

TRANSFER ARTICULATION: COMPUTER SCIENCE

Computer Science is an inter-disciplinary field encompassing mathematics, logic, science, communication, and engineering. Fundamental to a study of Computer Science is the development of intellectual tools and practical skills in the design and implementation of technology-based solutions to real world scientific, business, and human problems. The Sam Houston State University undergraduate computer science degree program has been accredited by the Computing Accreditation Commission of the Accreditation Board for Engineering and Technology (CAC/ABET). Degrees programs include Computer Science, Digital Forensics, and Information Assurance.

The Computer Science program offers major study plans for students wishing to pursue careers as an analyst/designer/programmer/software engineer (scientific, engineering, business), as network and database administrators, as digital forensics and information security professionals, or to prepare for advanced studies at the graduate level. Minor study plans are offered, which can be tailored to the needs of students majoring in almost any field. A plan leading to secondary teacher certification in Computer Science is also offered.

Computer Science

Phone: (936).294-3846

Location: AB1 Room 214

Student Advising and Mentoring Center (<https://www.shsu.edu/centers/sam-center/>)

Phone: (936) 294-4444

TCCN Table inserted here.

The baccalaureate degree in Computer Science consists of 6 components:

- A 26-hour computer science core. This represents the body of knowledge that all computer science professionals should know.
- An 18-hour concentration. The department offers four concentrations, **computing science** (CS – writing operating systems, networking, end user applications e.g., office suites, etcetera), **information systems** (IS – business data processing, financial, inventory control, management, etcetera), **information assurance and security** (IA – security-oriented curriculum) and **Software Engineering**.
- A 16-hour science component. This comprises eight semester credit hours in each of two natural sciences. Physics (PHYS2425 & 2426) and sciences for majors and minors preferred to increase job opportunities.
- A 17-hour mathematics component including Calculus I/II and Discrete Mathematics. The scientific/engineering mathematics sequence provides access to all career opportunities including business. MATH 2413, MATH 2414, and MTH2395 must be completed prior to registering in upper division (junior and senior level) courses.
- A maximum of 66 transfer credit hours (“C” or better excluding kinesiology) may be applied to a degree at SHSU. Students should carefully select courses to complete the associate degree while minimizing the number of hours that might exceed the 66-hour cap for transfer credit
- **In addition to the major core above transfer students should complete all or as much as possible of the state mandated 42-hour core curriculum** including: Communications; Mathematics; Life & Physical Science; Language, Philosophy and Culture; Social and Behavioral Science; and Component Area Option if available. **Use your institutions 42-hour core as a guide maximizing courses in the above major core which are included in your institutions state mandated core.**
- For more information visit the Department of Computer Science. (<http://cs.shsu.edu/>)

The Core Curriculum (<http://catalog.shsu.edu/archives/2020-2021/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/>) at Sam Houston State University (to be used by all incoming students as of fall 2014) contains 42 semester credit hours, encompassing nine component areas. Each component area has a minimum credit hour requirement and a selection of specific courses that may be used to satisfy the requirement. The Core Curriculum (<http://catalog.shsu.edu/archives/2020-2021/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/>) details Sam Houston State University courses and their Texas Common Course Number (TCCN) equivalents for college transfer students which comprise SHSU’s core curriculum.

Many SHSU disciplines including the sciences, business, and education require specific courses from the SHSU core as degree specific graduation requirements. To minimize cost and time to complete degree requirements always select SHSU/transfer core courses specified as degree requirements in your intended major. If you have not decided on a major, select core courses supporting your intended area of academic concentration.

Prior to enrolling in core classes, students are encouraged to review specific degree requirements for their major. Selection of major-specified core courses reduces the total number of hours required for graduation.

If you do not see a Texas Common Course Number (TCCN) mapping a specific core course to your transfer institution, please go to Transfer Course Equivalency Guide (<https://ww2.shsu.edu/regr27wp/>) and select your institution from the drop-down menu. The result will list all currently mapped transfer courses from your institution to SHSU courses.