



## Degree Requirements for a BS in Computer Science

Concentration: **Data Science**

Effective: **8-15-16**

### COMPUTER SCIENCE REQUIREMENTS

<b>PROGRAMMING</b>	<b>8 hours</b>	ITSC 1212/L, 1213/L
<b>COMMUNICATION</b>	10 hours	ITSC 1600, ITCS 3688, ENGL 2116, and PHIL 1106
<b>ANALYTIC</b>	15 hours	MATH 1241, 1242, 2164, ITSC 2175, and STAT 2122
<b>COMPUTER SCIENCE</b>	13 hours	ITSC 2214, 3146, 3155, and 3181/L
<b>RELATED WORK</b> (approval required)	9-15 hours	15 hours of non-CCI courses forming an integrated program, at least 6 hours must be at the 3000 level or above  <b>OR</b> 9 hours of MATH courses at the 3000 level or above
<b>CONCENTRATION</b>	15 hours	6 hours of required courses; 6 hours of courses (one from each group); plus 3 hours from either group (see table below)

Required courses (6 hours):	GROUP A Select at least one:	GROUP B Select at least one:
ITCS 3160	ITCS 3156	INFO 3236
ITCS 3162	ITCS 3190	ITCS 3134
	ITCS 3216	ITCS 4122
		ITIS 4510

<b>CCI TECHNICAL ELECTIVES</b>	<b>6 hours</b>	Must be at the 3000 level or above and in the College of Computing and Informatics
<b>CAPSTONE</b>	3 hours	ITCS 4155, 4650, 4651, 4990 or 4991

### GENERAL EDUCATION REQUIREMENTS

GENERAL EDUCATION I Skills of Inquiry	3-6 hours	6 hours UWRT 1101 and 1102; or 3 hours UWRT 1103 or UWRT 1104
GENERAL EDUCATION II Science	10 hours	7 hours of approved sciences with 1 lab 3 hours of approved social sciences
GENERAL EDUCATION III Liberal Education	12 hours	3 hours LBST 1101, 1102, 1103, 1104, or 1105 6 hours LBST 2101 and 2102 3 hours ITIS 2211
GENERAL EDUCATION IV Communication	counted above	ENGL 2116, ITCS 3688

### FREE ELECTIVES

<b>ELECTIVES</b>	<b>7-16 hours</b>	
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## **TOTAL 120 hours**

**G.P.A. REQUIREMENT:** At least 2.0 over each of the following three categories:

1. all courses applied to the degree, 2. all courses in the major, and 3. all upper division courses in the major.



**Curriculum Outline for a BS in Computer Science  
Concentration: Data Science**

**Freshman Year**

<i>Fall</i>			<i>Spring</i>		
ITSC	1212/L	4	ITSC	1213/L	4
ITSC	1600	1	LBST	110X	3
UWRT	1101	3	MATH	1242	3
MATH	1241	3	UWRT	1102	3
SCIENCE + LAB		4	PHIL	1106	3
		<u>15</u>			<u>16</u>

**Sophomore Year**

<i>Fall</i>			<i>Spring</i>		
ITSC	2214	3	ITSC	2175	3
STAT	2122	3	MATH	2164	3
LBST	2101	3	LBST	2102	3
ENGL	2116	3	SCIENCE		3
SOCIAL SCIENCE		3	Related Work (1 of 5)		3
		<u>15</u>			<u>15</u>

**Junior Year**

<i>Fall</i>			<i>Spring</i>		
ITSC	3181/L	4	ITSC	3146	3
ITSC	3155	3	ITIS	2211	3
ITCS	3160	3	ITCS	3688	3
Concentration Course (1 of 3)		3	ITCS	3162	3
Related Work (2 of 5)		3	Related Work (3 of 5)		3
		<u>16</u>			<u>15</u>

**Senior Year**

<i>Fall</i>			<i>Spring</i>		
CCI Technical Elective		3	Capstone		3
CCI Technical Elective		3	Concentration Course (3 of 3)		3
Concentration Course (2 of 3)		3	Related Work (5 of 5)		3
Related Work (4 of 5)		3	Free Elective		3
Free Elective		3	Free Elective		1
		<u>15</u>			<u>13</u>

**TOTAL 120 hours**