

CIT, CLOUD ADMINISTRATION, CERTIFICATE OF TECHNOLOGY



overview

Are you fascinated by how technology is moving to the cloud? Have you ever wondered how businesses deliver their services from virtually anywhere in the world? If so, San Jacinto College's Cloud Administration Certificate of Technology can help you gain the in-demand skills needed to launch a successful career in the rapidly growing field of cloud computing. Our program teaches students to deploy, configure, secure, and maintain cloud-based infrastructure and services, setting them on the path to a fulfilling career in today's technology-driven marketplace.

The San Jacinto College Cloud Administration program:

- Develops core competencies in cloud environments, focusing on platforms such as Amazon Web Services (AWS), Microsoft Azure, and Google Cloud.
- Emphasizes hands-on experience with cloud provisioning, security best practices, and resource management.
- Teaches critical skills for monitoring, troubleshooting, and optimizing cloud infrastructures to meet business needs.
- Prepares students for industry certifications such as CompTIA Cloud+, AWS Certified Cloud Practitioner, AWS Certified Solutions Architect, Microsoft Azure Administrator, and more.

Career opportunities

The Cloud Administration Certificate of Technology is an excellent entry point into further studies leading to a variety of cloud-focused careers, including:

- Cloud Systems Administrator
- Cloud Support Specialist
- Cloud Operations Technician
- Cloud Security Specialist
- Junior Cloud Architect

Earning Potential

Cloud Systems Administrator (<https://www.salary.com/research/salary/recruiting/cloud-administrator-salary/houston-tx/>): \$130,530 per year¹

Computer Network Support Specialist (<https://www.salary.com/research/salary/posting/computer-network-support-specialists-salary/houston-tx/>): \$123,135 per year¹

Cloud Security Specialist (<https://www.salary.com/research/salary/position/cloud-security-specialist-salary/houston-tx/>): \$70,561 per year¹

¹ Source: salary.com (<https://www.salary.com/>), average salary for Houston, Tx as of May 1, 2025

For more information, students may contact South Campus, 281-922-3424.

Campus

South Campus

Information

The Cloud Administration Certificate of Technology is designed for students seeking focused, in-demand skills to support and manage cloud-based environments in today's evolving information technology landscape. This certificate can typically be completed in four semesters, and for students who already industry certifications like CompTIA Cloud+, Security+, and A+, it may be possible to finish even sooner. It is generally recommended that students complete the 27 semester credit hour Computer Information Technology (CIT) Foundations Certificate of Technology before enrolling in this Cloud Administration certificate program, as many of those courses lay essential groundwork for advanced studies and will apply toward this certificate as well as other CIT certificates, Associates degrees and Bachelors degrees.

The Cloud Administration curriculum equips graduates with both theoretical knowledge and applied technical skills essential for roles involving cloud operations and management. Students gain hands-on experience in cloud infrastructure setup, resource management, security, and troubleshooting, preparing them for immediate entry into cloud-related occupations within business and industry. This certificate places special emphasis on:

- Deploying, configuring, and maintaining cloud platforms such as Amazon Web Services (AWS) and Microsoft Azure.
- Implementing best practices for security and compliance in cloud environments.
- Monitoring and optimizing performance to meet enterprise needs and service-level agreements.
- Preparing for recognized industry certifications, including AWS Certified Cloud Practitioner, AWS Certified Solutions Architect, and Microsoft Azure Administrator.

The Cloud Administration Certificate of Technology provides a direct path into the workforce for those interested in cloud-based careers. Upon completion, students may qualify for positions such as:

- Cloud Systems Administrator
- Cloud Support Specialist
- Cloud Operations Technician
- Cloud Security Specialist
- Junior Cloud Architect

Because cloud technologies are an integral part of modern IT systems, graduates can expect to find opportunities in a variety of organizations ranging from startups to large enterprises.

If your selected courses or program of study include clinical, practicum, externship, or cooperative learning components at external sites, you must meet all immunization or policy requirements outlined by the host facility. These requirements are determined by the external site's independent authority rather than by San Jacinto College. Failure to comply with these requirements can prevent you from completing your required external learning experiences and may delay graduation. Students seeking exemptions must address these directly with the external facility, as San Jacinto College does not process immunization exemptions.

By choosing the Cloud Administration Certificate of Technology, you position yourself at the forefront of a growing sector in IT. Whether you are launching a new career or seeking to enhance existing skills, our program offers the comprehensive education and hands-on training you need for success in the ever-expanding world of cloud computing.

Plan of Study

4IT-CLDADM

First Year

First Term		Credits
ITSC 1325	Personal Computer Hardware	3
ITSC 1305	Introduction to PC Operating Systems	3
ITSC 1309	Integrated Software Applications I	3
ITNW 1325 or ITCC 1314	Fundamentals of Networking Technologies or CCNA 1: Introduction to Networks	3
ITSE 1329	Programming Logic and Design	3
Credits		15

Second Term

ITSY 1342	Information Technology Security	3
ITNW 1309	Fundamentals of Cloud Computing	3
ITNW 1313	Computer Virtualization	3
ITSE 1359	Introduction to Scripting Languages	3
Credits		12

Second Year

First Term

ITNW 1336	Cloud Deployment & Infrastructure Management	3
ITNW 1354	Implementing and Supporting Servers	3
Credits		6

Second Term

ITNW 2327	Advanced Cloud Concepts	3
Select two of the following		6
ITNW 2364	Practicum (or Field Experience) - Computer Systems Networking and Telecommunications	
ITSC 1315	IT Project Management	
ITSC 1316	Linux Installation and Configuration	
ITSY 2300	Operating System Security	
ITSY 2341	Security Management Practices	
ITSY 2342	Incident Response and Handling	
Credits		9
Total Credits		42

Capstone Experience: ITNW 2327 Advanced Cloud Concepts