Academic Plan - Associate of Applied Science Computer Information Systems - Programming

**Catalog Year: 2019/2020**

**Total Credits:61**

The Computer Information System (CIS) degree is a two-year Associate of Applied Science degree that prepares students with a solid set of skills and knowledge in the Computer Information System field. The degree allows students to further their knowledge by pursuing an area of emphasis towards industry certification, computer programming or transferring to a 4-year university. \*

Major courses are carefully selected in areas of Information Systems, Computer Networking, and Computer Programming to provide students with an exceptional foundation in the field.

Job opportunities exist in entry-level positions as a computer support professional or technician, systems analyst or computer programmer.

# General Education Courses

3 Credits, COM 115 - Public Speaking\* OR COM 125 - Interpersonal Communication, available fall spring summer

3 Credits, ENG 121 - English Composition GT-CO1 OR ENG 131 - Technical Writing GT-CO1\*, available fall spring

summer

3 Credits, General Education Elective (See Notes for specific requirements), available fall spring summer

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4 Credits, MAT 121 - College Algebra: GT-MA1 or Higher\*, available fall spring summer

# Major Courses

3 Credits, CIS 118 - Intro to PC Applications, available fall spring summer

3 Credits, CIS 220 - Fundamentals of Unix, available fall spring summer

3 Credits, CIS 240 - Database Design and Development, available fall

3 Credits, CIS 243 - Introduction to Structured Query Language (SQL), available spring

3 Credits, CIS 267 - Management of Information Systems, available spring

3 Credits, CNG 124 - Networking I: Network +, available fall spring summer

3 Credits, CSC 119 - Introduction to Programming, available fall spring summer

4 Credits, CNG 121 - Computer Technician I: A+, available fall spring summer

# Concentration Courses

3 Credits, CSC 233 - Object-Oriented Prog.: (Java), available fall spring

3 Credits, Select One Elective Course: CIS 202, CIS 232, CSC 200, CSC 236, or CSC 246, available fall spring

4 Credits, CSC 160 - Computer Science I: Java\*, available fall spring

4 Credits, CSC 161 - Computer Science II: Java, available fall

# Pre-Requisites, Co-Requisites, and Recommendations

CIS 118 - Intro to PC Applications

Requirement: Students must have Windows file management skills to create file folders, rename files, delete

CSC 160 - Computer Science I: Java\*

Pre-Requisite: CSC 119 - Introduction to Programming: Java

CSC 161 - Computer Science II: Java

Pre-Requisite: CSC 160 - Computer Science I: Java

CSC 233 - Object-Oriented Prog.: (Java)

Pre-Requisite: CSC 160 - Computer Science I: Java

# Program Outcomes

Apply PC applications.

Understand the syntax of a computer language.

Apply object oriented concepts.

Understand networking principles.

# Notes

General Education Electives: Select four (4) courses from the following: BUS 115, ECO 201, ECO 202, ENG 122, HIS

121, PHI 111, POS 105, POS 111, PSY 101, SOC 101.

Course availability is subject to change.

Refer to 19/20 catalog for specific requirements and important information about this degree.

Recommended courses may be listed above for certain electives; consult with the Academic Advising Office (advising@arapahoe.edu or 303.797.5664) for additional elective recommendations.

Students transferring to MSU-Denver must take MAT 121.

\*This course requires college level readiness as measured by Accuplacer, ACT, or SAT scores; approved high school course work that is less than five years old; or successful completion of appropriate college-readiness course.

AAA 101 – College 101: Student Experience is required for all new college students seeking degrees or transfer.

# Graduation Requirements

To graduate, students must apply for graduation (form available at www.arapahoe.edu/departments-and-programs/graduation) by the deadline and meet all degree requirements.

# RECOMMENDED COURSE SEQUENCE FULL-TIME TRACK

## Year 1: Fall

3 Credits, CIS 118 - Intro to PC Applications

3 Credits, CSC 119 - Introduction to Programming

3 Credits, ENG 121 - English Composition GT-CO1 OR ENG 131 - Technical Writing GT-CO1

3 Credits, General Education Elective

4 Credits, MAT 121 - College Algebra: GT-MA1 or Higher

## Year 1: Spring

4 Credits, CNG 121 - Computer Technician I: A+

3 Credits, CNG 124 - Networking I: Network +

3 Credits, COM 115 - Public Speaking OR COM 125 - Interpersonal Communication

4 Credits, CSC 160 - Computer Science I: Java

## Year 2: Fall

3 Credits, CIS 220 - Fundamentals of Unix

3 Credits, CIS 240 - Database Design and Development

4 Credits, CSC 161 - Computer Science II: Java

3 Credits, General Education Elective

3 Credits, General Education Elective

## Year 2: Spring

3 Credits, CIS 243 - Introduction to Structured Query Language (SQL)

3 Credits, CIS 267 - Management of Information Systems

3 Credits, Concentration Elective

3 Credits, CSC 233 - Object-Oriented Prog.: (Java)

3 Credits, General Education Elective

# RECOMMENDED COURSE SEQUENCE PART-TIME TRACK

## Year 1: Fall

3 Credits, CIS 118 - Intro to PC Applications

3 Credits, ENG 121 - English Composition GT-CO1 OR ENG 131 - Technical Writing GT-CO1

4 Credits, MAT 121 - College Algebra: GT-MA1 or Higher

## Year 1: Spring

4 Credits, CNG 121 - Computer Technician I: A+

3 Credits, COM 115 - Public Speaking OR COM 125 - Interpersonal Communication

3 Credits, CSC 119 - Introduction to Programming

## Year 1: Summer

4 Credits, CSC 160 - Computer Science I: Java

3 Credits, General Education Elective

## Year 2: Fall

3 Credits, CIS 220 - Fundamentals of Unix

3 Credits, CIS 240 - Database Design and Development

4 Credits, CSC 161 - Computer Science II: Java

## Year 2: Spring

3 Credits, CIS 243 - Introduction to Structured Query Language (SQL)

3 Credits, CIS 267 - Management of Information Systems

3 Credits, CSC 233 - Object-Oriented Prog.: (Java)

## Year 2: Summer

3 Credits, General Education Elective

3 Credits, General Education Elective

## Year 3: Fall

3 Credits, CNG 124 - Networking I: Network +

3 Credits, Concentration Elective

3 Credits, General Education Elective