COMPUTER SCIENCE - B.A.

College of Arts and Sciences
Department of Computer Science
www.kent.edu/cs

About This Program

The Bachelor of Arts in Computer Science program provides a solid foundation in computer science principles and hands-on experience with industry-standard tools. With access to cutting-edge facilities and expert faculty, you will gain the skills needed to thrive in the tech industry. Read more...

Contact Information

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- Speak with an Advisor
  - Kent Campus
  - Stark Campus
- Chat with an Admissions Counselor: Kent Campus | Regional Campuses

Program Delivery

- **Delivery:**
  - In person
- **Location:**
  - Kent Campus
  - Stark Campus

Admission Requirements

The university affirmatively strives to provide educational opportunities and access to students with varied backgrounds, those with special talents and adult students who graduated from high school three or more years ago.

First-Year Students on the Kent Campus: First-year admission policy on the Kent Campus is selective. Admission decisions are based upon cumulative grade point average, strength of high school college preparatory curriculum and grade trends. Students not admissible to the Kent Campus may be administratively referred to one of the seven regional campuses to begin their college coursework. For more information, visit the admissions website for first-year students.

First-Year Students on the Regional Campuses: First-year admission to Kent State's campuses at Ashtabula, East Liverpool, Geauga, Salem, Stark, Trumbull and Tuscarawas, as well as the Twinsburg Academic Center, is open to anyone with a high school diploma or its equivalent. For more information on admissions, contact the Regional Campuses admissions offices.

International Students: All international students must provide proof of English language proficiency (unless they meet specific exceptions) by earning a minimum 525 TOEFL score (71 on the Internet-based version), minimum 75 MELAB score, minimum 6.0 IELTS score or minimum 48 PTE Academic score, or by completing the ELS level 112 Intensive Program. For more information, visit the admissions website for international students.

Transfer Students: Students who have attended any other educational institution after graduating from high school must apply as undergraduate transfer students. For more information, visit the admissions website for transfer students.

Former Students: Former Kent State students or graduates who have not attended another college or university since Kent State may complete the reenrollment or reinstatement form on the University Registrar's website.

Admission policies for undergraduate students may be found in the University Catalog's Academic Policies.

Some programs may require that students meet certain requirements before progressing through the program. For programs with progression requirements, the information is shown on the program's Coursework tab.

Program Requirements

Major Requirements

Code	Title	Credit Hours
Major Requirements (courses count in major GPA)		
CS 13001	COMPUTER SCIENCE I: PROGRAMMING AND PROBLEM SOLVING (min C grade in all) [1]	4
or CS 13011 & CS 13012	COMPUTER SCIENCE IA: PROCEDURAL PROGRAMMING and COMPUTER SCIENCE IB: OBJECT ORIENTED PROGRAMMING	
CS 23001	COMPUTER SCIENCE II: DATA STRUCTURES AND ABSTRACTION (min C grade)	4
CS 23022	DISCRETE STRUCTURES FOR COMPUTER SCIENCE	3
CS 33101	STRUCTURE OF PROGRAMMING LANGUAGES	3
CS 33211	OPERATING SYSTEMS	3
CS 33901	SOFTWARE ENGINEERING	3
CS 35101	COMPUTER ORGANIZATION	3
CS 44901	SOFTWARE DEVELOPMENT PROJECT (ELR) (WIC) [2]	4
Computer Science (CS) Upper-Division Electives (30000 or 40000 level) [3]		6
Computer Science (CS) Upper-Division Electives (40000 level) [3]		9
Additional Requirements (courses do not count in major GPA)		
UC 10001	FLASHES 101	1
Foreign Language (see Foreign Language College Requirement below)		14-16
Mathematics Elective, choose from the following:		3-5
MATH 10675	ALGEBRA FOR CALCULUS BOOST (KMCR)	
MATH 10775	ALGEBRA FOR CALCULUS PLUS (KMCR)	
MATH 11010	ALGEBRA FOR CALCULUS (KMCR)	
MATH 11022	TRIGONOMETRY (KMCR)	
MATH 12002	ANALYTIC GEOMETRY AND CALCULUS I (KMCR)	
MATH 12011	CALCULUS WITH PRECALCULUS I (KMCR)	
Kent Core Composition		6
Kent Core Humanities and Fine Arts (minimum one course from each)		9
Kent Core Social Sciences (must be from two disciplines)		6
Kent Core Basic Sciences (must include one laboratory)		6-7
Kent Core Additional		6
General Electives (total credit hours depends on earning 120 credit hours, including 39 upper-division credit hours)		27
Minimum Total Credit Hours:		**120**

[1] Students who meet the prerequisite for CS 13001 should take the course during semester one.
[2] A minimum C grade must be earned to fulfill the writing-intensive requirement.
[3] Students may apply a maximum 3 credit hours of CS 33192 and a maximum 6 credit hours of CS 49996, CS 49998 or a combination of the two courses to fulfill Computer Science (CS) electives. Please note that some Computer Science (CS) elective courses have math prerequisites that are not required in the B.A. degree. Please ensure that you have taken the necessary math courses before enrolling in these elective courses.

Graduation Requirements

Minimum Major GPA	Minimum Overall GPA
2.000	2.000

- A minimum C grade may be required in some courses

Foreign Language College Requirement, B.A.

Students pursuing the Bachelor of Arts degree in the College of Arts and Sciences must complete 14-16 credit hours of foreign language.[1]
To complete the requirement, students need the equivalent of Elementary I and II in any language, plus one of the following options[2]:

1. Intermediate I and II of the same language
2. Elementary I and II of a second language
3. Any combination of two courses from the following list:

    - Intermediate I of the same language
    - ARAB 21401
    - ASL 19401
    - CHIN 25421
    - MCLS 10001
    - MCLS 20001
    - MCLS 20091
    - MCLS 21417
    - MCLS 21420
    - MCLS 22217
    - MCLS 28403
    - MCLS 28404

[1] All students with prior foreign language experience should take the foreign language placement test to determine the appropriate level at which to start. Some students may start beyond the Elementary I level and will complete the requirement with fewer credit hours and fewer courses. This may be accomplished by (1) passing a course beyond Elementary I through Intermediate II level; (2) receiving credit through one of the alternative credit programs offered by Kent State University; or (3) demonstrating language proficiency comparable to Elementary II of a foreign language. When students complete the requirement with fewer than 14 credit hours and four courses, they will complete remaining credit hours with general electives.
[2] Certain majors, concentrations and minors may require specific languages, limit the languages from which a student may choose or require coursework through Intermediate II. Students who plan to pursue graduate study may need particular language coursework.

Roadmap

This roadmap is a recommended semester-by-semester plan of study for this major. However, courses designated as critical (!) must be completed in the semester listed to ensure a timely graduation.

	Semester One		Credits
	UC 10001	FLASHES 101	1
	Mathematics Elective		3-5
	Kent Core Requirement		3
	Kent Core Requirement		3
	Kent Core Requirement		3
		Credit Hours	**13**
	Semester Two		
!	CS 13001 or CS 13011 ***and*** CS 13012	COMPUTER SCIENCE I: PROGRAMMING AND PROBLEM SOLVING or COMPUTER SCIENCE IA: PROCEDURAL PROGRAMMING ***and*** COMPUTER SCIENCE IB: OBJECT ORIENTED PROGRAMMING	4
	Kent Core Requirement		3
	Kent Core Requirement		3
	Kent Core Requirement		3
	Kent Core Requirement		3
		Credit Hours	**16**
	Semester Three		
!	CS 23001	COMPUTER SCIENCE II: DATA STRUCTURES AND ABSTRACTION	4
!	CS 23022	DISCRETE STRUCTURES FOR COMPUTER SCIENCE	3
!	CS 35101	COMPUTER ORGANIZATION	3
	Foreign Language		4
	Kent Core Requirement		3
		Credit Hours	**17**
	Semester Four		
!	CS 33101	STRUCTURE OF PROGRAMMING LANGUAGES	3
!	CS 33211	OPERATING SYSTEMS	3
	Computer Science (CS) Upper-Division Elective (30000 or 40000 level)		3
	Foreign Language		4
	Kent Core Requirement		3
		Credit Hours	**16**
	Semester Five		
	CS 33901	SOFTWARE ENGINEERING	3
	Computer Science (CS) Upper-Division Elective (30000 or 40000 level)		3
	Foreign Language		3
	Kent Core Requirement		3
	Kent Core Requirement		3
		Credit Hours	**15**
	Semester Six		
	Computer Science (CS) Upper-Division Elective (40000 level)		3
	Foreign Language		3
	General Electives		9
		Credit Hours	**15**
	Semester Seven		
	Computer Science (CS) Upper-Division Elective (40000 level)		3
	General Electives		12
		Credit Hours	**15**

	Semester Eight		
!	CS 44901	SOFTWARE DEVELOPMENT PROJECT (ELR) (WIC)	4
	Computer Science (CS) Upper-Division Elective (40000 level)		3
	General Electives		6
		Credit Hours	**13**
		Minimum Total Credit Hours:	**120**

University Requirements

All students in a bachelor's degree program at Kent State University must complete the following university requirements for graduation.

NOTE: University requirements may be fulfilled in this program by specific course requirements. Please see Program Requirements for details.

Flashes 101 (UC 10001)	1 credit hour
Course is not required for students with 30+ transfer credits (excluding College Credit Plus) or age 21+ at time of admission.	
Diversity Domestic/Global (DIVD/DIVG)	2 courses
Students must successfully complete one domestic and one global course, of which one must be from the Kent Core.	
Experiential Learning Requirement (ELR)	varies
Students must successfully complete one course or approved experience.	
Kent Core (see table below)	36-37 credit hours
Writing-Intensive Course (WIC)	1 course
Students must earn a minimum C grade in the course.	
Upper-Division Requirement	39 credit hours
Students must successfully complete 39 upper-division (numbered 30000 to 49999) credit hours to graduate.	
Total Credit Hour Requirement	120 credit hours

Kent Core Requirements

Kent Core Composition (KCMP)	6
Kent Core Mathematics and Critical Reasoning (KMCR)	3
Kent Core Humanities and Fine Arts (KHUM/KFA) (min one course each)	9
Kent Core Social Sciences (KSS) (must be from two disciplines)	6
Kent Core Basic Sciences (KBS/KLAB) (must include one laboratory)	6-7
Kent Core Additional (KADL)	6
Total Credit Hours:	**36-37**

Program Learning Outcomes

Graduates of this program will be able to:

1. Understand the essential facts, concepts, principles and theories relating to computer science.
2. Apply computer science concepts to solve computer-related problems.
3. Analyze algorithms, computer science methods and techniques.
4. Analyze and plan the development of a typical professional computer science problem.
5. Make succinct oral presentations and written expositions about technical problems and their solutions.
6. Work effectively as a member of a software development team.

Full Description

The Bachelor of Arts degree in Computer Science is designed for students who seek a liberal arts education combined with a solid foundation in computer science. Students may choose electives from any complementary liberal arts program beyond computer science.

Students have the option to have a double major to attain depth of knowledge across two related areas.