a total of 12 credits) by completing "that-domain" SELECT Courses (SLDD)  **SELECT: The schemeter Science majors are exempt from the Select Science requirement as this domain is fulfilled by the major. Note: The remaining five domains can be fulfilled with only four courses (earning a total of 12 credits) by completing "that-domain" SELECT Courses (SLDD)  **SELECT: The schemeter Science majors are exempt from the Select Science requirement as this domain is fulfilled by the major. Note: The remaining fiv	Course #	<u>Credits</u>	Course #	<u>Credits</u>
MATH1040 Probability & Statistics 3 Prerequisite: MATH 1010  MATH2050 OR Discrete Mathematics 1 3 Prerequisite: MATH 1010  PHYSICS COMPONENT: 8 CREDITS  PHYSI032 Physics 1 3 PHYSI032 Physics I 3 PHYSI032 Physics I B 1 Co-requisite PHYS 1032 Physics I B 1 CO-requisite PHYS 1032 Physics I B 1 PHYSI033 Physics II B 1 CO-requisite PHYS 1032 Physics II B 1 CO-requisite PHYS 1032 Physics II B 1 CO-requisite PHYS 1033 Physics II B 1 Physics PHYS 1033 Physics PHYS 1033 Physics II B 1 Physics PHYS 1033 Physics PHYS 1032 Physics PHYS	Accounting, Computer	Information Technology, Computer	Security and For	ensics, Criminalistics, Criminal Justice, English, Information Technology
MATH1040 Probability & Statistics 3 Prarequisite: MATH 1010 MATH2050 OR Discrete Mathematics 1 3 Prarequisite: MATH 1032 CSCI2017 Discrete Structures Prerequisite: MATH 1032 PHYSI032 Physics I 3 PHYSI032 Physics I b 1 Co-requisite PHYS 1032 PHYS1033 Physics II b 1 Co-requisite PHYS 1032 PHYS1033 Physics II b 1 Co-requisite PHYS 1033 PHYS1031 Physics II Lab 1 Co-requisite PHYS 1033  ACADEMIC CORE COURSES – 37 CREDITS  Fundamentals: 12 credits ISTC1005 Practical Computer Applications 3 ENGL 1011 College Writing I 3 ENGL 1012 College Algebra 3 Prerequisite: LRCX 1001 LRCX 1002 Diversity/Discrimination 1 Prerequisite: LRCX 1001 LRCX 2002 Economic Justice 1 Prerequisite: LRCX 1001 LRCX 2002 Economic Justice 1 Prerequisite: LRCX 1001 *Note to transfer students: Students transferring more than 15 credits must attend an LRC Experience orientation session in lieu of LRCX 1001 They will be expected to complete the remainder of the LRC Experience series of courses  SELECT: The Select courses are designed to introduce students to different disciplines of study. Students select courses within each of the remaining five domains below. Computer Science majors are exempt from the Select Science requirement as this domain is fulfilled by the major. Note: The remaining five domains can be fulfilled with only four courses (earning a total of 12 credits) by completing "dual-domain" SELECT courses (SLDD. Student earns 3 credits only for each SLDD course. An additional major or general elective course may be necessary to meet the degree minimuc redifferent disciplines of study. Students select courses within each of the domains below. Computer Science majors are exempt from the Select Science requirement as this domain is fulfilled by the major. Note: The remaining five domains can be fulfilled with	COMM	credits required. (or 6 credits in s	3	nguage)
MATH1040 Probability & Statistics 3 Prerequisite: MATH 1010  MATH2050 OR Discrete Mathematics I 3 Prerequisite: MATH 1032  CSCI2017 Discrete Structures Prequisite: MATH 1032  PHYSI032 Physics I 3 PHYSI032 Physics I 3 PHYSI033 Physics II ab 1 Co-requisite PHYS 1032 PHYSI033 Physics II ab 1 Co-requisite PHYS 1032 PHYSI033 Physics II ab 1 Co-requisite PHYS 1033  PHYSI033L Physics II Lab 1 Co-requisite PHYS 1033  ACADEMIC CORE COURSES - 37 CREDITS  Fundamentals: 12 credits ISTC 1005 Practical Computer Applications 3 ENGL 1011 College Writing I 3 ENGL 1011 College Writing II 3 ENGL 1011 College Mriting II 3 MATH1010 College Algebra 3 Prerequisite: LRCX 1001 LRCX 2001 Regions of Conflict 1 Prerequisite: LRCX 1001 LRCX 2001 Regions of Conflict 1 Prerequisite: LRCX 1001 LRCX 2001 Regions of Conflict 1 Prerequisite: LRCX 1001 LRCX 2001 Regions of Conflict 1 Prerequisite: LRCX 1001 LRCX 2001 Regions of Conflict 1 Prerequisite: LRCX 1001 Note to transfer students: Students transferring more than 15 credits must attend an LRC Experience orientation session in lieu of LRCX 1001 They will be expected to complete the remainder of the LRC Experience series of courses  SELECT: The Select courses are designed to introduce students to different disciplines of study. Students select courses within each of the domains below. Computer Science majors are exempt from the Select Science requirement as this domain is fulfilled by the major. Note: The remaining five domains can be fulfilled with only four courses (earning a total of 12 credits) by completing "dual-domain" SELECT courses (SLDD Student earns a requirements.  SELECT: The Select courses are designed to introduce students to different disciplines of study. Students are selected to complete the remainder of the LRC Experience series of courses  SELECT: The Select courses are designed to introduce students to different disciplines of study. Students select courses within each of the domains below. Computer Science majors are exempt from the Select Science requirement as this do	language in high schoo and adult students are and must be approved	I must take one modern language of exempt from this requirement. Other in advance by completion of a Core	ourse to graduate er than this, SELL substitution form	e and can count this as their SELECT Social/Cultural course. Bilingual ECT course substitutions may be made only in extreme circumstances n.
MATH1040 Probability & Statistics 3 Prerequisite: MATH 1010  MATH2050 OR Discrete Mathematics   3 Prerequisite: MATH 1010  PHYSIOS COMPONENT: 8 CREDITS  PHYS1032 Physics   3 Physics   3 Physics   1 Phys1032 Physics   1 Phys1032 Physics   1 Phys1033 Physics   1 Phys1031 Physics   1 Phys1033 Physics   1 Phys1034 Phys1033 Physics   1 Phys1034 Phys10	,	,	_	· ·
MATH1040 Probability & Statistics 3 Prerequisite: MATH 1010  MATH2050 OR Discrete Mathematics 1 3 Prerequisite: MATH 1010  PHYSIOS COMPONENT: 8 CREDITS  PHYS1032 Physics 1 3 PHYS1032 Physics I 1 3 PHYS1033 Physics II 1 3 PHYS1033 Physics II 1 3 PHYS1031 Physics II 1 3  ACADEMIC CORE COURSES - 37 CREDITS  Fundamentals: 12 credits ISTC 1005 Practical Computer Applications 3 ENGL 1011 College Writing I 3 ENGL 1011 College Writing II 3 MATH1010 College Algebra 3  ACADEMIC Experience: 4 credits  IRCX 1001 Intro & History 1 IRCX 1002 Diversity/Discrimination 1 Prerequisite: LRCX 1001 IRCX 2001 Regions of Conflict 1 Prerequisite: LRCX 1001 IRCX 2002 Economic Justice 1 Prerequisite: LRCX 1001  Note to transfer students: Students transferring more than 15 credits must attend an LRC Experience orientation session in lieu of LRCX 1001.  Note to transfer students: Students transferring more than 15 credits must attend an LRC Experience orientation session in lieu of LRCX 1001.  Note to transfer students: Students transferring more than 15 credits must attend an LRC Experience orientation session in lieu of LRCX 1001.  Note to transfer students: Students transferring more than 15 credits must attend an LRC Experience orientation session in lieu of LRCX 1001.  Note to transfer students: Students transferring more than 15 credits must attend an LRC Experience orientation session in lieu of LRCX 1001.  Note to transfer students: Students transferring more than 15 credits must attend an LRC Experience orientation session in lieu of LRCX 1001.  Note to transfer students: Students transferring more than 15 credits purple the capture orientation session in lieu of LRCX 1001.  Note to transfer students: Students transferring more than 15 credits pur	SELECT Science	•	_	
MATH1040 Probability & Statistics 3 Prerequisite: MATH 1010  MATH2050 OR Discrete Mathematics   3 Prerequisite: MATH 1010  PHYSIOS COMPONENT: 8 CREDITS  PHYS1032 Physics   3 Physics   3 Physics   1 Physics   1 Physios   1				
MATH1040 Probability & Statistics 3 Prerequisite: MATH 1010  MATH2050 OR Discrete Mathematics I 3 Prerequisite: MATH 1032  CSCI2017 Discrete Structures Prerequisite: MATH 1032  CSCI2017 Discrete Structures Prerequisite: MATH 1032  PHYS1032 Physics I 3  PHYS1032 Physics I 3  PHYS1032 Physics II 3  PHYS1033 Physics II 3  PHYS1033 Physics II 1 3  PHYS1033 Physics II 1 1 Co-requisite PHYS 1032  PHYS1033 Physics II 1 2 Co-requisite PHYS 1033  PHYS1031 Physics II 1 3  PHYS1031 Physics II 1 3  ENGL1011 College Writing I 3 1 ENGL1011 College Writing I 3 1 ENGL1012 College Writing I 3 1 ENGL1012 College Writing II 3 1 ENGL1012 College Algebra 3 1 ENGL1012 College Algebra 3 1 ENGL1012 Intro & History I 1 ENCX1002 Diversity/Discrimination I Prerequisite: LRCX 1001 ENCX2001 Regions of Conflict I Prerequisite: LRCX 1001 ENCX2001 Economic Justice I Prerequisite: LRCX 1001  **Note to transfer students: Students transferring more than 15 credits must attend an LRC Experience orientation session in lieu of LRCX1001. They will be expected to complete the remainder of the LRC Experience series of courses  **SELECT: The Select courses are designed to introduce students to different disciplines of study. Students select courses within each of the remaining five domains below. Computer Science majors are exempt from the Select Science requirement as this domain is fulfilled by the major. Note: The remaining five domains can be fulfilled with only four courses (sening a total of 12 credits) by completing "dual-domain" SELECT courses (SLDD) Student eams 3 credits only for each SLDD course. An additional major or general elective course may be necessary to meet the degree minimus credit requirements.  SELECT Aesthetics (SLAE) 3	SFI FCT Literature	(SLLT)	_ 3	
MATH1040 Probability & Statistics 3 Prerequisite: MATH 1010  MATH2050 OR Discrete Mathematics I 3 Prerequisite: MATH 1032  CSCI2017 Discrete Structures Prequisite: MATH 1032  PHYS1032 Physics I 3 PHYS1032 Physics I 3 PHYS1032 Physics I 3 PHYS1033 Physics II 3 PHYS1033 Physics II 3 PHYS1033 Physics II 1 3 PHYS1033 Physics II 1 3 PHYS1033 Physics II 1 3 PHYS1031 Physics II 1 3  ACADEMIC CORE COURSES – 37 CREDITS  Fundamentals: 12 credits ISTC1005 Practical Computer Applications 3 ENGL 1011 College Writing I 3 ENGL 1012 College Writing I 3 MATH1010 College Algebra 3  La Roche Experience: 4 credits LRCX1001 Intro & History 1 LRCX2001 Regions of Conflict 1 Prerequisite: LRCX 1001 LRCX2002 Diversity/Discrimination 1 Prerequisite: LRCX 1001 LRCX2001 Regions of Conflict 1 Prerequisite: LRCX 1001 LRCX2002 Economic Justice 1 Prerequisite: LRCX 1001  *Note to transfer students: Students transferring more than 15 credits must attend an LRC Experience orientation session in lieu of LRCX1001. They will be expected to complete the remainder of the LRC Experience series of courses  SELECT: The Select courses are designed to introduce students to different disciplines of study. Students select courses within each of the domains below. Computer Science majors are exempt from the Select Science requirement as this domain is fulfilled by the major. Note: The remaining five domains can be fulfilled with only four courses (earning a total of 12 credits) by completing "dual-domain" SELECT courses (SLDD) Student earns 3 credits only for each SLDD course. An additional major or general elective course may be necessary to meet the degree minimus	SELECT Aesthetics		_ 3	
MATH1040 Probability & Statistics 3 Prerequisite: MATH 1010  MATH2050 OR Discrete Mathematics I 3 Prerequisite: MATH 1032  CSCI2017 Discrete Structures Prerequisite: MATH 1032  PHYSIO32 Physics I 3  PHYS1032 Physics I 1 3  PHYS1032 Physics II 3  PHYS1033 Physics II 3  PHYS1033 Physics II 3  PHYS1033L Physics II Lab 1 Co-requisite PHYS 1032  PHYS1033L Physics II 1 3  PHYS1031 Physics II Lab 1 Co-requisite PHYS 1033  PHYS1031 Physics II I 3  PHYS1032 Physics II I 3  PHYS1031 Physics II I 3  PHYS1031 Physics II I 3  ENGL 1011 College Writing I 3  ENGL 1011 College Writing I 3  ENGL 1012 College Writing I 3  MATH1010 College Algebra 3  La Roche Experience: 4 credits  LRCX1001 Intro & History 1  LRCX1002 Diversity/Discrimination 1 Prerequisite: LRCX 1001  LRCX2001 Regions of Conflict 1 Prerequisite: LRCX 1001  LRCX2002 Economic Justice In Prerequisite: LRCX 1001  *Note to transfer students: Students transferring more than 15 credits must attend an LRC Experience orientation session in lieu of LRCX1001.  *Note to transfer students: Students transferring more than 15 credits must attend an LRC Experience orientation session in lieu of LRCX1001.  *Note to transfer students: Students transferring more than 15 credits must attend an LRC Experience orientation session in lieu of LRCX1001.  *Note to transfer students: Students transferring more than 15 credits must attend an LRC Experience orientation session in lieu of LRCX1001.  *Note to transfer students: Students transferring more than 15 credits must attend an LRC Experience orientation session in lieu of LRCX1001.  *Note to transfer students: Students transferring more than 15 credits must attend an LRC Experience orientation session in lieu of LRCX1001.  They will be expected to complete the remainder of the LRC Experience series of courses.  **SELECT:* The Select courses are designed to introduce students to different disciplines of study. Students select courses within each of the domains below. Computer Science majors are exempt from the Select Science requiremen	Student earns 3 credits			
MATH1040 Probability & Statistics 3 Prerequisite: MATH 1010  MATH2050 OR Discrete Mathematics   3 Prerequisite: MATH 1032  CSCI2017 Discrete Structures Prerequisite: MATH 1032  PHYSIO32 Physics   3 PhySiO32 Physics   1 PhySIO32 Physics   1 PhySIO33 PhySIO	domains below. Comp	uter Science majors are exempt fro	m the Select Scie	ence requirement as this domain is fulfilled by the major. Note: The
MATH1040 Probability & Statistics 3 Prerequisite: MATH 1010  MATH2050 OR Discrete Mathematics   3 Prerequisite: MATH 1032 CSCI2017 Discrete Structures Prerequisite: MATH 1032 Prerequisite: MATH1010  PHYSICS COMPONENT: 8 CREDITS PHYS1032 Physics   3 PHYS1032 Physics   3 PHYS1032 Physics I   3 PHYS1033 Physics II   3 PHYS1033 Physics II   3 PHYS1033 Physics II   3 PHYS1031 Physics II   3 PHYS1031 Physics II   3 PHYS1032 Physics II   3 PHYS1031 Physics II   3 PHYS1032 Physics II   3 PHYS1031 Physics II   3 PHYS1032 Practical Computer Applications 3 ENGL 1011 College Writing I   3 ENGL 1011 College Writing I   3 ENGL 1012 College Writing I   3 MATH1010 College Algebra   3  La Roche Experience: 4 credits LRCX1001 Intro & History   1 LRCX1002 Diversity/Discrimination   1 Prerequisite: LRCX 1001 LRCX2001 Regions of Conflict   1 Prerequisite: LRCX 1001 LRCX2002 Economic Justice   1 Prerequisite: LRCX 1001  *Note to transfer students: Students transferring more than 15 credits must attend an LRC Experience orientation session in lieu of LRCX1001  *Note to transfer students: Students transferring more than 15 credits must attend an LRC Experience orientation session in lieu of LRCX1001  *Note to transfer students: Students transferring more than 15 credits must attend an LRC Experience orientation session in lieu of LRCX1001	•	,	•	
MATH1040 Probability & Statistics 3 Prerequisite: MATH 1010  MATH2050 OR Discrete Mathematics I 3 Prerequisite: MATH 1032 CSCI2017 Discrete Structures Preventisite: MATH 1032  PHYSICS COMPONENT: 8 CREDITS  PHYS1032 Physics I 3 PHYS1032L Physics I Lab 1 Co-requisite PHYS 1032 PHYS1033 Physics II 3 PHYS1033 Physics II Lab 1 Co-requisite PHYS 1033  PHYS1033L Physics II Lab 1 Co-requisite PHYS 1033  PHYS1031 Physics II Lab 1 Co-requisite PHYS 1033   **RACADEMIC CORE COURSES - 37 CREDITS**  ISTC 1005 Practical Computer Applications 3 ENGL 1011 College Writing I 3 ENGL 1012 College Writing II 3 MATH1010 College Algebra 3  **La Roche Experience: 4 credits**  La Roche Experience: 4 credits La Roche Experience: 4 credits La Roche Experience: 4 credits La Roche Diversity/Discrimination 1 Prerequisite: LRCX 1001 LRCX 2001 Regions of Conflict 1 Prerequisite: LRCX 1001				
MATH1040 Probability & Statistics 3 Prerequisite: MATH 1010  MATH2050 OR Discrete Mathematics I 3 Prerequisite: MATH 1032  CSCI2017 Discrete Structures Prerequisite: MATH 1032  PHYSICS COMPONENT: 8 CREDITS  PHYS1032 Physics I 3  PHYS1032L Physics I Lab 1 Co-requisite PHYS 1032  PHYS1033 Physics II 3  PHYS1033L Physics II Lab 1 Co-requisite PHYS 1033  PHYS1033L Physics II Lab 1 Co-requisite PHYS 1033  PHYS1031L Physics II Lab 1 Co-requisite PHYS 1033  ACADEMIC CORE COURSES – 37 CREDITS  Fundamentals: 12 credits  ISTC1005 Practical Computer Applications 3 ENGL1011 College Writing I 3  ENGL1011 College Writing II 3  MATH1010 College Algebra 3  La Roche Experience: 4 credits  LRCX1001 Intro & History 1  LRCX1002 Diversity/Discrimination 1 Prerequisite: LRCX 1001			1	•
MATH1040			1	
MATH1040         Probability & Statistics         3         Prerequisite: MATH 1010           MATH2050 OR         Discrete Mathematics I         3         Prerequisite: MATH 1032           CSCI2017         Discrete Structures         Prerequisite: MATH 1010           PHYSICS COMPONENT: 8 CREDITS           PHYS1032         Physics I         3           PHYS1032L         Physics I Lab         1           PHYS1033         Physics II         3           PHYS1033L         Physics II Lab         1           Co-requisite PHYS 1033         Physics II Lab           STC1005         Practical Computer Applications         3           ENGL1011         College Writing I         3           ENGL1012         College Writing II         3           MATH1010         College Algebra         3			1 1	Prerequisite: LRCX 1001
MATH1040			1	
MATH1040	MATH1010 Col	lege Algebra	3	
_MATH1040         Probability & Statistics         3         Prerequisite: MATH 1010           _MATH2050 OR         Discrete Mathematics I         3         Prerequisite: MATH 1032           _CSCI2017         Discrete Structures         Prerequisite: MATH1010           PHYSICS COMPONENT: 8 CREDITS           _PHYS1032         Physics I         3           _PHYS1032L         Physics I Lab         1           _PHYS1033         Physics II         3           _PHYS1033L         Physics II Lab         1           _PHYS1033L         Physics II Lab         1           _Co-requisite PHYS 1033           ACADEMIC CORE COURSES – 37 CREDITS           Fundamentals: 12 credits           _ISTC1005         Practical Computer Applications         3           _ENGL1011         College Writing I         3		3 3		
MATH1040				
MATH1040	ISTC1005	Practical Computer Applications		
MATH1040	Fundamentals: 12 cre		MIC CORE COL	JRSES – 37 CREDITS
MATH1040         Probability & Statistics         3         Prerequisite: MATH 1010          MATH2050 OR         Discrete Mathematics I         3         Prerequisite: MATH 1032          CSCI2017         Discrete Structures         Prerequisite: MATH1010          PHYSICS COMPONENT: 8 CREDITS	PHYS1033L	•	1	
MATH1040			3	O
MATH1040			1	Co-requisite PHYS 1032
MATH1040 Probability & Statistics 3 <u>Prerequisite: MATH 1010</u> MATH2050 OR Discrete Mathematics I 3 <u>Prerequisite: MATH 1032</u> CSCI2017 Discrete Structures <u>Prerequisite: MATH1010</u>			3	
MATH1040 Probability & Statistics 3 <u>Prerequisite: MATH 1010</u> MATH2050 OR Discrete Mathematics I 3 <u>Prerequisite: MATH 1032</u>	PHYSICS COMPONEN	IT: 8 CREDITS		
MATH1040 Probability & Statistics 3 <u>Prerequisite: MATH 1010</u> MATH2050 OR Discrete Mathematics I 3 <u>Prerequisite: MATH 1032</u>	CSC12017	Discrete Structures		Prerequisite. MATH 1010
MATH1040 Probability & Statistics 3 <u>Prerequisite: MATH 1010</u>			3	
	<del></del>			
	MATH1033	Analytical Geometry & Calculus II		Prerequisite: MATH 1032
MATH1032 Analytical Geometry & Calculus I 4 <u>Prerequisite: Math Placement Exam or MATH1010</u>			•	

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

FOR REGISTRAR USE ONLY Major Component Major Electives CORE General Electives	TOTAL 55 9 37 19	Completed	Need	Comments:
Accepted into transfer La Roche College Credit TOTAL	120			
Registrar's Signature		Dat	е	
Advisor Signature		Da	ate	

(When signed by Advisor, all required coursework/credits have been completed for graduation.)

## BACHELOR OF SCIENCE IN COMPUTER SCIENCE RECOMMENDED FULL-TIME COURSE SEQUENCE

YEAR I		a II	
Fall Semester	·-	Credits 2	Comments
CSCI1002	Introduction to Computer Science	3	
ISTC1005 ENGL1011/L	Practical Computer Apps. College Writing I/Lab	3	
MATH1032	Analytical Geometry & Calculus I	3 4	Prerequisite: Math Placement Exam or MATH1010
MA1111032 LRCX1001	LRC Experience: Intro & History	<u>1</u>	Trerequisite. Main Flacement Exam of MATH1010
LKCA1001	ERC Experience. Into & Tristory	<u>1</u> 14	
Spring Semester		17	
CSCI1010/L	Programming I/Lab	4	Prerequisite: CSC11002 or SLSC1005
ENGL1012	College Writing II	3	Prerequisite: ENGL1011
MATH1033	Analytical Geometry & Calculus II		Prerequisite: MATH1032
SELECT	(AE, HS, LT, RS, SO)	3	
LRCX1002/20	01/2002	<u>1</u>	
		15	
YEAR II			
Fall Semester		Credits	
CSCI2010/L	Programming II/Lab	4	Prerequisite: CSCI1010/L
	C2045 Database course*	3	Prerequisite: CSCI1010/L
SELECT	(AE, HS, LT, RS, SO) Discrete Mathematics I*	3	D
MATH2050	General Elective	3	Prerequisite: MATH1032
	General Elective	<u>3</u> 16	
Spring Semester		10	
CSCI2020	Algorithm Analysis	3	Prerequisite: CSCI2010/L, MATH2050
MATH1040	Probability & Statistics	3	Prerequisite: MATH1010
SELECT	(AE, HS, LT, RS, SO)	3	
~	General Elective	3	
	General Elective	3	
LRCX1002/20	01/2002	<u>1</u>	
		16	
YEAR III			
Fall Semester		Credits	D
CSCI2025/L	Systems Programming/Lab*	4	Prerequisite: CSCI2010/L
PHYS1032/L	Physics I/Lab	4	
COMM	General Elective	3 <u>3</u>	
	General Elective	<u>3</u> 14	
Spring Semester		1-7	
CSCI2035/L	Computer Organization & Design*	4	Prerequisite: CSCI2025
PHYS1033/L	Physics II/Lab	4	Prerequisite: PHYS1032
	CS Elective	3	
	General Elective	3	
LRCX1002/20	01/2002	<u>1</u>	
		15	
YEAR IV		C	
Fall Semester	Operating System - *	Credits	Promonisto CSC12025
CSCI3040	Operating Systems* CS Capstone I*	3	Prerequisite: CSC12035
CSCI4098 SELECT	(AE, HS, LT, RS, SO)	3	Prerequisite: Junior/Senior Status
SELECT	(AE, H3, L1, K3, 30)	3	
GEBE	CS Elective	<u>3</u>	
		15	
Spring Semester			
CSCI4099	CS Capstone II*	3	Prerequisite: CSCI4098
	CS Elective	3	
SELECT	(AE, HS, LT, RS, SO)	3	
	General Elective	4	
	General Elective	<u>3</u>	
		16	

<sup>\*</sup>These courses are offered only every 2 years. You should take these courses at your earliest opportunity after fulfilling prerequisites.