

# School of Computing & Engineering Bachelor of Information Technology

2017-2018 Major Map: First Time College Student

#### Four Year Graduation Plan - Courses & Critical Benchmarks:

The following is a sample course of study. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement. For more information see the University Catalog at <a href="https://www.umkc.edu/catalog">umkc.edu/catalog</a>.

Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. Critical Courses and minimum recommended grades (as noted below) provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

**Please Note:** Prior to Year 1 (may include summer) Students must have successfully passed (with a "C" or better) MATH 110: College Algebra and MATH 125: Trigonometry or MATH 120: Pre-calculus or have taken four (4) units of high school Mathematics including Trigonometry prior to enrolling in MATH 210: Calculus I.

First Math Course:		STAT 235 Elementary Statistics OR MATH 210 Calculus I	Foreign Language Requirement:	No		General Elective Hours:	11	
Critical Course	Co	ourse Subject, Number, & Title and Academic  Bold = UMKC General Education Core re  ** Co-Requisite Enrollment Requi	equirement	Min. Rec. Grade	Rec.   Credit   No.		5	
Fall Sen	nester `	Year 1: 16 hours						
$\Diamond$	MATH 210 Calculus I(Focus B)¹  ECON 202 Introduction to Economics II (Focus Elective)		С	4	<u></u>			
				3	<sup>1</sup> Enrollment restricted ALEKS Math Placem			
	Focus A Arts & Humanities Click for options				3	show prerequisite requirement to been met prior to enrolling.		
	**DISC	100 Reasoning & Values (Speech & Writing	Click for options		3	<sup>2</sup> HISTORY 101, 102, or POL-SCI 210 meet both Focus C & <u>Missouri</u>		
		HOR I Reasoning & Values Click for Options 150 Computing & Engineering in Society Rec	ommended)		3			
Complete 16 credit hours toward degree Earn minimum 2.00 term GPA					Constitution Requirements.			
Spring S	Semest	er Year 1: 15 hours						
$\Diamond$	STAT 2	STAT 235 Elementary Statistics		С	3			
$\Diamond$	COMP	-SCI 101 Problem Solving & Programming I		С	3	Register for <u>UMKC Roo Career</u>		
$\Diamond$	COMP	-SCI 191 Discrete Structures I		С	3			
	**DISC	**DISC 200 Culture & Diversity (Speech & Writing) Click for options			3	Network.		
	**ANC	HOR II Culture & Diversity Click for Options			3	-		
	Complete 15 credit hours toward degree Earn minimum 2.00 term GPA				<u>'</u>			
		ster Year 1: 0-4 hours						
$\Diamond$	MATH	210 or STAT 235 (if not already completed)		С	3-4			
Complete Complete	Complete COMP-SCI 101 & 191 Complete Anchor I & DISC 100 Complete at least 30 total credit hours toward degree Maintain a minimum 2.00 cumulative GPA			Recommend completing MATH 210 or STAT 235 over the summer if tested into MATH 100.				

Fall Semester Year 2: 13-15 hours				
COMP-SCI-201R + 201L Problem Solving & Programming II with Lab	4	Take the RooWriter Assessment after completing DISC 200 and		
COMP-SCI 291 Discrete Structures II	3	before reaching 90 credit hours.		
Life or Physical Sciences Course <sup>3</sup> (must have at least one lab course)	3-5			
General Elective	3	Science and one Physical Science course with a minimum of one lab		
Complete COMP-SCI 201R, 201L, & 291 Complete STAT 235, Anchor II & DISC 200 Complete 13+ credit hours toward degree Earn minimum 2.00 term GPA	one or the other. Students may select from: Biology, Chemistry, Environmental Science, Geography Geology, Natural Science, Physical Science OR Physics.			
Spring Semester Year 2: 15-17 hours				
COMP-SCI 281R Computer Architecture & Organization	3			
COMP-SCI 303 Data Structures	3			
INFO-TECH 222 Multimedia Production & Concepts	3			
ACCTNG 210 Principles of Accounting	3			
Life or Physical Sciences Course <sup>3</sup> (must have at least one lab course)	3-5			
Complete 15+ credit hours toward degree Earn minimum 2.00 term GPA				
Summer Semester Year 2: 0 hours				
Complete ECON 202, ACCTNG 210, & COMP-SCI 303 Complete RooWriter Assessment Complete at least 60 credit hours toward degree Maintain minimum 2.00 cumulative GPA	Students may use the summer to ensure completion of 30 hours per academic year or to lighten fall and spring course loads.			
Fall Semester Year 3: 15 hours				
INFO-TECH 321 Intro to Computing Resources Administration	3			
MKT 324 Marketing Concepts	3			
ANCH 308 Ethical Issues in Computing & Engineering	3			
**DISC 300 Civic & Community Engagement	3			
General Elective	3			
Complete 15 credit hours toward degree Earn minimum 2.00 term GPA				
Spring Semester Year 3: 15 hours				
COMP-SCI 431 Introduction to Operating Systems	3			
DSOM 326 Operational Management	3			
INFO-TECH 3XX/4XX Specialty Elective <sup>4</sup> Click for options	3	<sup>4</sup> BIT students should select at leas		
Focus C Human Values & Ethical Reasoning Click for options (HISTORY 101, 102, or POL-SCI 210 recommended)	3	two electives from an Interest Area Networking or Programing.		
General Elective	3			
Complete 15 credit hours toward degree Earn minimum 2.00 term GPA				

Fall Semester Year 4: 15 hours  COMP-SCI 449 Foundations of Software Engineering			
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	3		
COMP-SCI 371 Database Design, Implementation, & Validation OR COMP-SCI 470 Introduction to Database Management Systems	3	Apply for graduation & complete	
Anatomy of Business Elective I Click for options	3	your Final Degree Audit for Major and Minor (if applicable).	
INFO-TECH 3XX/4XX Specialty Elective <sup>4</sup> Click for options	3	,,	
Anatomy of Business Elective II <u>Click for options</u> OR General Elective	3	Take the <u>ETS Proficiency Profile</u> ( <u>EPP</u> ) exit exam.	
Complete 15 credit hours toward degree Earn minimum 2.00 term GPA			
Spring Semester Year 4: 14-15 hours			
COMP-SCI 451R Software Engineering Capstone	3		
COMP-SCI 420 Introductory Networking & Applications OR COMP-SCI 421A Foundations of Data Networks	3		
INFO-TECH 491 Internship	3	Take <u>Major Field (MF)</u> exit exam.	
COMP-SCI 456 Human Computer Interface	3	Complete the CSEE Exit Survey	
Anatomy of Business Elective II <u>Click for options</u> OR General Elective	2-3	two-weeks prior to graduation.	

### **Graduation Requirements Summary**

Total Hours	Total Hours at UMKC	Upper Lvl Hrs in Major at UMKC	Upper (300 / 400) Level Hours	Major GPA	UMKC GPA
120 minimum	30 minimum	12 minimum	36 minimum	2.00 minimum	2.00 minimum

#### **Other Information**

A minimum of 30 hours must be earned at the University of Missouri-Kansas City, regardless of the number and level of hours earned at another institution. Undergraduate degree-seeking students are required to earn credit in at least 36 hours of coursework numbered 300 and above at UMKC. In the case of transfer credit, the coursework must be numbered as junior-senior level work by the transferring institution. Community-college transfer coursework cannot count towards the 36-hour requirement.

Non-course Requirements		
RooWriter Assessment		
Major Field Exam		
ETS Proficiency Profile		

#### **Policy**

The University reserves the right to make changes in courses and course schedules. Students are expected to maintain a quality of achievement significantly above minimum UMKC standards for degree work. Individual student progress will be monitored throughout the program. Satisfactory progress is required of all students for retention in the program. Students are expected to maintain academic standards, perform satisfactorily in courses, refrain from academic dishonesty, comply with the established University requirements, and refrain from unethical or unprofessional behavior or behaviors that obstruct the training process or threaten the welfare of the student or others. Other circumstances involving student behavior will be addressed by the faculty on an individual basis.

#### **Advising Contact Information**

School of Computing & Engineering 534 R H Flarsheim Hall 5110 Rockhill Road Kansas City MO 64110 816-235-2399 sce@umkc.edu http://sce.umkc.edu/

## **Career Opportunities**

UMKC Career Services – <u>career.umkc.edu</u> | 816-235-1636 | 2<sup>nd</sup> Floor, Atterbury Student Success Center O\*Net OnLine – <u>OnetOnline.org</u> Learn about careers related to your major, income potential, and more.