Computer Science, BS, and Cybersecurity, BS

Kansas State University

Johnson County Community College Transfer Program to the Kansas State University	College of Engineering Student Services
College of Engineering	785-532-5592
Computer Science, BS ;Cybersecurity, BS	engineering@k-state.edu
Academic Year 2025-2026	engg.ksu.edu/academics/undergraduate/

Program Description

Computer science is the study of computing and its possibilities, ranging from theoretical foundations to applications in business, society and the sciences. The Bachelor of Science in Computer Science degree program emphasizes a broad foundation of computer organization, software engineering, distributed computing systems, data structures, programming environments and mathematics, together with electives that focus on advanced aspects and applications. An entrepreneurship option prepares graduates for entrepreneurial activities that are common in the computing industry.

Cybersecurity is the study of processes for protecting systems, networks, programs and information from digital attacks. The Bachelor of Science in Cybersecurity degree program emphasizes a broad foundation of computer science with in-depth study of principles and practices for secure computing.

Admission Requirements

- **Admissions -** Applicants must first be admitted to Kansas State University either as an incoming freshman or a transfer student. To apply for admission to Kansas State University, complete an online application (https://www.k-state.edu/admissions/) and have official transcripts from all previous colleges sent directly to the Office of Admissions, Kansas State University, 119 Anderson Hall, Manhattan, KS, 66505-0102, or faxed to 785-532-6393 or emailed via electronic transcript service to k-state@k-state.edu. (k-state@k-state.edu) For students transferring to K-State with fewer than 24 credit hours, please also send final high school transcript and ACT or SAT scores.
- Admission to the College of Engineering is selective. Declaration of the desired curriculum in the College of Engineering does not guarantee admission into the degree program selected. Visit the College of Engineering (https://engg.k-state.edu/academics/admissions/) for current admission information.
- Students not admitted to the College of Engineering can enter the university Open Option program or another available college/degree program. These students can still apply to enter the College of Engineering at a later date after they have completed one full-time semester at K-State as an internal transfer student.
- **Grade requirements -** In addition to the university standards and policies for grades, the College of Engineering has the following standards:
- **Curricula grades -** See the individual engineering department sections of the K-State Undergraduate Catalog (https://catalog.k-state.edu/) for the grade requirements for their curriculum and degree. All courses applied to degree requirements require a letter grade except for 0-credit hour assembly courses.
- **DirectLink** - an initiative between Kansas community colleges and Kansas State University to provide future transfer students with support as they prepare to make the transition to K-State. Visit DirectLink (https://apply2.ksu.edu/register/directlink/) to register.
- **Transferability of Courses -** Many of the fundamental courses required for a degree in engineering may be obtained through pre-engineering programs at other four-year institutions or at community colleges. However, there are differences among the curricula; students electing this route should work closely with their pre-engineering advisors**. Students should be aware that only half of the total Bachelor of Science degree credits may be earned at a two-year school, at least 30 credit hours must be K-State credit hours, and 20 of the last 30 must be K-State credit hours.** Only courses with a grade of A, B or C will be applicable toward engineering degree requirements. *The Cr and D grades are not acceptable for transfer into College of Engineering programs.*
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- Some K-State courses in the curriculum do not have an equivalent course at all other institutions. Visit the K-State Undergraduate Catalog (https://catalog.k-state.edu/) for details and lists of courses. To learn more about academic credit for prior learning and advanced credit, please visit K-State Advanced Standing (https://www.k-state.edu/admissions/undergrad/manhattan/apply/policies-requirements/advanced-standing-credit/) credit options.
- To determine which courses at a particular college or university will substitute for courses at K-State, visit Transfer Equivalency (https://go.k-state.edu/equiv/) on the K-State website.
- Students transferring to KSU, that complete the General Education requirements required for the Associate of Arts (AA) (https://catalog.jccc.edu/degreerequirements/associate-arts/), Associate of Fine Arts (AFA) (https://catalog.jccc.edu/degreerequirements/associate-fine-arts/) or Associate of Science (AS) (https://catalog.jccc.edu/degreerequirements/associate-science/) degree from JCCC will be considered to have satisfied KSU's core general education curriculum.
- Students who transfer to KSU, without completing the General Education requirements required for the Associate of Arts (AA) (https://catalog.jccc.edu/degreerequirements/associate-arts/), Associate of Fine Arts (AFA) (https://catalog.jccc.edu/degreerequirements/associate-fine-arts/) or Associate of Science (AS) (https://catalog.jccc.edu/degreerequirements/associate-science/) degree will have courses evaluated on a course-by-course basis toward meeting KSU requirements. To learn more about courses that satisfy KSU Core Requirements (https://catalog.k-state.edu/content.php?catoid=60&navoid=12133) and KSU Transfer Equivalency Tool (https://www.k-state.edu/admissions/undergrad/manhattan/apply/transfer/tools/course-search.html).
- Visit the KSU Core General Education Guide (https://nam12.safelinks.protection.outlook.com/?url=http%3A%2F%2Fnextcatalog.jccc.edu%2Ftransfer-guides%2Fk-state%2Fk-state-general-education&data=05%7C02%7Cskhalif2%40jccc.edu%7C3bbbe8fc84564328cf7008de1320415e%7C15244239dcf245e7aefd127b69fc5438%7C1%7C0%7C638969226426376370%7CUnknown%7CTWFpbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIlYiOiIwLjAuMDAwMCIsIlAiOiJXaW4zMiIsIkFOIjoiTWFpbCIsIldUIjoyfQ%3D%3D%7C0%7C%7C%7C%7C&sdata=p6L6HF0HBpB3aL3uFUWnztw8qzBp%2FiSMV2qlS%2FvLwxE%3D&reserved=0) for JCCC equivalents.

Program Requirements

Computer Science (CS) (B.S.) 120 hours required for the KSU B.S. degree

The curriculum for this major assumes students enter college prepared to take Calculus.

2025-26 Catalog

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Course Code	Course Title	Course Hours	Transfer Code	Transfer Title	Transfer Hours
Code	**Title**	**Hours**			
K-State Core					
English (two courses) Visit the KSU Core General Education guide for JCCC equivalents.					
Communications Visit the KSU Core General Education guide for JCCC equivalents.					
Math and Statistics					
MATH 241	Calculus I*	5	MATH 220	Analytic Geometry Calc I	4
Natural and Physical Sciences Visit the KSU Core General Education guide for JCCC equivalents.					
Social and Behavioral Sciences (Select two courses in two subject areas) Visit the KSU Core General Education guide for JCCC equivalents.					
Arts and Humanities (Select two courses in two subject areas) Visit the KSU Core General Education guide for JCCC equivalents.					
Free Electives (Any 100 or 200 level courses may apply) Visit the KSU Core General Education guide for JCCC equivalents.					

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Course Code	Course Title	Course Hours	Transfer Code	Transfer Title	Transfer Hours
Code	**Title**	**Hours**			
CS 134	Programming Fundamentals	4	CIS 115 Introduction to Computing Science AND CIS 116 Introduction to Programming		
Select one of the following:					
CS 200	Concepts of Programming Algorithms Using C++*	4	CIS 200 Programming Fundamentals		
CS 201	Concepts of Programming Algorithms using C#*	4	CIS 200 Programming Fundamentals		
CS 202	Concepts of Programming Algorithms using Python*	4	CIS 200 Programming Fundamentals		
CS 205	Concepts of Programming Algorithms using Java*	4	CIS 200 Programming Fundamentals		
MATH 242	Calculus II*	5	MATH 221	Analytic Geometry Calc II	4
MATH 243	Calculus III*	5	MATH 222	Analytic Geometry Calc III	4

* JCCC course has a prerequisite or corequisite.

Cybersecurity (CYS) (B.S.) 120 hours required for the K-State B.S. degree

The curriculum for this major assumes students enter college prepared to take Calculus.

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Code	**Title**	**Hours**			
K-State Core					
English (two courses) Visit the KSU Core General Education guide for JCCC equivalents.					
Communications Visit the KSU Core General Education guide for JCCC equivalents.					
Math and Statistics					
MATH 241	Calculus I*	5	MATH 220	Analytic Geometry Calc I	4
Natural and Physical Sciences					
Select one of the following:					
PHYS 130	College Physics I*	5	PHYS 113	General Physics I	4
PHYS 220	Engineering Physics I*	5	PHYS 213	Engineering Physics I	5
Social and Behavioral Sciences (Select two courses in two subject areas – 6 hours total) Visit the KSU Core General Education guide for JCCC equivalents.					
SOC 122	Introduction to Sociology	3	SOCIO 211 Introduction to Sociology		
Arts and Humanities (Select two courses in two subject areas) Visit the KSU Core General Education guide for JCCC equivalents.					
Free Electives (Any 100 or 200 level courses may apply) Visit the KSU Core General Education guide for JCCC equivalents.					

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Code	**Title**	**Hours**			
CS 134	Programming Fundamentals	4	CIS 115 Introduction to Computing Science AND CIS 116 Introduction to Programming		
Select one of the following:					
CS 200	Concepts of Programming Algorithms Using C++*	4	CIS 200 Programming Fundamentals		
CS 201	Concepts of Programming Algorithms using C#*	4	CIS 200 Programming Fundamentals		
CS 202	Concepts of Programming Algorithms using Python*	4	CIS 200 Programming Fundamentals		
CS 205	Concepts of Programming Algorithms using Java*	4	CIS 200 Programming Fundamentals		
MATH 242	Calculus II*	5	MATH 221	Analytic Geometry Calc II	4
MATH 243	Calculus III*	5	MATH 222	Analytic Geometry Calc III	4
Select one of the following:					
PHYS 131	College Physics II*	5	PHYS 114	General Physics II	4
PHYS 221	Engineering Physics II*	5	PHYS 214	Engineering Physics II	5

* JCCC course has a prerequisite or corequisite.

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