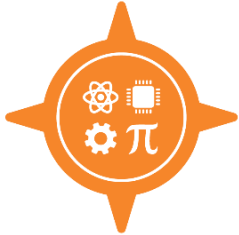# DALLAS COLLEGE

GUIDED PATHWAY: CLOUD SYSTEM OPERATIONS A.A.S.

ENGINEERING, TECHNOLOGY, MATHEMATICS and SCIENCES CAREER PATH

For more information, visit the Dallas College Cloud Computing webpage [www.dcccd.edu/CloudComputing] and your academic advisor at your college.

This is an example course sequence for students interested in pursuing the Cloud System Operations associate degree. It does not represent a contract, nor does it guarantee course availability. Following this pathway will help you earn an Associate of Applied Science (A.A.S.) degree in Cloud System Operations. Students must earn at least 25% of the credit hours (15 hours) required for graduation through instruction by Dallas College. See catalog for official degree requirements.

The Cloud System Operations Associate Degree Program provides education and training for individuals interested in developing the knowledge, skills, and concepts necessary to serve as a cloud engineering professional. Upon completion of the program, students will develop the fundamental skills necessary to deploy and manage application workloads on cloud platforms such as Amazon Web Services (AWS) and Microsoft Azure. Topics include scripting languages such as Python, PowerShell, Bash, cloud storage, database technologies, cloud networking, and security concepts. Additionally, advanced operational concepts, serverless computing, cloud infrastructure automation, containerization, and the orchestration of containerized application workloads such as Docker, Kubernetes, and Amazon Elastic Container Registry (ECR). **Courses that complete the Degree are noted below.**

Visit the NTCCC Transfer Consortium to view guided pathways created for students who complete an A.A.S. degree and the options for transfer to complete a Bachelor of Applied Arts and Science. Speak with an academic advisor at your campus to choose courses that will help you to transfer to a specific university.

Catalog Year	2020-2021 You may use this pathway if you entered Dallas College on or before this date.
Degree Type	Associate of Applied Science
GPA Requirement	Student must earn a GPA of 2.0 or higher
TSI	Must be Complete

SEMESTER-BY-SEMESTER MAP FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students. This is not an official degree plan. See catalog for official degree requirements.

AAS DEGREE MINIMUM: 60 SEMESTER CREDIT HOURS

SEMESTER 1	Total Hours: 13

ITNW 1309 – Fundamentals of Cloud Computing
ITNW 1378 – Cloud Networking
ITSE 1429 – Programming Logic and Design
***CHOOSE ONE:* SPCH 1311** – Introduction to Speech Communication *This is a Core course.*
            SPCH 1315 – Public Speaking *This is a core course.* **OR**
            SPCH 1321 – Business and Professional Communication *This is a Core course.*

SEMESTER 1 ACTION ITEMS
1. Meet with your advisor to confirm academic and career goals before the end of the semester.
2. Meet with a career advisor or coach to research your career options and opportunities for job shadowing.

SEMESTER 2	Total Hours: 16

ITSE 1359 – Introduction to Scripting Languages
ITSC 1416 – Linux Installation and Configuration
ITSE 1346 – Database Theory and Design
ITNW 1336 – Cloud Deployment and Infrastructure Management

ENGL 1301 – Composition I *This is a Core course. You must earn a grade of "C" or better.*

> *SEMESTER 2 ACTION ITEMS*
> 1. Meet with your advisor to request an official program of study audit and confirm or update your academic/career path and program of study.

SEMESTER 3   Total Hours: 16

ITNW 1377 – Introduction to Infrastructure Automation
ITNW 1373 – Cloud Computing Security
TECHNICAL ELECTIVE 1 *Select one*: *ITNW 2455, ITMT 1405, ITNW 1413, ITSC 2425, ITSE 2409.*
TECHNICAL ELECTIVE 2 *Select one: ENGL 2311, PHIL 2303, ITNW 1345, ITMT 1357.*
MATHEMATICS ELECTIVE* *This is a Core course. You must earn a grade of "C" or better.*

* There are several options to fulfill this requirement. See your academic advisor for a specific list.

> *SEMESTER 3 ACTION ITEMS*
> 1. Meet with a faculty of career advisor regarding placement for the Practicum course [if needed].
> 2. Meet with a career advisor or coach for assistance in preparing for job search.

SEMESTER 4   Total Hours: 15

ITSC 1315 – Project Management Software
SOCIAL/BEHAVIORAL SCIENCE ELECTIVE* *This is a Core course.*
HUMANITIES/FINE ARTS ELECTIVE* *This is a core course.*
CHOOSE ONE: **ITNW 2329** – Application Development for the Cloud ***OR***
     ITNW 2370 – Containerization and Micro Services
CHOOSE ONE: **ITNW 2327** – Advanced Cloud Concepts *This is a capstone experience for this award.* ***OR***
     ITNW 1364 – Practicum (or field Experience) – Computer Systems Networking and Telecommunications *This is a capstone experience for this award.*

* There are several options to fulfill this requirement. See your academic advisor for a specific list.

> *SEMESTER 4 ACTION ITEMS*
> 1. After reviewing your degree plan and program of study, meet with your advisor to apply for the Cloud Computing A.A.S.
> 2. Sign up for Commencement.
> 3. Join the Alumni Network!

PATHWAY TOTAL: 60 SEMESTER CREDIT HOURS