

**BACHELOR OF COMPUTER SCIENCE DEGREE PROGRAM**  
**2020 Catalog; Total 121 hours**

Student Name: \_\_\_\_\_ UIN: \_\_\_\_\_ Advisor: \_\_\_\_\_ THEA: \_\_\_\_\_ Entry Date \_\_\_\_\_

**FRESHMAN YEAR**

<i>First Semester</i>	<i>Hr</i>	<i>Gr</i>	<i>Yr</i>	<i>Second Semester</i>	<i>Hr</i>	<i>Gr</i>	<i>Yr</i>
MATH 1124	Calculus I (pre-req: Math1123 or Math1115; 3-core)	4		ENGL 1123	Freshman Composition I	3	
COMM 1003	Fundamentals of Speech Comm.	3		MATH 2024	Calculus II (pre-req: Math 1124)	4	
	Science Course*	3			Global Awareness - Select one NOT completed for Univ. Soc. & Beh. Sci. Core	3	
	Science Course Lab*	1		COMP 1223	CS II (Pre-req: COMP1211/1213; Pre/Co-req: Math1124 & COMP1221)	3	
COMP 1011	Intro to Engr. & CS Tech.	1		COMP 1221	CS II Lab. (Pre-req: COMP1211, 1213; Pre/Co-req: Math1124 & COMP1223)	1	
COMP 1213	CS-I (pre/co-req: Math1123 or Math1115; Co-req: COMP1211)	3					
COMP 1211	CS-I Lab. (pre/co-req: Math1123 or Math1115; Co-req: COMP1213)	1					
<b>Total</b>		<b>16</b>		<b>Total</b>		<b>14</b>	

**SOPHOMORE YEAR**

<i>First Semester</i>	<i>Hr</i>	<i>Gr</i>	<i>Yr</i>	<i>Second Semester</i>	<i>Hr</i>	<i>Gr</i>	<i>Yr</i>
COMP 2013	Data Structures (pre-req: COMP1223, 1221)	3		HIST 1313	U.S. TO 1876	3	
COMP	Lower Level CS Elective	3		COMP 2043	Digital Logic Circuits (pre-req: COMP1223/1221)	3	
COMP 2103	Discrete Struc. (pre-req: COMP1223, 1221)	3		COMP	Lower Level CS Elective	3	
ENGL 1143	Technical Writing	3			Social and Behavioral Sciences	3	
	Science Course*	3			Science Course*	3	
	Science Course Lab*	1			Science Course Lab*	1	
<b>Total</b>		<b>16</b>		<b>Total</b>		<b>16</b>	

**JUNIOR YEAR**

<i>First Semester</i>	<i>Hr</i>	<i>Gr</i>	<i>Yr</i>	<i>Second Semester</i>	<i>Hr</i>	<i>Gr</i>	<i>Yr</i>
POSC 1113	American Government I	3		HIST 1323	The U.S. 1876 to present	3	
MATH 3073	Linear Algebra (pre-req: MATH2024)	3		COMP 3053	Analysis of Algorithms (pre-req: COMP2013 & 2103)	3	
COMP 3043	Computer Organization (pre-req: comp2043)	3		COMP 3063	Operating Systems (pre-req: COMP2013 & [COMP3043 or ELEG4393])	3	
COMP 3953	Database Management (pre-req: COMP2013)	3		COMP 3223	Software Engineering (pre-req: COMP2013)	3	
MATH 3023	Prob. and Statistics (pre-req: Math2024)	3			Creative Arts	3	
<b>Total</b>		<b>15</b>		<b>Total</b>		<b>15</b>	

**SENIOR YEAR**

<i>First Semester</i>	<i>Hr</i>	<i>Gr</i>	<i>Yr</i>	<i>Second Semester</i>	<i>Hr</i>	<i>Gr</i>	<i>Yr</i>
COMP 4001	Ethics and Soc. Issues in Computing (co-req: COMP4072)	1		COMP 4082	Senior Design Project II (pre-req: COMP4072)	2	
COMP 4072	Senior Design Project I (pre-req: COMP2013, 2103; co-req: COMP4001)	2		COMP 4113	Programming Languages Design (pre-req: COMP2013)	3	
COMP 4123	Computer Networks (pre-req: COMP3063)	3		COMP 4233	Network Security (pre-req: COMP4123)	3	
COMP	Upper-level Computer Science	3		COMP	Upper-level Computer Science	3	
COMP 4143	Intro to Parallel Computing (pre-req: COMP2013, 2103)	3			Lang, Phil, and Culture	3	
POSC 1123	American Government II	3					
<b>Total</b>		<b>15</b>		<b>Total</b>		<b>14</b>	

\* Allowed Science Sequences: (counted towards Univ Life & Phy Sci core)

Science Sequence 1: CHEM 1033, CHEM 1011, CHEM 1043, CHEM 1021, PHYS 2513, PHYS 2511

Science Sequence 2: CHEM 1033, CHEM 1011, PHYS 2513, PHYS 2511, PHYS 2523, PHYS 2521

Science Sequence 3: BIOL 1113, BIOL 1111, PHYS 2513, PHYS 2511, PHYS 2523, PHYS 2521

**UNIVERSITY CORE, CS ELECTIVES AND CS MINOR  
(2020 CATALOG)**

**CREATIVE ARTS**

ARCH 1253	Arch Design I	DRAM 2223	African American Theater II
ARTS 1203	Introduction to Visual Arts	HCOL 1213	Honors Colloquium II
ARTS 2283	Afro-American Art	MUSC 1213	Fund Of Music
COMM 2643	Media Literacy	MUSC 1313	Music in Contemporary Life
DRAM 1103	Intro To Theater	MUSC 2333	Afro-American Music
DRAM 2213	African American Theater I	MUSC 2343	Survey of World Music

**LANGUAGE, PHILOSOPHY AND CULTURE**

ARCH 2233	History Of Arch I	ENGL 2383	Sur World Lit
ARCH 2243	History Of Arch II	HUMA 1303	Intro to Humanities
ARTS 2223	History Of Arts I	HUMA 1403	Mexican American Culture
ARTS 2233	History Of Arts II	PHIL 2023	Ethics
DRAM 2123	Theater History II	PHIL 2303	Critical Thinking
ENGL 2153	Intro. To Literature	SPAN 2023	Interim Span II
ENGL 2333	Studies In Lit		

**SOCIAL AND BEHAVIORAL SCIENCES OPTIONS**

CHEG 2003	Eco Anal Technical Application	HDFM 2553	Life Span Development
CRJS 1123	Crime in America	POSC 2213	Blacks In American Pol. Sys.
CRJS 1133	Principal of Criminal Justice	PSYC 1113	General Psychology
ECON 2113	Principle Of Microeconomics	PSYC 2423	Development Psychology
ECON 2123	Principle Of Macroeconomics	PSYC 2513	Personality
GEOG 1113	Intro To Geography	SOCG 1013	General Sociology
GEOG 2633	Cultural Geography	SOCG 2003	Sociology Of Minorities
HDFM 2513	Childhood Disorders		
HDFM 2533	Contem. Family in Cross Cult.		

**GLOBAL AWARENESS** (Select one course from this list NOT completed for the Social & Beh. Sciences area above)

AGHR 1303	Land Grant System & Global Food Security	CURR 2003	Global Influences on Teacher Education
CVEG 2073	Global Development Issues	ECON 2003	Fundamentals of Economics in a Global Society
FINA 2133	Financial Planning with a Global Perspective	HIST 1813	World Civilization to 1500
HIST 1823	World Civilization since 1500	MGMT 2263	Leadership in a Global Environment
POSC 2503	Global Issues	SOCG 2043	Social Problems

**COMPUTER SCIENCE ELECTIVES**

Course Number	Course Description	Prerequisite
COMP 2003	Intro. to Web Design & MM	Consent Of Advisor
COMP 2023	Appl. Development using C#	COMP 1013 or 1213 or HS Prog.
COMP 2133	Intro. Information Security	COMP 1223 and COMP 1221
COMP 2143	Introduction to Java	Consent Of Advisor.
COMP 2153	Python Programming Lang.	COMP 1223 and COMP 1221
COMP 3013	Embedded System	COMP 1224
COMP 3113	Object Oriented Anal. & Des.	COMP 2013
COMP 3203	System Anal. & Design	COMP 1223 and COMP 1221
COMP 3213	Graphics & Visual Computing	COMP 2013
COMP 3313	Information Privacy	COMP 2013
COMP 3323	Cryptography	COMP 2103
COMP 3333	Smart Device App Development	COMP 2013
COMP 3343	Internet of Things	COMP 2013
COMP 4063	Artificial Intelligence	COMP 2013 & MATH 3023
COMP 4073	Special Topics	Consent of Inst.
COMP 4153	Data Mining & Analytics	MATH 3023 & 3073
COMP 4163	Machine Learning	COMP 2013 & MATH 3023
COMP 4243	Advanced Application Development	COMP 3953
COMP 4313	Computer Forensics	COMP 3063
COMP 4323	Mobile Security	COMP 2013
COMP 4333	Ethical Hacking and Penetration Testing	COMP 3063 & COMP 4123
COMP 4843	Human-Computer Interface	COMP 3223
COMP 4963	Introduction to Service Computing	COMP 3953
COMP 4991,4992,4993	Independent Study	Consent Of Advisor

**ELIGIBILITY TO TAKE UPPER DIVISION COLLEGE COURSES**

The College of Engineering requires an eligibility standard for the students to take upper division college courses. Students in Computer Science Program must get a C or better in each of the Math, Science, English, and Computer Science courses to be eligible to enroll in upper division (3000 or 4000 level) courses in the College. Students transferring to the College of Engineering with 60 or more semester hours from another institution will be allowed a period of one semester to comply.

**REQUIREMENTS FOR COMPUTER SCIENCE AS A MINOR FIELD.....31 SCH**

COMP 1213, 1211, 1223,1221, 2013, 2103 and 9 semester hours of upper-division courses.....23 SCH  
MATH 1124, 2024.....8 SCH