## **COLLEGE OF ARTS & SCIENCES**

### 2023-2024 COMPUTER SCIENCE - SOFTWARE DEVELOPMENT DEGREE PLAN

FIRST YEAR - FRESHMAN									
Fall Semester (2023)				Spring Semester (2024)					
Dept	Crse#	Course Name	Hrs	Dept	Crse#	Course Name	Hrs		
CIS	171	Computer Programming I	3	CIS	172	Computer Programming II <sup>3</sup>	3		
ENG	101	English Composition I <sup>1</sup>	3	ENG	102	English Composition II <sup>1</sup>	3		
MAT	120	Precalculus <sup>3</sup>	4	MAT	122	Analytics & Calculus I <sup>3</sup>	4		
COM	140	Speech Communication <sup>1</sup>	3	CIS	211	Intro to Web Design	3		
BIB	121	Life of Christ <sup>1</sup>	2	BIB	122	Acts of the Apostles <sup>1</sup>	2		
			15				15		
SECO	ND YE	AR - SOPHOMORE							
Fall S	Fall Semester (2024)				Spring Semester (2025)				
Dept	Crse#	Course Name	Hrs	Dept	Crse#	Course Name	Hrs		
CIS	273	Data Structures <sup>3</sup>	3	CIS	374	Algorithms <sup>3</sup>	3		
PHS	211	Physics for Science & Eng 1	3	PHS	212	Physics for Science & Eng 2	3		
MAT	223	Analytics & Calculus II <sup>3</sup>	4			Elective	3		
CIS	277	Intro to Data Analytics <sup>3</sup>	3	MAT	235	Introductory Statistics	3		
BIB		Bible	2	BIB		Bible	3		
			15				15		
THIR	D YEAF	R - JUNIOR							
Fall Semester (2025)				Spring Semester (2026)					
	emest	er (2025)		Sprin	g Semo	ester (2026)			
		Course Name	Hrs			ester (2026) Course Name	Hrs		
	Crse#		<b>Hrs</b> 3		Crse#		<b>Hrs</b> 3		
Dept	Crse#	Course Name		Dept	Crse#	Course Name			
Dept CIS	<b>Crse#</b> 324	<b>Course Name</b> Database Systems <sup>3</sup>	3	Dept CIS	<b>Crse#</b> 467	Course Name DevOps <sup>3</sup>	3		
Dept CIS CIS	<b>Crse#</b> 324 368	Course Name Database Systems <sup>3</sup> Agile Development <sup>3</sup>	3 3	Dept CIS	<b>Crse#</b> 467	<b>Course Name</b> DevOps <sup>3</sup> Computer Networks <sup>3</sup>	3 3		
Dept CIS CIS	<b>Crse#</b> 324 368	Course Name Database Systems <sup>3</sup> Agile Development <sup>3</sup> Web Development <sup>3</sup>	3 3 3 3 3	Dept CIS CIS	<b>Crse#</b> 467 345	<b>Course Name</b> DevOps <sup>3</sup> Computer Networks <sup>3</sup> Behavioral Science <sup>1</sup>	3 3 3		
Dept CIS CIS	<b>Crse#</b> 324 368	Course Name Database Systems <sup>3</sup> Agile Development <sup>3</sup> Web Development <sup>3</sup> Elective	3 3 3 3	Dept CIS CIS	<b>Crse#</b> 467 345	Course Name DevOps <sup>3</sup> Computer Networks <sup>3</sup> Behavioral Science <sup>1</sup> Discrete Mathematics <sup>3</sup>	3 3 3 3		
Dept CIS CIS CIS BIB	Crse# 324 368 367	Course Name Database Systems <sup>3</sup> Agile Development <sup>3</sup> Web Development <sup>3</sup> Elective Elective Bible	3 3 3 3 3	Dept CIS CIS MAT	<b>Crse#</b> 467 345	Course Name DevOps <sup>3</sup> Computer Networks <sup>3</sup> Behavioral Science <sup>1</sup> Discrete Mathematics <sup>3</sup> History <sup>1</sup>	3 3 3 3 3		
Dept CIS CIS CIS BIB	Crse# 324 368 367	Course Name Database Systems <sup>3</sup> Agile Development <sup>3</sup> Web Development <sup>3</sup> Elective Elective	3 3 3 3 3 3	Dept CIS CIS MAT	<b>Crse#</b> 467 345	Course Name DevOps <sup>3</sup> Computer Networks <sup>3</sup> Behavioral Science <sup>1</sup> Discrete Mathematics <sup>3</sup> History <sup>1</sup>	3 3 3 3 3 3		
Dept CIS CIS CIS BIB	Crse# 324 368 367	Course Name Database Systems <sup>3</sup> Agile Development <sup>3</sup> Web Development <sup>3</sup> Elective Elective Bible	3 3 3 3 3 3	Dept CIS CIS MAT BIB	Crse# 467 345 240	Course Name DevOps <sup>3</sup> Computer Networks <sup>3</sup> Behavioral Science <sup>1</sup> Discrete Mathematics <sup>3</sup> History <sup>1</sup>	3 3 3 3 3 3		
Dept CIS CIS CIS BIB FOUR	Crse# 324 368 367 Crse#	Course Name Database Systems <sup>3</sup> Agile Development <sup>3</sup> Web Development <sup>3</sup> Elective Elective Bible AR - SENIOR er (2026) Course Name	3 3 3 3 3 3	Dept CIS CIS MAT BIB	Crse# 467 345 240 g Sem Crse#	Course Name DevOps <sup>3</sup> Computer Networks <sup>3</sup> Behavioral Science <sup>1</sup> Discrete Mathematics <sup>3</sup> History <sup>1</sup> Bible ester (2027) Course Name	3 3 3 3 3 3		
Dept CIS CIS CIS BIB FOUR	Crse# 324 368 367 Crse#	Course Name Database Systems <sup>3</sup> Agile Development <sup>3</sup> Web Development <sup>3</sup> Elective Elective Bible AR - SENIOR er (2026)	3 3 3 3 3 3 <b>18</b>	Dept CIS CIS MAT BIB	Crse# 467 345 240 g Sem Crse#	Course Name DevOps <sup>3</sup> Computer Networks <sup>3</sup> Behavioral Science <sup>1</sup> Discrete Mathematics <sup>3</sup> History <sup>1</sup> Bible	3 3 3 3 3 3 3 <b>18</b>		
Dept CIS CIS CIS BIB FOUR Fall S Dept	Crse# 324 368 367 Crse#	Course Name Database Systems <sup>3</sup> Agile Development <sup>3</sup> Web Development <sup>3</sup> Elective Elective Bible AR - SENIOR er (2026) Course Name	3 3 3 3 3 <b>18</b> Hrs	Dept CIS CIS MAT BIB Sprin Dept	Crse# 467 345 240 g Sem Crse#	Course Name DevOps <sup>3</sup> Computer Networks <sup>3</sup> Behavioral Science <sup>1</sup> Discrete Mathematics <sup>3</sup> History <sup>1</sup> Bible ester (2027) Course Name	3 3 3 3 3 3 <b>18</b> Hrs		
Dept CIS CIS CIS BIB FOUE Fall S Dept CIS	Crse# 324 368 367 Crse# 455	Course Name Database Systems <sup>3</sup> Agile Development <sup>3</sup> Web Development <sup>3</sup> Elective Elective Bible AR - SENIOR er (2026) Course Name Cloud Architecture <sup>3</sup>	3 3 3 3 3 3 <b>18</b> Hrs 3	Dept CIS CIS MAT BIB BIB Sprin Dept CIS	Crse# 467 345 240 g Sem Crse# 491	Course Name DevOps <sup>3</sup> Computer Networks <sup>3</sup> Behavioral Science <sup>1</sup> Discrete Mathematics <sup>3</sup> History <sup>1</sup> Bible ester (2027) Course Name Advanced Topics in CS <sup>3</sup>	3 3 3 3 3 3 <b>18</b> Hrs 3		
Dept CIS CIS CIS BIB FOUE Fall S Dept CIS	Crse# 324 368 367 Crse# 455	Course Name Database Systems <sup>3</sup> Agile Development <sup>3</sup> Web Development <sup>3</sup> Elective Elective Bible AR - SENIOR er (2026) Course Name Cloud Architecture <sup>3</sup> Architecture and Assembly Lang Elective Uppper division CIS Elective	3 3 3 3 3 3 3 <b>18</b> <b>Hrs</b> 3 3	Dept CIS CIS MAT BIB BIB Sprin Dept CIS	Crse# 467 345 240 g Sem Crse# 491	Course Name DevOps <sup>3</sup> Computer Networks <sup>3</sup> Behavioral Science <sup>1</sup> Discrete Mathematics <sup>3</sup> History <sup>1</sup> Bible ester (2027) Course Name Advanced Topics in CS <sup>3</sup> Operating Systems <sup>3</sup>	3 3 3 3 3 3 3 <b>18</b> <b>Hrs</b> 3 3		
Dept CIS CIS CIS BIB FOUR Fall S Dept CIS CIS	Crse# 324 368 367 Crse# 455	Course Name Database Systems <sup>3</sup> Agile Development <sup>3</sup> Web Development <sup>3</sup> Elective Elective Bible AR - SENIOR er (2026) Course Name Cloud Architecture <sup>3</sup> Architecture and Assembly Lang Elective	3 3 3 3 3 3 <b>18</b> <b>Hrs</b> 3 3 3 3	Dept CIS CIS MAT BIB BIB Sprin Dept CIS	Crse# 467 345 240 g Sem Crse# 491	Course Name DevOps <sup>3</sup> Computer Networks <sup>3</sup> Behavioral Science <sup>1</sup> Discrete Mathematics <sup>3</sup> History <sup>1</sup> Bible ester (2027) Course Name Advanced Topics in CS <sup>3</sup> Operating Systems <sup>3</sup> Elective	3 3 3 3 3 3 3 <b>18</b> <b>Hrs</b> 3 3 3 3		

(Superscripts if needed)

<sup>1</sup>Liberal Arts Core Requirement

<sup>2</sup>Liberal Arts Core Requirement in Undergraduate Catalog

<sup>3</sup>Course has prerequisite. See corresponding Undergraduate Catalog

## ADDITIONAL ITEMS RELATED TO THE MAJOR

The Quantitative Reasoning liberal arts core requirement must be satisfied by MAT 122, Calculus I. The Natural Sciences liberal arts core requirement must be satisfied by PHY 211, Physics for Science and Engineering I.

Due to a deep presrequisite structure, it's is essential that CIS 171, Computer Programming I, be taken the first fall semester of study in order to graduate in 8 semesters.

# The following guidelines are important. Failure to follow these guidelines may delay graduation.

- 1. Plan schedules carefully. Plan to fulfill prerequisites for future courses.
- 2. Do not alter the sequence of courses without consulting with your academic adviser as not all classes are offered every semester.
- 3. Before the enrollment period, check to make sure holds will not prevent you from registration.
- 4. Register for classes early during the registration period to secure classes.

# The Four-Year Degree Plan is a suggested plan of study. This plan does not replace the *Undergraduate Catalog*. The *Undergraduate Catalog* provides the official listing of program requirements.

2023-2024 Ondergraddate Liberal Arts core Requirements						
I. Biblical Values	III. Broadened Perspectives					
A. Bible	A. Behavioral Sciences					
BIB 121 & 122 & 346 <b>OR</b> 446 7	BIB/FAM 230 OR PSY 210 OR SOC 241 OR	3				
II. Basic Skills	SOC 251					
11. Dasic Skills	B. Natural Sciences					
A. Written Communication	BIO 100 OR BIO 105 OR BIO 110 OR BIO	3				
ENG 101 AND ENG 102 6	111 OR BIO 112 OR BIO 211 OR CHE 121					
<b>B. Oral Communication</b>	& CHE 121L OR PHS 111 OR PHS 112 OR					
COM 140 3	PHS 201 <b>OR</b> PHS 211					
C. Quantitative Reasoning	C. Arts and Humanities					
MAT 100 OR MAT 101 OR MAT 120 OR 3		3				
MAT 122 <b>OR</b> MAT235	221 OR HIS 222 OR HUM 399A OR POL					
	CRITICAL AND CREATIVE WORKS:	3				
Complete course names and descriptions	ART 110 <b>OR</b> ART 201 <b>OR</b> ART 234 <b>OR</b>					
	ENG 215 UK ENG 225 UK ENG 235 UK					
for the Liberal Arts Core Requirements	ENG 299A/399A OR MUS 110 OR MUS 214					
are located in the Undergraduate	OR PHI 243 OR PHI 245 OR PHI246 OR					
Catalog.	THE 160 <b>OR</b> THE 265 <b>OR</b> THE 299A/399A					
	HUMANITIES CAPSTONE: BIB/HUM 495	3				
	Total	34				

#### 2023-2024 Undergraduate Liberal Arts Core Requirements