Computer and Information Systems

Bachelor of Science (BS.CIS)

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 MATH 100 are 3-credit courses and will count a free electives. It The Intercultural Competence requirement can be satisfied by taking a 100 level language class for credits or participating an approved Study Abroad experience. (See college catalog for more information) SBM = Satisfied by Maji requirement(s) and credit(s) listed below.
Citizenship	History Intercultural Global Connections	HIST 100-149 FREN/GERM/SPAN 100-level or Study Abroad++ ECON 150-199; GEOG 150-199; HIST 150-199; PS 150-199; SOC 150-199	3 3 3	
Quantitative & Scientific Reasoning	SBM Quantitative Reasoning Scientific Endeavor Science in Context Human Beh. & Soc. Inst Soc. Inst	MATH 120 [†] or higher level NSCI 100 NSCI 171-199 ECON 111, 112; GEOG 101, 102; PS 101, PSYC 101, SOC 101	- 3 3 3	
Wisdom, Faith, & the Good Life	Introduction to Phil. Phil. Investigations Theology & Wisdom Theology & the Good Life	PHIL 101 PHIL 170-199 THEO 150-159 THEO 160-169	3 3 3 3	
	1	Total Core Credits	45	

Cred Electives³ / Other Requirements Major Requirements Credits its CIS 106 IT Methods & Procedures (fall only) HCE 101 Holy Cross Experience 3 1 CIS 116 Programming I (fall only) 3 Free Elective³ 3 CIS 117 PR Programming II (spring only) 3 3 Free Elective³ CIS 119 Spreadsheet Analysis (spring only) 3 Free Elective³ 3 CIS 244^{PR} Structured Programming (fall only) 3 Free Elective³ 3 CIS 251 WEB-based Info. Systems (spring only) 3 Free Elective³ 3 CIS 255 Geographic Info. Systems (spring only) 3 3 CIS 351 Syst. Analysis, Design, & Impl. I (fall only) CIS 352^{PR} Syst. Analysis, Design, & Impl. II (spring only) 3 CIS 356 Database Management Systems (fall only) 3 CIS 385 Cyber Network Foundations (fall only) 3 CIS 386^{PR} Advanced Cyber Networks and Security 3 (spring only) CIS 471 Information Systems Security and Assurance 3 (fall only) 3 CIS 472 IT Project Management (spring only) CIS 487 Enterprise Cyber Security (fall only) 3 CIS 499 CIS Internship 3 MATH 123² Finite Mathematics 3 MSB 110 Intro. To Financial Reporting 3 3 MSB 120^{PR} Intro. to Management Acct. & Plan. 3 ECON 221 or MATH 126

Total Major Credits 60

Total Elective / Other Credits 16

Total Credits Required for Graduation = 121

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 and Information Systems

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.

CS 106 IT Methods & Procedures (fall anly) 3 CS 115 Programming II (fall anly) CS 115 Programming II (fall anly) 3 CS 117 Programming II (spring anly) MSB 110 Intro. To Financial Reporting 3 CS 117 Programming II (spring anly) MATH 123 Finite Mathematics 3 Core Course ¹ (IAKI 51 00-149) Core Course ¹ (IAKI 210 Academic Writing) 3 Core Course ¹ (IAKI 51 00 Quest for Meaning) HCE 101 Holy Cross Experience 1 Core Course ¹ (IAKI 51 00 Quest for Meaning) HCE 101 Holy Cross Experience 16 Summer Credits 16 Summer Credits 16 Core Course ¹ Spring	S 106 IT Methods & Procedures (fall only)	Credits	Spring	Credi		
MSB 110 Intro. To Financial Reporting 3 MSB 120 ^{nst} Intro. to Management Acct. & Plan. MATH 123 Finite Mathematics 3 Core Course ¹ (ARTS 100-149) Core Course ¹ (ARTS 100 Academic Writing) 3 Core Course ¹ (ARTS 100 Quest for Meaning) HCE 101 Holy Cross Experience 1 Credits Credits Fall Credits Systems (fall only) GS 244 Structured Programming (fall only) 3 CIS 251 WB-based Info. Systems (spring only) CIS 255 Geographic Info. Systems (fall only) 3 Core Course ¹ Core Course ¹ 3 Core Course ¹ Summer Credits Spring Core Course ¹ 3 Core Course ¹ Summer Tedits Spring Is <td>5 100 m Methods & motedures (Juli Olily)</td> <td>3</td> <td>CIS 119 Spreadsheet Analysis (spring only)</td> <td>3</td>	5 100 m Methods & motedures (Juli Olily)	3	CIS 119 Spreadsheet Analysis (spring only)	3		
MATH 123 Finite Mathematics 3 Core Course ¹ (ARTS 100-149) Core Course ¹ (ENGL 110 Academic Writing) 3 Core Course ¹ (CSEM 100 Quest for Meaning) HCE 101 Holy Cross Experience 1 1 16 Summer Credits Cli S 244 Structured Programming (fall only) 3 Cli S 251 WEB-based Info. Systems (spring only) Cli S 244 Structured Programming (fall only) 3 ECON 221 Bus. Statistics OR MATH 126 Statistics Core Course ¹ 3 Core Course ¹ Core Course ¹ Core Course ¹ 3 Core Course ¹ Core Course ¹ Core Course ¹ Summer Credits Spring Core Course ¹ Stata Communications I (fall only) Core Course ¹ Summer Credits Spring Course ¹ Stata Communications I (fall only) Course ¹ Core Course ¹ Spring Core Course ¹ <td>5 116 Programming I <i>(fall only)</i></td> <td>3</td> <td>CIS 117 Programming II (spring only)</td> <td>3</td>	5 116 Programming I <i>(fall only)</i>	3	CIS 117 Programming II (spring only)	3		
Core Course ¹ (ENGL 110 Academic Writing) 3 Core Course ¹ (CSEM 100 Quest for Meaning) HCE 101 Holy Cross Experience 1 16 Summer Credits Systems (fall only) Cis 244 Structured Programming (fall only) Cis 244 Structured Programming (fall only) Cis 244 Structured Programming (fall only) Cis 251 WEB-based Info. Systems (spring only) Cis 255 Geographic Info. Systems (fall only) Core Course ¹ <td <="" colspan="2" td=""><td>SB 110 Intro. To Financial Reporting</td><td>3</td><td>MSB 120^{PR} Intro. to Management Acct. & Plan.</td><td>3</td></td>	<td>SB 110 Intro. To Financial Reporting</td> <td>3</td> <td>MSB 120^{PR} Intro. to Management Acct. & Plan.</td> <td>3</td>		SB 110 Intro. To Financial Reporting	3	MSB 120 ^{PR} Intro. to Management Acct. & Plan.	3
HCE 101 Holy Cross Experience 1 16 Summer Credits Fall Credits CIS 244 Structured Programming (fall only) 3 CIS 255 Geographic Info. Systems (fall only) CIS 255 Geographic Info. Systems (fall only) 3 CIS 255 Geographic Info. Systems (fall only) Core Course ¹ 3 Core Course ¹ Summer Credits Spring CIS 351 Syst. Analysis, Design, & impl. 1 (fall only) 3 CIS 352 Stress Syst. Analysis, Design, & impl. II (sp. only) CIS 355 Data Communications I (fall only) 3 Core Course ¹ Core Course ¹ 3 Core Course ¹ Core Course ¹ 3 Core Course ¹ Stata Communications I (fall only) 3 Core Course ¹ Core Course ¹ 3 Core Course ¹	ATH 123 Finite Mathematics	3	Core Course ¹ (ARTS 100-149)	3		
Image: 16 Summer Credits Fall Credits Cl5 244 Structured Programming (fall only) 3 Cl5 245 Geographic Info. Systems (fall only) 3 Cl5 255 Geographic Info. Systems (fall only) 3 Core Course ¹ 3 Free Elective ³ 3 Tree Elective ³ 15 Summer Cis 497 Otsi Management (spr	re Course ¹ (ENGL 110 Academic Writing)	3	Core Course ¹ (CSEM 100 Quest for Meaning)	3		
Summer Credits Fall Credits CIS 244 Structured Programming (fall only) 3 CIS 255 Geographic Info. Systems (fall only) 3 CIS 255 Geographic Info. Systems (fall only) 3 Core Course ¹ 5 Summer Credits Soft Statistics Spring CIS 355 Pyst. Analysis, Design, & Impl. II (sp. only) CIS 355 Database Management Syst. (fall only) 3 Core Course ¹ 3 Free Elective ³ 3 Is Summer Credits	E 101 Holy Cross Experience	1				
Fall Credits Spring CIS 234 Structured Programming (fall only) 3 CIS 251 WEB-based Info. Systems (spring only) CIS 255 Geographic Info. Systems (fall only) 3 ECON 221 Bus. Statistics OR MATH 126 Statistics Core Course ¹ 3 Core Course ¹ Summer Credits Spring 15 Summer Cis 351 Syst. Analysis, Design, & Impl. I (fall only) 3 CIS 355 Data Communications I (fall only) 3 CIS 355 Database Management Syst. (fall only) 3 Core Course ¹ Core Course ¹ Summer Core Course ¹ <		16		15		
CIS 244 Structured Programming (fall only) 3 CIS 255 Geographic Info. Systems (fall only) CIS 255 Geographic Info. Systems (fall only) 3 ECON 221 Bus. Statistics <u>OR</u> MATH 126 Statistics Core Course ¹ 3 Core Course ¹ Summer Credits Spring CIS 351 Syst. Analysis, Design, & Impl. I (fall only) 3 CIS 352 ^{PR} Syst. Analysis, Design, & Impl. II (sp. only) CIS 355 Database Management Syst. (fall only) 3 Core Course ¹ Core Course ¹ Core Course ¹ 3 Core Course ¹ State Core Course ¹ State Core Course ¹ Free Elective ³ 3 Core Course ¹ State Core Course ¹ State Core Course ¹ Summer Credits State Core Course ¹	mmer	Credits				
CIS 244 Structured Programming (fall only) 3 CIS 251 WEB-based Info. Systems (spring only) CIS 255 Geographic Info. Systems (fall only) 3 ECON 221 Bus. Statistics OR MATH 126 Statistics Core Course ¹ 3 Core Course ¹ 3 Core Course ¹ 3 Core Course ¹ 5 Summer Credits Spring CIS 351 Syst. Analysis, Design, & Impl. II (sp. only) CIS 355 Database Management Syst. (fall only) 3 CIS 356 Patabase Management Syst. (fall only) 3 Core Course ¹ 3 Core Course ¹ Core Course ¹ Spring only) CIS 356 Database Management Syst. (fall only) 3 Core Course ¹ Spring only) Core Course ¹ 3 Core Course ¹ Spring only) Spring only Core Course ¹ 3 Core Course ¹ Spring only Spring only Core Course ¹ 3 Core Course ¹ Spring	II	Credits	Spring	Credi		
CIS 255 Geographic Info. Systems (fall only) 3 ECON 221 Bus. Statistics OR MATH 126 Statistics Core Course ¹ 3 Core Course ¹ IS Summer Credits Syst. Analysis, Design, & Impl. I (fall only) 3 CIS 352 ^{PR} Syst. Analysis, Design, & Impl. II (sp. only) CIS 355 Database Management Syst. (fall only) 3 CIS 356 Database Management Syst. (fall only) Core Course ¹ 3 Core Course ¹ Core Course ¹ Free Elective ³ IS Summer Credits Core Course ¹ IS Core Course ¹ IS Core Course ¹ Core Course ¹ Core Course ¹ IS Core Course ¹ Core Course ¹				3		
Core Course ¹ 3 Core Course ¹ Summer Credits Spring CIS 351 Syst. Analysis, Design, & Impl. I (fall only) 3 CIS 352 ^{pn} Syst. Analysis, Design, & Impl. II (sp. only) CIS 355 Database Management Syst. (fall only) 3 Core Course ¹ CiS 355 Database Management Syst. (fall only) 3 Core Course ¹ Core Course ¹ 3 Core Course ¹ Core Course ¹ 3 Core Course ¹ Free Elective ³ 3 Free Elective ³ IS IS Spring CIS 471 Global Information Systems (fall only) 3 CiS 472 IT Project Management (spring only) CIS 471 Global Information Systems (fall only) 3 Cis 472 IT Project Management (spring only) Cis 471 Global Information Systems (fall only) 3 Cis 472 IT Project Management (spring only) Cis 471 Global Information Systems (fall only) 3 Cis 472 IT Project Management (spring only) Core Course ¹				3		
Core Course ¹ 3 Core Course ¹ Core Course ¹ 3 Core Course ¹ Is Summer Credits Cls 351 Syst. Analysis, Design, & Impl. I (fall only) 3 CIS 352 P ^R Syst. Analysis, Design, & Impl. II (sp. only) CIS 355 Data Communications I (fall only) 3 CIS 356 Pata Communications II (spring only) CIS 355 Database Management Syst. (fall only) 3 Core Course ¹ Core Course ¹ 3 Core Course ¹ Free Elective ³ 3 Free Elective ³ Is Summer Credits Core Course ¹ Free Elective ³ Is Summer Credits Core Course ¹ Core Course ¹ Is Is Core Course ¹ Free Elective ³ Core Course ¹ Is Summer Core Course ¹ Is Is				3		
Core Course ¹ 3 Core Course ¹ 15 Summer Credits Fall Credits CIS 351 Syst. Analysis, Design, & Impl. 1 (fall only) 3 CIS 355 Data Communications 1 (fall only) 3 CIS 356 Database Management Syst. (fall only) 3 Core Course ¹ Core Course ¹ Core Course ¹ 3 Core Course ¹ Core Course ¹ Core Course ¹ 3 Free Elective ³ Free Elective ³ Is Summer Credits Summer Credits Spring Is Summer Credits Spring Credits Spring Credits Spring Credits Spring Credits Credits Core Course ¹ CiS 471 Global Information Systems (fall only) <td></td> <td>-</td> <td></td> <td>3</td>		-		3		
15 Summer Credits Fall Credits CIS 351 Syst. Analysis, Design, & Impl. I (fall only) 3 CIS 351 Syst. Analysis, Design, & Impl. I (fall only) 3 CIS 3551 Syst. Analysis, Design, & Impl. I (fall only) 3 CIS 355 Data Communications I (fall only) 3 Cis 355 Data Sommunications I (fall only) 3 Core Course ¹ Core Course ¹ Core Course ¹ 3 Free Elective ³ Core Course ¹ Free Elective ³ Tere Elective ³ 15 Summer Credits Fall Credits Spring CIS 471 Global Information Systems (fall only) 3 CIS 472 IT Project Management (spring only) CIS 471 Global Information Systems (fall only) 3 CIS 472 IT Project Management (spring only) CIS 471 Global Information Systems (fall only) 3 CIS 479 CIS Internship Core Course ¹ 3 CIS 479 CIS Internship Core Course ¹ 3 Core Course ¹				3		
Summer Credits Fall Credits Spring CIS 351 Syst. Analysis, Design, & Impl. 1 (fall only) 3 CIS 352 ^{PR} Syst. Analysis, Design, & Impl. 11 (sp. only) CIS 385 Data Communications 1 (fall only) 3 CIS 386 ^{PR} Data Communications II (spring only) CIS 355 Database Management Syst. (fall only) 3 Core Course ¹ Core Course ¹ 3 Core Course ¹ Free Elective ³ 3 Free Elective ³ 15 Summer Credits Fall Credits Spring CIS 471 Global Information Systems (fall only) 3 CIS 472 IT Project Management (spring only) CIS 471 Global Information Systems (fall only) 3 CIS 472 IT Project Management (spring only) CIS 471 Network Security (fall only) 3 CIS 472 IT Project Management (spring only) CIS 487 Network Security (fall only) 3 CIS 499 CIS Internship Core Course ¹ 3 Core Course ¹		5		5		
Fall Credits Spring CIS 351 Syst. Analysis, Design, & Impl. 1 (fall only) 3 CIS 352 ^{PR} Syst. Analysis, Design, & Impl. II (sp. only) CIS 385 Data Communications I (fall only) 3 CIS 386 ^{PR} Data Communications II (spring only) CIS 356 Database Management Syst. (fall only) 3 Core Course ¹ Core Course ¹ 3 Core Course ¹ Core Course ¹ 3 Core Course ¹ Free Elective ³ 3 Free Elective ³ Issummer Credits Fall Credits Spring CIS 471 Global Information Systems (fall only) 3 CIS 472 IT Project Management (spring only) CIS 487 Network Security (fall only) 3 CIS 499 CIS Internship Core Course ¹ 3 Core Course ¹				15		
Summer Credits Fall Credits CIS 471 Global Information Systems (fall only) 3 CIS 471 Global Information Systems (fall only) 3 CIS 487 Network Security (fall only) 3 Core Course ¹ 3	S 351 Syst. Analysis, Design, & Impl. I (fall only) S 385 Data Communications I (fall only) S 356 Database Management Syst. (fall only) rre Course ¹	3 3 3 3	CIS 352 ^{PR} Syst. Analysis, Design, & Impl. II (sp. only) CIS 386 ^{PR} Data Communications II (spring only) Core Course ¹ Core Course ¹	Cred 3 3 3 3 3 3		
FallCreditsSpringCIS 471 Global Information Systems (fall only)3CIS 472 IT Project Management (spring only)CIS 487 Network Security (fall only)3CIS 499 CIS InternshipCore Course13Core Course1		15		15		
CIS 471 Global Information Systems (fall only) 3 CIS 472 IT Project Management (spring only) CIS 487 Network Security (fall only) 3 CIS 499 CIS Internship Core Course ¹ 3 Core Course ¹	mmer	Credits				
CIS 487 Network Security (fall only) 3 CIS 499 CIS Internship Core Course ¹ 3 Core Course ¹				Cred		
Core Course ¹ 3 Core Course ¹				3		
		-		3		
Core Course ¹ 3 Free Elective ³	re Course ¹			3		
	- 1	-		3		
Free Elective ³ 3 Free Elective ³		3	Free Elective ³	3		
15				15		

NOTES:

¹Choose one course from each of the Core Requirements listed on the reverse side.

² Course may satisfy both a Major and a Core requirement. MATH 123 will satisfy the Quantitative Reasoning Core requirement.

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

 ${}^{\tt PR}\mbox{Course}$ has a prerequisite – check college catalog.