Building Cloud Skills for the Digital Economy in Texas

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Discussion topics:

1

AWS and the IT skills gap

2

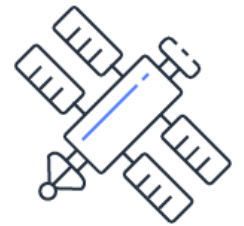Connecting industry and academia

3

Questions and next steps

Cloud migration has accelerated, and companies around the world are investing in the cloud.

What is the cloud?

Cloud computing is the on-demand delivery of IT resources over the Internet.

Organizations of every type, size, and industry are using the cloud for data backup, email, disaster recovery, software development, big data analytics, and much more.

What is AWS?

Amazon Web Services (AWS) is the world's most comprehensive and broadly adopted cloud platform.

- Robust functionality

- Largest global community of customers and partners

- Most flexible and secure environment

- Fastest pace of innovation

- Proven operational expertise

Companies investing in the AWS Cloud

Start-Up	Enterprise	Public Sector

What customers tell us

They need to:

accelerate their business transformation initiatives

operate in the cloud but lack the in-house skills

ensure cloud security and compliance

develop cloud skills and approaches

reduce their operating costs

innovate quickly

"
The biggest inhibitor to cloud adoption is lack of skills. Enterprises can't hire and train fast enough. "
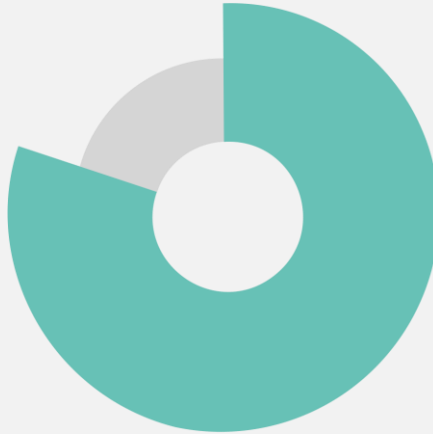
Gartner

aws

Cloud skills gaps have nearly doubled in the past three years.

90% of organizations report severe shortages. [1]

Nearly **80%** of IT decision makers say their teams lack the cloud computing skills they need. [2]

[1] 2019 Demystifying cloud transformation, 451 Research
[2] 2020 IT Skills and Salary Report, Global Knowledge

aws

Cloud skills demand in your region

*Include data on country-specific growth of AWS if possible

Texas Careers in the Cloud

348,709

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unique job postings in TX
requiring cloud computing skills
EMSI, 2021

Top 10

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highest paying certifications
(AWS Certifications)
Global Knowledge, 2019

41%

Job Posting (with AWS
Certifications) - % Increase
between Jan 2020 - Jan 2021 TX
EMSI, 2021

AWS is committed to empowering higher education communities with the resources they need to prepare students for in-demand roles.

AWS Academy

Providing higher education institutions with a ready-to-teach cloud computing curriculum (no cost) that prepares students to pursue industry-recognized AWS Certification and in-demand cloud jobs
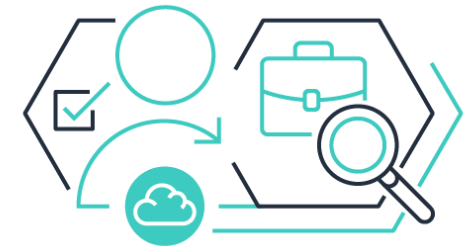
Curriculum developed and maintained by AWS

Post-secondary program integration

Aligned to AWS Certification

Employment readiness

aws academy

Curriculum components

Lecture modules

Technical concepts are presented to students in a live lecture and/or digital lectures

Hands-on labs

Guided exercises in the AWS Console allow students to practice skills in a sandbox

Knowledge checks

Multiple-choice quizzes for each module motivate students and assess comprehension

Project exercises*

Scenario-based projects require students to develop and implement an AWS solution

* Project exercises are not included in all courses.

aws academy

Industry & Higher Education:

The cloud is opening the door to new opportunities for innovation and collaboration between education and industry.

Connecting industry and academia

Our teams work with academic leadership to develop initiatives that align education to careers in the cloud and promote student employability.
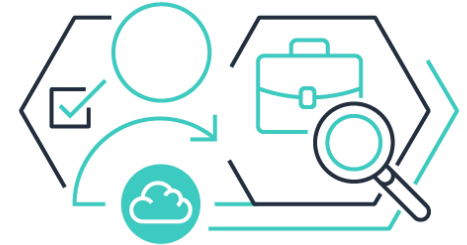

Higher Education Institutions

Administer high-quality AWS skills training programs without the cost of developing new curriculum.

Students

Gain cloud skills and earn industry-recognized credentials that map to in-demand jobs.

AWS Customers and Partners

Connect to a talent pool of highly-qualified candidates with the skills to support adoption of cloud solutions.
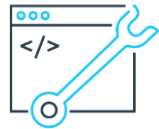
Academic Solutions

Embed in-demand AWS skills into your curricula with innovative cloud courses and learning resources.

- Save time building curriculum with lectures, interactive labs, knowledge checks, and extended project environments.

- Prepare educators to earn industry-recognized AWS Certifications and teach leading-edge cloud courses to your students.

Student Employability Solutions

Provide access to career services, virtual job fairs, and thousands of job and internship opportunities at companies building on AWS around the world.

Cloud Support Associate

Web Development Engineer

Application Developer

Software Development Engineer

DevOps Engineer

Data Integration Specialist

Cybersecurity Specialist

Cloud Support Engineer

Machine Learning Scientist

Data Scientist

Solutions Architect

Workforce Development Solutions

Craft scalable upskilling and reskilling programs in your community with a global network of collaborating organizations that share our mission to empower individuals to begin meaningful careers.

Houston Community College by the numbers

- Serving Houston & beyond for 50+ years
- 26 Campus Locations Across Greater Houston including The Texas Medical Center
- One of the largest in the US (Ranked 3rd and 4th in the past)
- 81,682 students total unduplicated enrollment 20-21 academic year despite challenges due to Covid-19
- Graduates the most internationals in the US
- 270+ certifications and 100+ instructional programs
- Generated $4.8b in economic impact to the region (2019)
- Supported nearly 52,000 regional jobs (1/67 job in the region)
- Increased annual earnings for students who received an Associate Degree by $11,900
- Dual credit pathways: Alief ISD, Houston ISD, Fort Bend ISD, Katy ISD, Spring Branch ISD, Stafford MSD
- Early College High Schools HCC SW West Loop, HCC Northline, HCC Felix Fraga, HCC Northwest

POWERFUL PARTNERSHIPS

We continue to actively work with key partners who contribute to our student-focused educational advancement and learning opportunities. A few of our corporate and community partnerships include:

Accenture	CEMEX	Harris County	Microsoft
Amazon	CenterPoint	HEB	PepsiCo
Aon	Gallery Furniture	Houston Urban League	Subaru
Apple	Goodwill	Intel	Trellis Foundation
Audi	Greater Houston Apprenticeship Network	Marvey Finger Family Foundation	Wells Fargo
Capital IDEA			

Digital Information & Technology – Center of Excellence

Programs offered (AS, AAS, AA degrees and Level 1 and Level 2 certificates)

Artificial Intelligence (First AI AAS in Texas) – **51** (F21)
Computer Programming/Info Sys (CS, Cloud Computing, App Dev C#, C++, Java, Info Sys) - **1606** (F21)
51 students enrolled in the Cloud Computing AAS degree. Fall 2019: 6, Fall 2020: 35, Fall 2021: 51
Networking/Cyber Security (Cyber Security, Microsoft, Red Hat, Cisco, IT Core) – **600** (F21)
Digital Communication (Web Design, Digital Photo., Visual Effects, XR Design & Dev) – **557** (F21)
Digital Gaming & Simulation (Artists, Programmers) – **139** (F21)
Continuing Education (CompTIA, AWS, Cisco, Drones). – **1004** (2021)

HCC Centers of Excellence (14)

Academics

Architectural Design & Construction

Business

Consumer Arts & Sciences

Digital & Information Technology

Education Professions

Engineering

TEKsystems | Global Services

A little about us…

As an industry leader in Full-Stack Technology Services, Talent Services & real-world application, we work with progressive leaders to drive change.

Experience the power of real partnership.
TEKsystems.com

$4+ billion annual revenue

100+ locations worldwide

Serving 6K+ Clients, 80% of the Fortune 500

Full-Stack Expertise and Services

98% client retention

94% NPS score for services delivered

30% higher client satisfaction vs. the competition

Global Delivery seamlessly on shore, off shore, near shore

Industry-specific expertise

STRATEGIC PARTNERS | Google Cloud | Red Hat | Microsoft | aws | SCALED AGILE | salesforce | servicenow

Why Community College?
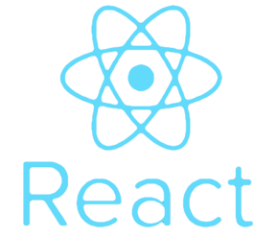
Our story with AWS and HCC

Highlights

- 12-week Full stack development program

- Successful graduates will be given a fulltime offer with TEKsystems Global Services.

- Be part of a IT professional services organization that has a vested interest in your growth and success.

- You can explore being a part of Core Development , Continuous Testing and TDC(Transformation –DevOps – Cloud Practice) and build your career.

- Continued support

Curriculum Overview

Case Studies

UNIT 1
Front End

HTML5 · CSS3 · JS · React

git

UNIT 2
Object Oriented Programming & Design

UNIFIED MODELING LANGUAGE™ · {OOP} · Java

GitHub

UNIT 3
Back End

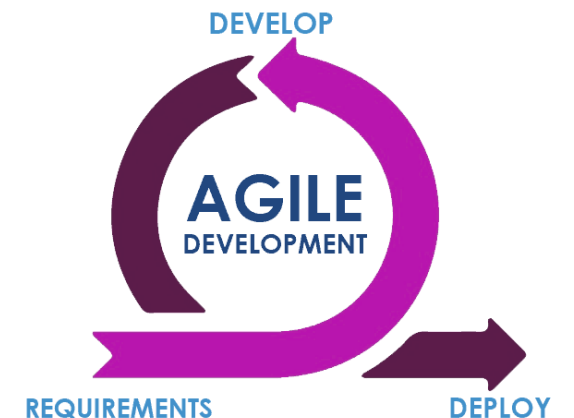MySQL · spring BOOT

DEVELOP · AGILE DEVELOPMENT · REQUIREMENTS · DEPLOY

APPLICATION PROCESS

Apply online

Take the test

Speak with a recruiter

Next Steps

In just 12 weeks, you could be on your way to a long-term #fullstack developer career.

Next Steps:

Introduce to your CIS/Business department chairs and faculty.

To get started:

aws.amazon.com/training/awsacademy

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