

PROGRAM NAME: Computer Science
 PROGRAM COLLEGE: College of Business, Influence and Analytics
 CATALOG TERM: 2018-2019

NOTE: Individual Programs of Study will vary in consultation with your Advisor and course/section availability each term. The below schedule serves only as an **example** four year degree plan.

YEAR 1

Fall Semester

Course Name	Credits	Minimum Grade Required	Experience Notes
Core: Written Communication (WCP)	3		<ul style="list-style-type: none"> Participate in the Finucane Service Project
Core: Philosophical Mode Lv I (PLI)	3		
MT 1800 Calculus I (MTP)	4	C	
NS 1010 Introduction to the Engineering and Computing Program	1		
CS 101 Problem Solving and Programming I (UMKC)	3	C	
Core: Artistic Mode (ARI)	3		
TOTAL HOURS	17		

Spring Semester

Course Name	Credits	Minimum Grade Required	Notes
Core: Oral Communication (OCP)	3		<ul style="list-style-type: none"> Complete 15 service hours for year 1
Core: Literary Mode Lv I (LTI)	3		
MT 1810 Calculus II	4	C	
PH 2850 Physics for Scientists and Engineers I (SCI)	3	C	
PH 2860 Physics for Scientists and Engineers Laboratory I (SCI)	1	C	
CS 191 Discrete Structures I (UMKC)	3	C	
TOTAL HOURS	17		

YEAR 2

Fall Semester

Course Name	Credits	Minimum Grade Required	Notes
Core: Philosophical Mode Lv II (PLII)	3		<ul style="list-style-type: none"> Begin Looking for internships
PH 2940 Physics for Scientists and Engineers II (SCII)	3	C	
PH 2920 Physics for Scientists and Engineers Laboratory II (SCII)	1	C	
MT 3400 Probability and Statistics I	3	C	
CS 201 Problem Solving and Programming II (UMKC)	3	C	
CS 201 Problem Solving and Programming II Laboratory (UMKC)	1	C	
CS 291 Discrete Structures II (UMKC)	3	C	
TOTAL HOURS	17		

Spring Semester

Course Name	Credits	Minimum Grade Required	Notes
Core: Theological Mode Lv I (THI)	3		<ul style="list-style-type: none"> Apply for summer internships Complete 15 service hours for year 2
MT 3810 Linear Algebra	3	C	
MT 4410 Probability and Statistics II	3	C	
CS 281R Computer Architecture and Organization (UMKC)	3	C	
CS 303 Data Structures (UMKC)	3	C	
TOTAL HOURS	15		

YEAR 3

Fall Semester

Course Name	Credits	Minimum Grade Required	Notes
Core: Historical Mode Lv I (HSI)	3		
Core: Scientific-Relational Mode Lv I (SRI)	3		
Rockhurst Elective (3XXX or 4XXX)	3		
Rockhurst Elective (3XXX or 4XXX)	3		
CS 3XX or 4XX Computer Science Elective (UMKC)	3	C	
CS 304WI Ethics and Professionalism in Computing and Engineering (UMKC)	3	C	
TOTAL HOURS	16		

Spring Semester

Course Name	Credits	Minimum Grade Required	Notes
CS 404 Introduction to Algorithm Analysis (UMKC)	3	C	<ul style="list-style-type: none"> Apply for summer internships Complete 15 service hours for year 2
CS 431 Introduction to Operating Systems (UMKC)	3	C	
CS 441 Programming Language Design and Implementation (UMKC)	3	C	
CS 3XX or 4XX Computer Science Elective (UMKC)	3	C	
Core: Historical Mode or Literary Mode Lv II (HSII or LTII)	3		
TOTAL HOURS	15		

YEAR 4

Fall Semester

Course Name	Credits	Minimum Grade Required	Notes
CS 371 Database Design, Implementation and Validation (UMKC)	3	C	
CS 449 Fundamentals of Software Engineering (UMKC)	3	C	

CS 4XX Computer Science Elective (UMKC)	3	C	
Rockhurst Elective (3XXX or 4XXX)	3	C	
Core: Theological Mode Lv II (THII)	3		
Core: Global Perspectives (GPR)	3		
TOTAL HOURS	18		

Spring Semester

Course Name	Credits	Minimum Grade Required	Notes
Core: Philosophical Mode or Theological Mode Lv II (PLII or THII)	3		
Core: Scientific-Relational Mode Lv I or Lv II (SRI or SRII)	3		
CS 421 Fundamentals of Data Communication (UMKC)	3	C	
CS 3XX or 4XX Computer Science Elective (UMKC)	3	C	
CS 4XX Computer Science Elective (UMKC)	3	C	
CS 451 Software Engineering (UMKC)	3	C	
TOTAL HOURS	18		

Credit Hours

- Core: 51-54 hours
- Major: 87 hours

TOTAL Credit Hours: 135