# **Computer Science – Business**

Bachelor of Science (BS.CS(BUS))

Core Requir	ements		Credits	Notes/Instructions
College Sem.	Quest for Meaning	CSEM 100	3	†A student may be required to take ENGL
Communication & Creative Expression	Writing Oral Communication Literature The Arts	ENGL 110† COMM 101 ENGL 140-149 ARTS 100-149	3 3 3 3	105 and/or MATH 100 based on placement exams administered prior to their first semester at King's College. ENGL 105 and
Citizenship	History Intercultural Global Connections	HIST 100-149 FREN/GERM/SPAN 100-level or Study Abroad <sup>++</sup> ECON 150-199; GEOG 150-199; HIST 150-199; PS 150-199; SOC 150-199	3 3 3	MATH 100 are 3-credit courses and will count as free electives.  ††The Intercultural Competence
Quantitative & Scientific Reasoning	SBM Quantitative Reasoning Scientific Endeavor Science in Context Human Beh. & Soc. Inst	MATH 120 <sup>†</sup> or higher level NSCI 100 NSCI 171-199 <b>ECON 111, 112</b> ; GEOG 101, 102; PS 101, PSYC 101, SOC 101	- 3 3	requirement can be satisfied by taking a 100- level language class for 3 credits or participating in an approved Study Abroad experience. (See
Wisdom, Faith, & the Good Life	Introduction to Phil. Phil. Investigations Theology & Wisdom Theology & the Good Life	PHIL 101 PHIL 170-199; MSB 287 THEO 150-159 THEO 160-169	3 3 3 3	college catalog for more information)  SBM = Satisfied By Major requirement(s) and credit(s) listed below.
		Total Core Credits	42	

Major Requirements	Credits	Business Requirements	Credits
CS 112 Intro. to Programming (fall)	3	ECON 111 <sup>2</sup>	3
CS 120 <sup>PR</sup> OO Software Dev. (spring)	3	ECON 112	3
CS 120L <sup>PR</sup> OO Software Dev. Lab (spring)	1	ECON 221	3
CS 232 <sup>PR</sup> Data Structures (fall)	3	MSB 110	3
CS 232L <sup>PR</sup> Data Structures Lab (fall)	1	MSB 120	3
CS 233 <sup>PR</sup> Adv. Data Structures (spring)	3	MSB 200	3
CS 233L <sup>PR</sup> Adv. Data Structures Lab (spring)	1	MSB 210	3
CS 256 <sup>PR</sup> Database Management	3	MSB 220	3
CS 256LPR Database Management Lab	1	Business Elective 1 <sup>4</sup>	3
CS 270 <sup>PR</sup> Computer Organization	3	Business Elective 2 <sup>4</sup>	3
CS 270L <sup>PR</sup> Computer Organization Lab	1		
CS 480 <sup>PR</sup> Software Engineering (fall)	3		
CS 481 <sup>PR</sup> Appl. Soft. Engr. <b>OR</b> CS 499 <sup>PR</sup> CS Internship	3		
CS Elective*,PR	3		
MATH 127 Logic & Axiomatics	3		
MATH 129 <sup>2</sup> Calculus I	4		
MATH 130 <sup>PR</sup> Calculus II	4	Other Requirements	
MATH 235 <sup>PR</sup> Discrete Mathematics	3	HCE 101 Holy Cross Exp.	1
Total Major Credits	61	Total Business / Other Credits	31

### **Total Credits Required for Graduation = 134**

\*A student majoring in Computer Science must complete six (6) of the following CS Electives (only 2 can be CIS courses):

		CS Elec	tive*,PR		
CS 305	CS 328	CS 364	CS 380	CS 448	CIS 386
CS 315	CS 336	CS 375	CS 420	CIS 385	CIS 487
		Any CS course	300 or higher		

### **General Information**

A student must earn a minimum of 120 credit hours to be awarded the baccalaureate degree. The number of credit hours required for graduation may be higher in certain major programs <u>or</u> if the student elects to pursue a second major. Beyond the requirements of the Core Curriculum and of a student's chosen major program, the balances of the credit hours required for graduation are "free electives."

# **Computer Science – Business**

## **Suggested Sequence**

A suggested course sequence of degree requirements is listed below. Refer to the college catalog for course titles, descriptions, and prerequisites. Always consult your Academic Advisor when planning and scheduling your classes.

Fall	Credits	Spring	Credi
CS 112 Intro. to Programming (fall only)	3	CS 120 <sup>PR</sup> OO Software Development (spring only)	3
MATH 127 <sup>2</sup> Logic & Axiomatics (fall only)	3	CS 120L PR OO Software Devel. Lab (spring only)	1
MATH 129 <sup>2</sup> Analytical Geometry & Calculus I	4	MATH 130 <sup>PR</sup> Analytical Geometry & Calculus II	4
Core Course <sup>1</sup> (ENGL 110 Academic Writing)	3	Core Course <sup>1</sup> (ARTS 100 – 149)	3
Core Course <sup>1</sup>	3	Core Course <sup>1</sup> (CSEM 100 Quest for Meaning)	3
HCE 101 Holy Cross Experience	1	Core Course <sup>1</sup>	3
	17		17
Summer	Credits		
Fall	Credits	Spring	Cred
CS 232 <sup>PR</sup> Data Structures (fall only)	3	CS 233 <sup>PR</sup> Adv. Data Structures (spring only)	3
CS 232LPR Data Structures (fall only)	1	CS 233 <sup>PR</sup> Adv. Data Structures Lab (spring only)	1
CS 256PR Database Management Systems	3	CS 270 <sup>PR</sup> Computer Organization	3
CS 256LPR Database Management Systems Lab	1	CS 270LPR Computer Organization Lab	1
MATH 235 <sup>PR</sup> Discrete Mathematics	3	ECON 112 <sup>2</sup> Introduction to Microeconomics	3
ECON 111 <sup>2</sup> Introduction to Macroeconomics	3	Core Course <sup>1</sup>	3
Core Course <sup>1</sup>	3	Core Course <sup>1</sup>	3
	17		17
Summer	17 Credits		17
Fall CS Elective*,PR CS Elective*,PR	Credits  Credits  3 3	Spring CS Elective*,PR CS Elective*,PR	Cred 3 3
Fall CS Elective*,PR CS Elective*,PR MSB 110 Introduction to Financial Reporting	Credits  Credits  3 3 3	CS Elective*,PR CS Elective*,PR MSB 120 Intro. To Mgmt. Control & Planning	<b>Cred</b> 3 3 3
Fall  CS Elective*,PR  CS Elective*,PR  MSB 110 Introduction to Financial Reporting  MSB 200 Principles of Management	Credits  Credits  3 3 3 3	CS Elective*,PR CS Elective*,PR MSB 120 Intro. To Mgmt. Control & Planning MSB 210 Principles of Marketing	Crec 3 3 3 3 3 3
Fall CS Elective*,PR CS Elective*,PR MSB 110 Introduction to Financial Reporting	Credits  Credits  3 3 3 3 3	CS Elective*,PR CS Elective*,PR MSB 120 Intro. To Mgmt. Control & Planning	Crec 3 3 3 3 3 3 3 3 3 3
Fall  CS Elective*,PR  CS Elective*,PR  MSB 110 Introduction to Financial Reporting  MSB 200 Principles of Management	Credits  3 3 3 3 3 3 3	CS Elective*,PR CS Elective*,PR MSB 120 Intro. To Mgmt. Control & Planning MSB 210 Principles of Marketing	Cree 3 3 3 3 3 3 3 3 3 3 3
Fall  CS Elective*,PR  CS Elective*,PR  MSB 110 Introduction to Financial Reporting  MSB 200 Principles of Management  Core Course¹	Credits  Credits  3 3 3 3 3	CS Elective*,PR CS Elective*,PR MSB 120 Intro. To Mgmt. Control & Planning MSB 210 Principles of Marketing Core Course¹	<b>Cre</b>
Fall  CS Elective*,PR  CS Elective*,PR  MSB 110 Introduction to Financial Reporting  MSB 200 Principles of Management  Core Course¹	Credits  3 3 3 3 3 3 3	CS Elective*,PR CS Elective*,PR MSB 120 Intro. To Mgmt. Control & Planning MSB 210 Principles of Marketing Core Course¹	Crec 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
Fall  CS Elective*,PR  CS Elective*,PR  MSB 110 Introduction to Financial Reporting  MSB 200 Principles of Management  Core Course¹  Core Course¹  Summer	Credits  Credits  3 3 3 3 3 18** Credits	CS Elective*,PR CS Elective*,PR MSB 120 Intro. To Mgmt. Control & Planning MSB 210 Principles of Marketing Core Course¹ Core Course¹	Crec 3 3 3 3 3 3 3 18
Fall  CS Elective*,PR  CS Elective*,PR  MSB 110 Introduction to Financial Reporting  MSB 200 Principles of Management  Core Course¹  Core Course¹  Summer	Credits  Credits  3 3 3 3 3 18** Credits	CS Elective*,PR CS Elective*,PR MSB 120 Intro. To Mgmt. Control & Planning MSB 210 Principles of Marketing Core Course¹ Core Course¹ Spring	Crec 3 3 3 3 3 3 18
Fall  CS Elective*,PR  CS Elective*,PR  MSB 110 Introduction to Financial Reporting  MSB 200 Principles of Management  Core Course¹  Core Course¹  Summer  Fall  CS 480 Software Engineering	Credits  3 3 3 3 3 18** Credits  Credits	CS Elective*,PR CS Elective*,PR MSB 120 Intro. To Mgmt. Control & Planning MSB 210 Principles of Marketing Core Course¹ Core Course¹ Spring CS 481 Appl. Soft. Engr. OR CS 499 CS Internship	Crec 3 3 3 3 3 3 3 18 3 5 Crec 3 3
Fall  CS Elective*,PR  CS Elective*,PR  MSB 110 Introduction to Financial Reporting  MSB 200 Principles of Management  Core Course¹  Core Course¹  Summer  Fall  CS 480 Software Engineering  CS Elective*,PR	Credits  3 3 3 3 3 18**  Credits  Credits  3 3 3 3 4 4 5 6 6 7 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8	CS Elective*,PR CS Elective*,PR MSB 120 Intro. To Mgmt. Control & Planning MSB 210 Principles of Marketing Core Course¹ Core Course¹  Spring CS 481 Appl. Soft. Engr. OR CS 499 CS Internship CS Elective*,PR	Cree 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
Fall  CS Elective*,PR CS Elective*,PR MSB 110 Introduction to Financial Reporting MSB 200 Principles of Management Core Course¹ Core Course¹  Summer  Fall  CS 480 Software Engineering CS Elective*,PR ECON 221 Statistics for Economics & Business I	Credits  3 3 3 3 3 18** Credits  Credits	CS Elective*,PR CS Elective*,PR MSB 120 Intro. To Mgmt. Control & Planning MSB 210 Principles of Marketing Core Course¹ Core Course¹ Spring CS 481 Appl. Soft. Engr. OR CS 499 CS Internship	Cree 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
Fall  CS Elective*,PR  CS Elective*,PR  MSB 110 Introduction to Financial Reporting  MSB 200 Principles of Management  Core Course¹  Core Course¹  Summer  Fall  CS 480 Software Engineering  CS Elective*,PR	Credits  3 3 3 3 3 18**  Credits  Credits  Credits  3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	CS Elective*,PR CS Elective*,PR MSB 120 Intro. To Mgmt. Control & Planning MSB 210 Principles of Marketing Core Course¹ Core Course¹  Spring CS 481 Appl. Soft. Engr. OR CS 499 CS Internship CS Elective*,PR	Cree 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
Fall  CS Elective*,PR CS Elective*,PR MSB 110 Introduction to Financial Reporting MSB 200 Principles of Management Core Course¹ Core Course¹  Summer  Fall  CS 480 Software Engineering CS Elective*,PR ECON 221 Statistics for Economics & Business I	Credits  3 3 3 3 3 18**  Credits  Credits  3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	CS Elective*,PR CS Elective*,PR MSB 120 Intro. To Mgmt. Control & Planning MSB 210 Principles of Marketing Core Course¹ Core Course¹ Core Course¹  Spring CS 481 Appl. Soft. Engr. OR CS 499 CS Internship CS Elective*,PR MSB 220 Financial Management	Cree 3 3 3 3 3 3 18

### NOTES

<sup>\*\*</sup> Students are encouraged to take summer courses to relieve the course load pressure during this semester.

<sup>&</sup>lt;sup>1</sup>Choose one course from each of the Core Requirements listed on the reverse side.

<sup>&</sup>lt;sup>2</sup> Course may satisfy both a Major and a Core requirement. MATH 127 or MATH 129 will satisfy the Quantitative Reasoning Core requirement.

<sup>&</sup>lt;sup>3</sup> Students may select "free electives" for personal enrichment <u>OR</u> for Minor and/or Second Major Requirements.

<sup>&</sup>lt;sup>4</sup> The following "Free Electives" are recommended for Computer Science majors: MATH 126, MATH 237, PHYS 111 & PHYS 111L. CIS 106 is recommended particularly to freshman choosing between Computer Science and Computer Information Systems.

 $<sup>^{\</sup>mbox{\scriptsize PR}}$  Course has a prerequisite – check college catalog.