

# GUIDED PATHWAY: SOFTWARE PROGRAMMER/DEVELOPER A.A.S.

ENGINEERING, TECHNOLOGY, MATHEMATICS and SCIENCES CAREER PATH



For more information, visit the <u>Dallas College Computer Information Technology webpage</u> [www.dcccd.edu/CIT] and your academic advisor at your campus.

This is an example course sequence for students interested in pursuing Software Programmer/Developer. 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 Computer Information Technology-Software Programmer/Developer. 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 A.A.S. degree is designed to provide in-depth skills and knowledge in one introductory specialization language or development tool, an operating system used with that platform, plus additional skills and knowledge with an advanced specialization language or development tool. The graduate will be qualified to work as an entry-level programmer or developer in an applications setting. Courses that complete the degree, the <a href="Programmer Level I Certificate">Programmer Level I Certificate</a> (PC) and <a href="Software Programmer/Developer Assistant Certificate">Software Programmer/Developer Assistant Certificate</a> (PD) are noted below.

Visit the <u>NTCCC Transfer Consortium</u> to view guided pathways created for students who complete an A.A.S. degree and the options for transfer should you choose. 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	
<b>GPA</b> 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** 

## PROGRAM SPECIFIC REQUIREMENTS

To earn the Software Programmer/Developer Assistant Certificate, you must complete one of the listed courses: ITSC 1401, BCIS 1405, or COSC 1301. For those who demonstrate current computer literacy, course(s) may be substituted. Speak with your advisor for more information.

If needed, complete one:

- 1. ITSC 1401
- 2. BCIS 1405
- COSC 1301

## SEMESTER 1 Total Hours: 15

ITSE 1429 - Programming Logic and Design (Course also applies to PC, PD)

ITNW 1425 – Fundamentals of Networking Technologies (Course also applies to PD)

**MATHEMATICS ELECTIVE\*** 

**CHOOSE ONE**: <u>ITSW 1407</u> – Introduction to Database

ITMT 1403 – Querying Microsoft SQL Server w/Transact-SQL OR

ITSE 1445 - Introduction to Oracle SQL (Either course also applies to PC, PD)

## SEMESTER 1 ACTION ITEMS

Meet with your advisor to confirm academic and career goals before the end of the semester.

<sup>\*</sup> There are several options to fulfill this requirement. See your academic advisor for a specific list.

Meet with a career advisor or coach to research your career options and opportunities for job shadowing.

SEMESTER 2 Total Hours: 15

IMED 1416 – Web Design I (Course also applies to PD)

**TECHNICAL ELECTIVE\*** (one course) (Course also applies to PD)

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

CHOOSE ONE: ITSE X4XX Introductory Course\*\* OR

**COSC X4XX** Introductory Course\*\* (Either course also applies to PC, PD)

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 2 ACTION ITEMS

 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: 15

OPERATING SYSTEMS COURSE — Select from the following: ITSC 1405, ITSC 1407, ITSC 1416, ITMT 1458, ITNW 1408, ITNW 1413

ADVANCED SPECIALIZATION COURSE\*\* — Check with your advisor to make sure the classes you select for this specialization will count toward both the A.A.S. degree and the Certificates. (Course also applies to PC, PD)

**SOCIAL/BEHAVIORAL SCIENCE ELECTIVE\*** This is a Core course.

CHOOSE ONE: ITSE X4XX Introductory Course\*\* OR

COSC X4XX Introductory Course\*\* (Either course also applies to PD)

## SEMESTER 3 ACTION ITEMS

- 1. Meet with a career advisor or coach for assistance in preparing for job search.
- 2. Meet with your advisor to apply for the Programmer Level I Certificate and Software Programmer/Developer Assistant Certificate. See Program Specific Requirements.

# SEMESTER 4 Total Hours: 15

**HUMANITIES/FINE ARTS ELECTIVE\*** This is a Core course.

## **ADVANCED SPECIALIZATION COURSE\*\***

ITSY 1400 - Fundamentals of Information Security

ITSE 1450 - System Analysis and Design

## SEMESTER 4 ACTION ITEMS

- 1. Meet with your advisor to apply for the Software Programmer/Developer A.A.S.
- 2. Sign up for Commencement.
- 3. Join the Alumni Network!

**PATHWAY TOTAL: 60 SEMESTER CREDIT HOURS** 

<sup>\*</sup> Technical Elective must be selected from the following: IMED 1191, ITCC 1191, ITNW 1164, ITNW 1192, ITSC 1164, ITSC 1166, ITSC 1171, ITSC 1191, ITSE 1191, or ITSY 1191

<sup>\*\*</sup> Introductory and Advanced Specialization courses can be taken from the following emphases: General Programming, Visual Basic.Net, Java, C++, and/or C#. A specific list of courses can be found in the catalog and with your advisor.

<sup>\*</sup> There are several options to fulfill this requirement. See your academic advisor for a specific list.

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