

MISSION STATEMENT

Texas College is a Historically Black College founded in 1894, by the Colored Methodist Episcopal Church, now the Christian Methodist Episcopal Church (CME). Our mission continues to embody the principles of the Christian Methodist Episcopal Church. The College shall prepare students with competencies in critical and creative thinking related to the knowledge, skills and abilities as defined in the areas of study using different modalities of instruction. Additionally, the College shall provide an environment to inspire intellectual, spiritual, ethical moral and social development, which empowers graduates to engage in life-long learning, leadership, and service. (Restated and approved by the Board of Trustees, October 24, 2024).

CORE VALUES

To address the mission, the College incorporates the core values of:

Academic Excellence - Developing a culture of curiosity and creativity that will challenge the frontiers of teaching/learning; stimulate research; raise the level of analytical reasoning and inquiry; and enable students to acquire leadership, human relations, communication, and technology skills.

Integrity - Instilling the pursuit of character, honesty, and sincerity of purpose as the moral rubrics upon which the behaviors of our graduates and College family are anchored.

Perseverance - Implanting diligence, enterprise, and pride in the application of skills, knowledge, and abilities developed during the course of study at Texas College.

Social Responsibility - Promoting in the College community a conscious awareness that we are all stewards of the resources entrusted to our care.

Tolerance - Emphasizing openness to divergent points of view, applying an eclectic approach to rational and analytical thinking.

Community Service - Encouraging self-extension in service to others as the heart and soul of our educational enterprise.

VISION STATEMENT

Texas College - a creative, culturally diverse, inclusive environment, preparing students who aspire to be purpose-driven, financially secure and marketable leaders.



CONTACT Us

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DIVISION OF NATURAL AND COMPUTATIONAL SCIENCES DEPARTMENT OF COMPUTER SCIENCE

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THE DIVISION OF NATURAL AND
COMPUTATIONAL SCIENCES

COMPUTER SCIENCE





WHAT IS COMPUTER SCIENCE?

Computer science is a discipline that spans theory and practice. It requires thinking both in abstract terms and in concrete terms. The practical side of computing can be seen everywhere. In the modern era, practically everyone is a computer user, and many people are even computer programmers. Getting computers to do what you want them to do requires intensive hands-on experience. But, computer science can be seen on a higher level, as a science of problem solving. Computer scientists must be adept at modeling and analyzing problems. They must also be able to design solutions and verify that they are correct. Problem solving requires precision, creativity, and careful reasoning.

Computer science also has strong connections to other disciplines. Many problems in science, engineering, health care, business, and other areas can be solved effectively with computers, but finding a solution requires both computer science expertise and knowledge of the particular application domain. Thus, computer scientists are oftentimes proficient in other subjects as well.

Computer science has a wide range of specialties, including computer architecture, software systems, graphics, computational science, artificial intelligence, and software engineering. Drawing from a common core of computer science knowledge, each specialty area focuses on particular challenges.

COMPUTER SCIENCE AT TEXAS COLLEGE

The Department of Computer Science at Texas College is diversified. The College's Computer Science program offers a hands-on-approach for learning with the latest technology available. The Computer Science program includes programming, graphics, micro-computer applications, game programming, and the latest, most innovative next-generation technology available. Texas College seeks to educate our student for a successful transition to graduate school in pursuit of a Master's and Ph.D. in the field.

Texas College's Computer Science program prepares you to compete in the career field. To be successful, you must be knowledgeable on the latest information and technologies, and Texas College ensure that you are.

CAREERS IN COMPUTER SCIENCE-RELATED FIELDS

Computer scientists are computer scientists because it is fun; however, there are also lucrative career opportunities! and preparation for graduate school, as well as several careers, such as:

- Systems Engineering
- Software Engineering
- Programming
- Computer Graphics
- Security and Cryptography
- Computational Science



WHY BECOME A COMPUTER SCIENCE MAJOR?

PERHAPS YOU HAVE A SMART PHONE

If so, you know inside that phone is a powerful computer. Someone has to develop all those apps. Our classes regularly have projects to implement what are called "graphical user interfaces" or "GUIs" that are the basis of apps.

DO YOU USE FACEBOOK?

Facebook supports more than 800 million users (yes, that's a lot of people!) sharing a billion (with a "B"!) pieces of content daily. How does it do that? Well, Facebook uses some really neat technology including Apache Hive to handle that volume of data. Apache Hive is free database software developed by computer scientists. And you can learn all about databases in our database course.

ARE YOU LOOKING FOR A GREAT JOB?

CNNMoney.com put out a poster using US Bureau of Labor Statistics data of the Best Jobs in America. What job was at the top? Systems Engineer, making more than the average college professor. Seven of the top "Best Jobs in America" are in computing. Software engineering was rated 2012's Top Job as well as America's Best Job of 2011.