

Computer Science

120 credit hours total

YEAR 1		YEAR 2		YEAR 3		YEAR 4	
FALL	SPRING	FALL	SPRING	FALL	SPRING	FALL	SPRING
<p>*MATH 220 (4)</p> <p>Analytic Geometry and Calculus I</p> <p>KSC-3</p>	<p>MATH 221 (4)</p> <p>Analytic Geometry and Calculus II</p> <p>PR: MATH 220 ≥ C</p>	<p>CIS 300 (3)</p> <p>Data and Program Structures</p> <p>PR: MATH 205 or 220, CIS 200 ≥ C</p>	<p>MATH 510 (3)</p> <p>Discrete Mathematics</p> <p>PR: MATH 221 ≥ C</p>	<p>CIS 450 (3)</p> <p>Computer Architecture and Operations</p> <p>PR: ECE 241 ≥ C PR/CO: CIS 308 ≥ C</p>	<p>STAT 510 (3)</p> <p>Introductory Probability and Statistics I</p> <p>PR: MATH 221</p>	<p>▲ Elective (3)</p> <p>Systems</p>	<p>▲ Elective (3)</p> <p>Capstone</p>
<p>CIS 115 (2)</p> <p>Introduction to Computing Science</p> <p>PR/CO: CIS 116</p>	<p>CIS 200 (4)</p> <p>Programming Fundamentals</p> <p>PR: CIS 116 ≥ C PR/CO: MATH 205 or 220 ≥ C</p>	<p>CIS 301 (3)</p> <p>Logical Foundations of Programming</p> <p>PR: CIS 200 ≥ C</p>	<p>CIS 308 (1)</p> <p>C Language Laboratory</p> <p>PR: CIS 300 ≥ C</p>	<p>CIS 501 (3)</p> <p>Software Architecture and Design</p> <p>PR: CIS 400 ≥ C</p>	<p>CIS 415 (3)</p> <p>Ethics and Conduct for Computing Professionals</p> <p>PR: CIS 300 ≥ C, JR Standing</p>	<p>▲ Elective (3)</p> <p>Technical</p>	<p>▲ Elective (3)</p> <p>Technical</p>
<p>CIS 116 (1)</p> <p>Introduction to Programming</p> <p>PR: MATH 100</p>	<p>ECE 241 (3)</p> <p>Introduction to Electrical and Computer Engineering</p>	<p>* Elective (4)</p> <p>Natural Science with Laboratory</p> <p>KSC-4</p>	<p>CIS 400 (3)</p> <p>Object-Oriented Design, Implementation and Testing</p> <p>PR: CIS 300 ≥ C</p>	<p>CIS 505 (3)</p> <p>Introduction to Programming Languages</p> <p>PR: CIS 400 ≥ C</p>	<p>CIS 560 (3)</p> <p>Database System Concepts</p> <p>PR: CIS 300/301 ≥ C PR/CO: MATH 510 ≥ C</p>	<p>▲ Elective (3)</p> <p>Math</p>	<p>▲ Elective (3)</p> <p>Upper Division</p>
<p>* ENGL 100 (3)</p> <p>Expository Writing I</p> <p>KSC-1</p>	<p>* ENGL 200 (3)</p> <p>Expository Writing II</p> <p>KSC-1 PR: ENGL 100</p>	<p>Elective (4)</p> <p>Unrestricted</p>	<p>▲ Elective (3)</p> <p>Communications</p>	<p>▲ Elective (3)</p> <p>Technical Writing</p>	<p>CIS 575 (3)</p> <p>Introduction to Algorithm Analysis</p> <p>PR: CIS 300/301 ≥ C PR: MATH 510 ≥ C</p>	<p>* Elective (3)</p> <p>Arts and Humanities</p> <p>KSC-6</p>	<p>▲ Elective (3)</p> <p>Upper Division</p>
<p>* COMM 106 (3)</p> <p>Public Speaking</p> <p>KSC-2</p>			<p>* Elective (3)</p> <p>Arts and Humanities</p> <p>KSC-6</p>	<p>* Elective (3)</p> <p>Social and Behavioral Sciences</p> <p>KSC-5</p>	<p>* Elective (3)</p> <p>Institutional</p> <p>KSC-7</p>	<p>* Elective (3)</p> <p>Institutional</p> <p>KSC-7</p>	<p>▲ Elective (3)</p> <p>Upper Division</p>
<p>* Elective (3)</p> <p>Social and Behavioral Sciences</p> <p>KSC-5</p>			<p>Elective (3)</p> <p>Unrestricted</p>				

(16 credit hours)

(14 credit hours)

(14 credit hours)

(16 credit hours)

(15 credit hours)

(15 credit hours)

(15 credit hours)

(15 credit hours)

KEY

- ▣ = Prerequisite for another course
- PR = Prerequisite requirement
- PR/CO = Prerequisite or concurrent requirement
- * = K-State Core (KSC) course
- ▲ = See department approved electives
- = Only offered in the semester shown

Computer Science Curriculum Notes

A grade of C or better is required for prerequisites to all CIS courses taken.

Students who satisfy all or part of K-State Core Electives with courses that satisfy other degree requirements may use additional unrestricted electives to meet the degree requirement of 120 credit hours.

Math and technical electives must have departmental approval if not already on the approved list.

Additional information and elective lists are available at cs.k-state.edu/academics/undergraduate/computer-science.

K-State Core

The K-State Core (KSC) is the university's version of the systemwide general education framework established by the Kansas Board of Regents.

KSC requirement 1 – English (6 hours)

KSC requirement 2 – Communications (3 hours)

KSC requirement 3 – Math and Statistics (3 hours)

KSC requirement 4 – Natural and Physical Sciences (4-5 hours)

KSC requirement 5* – Social and Behavioral Sciences (6 hours)

KSC requirement 6* – Arts and Humanities (6 hours)

KSC requirement 7 – Institutional Electives (6 hours)

To view course lists for each requirement, visit k-state.edu/general-education.

**Requires two courses from two different subject areas.*