Computer Information Technology: Computer Programming – Software Testing Specialization

CS &IT

Degree: Associate of Applied Science (AAS)
Certificate: Level 1 (C1)

COMPUTER SCIENCE & INFORMATION TECHNOLOGY

AUSTIN COMMUNITY COLLEGE DISTRICT

Program Description: This is a course sequence for those interested in Computer Programming Software Testing.

Use this Program Map to choose courses with your college advisor and track your progress towards milestones and completion of program.

Pre-Degree Requirements		
Program Specific	**Reading and Writing Placement** *Placements based on TSI*	**Mathematics Placement** *Placements based on TSI*
□ Prerequisite for MATH 1314 - MATD 0390 with a C or better or a satisfactory score on the ACC Mathematics Assessment Test or completion of TSI requirements in mathematics. □ Prerequisite for MATH 1324 - MATD 0390 with a C or satisfactory score on the ACC Mathematics Assessment Test or completion of TSI requirements in mathematics. □ Prerequisite for ENGL 1301 - TSI complete in reading and writing or exempt. □ Prerequisite for COSC 1337 - COSC 1336 or department approval. □ Prerequisite for ITSE 2321 - COSC 1336 or department approval. □ Prerequisite for ITSE 2309 - COSC 1315 (or corequisite) or COSC 1336 (or corequisite) or department approval. □ Prerequisite for ITSE 1325 - COSC 1301 (or corequisite) or department approval. □ Prerequisite for ITSE 1307 - One semester of programming or ITNW 1325. □ Prerequisite for BCIS 2390 - Sophomore standing or department approval.	□ Basic Developmental Courses □ ESOL Courses □ INRW Courses	□ 0332 - Basic Math Skills □ 0370 - Elementary Algebra □ 0385 - Developing Mathematical Thinking □ 0390 - Intermediate Algebra □ 0421 - Developmental Math

D=Degree
C1=Level 1 Certificate

SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS
Plans can be modified to fit the needs of part-time students by adding more semesters

C1	D	Semester 1	CR	Advising Notes
	●	EDUC 1100 - Effective Learning: Strategies for College Success	1	New ACC Students with less than 12 SCH of successful college credit must take EDUC 1100 in their first semester. All other students can choose EDUC 1100 or another 1 credit hour course.
●	●	COSC 1301 - Introduction to Computing	3	
●	●	ITSE 1391 - Special Topics in Computer Programming	3	
●	●	COSC 1336 - Programming Fundamentals I	3	
●	●	ITNW 1325 - Fundamentals of Networking Technologies	3	
	●	Mathematics	3	Select from MATH 1314, MATH 1324, MATH 1332, MATH 1342.
			16	**Program Semester Hours / Meet with your advisor**

		Semester 2		
●	●	ITSE 1303 - Introduction to MySQL **OR** ITSE 2309 - Database Programming: Oracle	3	
●	●	ITSE 1359 - Introduction to Scripting Languages: Python	3	
●	●	ITSC 1325 - Personal Computer Hardware	3	
	●	ITSC 1307 - UNIX Operating System I	3	
	●	ENGL 2311 - Technical and Business Writing	3	
			15	**Program Semester Hours / Meet with your advisor**
		Semester 3		
●	●	ITSE 1392 - Special Topics in Computer Programming	3	Capstone course for certificate. **ACHIEVEMENT:** Completion of Software Testing Level 1 Certificate
	●	ITSW 2337 - Advanced Database: MySQL **OR** ITSE 1345 - Introduction to Oracle SQL and PL/SQL	3	
	●	COSC 1337 - Programming Fundamentals II	3	
	●	Computer Information Technology/Computer Science Elective	3	Select elective courses that are in accordance with career objectives. Subject to departmental approval. Select Computer Information Technology/Computer Science Electives from BCIS 1305, GAME 1343, GAME 1359, GAME 1394, GAME 2302, GAME 2332, GAME 2341, GAME 2342, GAME 2347, INEW 2338, ITMT 1300, ITNW 1337, ITNW 1351, ITNW 1354, ITNW 2305, ITNW 2312, ITNW 2321, ITSC 2335, ITSC 2337, ITSC 2339, ITSE 1301, ITSE 1303, ITSE 1311, ITSE 1330, ITSE 1331, ITSE 1345, ITSE 1356, ITSE 1393, ITSE 1394, ITSE 2302, ITSE 2305, ITSE 2309, ITSE 2317, ITSE 2321, ITSE 2331, ITSE 2349, ITSE 2356, ITSW 1304, ITSW 1307, ITSW 2337, ITSY 2300, ITSY 2301, ITSY 2330, ITSY 2342, ITSY 2343.
	●	Oral Communication	3	Select from SPCH 1311, SPCH 1315, SPCH 1318, SPCH 1321.
			15	**Program Semester Hours / Meet with your advisor**
		Semester 4		
	●	Social and Behavioral Sciences	3	Select from the appropriate section of the Core Curriculum Course List.
	●	BCIS 2390 - System Analysis and Design: Project Management	3	Capstone course for degree.
	●	Computer Information Technology/Computer Science Elective	3	Select Computer Information Technology/Computer Science Electives from BCIS 1305, GAME 1343, GAME 1359, GAME 1394, GAME 2302, GAME 2332, GAME 2341, GAME 2342, GAME 2347, INEW 2338, ITMT 1300, ITNW 1337, ITNW 1351, ITNW 1354, ITNW 2305, ITNW 2312, ITNW 2321, ITSC 2335, ITSC 2337, ITSC 2339, ITSE 1301, ITSE 1303, ITSE 1311, ITSE 1330, ITSE 1331, ITSE 1345, ITSE 1356, ITSE 1393, ITSE 1394, ITSE 2302, ITSE 2305, ITSE 2309, ITSE 2317, ITSE 2321, ITSE 2331, ITSE 2349, ITSE 2356, ITSW 1304, ITSW 1307, ITSW 2337, ITSY 2300, ITSY 2301, ITSY 2330, ITSY 2342, ITSY 2343.
	●	Language, Philosophy, and Culture OR Creative Arts	3	Select from the appropriate section of the Core Curriculum Course List.

		ITSC 2264 - Practicum - CIS, General **OR** Advanced Computer Information Technology/Computer Science Elective	2-4	Select Advanced Computer Information Technology/Computer Science Elective from ITSC 2264, COSC 2325, COSC 2436, GAME 1394, GAME 2302, GAME 2332, GAME 2341, GAME 2347, ITSC 2335, ITSC 2337, ITSC 2339, ITSE 1345, ITSE 1392, ITSE 1393, ITSE 1394, ITSE 2302, ITSE 2305, ITSE 2317, ITSE 2321, ITSE 2331, ITSE 2349, ITSE 2356, ITSY 2300, ITSY 2301, ITSY 2330, ITSY 2342.2337, ITSC 2339, ITSE 1345, ITSE 1392, ITSE 1393, ITSE 1394, ITSE 2302, ITSE 2317, ITSE 2321, ITSE 2321, ITSE 2331, ITSE 2349, ITSE 2356, ITSY 2300, ITSY 2301, ITSY 2330, ITSY 2342, ITSY 2343, ITSY 2359. **ACHIEVEMENT:** Completion of Software Testing Specialization Associate of Applied Science degree
			14-16	**Program Semester Hours**

Total Program Hours:	60-62

Please always check online at **austincc.edu/catalog** or meet with your academic or program advisor to ensure that you are viewing the latest and most accurate information.

Career & Transfer Resources

ACC's Career & Transfer websites provide detailed, guided information on career exploration and transfer.
www.austincc.edu/career
www.austincc.edu/transfer

For further information regarding this specific program, please see the Career & Transfer Resources supplement provided in the next section of this Program Map.

Program Map

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Career Information

Common Job Titles

Software Quality Assurance Engineers and Testers, Computer Programmer, Analyst Programmer, Applications Developer, Computer Programmer, Computer Programmer Analyst, Internet Programmer, Java Developer, Programmer, Programmer Analyst, Software Developer, Web Programmer

Regional Labor Market Information

Software Quality Assurance Engineers and Testers: New workers generally start around $52,742. Normal pay for Software Quality Assurance Engineers and Testers is $77,437 per year, while highly experienced workers can earn as much as $116,813. Over the last year, 663 companies have posted 4,549 jobs for Software Quality Assurance Engineers and Testers. There are currently 2,935 Software Quality Assurance Engineers and Testers that are employed in Austin-Round Rock, TX.
Source: https://austincc.emsicc.com/careers/software-quality-assurance-engineer-and-tester

Career and labor market research tools (see Quick Reference Guide at http://www.austincc.edu/career):
EMSI: https://austincc.emsicc.com/, Bureau of Labor Statistics: http://www.bls.gov/ooh/, O*NET: https://www.onetonline.org/

Career Resources: ACC's career services website provides information on career exploration and employment at http://www.austincc.edu/career. Students are encouraged to consult with their area of study advisor for additional career assistance. The above information is provided as a guide and reference tool for occupations related to this program. This is not a guarantee of job placement in any of these occupations after successful completion of an ACC program. The common job titles listed are representative titles and are provided for career research. These are not the only occupations possible in this area of study.

Transfer Information

The Associate of Applied Science in Computer Programming – Software Testing is a workforce pathway that provides students with the skills that local employers need in the Information Technology field. A Bachelor of Applied Arts and Sciences (BAAS) is a degree option for students in AAS programs who want to transfer and complete a 4-year degree.

Transfer Guides: *The universities listed here do not constitute an ACC endorsement. Transfer course evaluations and determination of which courses will count toward a bachelor's degree are made by the receiving transfer institution.*

Texas State University: http://www.owls.txstate.edu/undergraduate-degrees/applied-arts-sciences.html
Concordia University Texas: http://www.concordia.edu/academics/college-of-business-and-communication/baas-in-business.html
Tarleton State University: http://www.tarleton.edu/degrees/bachelors/baas-business/
Texas A&M University - Central Texas: https://www.tamuct.edu/degrees/undergraduate/business-management.html
Texas Tech University: https://www.depts.ttu.edu/universitystudies/prospective_students/baas.php

Additional Transfer Resources: ACC's transfer website provides information on additional colleges & universities: http://www.austincc.edu/transferguides. Students are encouraged to consult with a faculty advisor, area of study advisor, and/or their chosen transfer institution to ensure courses taken at ACC will apply toward their bachelor's degree program.