

# COMPUTER SCIENCE FALL 2016 - PRESENT

## I. General Education Requirements

**TOTAL REQUIRED FOR GENERAL EDUCATION -**

**40 Credits**

Students should consult with their freshman or departmental advisor when making course selections.

### A. CURRICULUM AREA I - (ARTS AND HUMANITIES)

**9 CREDITS**

<u>COURSE</u>	<u>No.</u>	<u>TITLE</u>	<u>CREDITS</u>
ENGL	203	Fundamentals of Contemporary Speech <b>and</b>	3
FREN	101	Fundamentals of French I	3
FREN	102	Fundamentals of French II <b>or</b>	3
SPAN	101	Fundamentals of Spanish I	3
SPAN	102	Fundamentals of Spanish II	3

### B. CURRICULUM AREA II - (SOCIAL & BEHAVIORAL SCIENCES) 6 CREDITS

Students must select one course from each of two categories

**SOCIAL SCIENCES:** ECON 201 or ECON 201H, ECON 202 or ECON 202H,  
GEOG 201 or GEOG 202, HIST 101 or HIST 111H,  
HIST 102 or HIST 112H, POLI 200 or POLI 200H  
POLI 342, SOCI 101 or SOCI 111H

**BEHAVIORAL SCIENCES:** CRJS 101, HUEC 203, HUEDC 220, HUEC 361,  
PSYC 100, SOCI 201, SOWK 200 or SOWK 200H

### C. CURRICULUM AREA III - (BIOLOGICAL & PHYSICAL SCIENCES)

**8 CREDITS**

<u>COURSE</u>	<u>No.</u>	<u>TITLE</u>	<u>CREDITS</u>
BIOL	111	Principles of Biology I	3
BIOL	113	Principles of Biology I Laboratory	1
BIOL	112	Principles of Biology II	3
BIOL	114	Principles of Biology II Laboratory <b>or</b>	1
CHEM	111	Principles of Chemistry I	3
CHEM	113	Principles of Chemistry I Laboratory	1
CHEM	112	Principles of Chemistry II	3
CHEM	114	Principles of Chemistry II Laboratory	1

### D. CURRICULUM AREA IV - (MATHEMATICS)

**4 CREDITS**

<u>COURSE</u>	<u>No.</u>	<u>TITLE</u>	<u>CREDITS</u>
MATH	112	Calculus I	4

### E. CURRICULUM AREA V - (ENGLISH COMPOSITION)

**9 CREDITS**

<u>COURSE</u>	<u>No.</u>	<u>TITLE</u>	<u>CREDITS</u>
ENGL	101	Basic Composition I <b>or</b>	3
ENGL	101H	Basic Composition I (Honors)	3
ENGL	102	Basic Composition II <b>or</b>	3
ENGL	102H	Basic Composition II (Honors)	3
ENGL	305/W	Technical Writing <b>or</b>	3
ENGL	310/W	Advanced Composition	3

**F. CURRICULUM AREA VI - (EMERGING ISSUES) 4 CREDITS**

<b>COURSE</b>	<b>No.</b>	<b>TITLE</b>	<b>CREDITS</b>
CSDP	100	Computer Science Orientation	1
EXSC	111	Personalized Health Fitness	3

**II. PROGRAM CORE REQUIREMENTS**

**TOTAL REQUIRED FOR CORE REQUIREMENTS 80 CREDITS**

**A) COMPUTER SCIENCE 50 CREDITS**

<b>COURSE</b>	<b>No.</b>	<b>TITLE</b>	<b>CREDITS</b>
CSDP	100	Computer Science Orientation	1
CSDP	221	Introduction to Computer Programming	4
CSDP	222	Advanced Programming	4
CSDP	250	Data Structures	3
CSDP	301	Computer Organization & Assembly Language Programming	3
CSDP	305	Software Engineering I	3
CSDP	332	Internet Programming	3
CSDP	351	Computer Architecture	3
CSDP	390	Social, Ethical and Legal Issues in Computer Science	3
CSDP	398	Computer Language Topics A: Java	3
CSDP	399	Computer Language Topics B: UNIX	3
CSDP	401	Operating Systems	3
CSDP	402	Computer Networks	3
CSDP	403	Computer Language Theory	3
CSDP	404	Database Management Systems	3
CSDP	450	Algorithms and Data Structures	3
CSDP	490	Senior Design Project	3

**\*Advanced Computer Science Electives (choose three) 9 CREDITS**

<b>COURSE</b>	<b>No.</b>	<b>TITLE</b>	<b>CREDITS</b>
CSDP	341	Numerical Analysis I	3
CSDP	405	Software Engineering II	3
CSDP	431	Data Warehousing and Data Mining	3
CSDP	442	Numerical Analysis II	3
CSDP	498	Selected Topics in Computer Science A	3
CSDP	499	Selected Topics in Computer Science B	3

**B) MATH (IN ADDITION TO COURSES SATISFYING I D) 16 CREDITS**

<b>COURSE</b>	<b>No.</b>	<b>TITLE</b>	<b>CREDITS</b>
MATH	211	Calculus II	4
MATH	232	Introduction to Linear Algebra	3
MATH	309	Introduction to Probability	3
MATH	323	Introduction to Discrete Structures	3
MATH	360	Statistics for Scientists	3

**III. FREE ELECTIVE COURSES 5 CREDITS**

It is advisable to take 300 and 400 upper level computer science, natural sciences, engineering, and technology courses relevant to fields of interest.

**CURRICULUM GUIDE FOR COMPUTER SCIENCE**

**FRESHMAN YEAR**

<i>First Semester</i>	<i>Credit</i>	<i>Second Semester</i>	<i>Credit</i>
BIOL 111	3	BIOL 112	3
BIOL 113 or	1	BIOL 114 or	1
CHEM 111	3	CHEM 112	3
CHEM 113	1	CHEM 114	1
ENGL 101	3	ENGL 102	3
CSDP 100	1	CSDP 221	4
EXSC 111 <sup>1</sup>	3	MATH 112	<u>4</u>
GEN CURR AREA I <sup>2</sup>	3		15
FREE Elective	<u>1</u>		
	15		

**SOPHOMORE YEAR**

<i>First Semester</i>	<i>Credit</i>	<i>Second Semester</i>	<i>Credit</i>
ENGL 203	3	CSDP 250	3
MATH 211	4	BIO or CHEM or PHYS 181 <sup>2</sup>	4
CSDP 222	4	MATH 323	3
FREN 101 or		MATH 309	3
SPAN 101	<u>3</u>	FREN 102 or	
	14	SPAN 102	<u>3</u>
			16

**JUNIOR YEAR**

<i>First Semester</i>	<i>Credit</i>	<i>Second Semester</i>	<i>Credit</i>
CSDP 301	3	CSDP 305	3
CSDP 398	3	CSDP 399	3
CSDP 403	3	CSDP 390	3
MATH 232	3	MATH 360	3
ENGL 305	<u>3</u>	CSDP 332	<u>3</u>
	15		15

**SENIOR YEAR**

<i>First Semester</i>	<i>Credit</i>	<i>Second Semester</i>	<i>Credit</i>
CSDP 404	3	CSDP 401	3
CSDP 450	3	CSDP Elective	3
CSDP 351	3	CSDP 490	3
GEN CURR AREA II	3	CSDP Elective <sup>3</sup>	3
CSDP Elective <sup>3</sup>	<u>3</u>	FREE Elective	<u>3</u>
	15		15

Total Credits Hour: 120

<sup>1</sup>Course cannot be repeated for credit.

<sup>2</sup>Student must select from GEN CURR AREA I:B

<sup>3</sup>Student must select an Advanced CSDP course.

<sup>4</sup>Student must select from CSDP Core II:D.

