

GRADUATE CERTIFICATE IN DATA ASSURANCE

The Data Assurance certificate provides students with a concentrated and in-depth exposure to the management, mining, and security concerns of enterprise database administrators enhancing their professional capability and employability. Individuals holding a baccalaureate degree in Computer Science, Management Information Systems, or a related field would be suitable candidates for this program.

This Graduate Certificate is eligible to receive Title IV funding – Direct Unsubsidized Loans and Graduate PLUS loans by request. To be considered for aid, students need to submit a Free Application for Federal Student Aid (FAFSA).

Additional information: Reference the Program Landing Page (<https://www.shsu.edu/programs/certificate/data-assurance/>) for additional information, such as cost, delivery format, contact information, or to schedule a visit.

Applicants seeking admission to the graduate certificate program in Data Assurance must submit the following directly to the Office of Graduate Admissions (<https://www.shsu.edu/dept/graduate-admissions/prospective-students.html>):

1. Graduate Application (<http://www.shsu.edu/admissions/apply-texas.html>)
2. Application fee (<http://www.shsu.edu/dept/graduate-studies/application-fee.html>)
3. Official transcript from the baccalaureate degree granting institution
4. Bachelor's degree in Computer Science or a closely related field with a minimum GPA of 3.0
5. Up-to-date Resume

Stem Requirement

At the minimum, students are expected to present a background comparable to that provided in the following courses as described in the Undergraduate Catalog of Sam Houston State University:

Prerequisite courses

Code	Title	Hours
Prerequisite Courses		
COSC 2327	Introduction to Computer Networks	3
COSC 3318	Data Base Management Systems	3
MATH 1420	Calculus I	4
STAT 3379	Statistical Methods in Practice	3

Students **who have not fulfilled** the prerequisites in formal coursework **are required** to take one or more of the graduate stem courses, in addition to the 30 semester credit hours required in the Graduate Certificate in Data Assurance.

Graduate Stem Course Requirements

Code	Title	Hours
Graduate Stem Course Requirements		
COSC 5301	Quantitative Foundations of Computer Science	3
COSC 5302	Computer Science Core Topics	3

Code	Title	Hours
Graduate Certificate in Data Assurance		
Specified Courses		
COSC 5310	Cryptography & Steganography	3
COSC 5330	Malware	3
COSC 5335	Database Security	3
DFSC 5310	Principle and Policy in Information Assurance	3
DFSC 5336	Business Continuity Management	3
Total Hours		15

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The Texas Higher Education Coordinating Board (THECB) marketable skills initiative is part of the state's **60x30TX plan** and was designed to help students articulate their skills to employers. Marketable skills are those valued by employers and/or graduate programs that can be applied in a variety of work or education settings and may include interpersonal, cognitive, and applied skill areas.

The Graduate Certificate in Data Assurance is designed to provide graduates with the following marketable skills:

- Enterprise data management skills.
- Business continuity management skills.
- Risk management skills.
- Cryptanalysis and stegananalysis skills.