

**CURRICULUM FOR BACHELOR OF SCIENCE** Minor: \_\_\_\_\_

**COMPUTER SCIENCE**

120 Specific Hours Required for Graduation (Effective Fall 2019)

**BS Computer Science**

FIRST YEAR					
FALL SEMESTER			SPRING SEMESTER		
Course #	Cr	Gr	Course #	Cr	Gr
CS 1152 (152L): Comp Prog Fund <sup>(1)</sup>	3		MATH 1522 (163): Calculus II	4	
MATH 1512 (162): Calculus I	4		CS 2251 (251L): Intermediate Program	3	
Lab Science I <sup>(2)</sup>	4		Lab Science II <sup>(2)</sup>	4	
<i>ENGL 1120: Composition II</i>	3		CS 2201 (261): Math Foundations CS	3	
			<i>Core/Writing &amp; Speaking</i> <sup>(6)</sup>	3	
<b>Total</b>	<b>14</b>		<b>Total</b>	<b>17</b>	

SECOND YEAR					
FALL SEMESTER			SPRING SEMESTER		
Course #	Cr	Gr	Course #	Cr	Gr
ECE 238L: Comp Logic Design <sup>(3)</sup>	4		CS 351L: Design Large Program	4	
CS 241L: Data Organization	3		Lecture Science IV <sup>(2)</sup>	3	
CS 293: Soc/Ethic Issues Comp	1		<i>Core/Social Science</i>	3	
Math 2810(314/321):Linear Algebra	3		<i>Core/Humanities</i>	3	
Lecture Science III <sup>(2)</sup>	3		<i>Core/Arts &amp; Design</i>	3	
<b>Total</b>	<b>14</b>		<b>Total</b>	<b>16</b>	

THIRD YEAR					
FALL SEMESTER			SPRING SEMESTER		
Course #	Cr	Gr	Course #	Cr	Gr
CS/MATH 375: Intro to Numerical	3		CS 357L: Declarative Prog	3	
STAT 345: Elements Math Stats	3		CS 362L: Data Struct/Algorithms II	3	
CS 361L Data Struct/Algorithms	3		CS Elective 400 Level	3	
Minor <sup>(4)</sup>	3		Minor Elective <sup>(4)</sup>	3	
Minor Elective	3		<i>Core/Second Language</i>	3	
<b>Total</b>	<b>15</b>		<b>Total</b>	<b>15</b>	

FOURTH YEAR					
FALL SEMESTER			SPRING SEMESTER		
Course #	Cr	Gr	Course #	Cr	Gr
CS 341L: Intro to Comp Systems	3		CS 460: Software Engineering	3	
CS Elective 400 Level	3		CS 481: Dig Comp Operating Systems	3	
CS Elective 400 Level	3		Minor / Elective <sup>(4)</sup>	3	
Minor / Elective <sup>(4)</sup>	3		Minor / Elective <sup>(4)</sup>	3	
Minor / Elective <sup>(4)</sup>	3		Minor / Elective <sup>(4)</sup>	2/3	
<b>Total</b>	<b>15</b>		<b>Total</b>	<b>15</b>	

NOTE: See list of approved UNM Core Curriculum Courses at <http://advisement.unm.edu/resources/common-course-numbering/index.html>.

## **PRE-COMPUTER SCIENCE ADMISSION**

If you have not completed all the course requirements for Department Admission, you will be admitted as a Pre-Major CS student. Please speak with a CS Academic Advisor in Farris Engineering Center (FEC), Bldg. #119 (on UNM Map), Suite 2200, (505) 277-3112 [csinfo@cs.unm.edu](mailto:csinfo@cs.unm.edu) if you are interested in being admitted to the Pre-Major CS degree program.

## **ADMISSION REQUIREMENTS**

Pre-CS students are required to take CS 105L (Intro to Computer Programming) or 108L (CS for All: Intro To computational Science & Modeling). CS 105L or 108L do not count towards the CS degree program but are required as a prerequisite to CS 152L. Before students are eligible to apply to the CS program, students must complete a minimum of 23 credit hours acceptable towards a degree of a bachelors in Computer Science with a cumulative GPA of a 2.5 or higher. Students must pass the following courses with a B- or better; CS 152L (3 CR) and MATH 1512 (4 CR). While also completing CS 241L (3 CR), CS 251L (3 CR), CS 261L (3 CR) and ENGL 1120 (3 CR) with a C or better.

***NOTES: Once you have completed the following courses, you will then automatically be admitted to the School of Engineering, Computer Science program (transition from Pre-Computer Science to admitted Computer Science).***

## **SCHOOL OF ENGINEERING 3 ATTEMPT RULE**

All School of Engineering students are required to pass all CS classes with a B- or better and other general courses with a C or better. Students who do not pass any class within 3 attempts will be dismissed from the program. Please contact your academic advisor after your second attempt to request permission for the 3<sup>rd</sup> attempt. An appeals process is set in place for students who are requesting a 4<sup>th</sup> attempt in which students must submit a request to the School Of Engineering's Dean of Students.

***NOTES: Withdrawals, Failed Classes, Incompletes, No Credit and any other record appearing on the student's transcript qualifies as an attempt.***

## **COMPUTER SCIENCE DEGREE REQUIREMENTS**

1. Students are required to take CS 150L or CS 108L as a required pre-requisite to take CS 152L. CS 105L or CS 108L does not count towards to CS degree coursework.
2. Students are required to complete a total of four science courses that total 14 credit hours of Laboratory and Lecture science. Two of these science courses must be lab sciences and must be completed in course sequence. Please gain science coursework approval through your academic advisor to ensure that you are taking the correct science courses and labs. Acceptable science courses include advanced courses or the following recommended;
  - a. ASTR 2110/L & ASTR 2115/L(MATH pre-req requirements)
  - b. BIOL 2110 & BIOL 2410 (CHEM pre-req requirements)
  - c. CHEM 1215/L & CHEM 1225/L (MATH pre-req requirements)
  - d. GEOL 1110/L or GEOL 1129/L & GEOL 2110 (No MATH pre-req required)
  - e. PHYS 1310/L & PHYS 1320/L (MATH pre-req requirements)
3. CS 152L is a *pre-requisite* for ECE 238. ***CS majors are not required to take ECE 131***
4. ***All CS students are REQUIRED to have a Minor.*** Please talk to your advisor about this
5. MATH minors will not receive credit for MATH 314 and MATH 321
6. For the Writing & Speaking core requirements, students may only choose from COMM 1130, ENGL 2210 or ENGL 2120
7. ***Upper division CS courses must be passed with a B or better***
8. Students must complete the university's diversity requirement which are satisfied by undergraduate coursework
9. ***A hold will be placed on every student's account every semester which will prevent them for registering. This requires students to meet with their academic advisor once every semester. Advisement and hold removals can only be done in person. Phone or email advisement is discouraged.***
10. **CS 361L is ONLY offered in FALL SEMESTER, while CS 357L and CS 362L are ONLY offered in SPRIN SEMESTER**