4 Catalog 2024-2025

# **Computer and Information Systems**

Bachelor of Science (BS.CIS)

<b>Core Require</b>	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 ECON 111, 112; GEOG 101, 102; PS 101, PSYC 101, SOC 101	- 3 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 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	45	

Major Requirements	Credits	Electives <sup>3</sup> / Other Requirements	
CIS 106 IT Methods & Procedures (fall only)	3	HCE 101 Holy Cross Experience	1
CIS 116 Programming I (fall only)	3	Free Elective <sup>3</sup>	3
CIS 117 Programming II (spring only)	3	Free Elective <sup>3</sup>	3
CIS 119 Spreadsheet Analysis (spring only)	3	Free Elective <sup>3</sup>	3
CIS 244 Structured Programming (fall only)	3	Free Elective <sup>3</sup>	3
CIS 251WEB-based Info. Systems (spring only)	3	Free Elective <sup>3</sup>	3
CIS 255 Geographic Info. Systems (fall only)	3		
CIS 351 Syst. Analysis, Design, & Impl. I (fall only)	3		
CIS 352 <sup>PR</sup> Syst. Analysis, Design, & Impl. II (sp only)	3		
CIS 356 Database Management Syst. (fallonly)	3		
CIS 385 Data Communications I (fall only)	3		
CIS 386 <sup>PR</sup> Data Communications II (spring only)	3		
CIS 471 Global Information Systems (fall only)	3		
CIS 472 IT Project Management (spring only)	3		
CIS 487 Network Security (fall only)	3		
CIS 499 CIS Internship	3		
MATH 123 <sup>2</sup> Finite Mathematics	3		
MSB 110 Intro. To Financial Reporting	3		
MSB 120 <sup>PR</sup> Intro. to Management Acct. & Plan.	3		
ECON 221 or MATH 126	3		
Total Major Credits	60	Total Elective / Other Credit	s 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 or 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.

Fall	Credits	Spring	Credi
CIS 106 IT Methods & Procedures (fall only)	3	CIS 119 Spreadsheet Analysis (spring only)	3
CIS 116 Programming I (fall only)	3	CIS 117 Programming II (spring only)	3
MSB 110 Intro. To Financial Reporting	3	MSB 120 <sup>PR</sup> Intro. to Management Acct. & Plan.	3
MATH 123 Finite Mathematics	3	Core Course <sup>1</sup> (ARTS 100-149)	3
Core Course <sup>1</sup> (ENGL 110 Academic Writing)	3	Core Course <sup>1</sup> (CSEM 100 Quest for Meaning)	3
HCE 101 Holy Cross Experience	1		
	16		15
Summer	Credits		
Fall	Credits	Spring	Cred
CIS 244 Structured Programming (fall only)	3	CIS 251 WEB-based Info. Systems (spring only)	3
CIS 255 Geographic Info. Systems (fall only)	3	ECON 221 Bus. Statistics OR MATH 126 Statistics	3
Core Course <sup>1</sup>	3	Core Course <sup>1</sup>	3
Core Course <sup>1</sup>	3	Core Course <sup>1</sup>	3
Core Course <sup>1</sup>	3	Core Course <sup>1</sup>	3
	15		15
Summer	Credits		
Fall CIS 351 Syst. Analysis, Design, & Impl. I (fall only)	Credits 3	Spring CIS 352 <sup>PR</sup> Syst. Analysis, Design, & Impl. II <i>(sp. only)</i>	
CIS 351 Syst. Analysis, Design, & Impl. I (fall only) CIS 385 Data Communications I (fall only) CIS 356 Database Management Syst. (fall only) Core Course <sup>1</sup>	3 3 3 3	CIS 352 <sup>PR</sup> Syst. Analysis, Design, & Impl. II (sp. only) CIS 386 <sup>PR</sup> Data Communications II (spring only) Core Course <sup>1</sup> Core Course <sup>1</sup>	3 3 3
CIS 351 Syst. Analysis, Design, & Impl. I (fall only) CIS 385 Data Communications I (fall only) CIS 356 Database Management Syst. (fall only)	3 3 3 3 3	CIS 352 <sup>PR</sup> Syst. Analysis, Design, & Impl. II (sp. only) CIS 386 <sup>PR</sup> Data Communications II (spring only) Core Course <sup>1</sup>	3 3 3 3
CIS 351 Syst. Analysis, Design, & Impl. I (fall only) CIS 385 Data Communications I (fall only) CIS 356 Database Management Syst. (fall only) Core Course <sup>1</sup> Free Elective <sup>3</sup>	3 3 3 3 3	CIS 352 <sup>PR</sup> Syst. Analysis, Design, & Impl. II (sp. only) CIS 386 <sup>PR</sup> Data Communications II (spring only) Core Course <sup>1</sup> Core Course <sup>1</sup>	3 3 3
CIS 351 Syst. Analysis, Design, & Impl. I (fall only) CIS 385 Data Communications I (fall only) CIS 356 Database Management Syst. (fall only) Core Course <sup>1</sup>	3 3 3 3 3	CIS 352 <sup>PR</sup> Syst. Analysis, Design, & Impl. II (sp. only) CIS 386 <sup>PR</sup> Data Communications II (spring only) Core Course <sup>1</sup> Core Course <sup>1</sup>	3 3 3
CIS 351 Syst. Analysis, Design, & Impl. I (fall only) CIS 385 Data Communications I (fall only) CIS 356 Database Management Syst. (fall only) Core Course <sup>1</sup> Free Elective <sup>3</sup>	3 3 3 3 3	CIS 352 <sup>PR</sup> Syst. Analysis, Design, & Impl. II (sp. only) CIS 386 <sup>PR</sup> Data Communications II (spring only) Core Course <sup>1</sup> Core Course <sup>1</sup>	3 3 3 3 1
CIS 351 Syst. Analysis, Design, & Impl. I (fall only) CIS 385 Data Communications I (fall only) CIS 356 Database Management Syst. (fall only) Core Course <sup>1</sup> Free Elective <sup>3</sup> Summer	3 3 3 3 3 15 Credits	CIS 352 <sup>PR</sup> Syst. Analysis, Design, & Impl. II (sp. only)  CIS 386 <sup>PR</sup> Data Communications II (spring only)  Core Course <sup>1</sup> Core Course <sup>1</sup> Free Elective <sup>3</sup>	3 3 3 3 1!
CIS 351 Syst. Analysis, Design, & Impl. I (fall only) CIS 385 Data Communications I (fall only) CIS 356 Database Management Syst. (fall only) Core Course <sup>1</sup> Free Elective <sup>3</sup> Summer	3 3 3 3 15 Credits	CIS 352 <sup>PR</sup> Syst. Analysis, Design, & Impl. II (sp. only)  CIS 386 <sup>PR</sup> Data Communications II (spring only)  Core Course <sup>1</sup> Core Course <sup>3</sup> Free Elective <sup>3</sup> Spring	3 3 3 3 1!
CIS 351 Syst. Analysis, Design, & Impl. I (fall only) CIS 385 Data Communications I (fall only) CIS 356 Database Management Syst. (fall only) Core Course <sup>1</sup> Free Elective <sup>3</sup> Summer  Fall CIS 471 Global Information Systems (fall only)	3 3 3 3 3 15 Credits	CIS 352 <sup>PR</sup> Syst. Analysis, Design, & Impl. II (sp. only)  CIS 386 <sup>PR</sup> Data Communications II (spring only)  Core Course <sup>1</sup> Core Course <sup>3</sup> Free Elective <sup>3</sup> Spring  CIS 472 IT Project Management (spring only)	Crec 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
CIS 351 Syst. Analysis, Design, & Impl. I (fall only) CIS 385 Data Communications I (fall only) CIS 356 Database Management Syst. (fall only) Core Course <sup>1</sup> Free Elective <sup>3</sup> Summer  Fall CIS 471 Global Information Systems (fall only) CIS 487 Network Security (fall only)	3 3 3 3 3 15 Credits  Credits 3 3	CIS 352 <sup>PR</sup> Syst. Analysis, Design, & Impl. II (sp. only)  CIS 386 <sup>PR</sup> Data Communications II (spring only)  Core Course <sup>1</sup> Core Course <sup>1</sup> Free Elective <sup>3</sup> Spring  CIS 472 IT Project Management (spring only)  CIS 499 CIS Internship	3 3 3 3 3 1!  Cree 3 3 3 3 3 3
CIS 351 Syst. Analysis, Design, & Impl. I (fall only) CIS 385 Data Communications I (fall only) CIS 356 Database Management Syst. (fall only) Core Course <sup>1</sup> Free Elective <sup>3</sup> Summer  Fall CIS 471 Global Information Systems (fall only) CIS 487 Network Security (fall only) Core Course <sup>1</sup>	3 3 3 3 3 15 Credits  Credits 3 3 3 3	CIS 352 <sup>PR</sup> Syst. Analysis, Design, & Impl. II (sp. only)  CIS 386 <sup>PR</sup> Data Communications II (spring only)  Core Course <sup>1</sup> Core Course <sup>1</sup> Free Elective <sup>3</sup> Spring  CIS 472 IT Project Management (spring only)  CIS 499 CIS Internship  Core Course <sup>1</sup>	3 3 3 3 3 1!  Cree 3 3 3 3
CIS 351 Syst. Analysis, Design, & Impl. I (fall only) CIS 385 Data Communications I (fall only) CIS 356 Database Management Syst. (fall only) Core Course <sup>1</sup> Free Elective <sup>3</sup> Summer  Fall CIS 471 Global Information Systems (fall only) CIS 487 Network Security (fall only) Core Course <sup>1</sup> Core Course <sup>1</sup>	3 3 3 3 3 15 Credits  Credits 3 3 3 3 3 3	CIS 352 <sup>PR</sup> Syst. Analysis, Design, & Impl. II (sp. only)  CIS 386 <sup>PR</sup> Data Communications II (spring only)  Core Course <sup>1</sup> Core Course <sup>1</sup> Free Elective <sup>3</sup> Spring  CIS 472 IT Project Management (spring only)  CIS 499 CIS Internship  Core Course <sup>1</sup> Free Elective <sup>3</sup>	33 33 33 31 11 Crec 33 33 33

### NOTES:

 $<sup>^{1}\!\</sup>text{Choose}$  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 123 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.

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