

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.

Required Courses	Credits	Pre or Co Reqs Rqd	Course Availability		
			Fall	Spr	Sum
General Education Courses					
• COM 115 - Public Speaking* OR COM 125 - Interpersonal Communication (3 Cr.)	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• ENG 121 - English Composition GT-CO1 OR ENG 131 - Technical Writing GT-CO1*	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• General Education Elective (See Notes for specific requirements)	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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• MAT 121 - College Algebra: GT-MA1 or Higher*	4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Major Courses					
• CIS 118 - Intro to PC Applications (3 Cr.)	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• CIS 220 - Fundamentals of Unix (3 Cr.)	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• CIS 240 - Database Design and Development (3 Cr.)	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• CIS 243 - Introduction to Structured Query Language (SQL) (3 Cr.)	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• CIS 267 - Management of Information Systems (3 Cr.)	3	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• CNG 121 - Computer Technician I: A+ (4 Cr.)	4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• CNG 124 - Networking I: Network + (3 Cr.)	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• CSC 119 - Introduction to Programming (3 Cr.)	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Concentration Courses					
• CIS 232 - Unix Shell Programming OR CIS 287 - Internship	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• CNG 120 - A+ Certification Preparation (4 Cr.)	4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• CNG 122 - Computer Technician II: A+ (4 Cr.)	4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• CNG 132 - Network Security Fundamentals (3 Cr.)	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Pre-Requisites, Co-Requisites, and Recommendations (grade C or better required)

Where requirements are listed as course categories (e.g. Electives, Arts/Humanities) rather than as specific courses, please note that depending upon course choice, pre-requisites may be required.

CNG 120 - A+ Certification Preparation (4 Cr.)

- Pre-Requisite/Corequisite: CNG 122 - Computer Technician II: A+

CNG 122 - Computer Technician II: A+ (4 Cr.)

- Pre-Requisite: CNG 121 - Computer Technician I: A+

CNG 132 - Network Security Fundamentals (3 Cr.)

- Co-Requisite: CNG 124 - Networking I: Network +

ENG 121 - English Composition GT-CO1 OR ENG 131 - Technical Writing GT-CO1*

- Co-Requisite: CCR 094 - Studio 121

MAT 121 - College Algebra: GT-MA1 or Higher*

- Co-Requisite: MAT 093 - Algebra Lab* (1 Cr.) OR MAT 077 - Prep Lab for College Algebra (2 Cr.)
- Pre-Requisite: MAT 055 - Algebraic Literacy (4 Cr.) or appropriate score

Program Outcomes

- Apply hardware principles.
- Understand network security.
- Apply PC applications.

Notes

- *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.
- Course availability is subject to change.
- 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. IF TRANSFERRING TO MSU MUST CHOOSE FROM BUS 115, ECO 201, ECO 202, ENG 122, AND HIS 121.
- In order to meet program requirements, students registered for ENG 121 or ENG 131 must also register for CCR 094 unless they can demonstrate otherwise meeting the CCR 094 standard through assessment testing, prior college coursework, or recent High School coursework. See an Advisor for details.
- 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.
- Refer to 21/22 catalog for specific requirements and important information about this degree.
- Students transferring to MSU-Denver must take MAT 121.

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	Credits	Course
	3	CIS 118 - Intro to PC Applications (3 Cr.)
	4	CNG 121 - Computer Technician I: A+ (4 Cr.)
	3	ENG 121 - English Composition GT-CO1 OR ENG 131 - Technical Writing GT-CO1 ~Recommended Course(s)~ ENG 131 - Technical Writing I: GT-CO1* (3 Cr.)
	4	MAT 121 - College Algebra: GT-MA1 or Higher
Year 1: Spring	Credits	Course
	4	CNG 122 - Computer Technician II: A+ (4 Cr.)
	3	CNG 124 - Networking I: Network + (3 Cr.)
	3	COM 115 - Public Speaking OR COM 125 - Interpersonal Communication (3 Cr.) ~Recommended Communication Course(s)~ COM 125 - Interpersonal Communication (3 Cr.)
	3	CSC 119 - Introduction to Programming (3 Cr.)
	3	General Education Elective ~Recommended Course(s)~ BUS 115 - Introduction to Business (3 Cr.) ECO 201 - Principles of Macroeconomics: GT-SS1* (3 Cr.) ECO 202 - Principles of Microeconomics: GT-SS1* (3 Cr.) ENG 122 - English Composition II: GT-CO2 (3 Cr.) HIS 121 - U.S. History to Reconstruction: GT-H1* (3 Cr.) PHI 111 - Introduction to Philosophy: GT-AH3* (3 Cr.) POS 105 - Introduction to Political Science: GT-SS1* (3 Cr.)
Year 2: Fall	Credits	Course
	3	CIS 220 - Fundamentals of Unix (3 Cr.)
	3	CIS 240 - Database Design and Development (3 Cr.)
	4	CNG 120 - A+ Certification Preparation (4 Cr.)
	3	General Education Elective ~Recommended Course(s)~ ECO 202 - Principles of Microeconomics: GT-SS1* (3 Cr.) ENG 122 - English Composition II: GT-CO2 (3 Cr.) HIS 121 - U.S. History to Reconstruction: GT-H1* (3 Cr.) PHI 111 - Introduction to Philosophy: GT-AH3* (3 Cr.) POS 111 - American Government: GT-SS1* (3 Cr.) PSY 101 - General Psychology I: GT-SS3* (3 Cr.) SOC 101 - Introduction to Sociology I: GT-SS3* (3 Cr.)

- 3 General Education Elective
~Recommended Course(s)~
BUS 115 - Introduction to Business (3 Cr.)
ECO 201 - Principles of Macroeconomics: GT-SS1* (3 Cr.)
PHI 111 - Introduction to Philosophy: GT-AH3* (3 Cr.)
POS 105 - Introduction to Political Science: GT-SS1* (3 Cr.)
POS 111 - American Government: GT-SS1* (3 Cr.)
PSY 101 - General Psychology I: GT-SS3* (3 Cr.)
SOC 101 - Introduction to Sociology I: GT-SS3* (3 Cr.)

Year 2: Spring

Credits

Course

- 3 CIS 243 - Introduction to Structured Query Language (SQL) (3 Cr.)
3 CIS 267 - Management of Information Systems (3 Cr.)
3 CIS Concentration Choice
~Recommended Course(s)~
CIS 287 - Cooperative Education (3 Cr.)
3 CNG 132 - Network Security Fundamentals (3 Cr.)
3 General Education Elective
~Recommended Course(s)~
BUS 115 - Introduction to Business (3 Cr.)
ECO 201 - Principles of Macroeconomics: GT-SS1* (3 Cr.)
HIS 121 - U.S. History to Reconstruction: GT-H1* (3 Cr.)
PHI 111 - Introduction to Philosophy: GT-AH3* (3 Cr.)
POS 105 - Introduction to Political Science: GT-SS1* (3 Cr.)
POS 111 - American Government: GT-SS1* (3 Cr.)

RECOMMENDED COURSE SEQUENCE PART-TIME TRACK

Year 1: Fall	Credits	Course
	3	CIS 118 - Intro to PC Applications (3 Cr.)
	3	ENG 121 - English Composition GT-CO1 OR ENG 131 - Technical Writing GT-CO1 ~Recommended Course(s)~ ENG 131 - Technical Writing I: GT-CO1* (3 Cr.)
	4	MAT 121 - College Algebra: GT-MA1 or Higher
Year 1: Spring	Credits	Course
	4	CNG 121 - Computer Technician I: A+ (4 Cr.)
	3	COM 115 - Public Speaking OR COM 125 - Interpersonal Communication (3 Cr.) ~Recommended Communication Course(s)~ COM 125 - Interpersonal Communication (3 Cr.)
	3	CSC 119 - Introduction to Programming (3 Cr.)
Year 1: Summer	Credits	Course
	3	General Education Elective ~Recommended Course(s)~ BUS 115 - Introduction to Business (3 Cr.) ECO 201 - Principles of Macroeconomics: GT-SS1* (3 Cr.) PHI 111 - Introduction to Philosophy: GT-AH3* (3 Cr.) POS 105 - Introduction to Political Science: GT-SS1* (3 Cr.) POS 111 - American Government: GT-SS1* (3 Cr.) PSY 101 - General Psychology I: GT-SS3* (3 Cr.) SOC 101 - Introduction to Sociology I: GT-SS3* (3 Cr.)
	3	General Education Elective ~Recommended Course(s)~ BUS 115 - Introduction to Business (3 Cr.) ECO 201 - Principles of Macroeconomics: GT-SS1* (3 Cr.) ECO 202 - Principles of Microeconomics: GT-SS1* (3 Cr.) ENG 122 - English Composition II: GT-CO2 (3 Cr.) HIS 121 - U.S. History to Reconstruction: GT-H1* (3 Cr.) PHI 111 - Introduction to Philosophy: GT-AH3* (3 Cr.) POS 105 - Introduction to Political Science: GT-SS1* (3 Cr.)
Year 2: Fall	Credits	Course
	3	CIS 220 - Fundamentals of Unix (3 Cr.)
	3	CIS 240 - Database Design and Development (3 Cr.)
	4	CNG 122 - Computer Technician II: A+ (4 Cr.)
Year 2: Spring	Credits	Course
	3	CIS 243 - Introduction to Structured Query Language (SQL) (3 Cr.)
	3	CIS 267 - Management of Information Systems (3 Cr.)
	3	CNG 124 - Networking I: Network + (3 Cr.)

Year 2: Summer	Credits	Course
	3	General Education Elective ~Recommended Course(s)~ BUS 115 - Introduction to Business (3 Cr.) ECO 201 - Principles of Macroeconomics: GT-SS1* (3 Cr.) HIS 121 - U.S. History to Reconstruction: GT-H1* (3 Cr.) PHI 111 - Introduction to Philosophy: GT-AH3* (3 Cr.) POS 105 - Introduction to Political Science: GT-SS1* (3 Cr.) POS 111 - American Government: GT-SS1* (3 Cr.)
	3	General Education Elective ~Recommended Course(s)~ ECO 202 - Principles of Microeconomics: GT-SS1* (3 Cr.) ENG 122 - English Composition II: GT-CO2 (3 Cr.) HIS 121 - U.S. History to Reconstruction: GT-H1* (3 Cr.) PHI 111 - Introduction to Philosophy: GT-AH3* (3 Cr.) POS 111 - American Government: GT-SS1* (3 Cr.) PSY 101 - General Psychology I: GT-SS3* (3 Cr.) SOC 101 - Introduction to Sociology I: GT-SS3* (3 Cr.)
Year 3: Fall	Credits	Course
	3	CIS Concentration Choice ~Recommended Course(s)~ CIS 287 - Cooperative Education (3 Cr.)
	4	CNG 120 - A+ Certification Preparation (4 Cr.)
	3	CNG 132 - Network Security Fundamentals (3 Cr.)