



## Degree Requirements for a BS in Computer Science

**Concentration: Bioinformatics**

**Effective: 8-15-16**

### COMPUTER SCIENCE REQUIREMENTS

PROGRAMMING	8 hours	ITSC 1212/L, 1213/L
COMMUNICATION	10 hours	ITSC 1600, ITCS 3688, ENGL 2116, and PHIL 1106
ANALYTIC	15 hours	MATH 1241, 1242, 2164, ITSC 2175, and STAT 2122
COMPUTER SCIENCE	13 hours	ITSC 2214, 3146, 3155, and 3181/L
RELATED WORK (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
CONCENTRATION	21-22 hours	12 hours of required courses; 9-10 hours of courses by selecting one from each of three groups (see table below)

Required courses (12 hours):	GROUP A Select at least one:	GROUP B Select at least one:	GROUP C Select at least one:
BINF 1101+L *May count as Gen Ed Science with lab	BINF 3121	BINF 4171	BINF 3201+L
BINF 2111+L	BINF 3211	BINF 4191	BINF 4101
BINF 3101+L	BINF 4211		BINF 4111
BINF 4600			

CAPSTONE 3 hours BINF 4650 or ITCS 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 *BINF 1101+L may count as science with 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

ELECTIVES 6-16 hours

## 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: Bioinformatics**

**Freshman Year**

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

**Sophomore Year**

<i>Fall</i>			<i>Spring</i>		
BINF	2111+L	4	ITSC	2214	3
STAT	2122	3	ITIS	2211	3
LBST	2101	3	MATH	2164	3
UWRT	1102	3	LBST	2102	3
SOCIAL SCIENCE		<u>3</u>	ENGL	2116	<u>3</u>
		<u>16</u>			<u>15</u>

**Junior Year**

<i>Fall</i>			<i>Spring</i>		
ITSC	2175	3	ITCS	3688	3
ITSC	3155	3	BINF (Group A)		3
BINF	3101+L	3	BINF (Group C)		3 / 4
Related Work (1 of 5)		3	Related Work (3 of 5)		3
Related Work (2 of 5)		<u>3</u>	Related Work (4 of 5)		<u>3</u>
		<u>15</u>			<u>15/16</u>

**Senior Year**

<i>Fall</i>			<i>Spring</i>		
ITSC	3181/L	4	Capstone		3
BINF (Group B)		3	BINF	4600	1
Free Elective		3	ITSC	3146	3
Free Elective		3	Related Work (5 of 5)		3
Free Elective		<u>1/2</u>	Free Elective		<u>3</u>
		<u>14 / 15</u>			<u>13</u>

**TOTAL 120 hours**