



## Major Map: Bachelor of Information Technology

Catalog Year: 2013-2014

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 you may go to our website at [www.sce.umkc.edu](http://www.sce.umkc.edu) or the catalog at <http://www.umkc.edu/catalog> **Please note this Program of Study is pending final approval by the CSEE faculty.**

*Your path to graduation may vary slightly 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.*

**First Mathematics: Calculus I & Statistics**

**2<sup>nd</sup> Language Requirement: None**

**Free Elective Hours: 11-12**

Critical Course or Bench mark ◆	Course Subject, Number, Title and Academic Plan Benchmarks <b>Bold=UMKC General Education Core Requirement</b> *Prerequisites are Required **Co-Requisite Enrollment Required	CREDIT HOURS	Min Recmd Grade	Additional Critical Tracking Notes
Prior to Year 1 (may include summer)				
◆	Students must have successfully passed (with a "C" or better) MATH 120: Pre-calculus or a combination of a MATH 110: College Algebra and MATH 125: Trigonometry or have taken four (4) units of high school mathematics including trigonometry as preparation for MATH 210 and preferably before Fall Semester Year 1, but not mandatory.			
Fall Semester Year 1: 15 hours				
◆	COMP-SCI 101: Problem Solving & Programming I	3	C	
◆	COMP-SCI 191: Discrete Structures I	3	C	
	<b>**Anchor I: Reasoning and Values<sup>1</sup></b>	3	C-	<b>SCE 101 preferred</b>
	<b>**Discourse I: DISC 100 :Reasoning and Values<sup>1</sup></b>	3	C-	
◆	<b>Focus B: Scientific Reasoning and Quantitation Analysis- STAT 235: Elementary Statistics required for degree<sup>1,2</sup></b>	3	C	<b>Math Entrance Test Required<sup>2</sup></b>
◆	Complete 15 term credit hours Earn minimum 2.000 term UM GPA			
Spring Semester Year 1: 17 hours				
◆	<b>**COMP-SCI 201R: Problem Solving &amp; Programming II</b>	3	C	
◆	<b>**COMP-SCI 201L: Problem Solving &amp; Programming II Lab</b>	1	C	
◆	COMP-SCI 291: Discrete Structures II	3	C	
	<b>Anchor II: Culture &amp; Diversity<sup>1</sup></b>	3		
	<b>Discourse II: DISC 200- Culture &amp; Diversity<sup>1</sup></b>	3		
◆	MATH 210: Calculus I <sup>2</sup>	4	C	<b>Math Entrance Test Req<sup>2</sup></b>
◆	Complete 14 term credit hours Complete 29 cumulative credit hours Earn a minimum 2.000 UM GPA			
Summer Semester Year 2: ___hours				
◆	Earn a minimum 2.000 cumulative UM GPA Complete Anchor II and Discourse II			
Fall Semester Year 2: 16-17 hours				
◆	ACCT 210: Principles of Accounting	3	C	
◆	COMP-SCI 303: Data Structures	3	C	
◆	ECON 202: Introduction to Economics II	3	C	
	<b>Focus A: Arts &amp; Humanities<sup>1</sup></b>	3		
	Life & Physical Science <sup>4</sup>	4-5		
◆	Complete 16 term credit hours Earn minimum 2.000 cumulative UM GPA Complete RooWriter Assessment Test <sup>3</sup>			
Spring Semester Year 2: 15-16 hours				
◆	COMP-SCI 281R: Computer Architecture & Organization	3	C	
◆	INFO-TECH 222: Multimedia Production & Concepts	3	C	
	Life & Physical Science <sup>4</sup>	3-4		
	<b>Focus Elective: General Elective<sup>1</sup></b>	3		
	General Elective	3		



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◆	Complete 15 term credit hours Complete 60 cumulative credit hours Earn minimum 2.000 cumulative UM GPA Complete ECON 202, STAT 235, ACCT 210 and COMP-SCI 303 before Fall Semester Year 3.			
<b>Fall Semester Year 3: 15 hours</b>				
	INFO-TECH 321: Intro Comp Res Admin	3	C	
	INFO-TECH 350: Object-Oriented Software Development	3	C	
	MKT 324: Marketing Concepts	3	C	
	<b>Anchor III: Civic &amp; Community Engagement –COMP-SCI 304WI: Ethics and Professionalism<sup>1</sup></b>	3	C	COMP-SCI 304WI: Ethics & Professionalism required for degree (pending approval)
	<b>Discourse III: DISC 300- Civic &amp; Community Engagement<sup>1</sup></b>	3		
	Complete 15 term credit hours Earn minimum 2.000 cumulative UM GPA Complete MKT 324 before enrolling in Business electives.			
<b>Spring Semester Year 3: 15 hours</b>				
	COMP-SCI 431: Introduction to Operating Systems	3	C	<b>Assessment Test &amp; Major Field Exam<sup>5</sup></b>
	DSOM 326, Operational Management	3	C	
	INFO-TECH300<490, IT Specialty Elective <sup>6</sup>	3	C	
	<b>Focus C: Human Values &amp; Ethical Reasoning<sup>1</sup> Constitution<sup>4</sup></b>	3		Constitution requirement required for degree <sup>4</sup>
	General Elective	3		
	Complete 15 term credit hours Complete 90 cumulative credit hours Earn minimum 2.000 cumulative UM GPA			
<b>Fall Semester Year 4: 15 hours</b>				
	COMP-SCI 449: Fundamentals of Software Engineering	3	C	<b>Apply for graduation</b>
	COMP-SCI/INFO-TECH 300<490: Elective <sup>7</sup>	3	C	
	INFO-TECH300<490: IT Specialty Elective <sup>6</sup>	3	C	
	BUS 300<490: Business Elective <sup>8</sup>	3	C	
	General Elective	3		
	Complete 16 term credit hours Earn minimum 2.000 cumulative UM GPA Take COMP-SCI 449 and COMP-SCI 451R consecutively.			
<b>Spring Semester Year 4: 14-15 hours</b>				
	COMP-SCI 451R: Software Engineering	3	C	
	INFO-TECH 300<490: IT Specialty Elective <sup>6</sup>	3	C	
	INFO-TECH 491: Internship <sup>9</sup>	3		
	BUS 300<490: Business Elective <sup>8</sup>	3	C	<b>UMKC Exit Survey</b>
	General Elective <sup>4</sup>	2-3		<b>CSEE Exit Survey</b>
	Complete minimum 14 term credit hours Complete 120 cumulative credit hours Earn minimum 2.000 cumulative UM GPA.			
	Total: <u>120</u> hours			

<sup>1</sup> All students must take and/or establish credit for the following General Education Course Requirements: Discourse I, Discourse II, Discourse III, Anchor 1, Anchor 2, Anchor 3, Focus A, Focus B, Focus C and Focus D for a total of 30 credit hours of General Education. See General Education Requirements list for appropriate courses. Go to [www.umkc.edu/core/courses](http://www.umkc.edu/core/courses)

<sup>2</sup> Enrollment is restricted. Students must pass the online Math Entrance Test prior to enrolling. See <http://cas.umkc.edu/math/> for more details.

Constitution requirement may be satisfied by taking either HIST 1100 or HIST 1101 or POLSC 210

<sup>3</sup> RooWriter Assessment Test must be taken following the successful completion of Discourse 1, but must be taken the semester before enrolling in COMP-SCI 304WI. <http://cas.umkc.edu/writingcenter/StudentResources/WEPT.asp>

<sup>4</sup> Select either a Life Science or a Physical Science and at least one with a lab. Choices are: Biology, Chemistry, Environmental Science, Geo-Science or Physics. General elective credit hours are based upon how many credits are taken in the Life & Physical Sciences to equal a total of 120 credit hours for the degree.

<sup>5</sup> All UMKC students must take the ETS-PP or MAPP Assessment Test and CS/IT majors must take the Major Field Exam after completing 70 credit hours and before applying for graduation. For details go to: [www.umkc.edu/testingcenter](http://www.umkc.edu/testingcenter)

<sup>6</sup> IT Specialty electives are satisfied by taking two courses from the following categories: Networking (COMP-SCI 420, INFO-TECH 426 or INFO-TECH427) or Programming (COMP-SCI 375, COMP-SCI 423, COMP-SCI 456, COMP-SCI 457, or COMP-SCI 461)

<sup>7</sup> CS/IT Electives can be any COMP-SCI/INFO-TECH course that is at the 300 level or above that is not a required course. See advisor for details.

<sup>8</sup> Business Elective - choose two of the following: ACCT 211, MGT 306, MGT 330, FIN 325 or ENT 215)

<sup>9</sup> Students with appropriate Computer Science, Information Technology or Business experience may petition to replace the internship requirement with a three credit hour CS/IT elective.

**Non-course requirements**  
RooWriter Assessment Test

**Met**



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- ETS-PP or Measure of Academic Proficiency and Progress (MAPP)
- Major Field Exam
- UMKC Senior Exit Survey
- CSEE Exit Survey and Interview

The School reserves the right to make changes in courses, degree requirements, and course schedules without notice.

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 and teacher education timetables and 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.

### Graduation Requirements Summary:

Total Hours (120 minimum)	Totals Hrs at UMKC (30 hours min)	Major GPA (2.0 min)	UMKC GPA (2.0 min)

Academic Advisor: \_\_\_\_\_ Date: \_\_\_\_\_

Faculty Advisor: \_\_\_\_\_ Date: \_\_\_\_\_