Program Map

Information Technology: Applications Specialization

Degree: Associate of Applied Science (AAS)

COMPUTER SCIENCE & INFORMATION TECHNOLOGY

Program Description: This is an example course sequence for students interested in Information Technology – Applications Specialization. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate of Applied Science (AAS) degree in Information Technology – Applications Specialization.

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Department Website
sites.austincc.edu/cs

*Use this **Program MAP** as an advising guide to choose courses with your advisor and track 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*
	☐ Basic Developmental Courses ☐ ESOL Courses ☐ INRW Courses	☐ MATD-0332 - Basic Math Skills ☐ MATD-042x/032x – ALEKS Sequence ☐ MATD-0385/0485 – Developing Mathematical Thinking *Not prerequisite for MATH-1314/1324* ☐ MATD-0370 – Elementary Algebra ☐ MATD-0390 – Intermediate Algebra *Take MATD-0370 and 0390 to prepare for MATH-1314/1324*

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

Semester 1	CR	Advising Notes
EDUC 1100 - Effective Learning: Strategies for College Success	1	Required if student has less than 12 credit hours, but must have 60 total credit hours to graduate.
COSC 1301 – Introduction to Computing	3	
COSC 1315 – Fundamentals of Programming	3	**OR** ITSE 1331 Introduction to Visual Basic Programming NET.
ENGL 1301 – English Composition I	3	**Prerequisite for ENGL 1301** – TSI complete in reading and writing or exempt.
MATH 1314 – College Algebra	3	**OR choose** MATH 1324 – Mathematics for Business and Economics **OR** MATH 1332 – College Mathematics **OR** MATH 1342 – Elementary Statistics. **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.
	13	Program Semester Hours / Meet with your advisor
Semester 2		
ITNW 1325 - Fundamentals of Networking Technologies	3	**Prerequisite for ITNW 1325** – COSC 1301 (or corequisite) or instructional program approval.
ITSC 1325 – Personal Computer Hardware	3	**Prerequisite for ITSC 1325** – COSC 1301 and one semester of programming or instructional program approval.

ITSW 1307 – Introduction to Database: Access	3	**Prerequisite for ITSW 1307** – COSC 1301 or instructional program approval.
ENGL 2311 – Technical and Business Writing	3	
Social and Behavioral Sciences Elective	3	GOVT 2305 – United State Government **OR** HIST 1302 – United State History II **OR** PSYC 2301 – Introduction to Psychology. Recommended but may select Social and Behavioral Sciences. Select from the appropriate section of the Core Curriculum Course List.
Computer Information Technology/Computer Science Elective	3	Select Computer Information Technology/Computer Science Elective courses that are in accordance with career objectives. Subject to departmental approval.
	18	Program Semester Hours / Meet with your advisor
Semester 3		
ITSW 1304 - Introduction to Spreadsheets	3	**Prerequisite for ITSW 1304** – COSC 1301 or instructional program approval.
ITSE 1301 - Web Design Tools	3	**Prerequisite for ITSE 1301** – Competency in desktop operating systems and computer applications or instructional program approval.
ITSE 2309 - Database Programming: Oracle	3	**Prerequisite for ITSE 2309** – COSC 1315 (or corequisite) or COSC 1336 (or corequisite) or instructional program approval.
SPCH 1311 – Introduction to Speech Communications	3	**OR** SPCH 1315 – Public Speaking **OR** SPCH 1318 – Interpersonal Communication **OR** SPCH 1321 – Business and Professional Communication.
Computer Information Technology/Computer Science Elective	3	Select Computer Information Technology/Computer Science Elective courses that are in accordance with career objectives. Subject to departmental approval.
	15	Program Semester Hours / Meet with your advisor
Semester 4		
BCIS 2390 - System Analysis and Design: Project Management	3	**Prerequisite for BCIS 2390** - Sophomore standing or department approval.
ITSC 2339 - Personal Computer Help Desk	3	**Prerequisite for ITSC 2339** - COSC 1301, ITNW 1325, ITSC 1425, or instructional program approval.
ACCT 2301 - Principles of Accounting I - Financial	3	
ITSC 2264 - Practicum -- CIS, General	2	**OR** Computer Information Technology/Computer Science Elective (3-4). **Prerequisite for ITSC 2264** - Sophomore standing with B average or instructional program approval.
Arts and Humanities Elective	3	PHIL 1301 - Introduction to Philosophy **OR** PHIL 2306 – Ethics **OR** ARTS 1301 – Introduction to the Visual Arts. **ACHIEVEMENT:** Associate of Applied Science Degree
	14	Program Semester Hours
Total Program Hours	**60**	

COURSES AND ELECTIVES	
Computer Electives: ITNW 1337 – Introduction to Internet ITSC 1309 – Integrated Software Applications ITSE 1301 – Web design Tools ITSW 1304 – Introduction to Spreadsheets ITSW 1307 – Introduction to Database: Access **Programming Elective I:** BCIS 2316 – Introduction to Java Programming COSC 1337 – Programming Fundamentals II GAME 1343 – Game and Simulation Programming I GAME 2341 – Game Scripting ITSE 1302 – Computer Programming: LabVIEW ITSE 1303 – Introduction to MySQL ITSE 1311 – Beginning Web Programming ITSE 1330 – Introduction to C# Programming ITSE 1391 – Special Topics in Computer Programming ITSE 2302 – Intermediate Web Programming ITSE 2305 – Windows Programming (Visual Basic .NET) ITSE 2309 – Database Programming: Oracle ITSE 2321 – Object-Oriented Programming (Java)	**Programming Elective II**: COSC 2325 – Computer Organization and Machine Language COSC 2436 – Programming Fundamentals III: Data Structure GAME 1359 – Game and Simulation Programming II GAME 1394 – Special Topics in Animation, Interactive Technology, Video Graphics and Special Effects GAME 2342 – Game Development Using C++ GAME 2344 – DirectX Programming: Introduction to 3D Graphics INEW 2338 – Advanced Java Programming: Visual ITSC 2337 – UNIX Operating Systems II ITSE 1345 – Introduction to Oracle SQL and PL/SQL ITSE 1359 – Introduction to Scripting Languages; Python ITSE 1392 – Special Topics in Computer Programming ITSE 1394 – Special Topics in Computer Science ITSE 2317 – Java Programming (Intermediate) ITSE 2331 – Advanced C++ Programming ITSE 2343 – Advanced Windows Programming (C#) ITSE 2349 – Advanced Visual Basic Programming .NET ITSW 2337 – Advanced Database: MySQL

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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Degree: Associate of Applied Science (AAS) Career & Transfer Resources Updated 8/18/17

Career Information

Common Job Titles

Computer Programmers, Applications Developer, Computer User Support Specialists (includes Computer Specialist, Computer Support Specialist, Computer Technician, Help Desk Analyst, Information Technology Specialist, Network Support Specialist, Network Technician, Support Specialist, Technical Support Specialist)

Many career opportunities in this field require completion of a bachelor's degree or higher.

Regional Labor Market Information

Computer Programmers: New workers generally start around $51,859. Normal pay for Computer Programmers is $78,892 per year, while highly experienced workers can earn as much as $127,607. Over the last year, 381 companies have posted 1,984 jobs for Computer Programmers in this region. There are currently 3,191 Computer Programmers that are employed in Austin-Round Rock, TX. Source: https://austincc.emsicc.com/careers/computer-programmer

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 Information Technology - Applications Specialization 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.