

# COMPUTER INFORMATION TECHNOLOGY

## Associate in Science Degree (CIP# 1511010307)

This program is designed for students who wish to develop information technology skills in technical customer service, information technology support, and computer security. There is significant flexibility in this degree. It is designed for students who seek immediate employment, and it provides the option for students to transfer as a junior to complete a four-year Bachelor's degree in Information Systems Technology.

Students are strongly encouraged to consult a student success coach in the department office for assistance in determining the best education plan for their career goals.

Although scheduling may not always provide for the following progression of courses, students should use the foundation, intermediate and advanced course sequence as a guide in program planning.

All degree-seeking students must satisfy entry testing requirements and satisfactorily complete all mandatory courses in reading, student success, mathematics, English, and English for Academic Purposes in which the student is placed.

## Alternative Ways to Earn Credit toward this Degree

Graduates of specific programs at Orange Technical College and Osceola Technical College, as well as other institutions may be eligible to receive college credit for courses in this program. You may also be eligible to receive credit toward this degree if you have earned one of the approved Gold Standard industry certifications or Career Pathways credit. To learn more about Valencia's award of credit options, visit <https://valenciacollege.edu/academics/programs/as-degree/credit-industry-certification-agreements.php>. Eligible students should contact the Student Success Coach in their academic department for more information about the requirements for the award of credit.

## College Credit Technical Certificates

The Computer Information A.S. degree also offers the following college credit certificate programs. These certificates can put you on the fast-track to reaching your career goals. They are designed to equip you with a specialized skill set for entry-level employment or to upgrade your skills for job advancement. Most can be completed in one year or less, and all of the courses in the certificates are embedded in the A.S. degree. You can earn the certificates as you progress through your A.S. Degree or as a separate, stand-alone credential. Click on the Certificate tab at the top of the page for more information about the certificates that are offered.

- Computer Information Data Specialist (9 credits) (CIP # 0611050101)
- Computer Information Technology Specialist (18 credits) (CIP # 0511010311)
- Computer Information Technology Analyst (27 credits) (CIP # 0511010312)
  - IT Security Specialization
  - IT Support Specialization

## Start Right

Degree-seeking students enrolling at Valencia for the first time will have a limited range of courses from which to choose for their first 18

college-level credits. Within the first 18 college credit hours, you will be required to take ENC1101 (3 credits), and if applicable, SLS 1122 (3 credits) and a mathematics course appropriate to your selected meta-major (3 credits). The remaining courses will be chosen from the General Education Core Courses in humanities (3 credits), science (3 credits), or social science (3 credits), and/or the introductory courses within the A.S. degree programs. For specific courses see the *Foundation Courses* on the "Program Requirements" tab. For course sequencing recommendations, see your Student Success Coach or create an education plan by logging into MyVC, clicking on the LifeMap tab and clicking My Education Plan.

## Potential Careers

- Technical Support Analyst
- User Support Analyst/Specialist
- Applications Systems Analyst
- Information Systems Specialist
- Software Tester/Trainer
- Computer Information Manager
- Internet Security Specialist
- PC Support Technician
- Help Desk Technician
- Security Administrator

## Salary & Earnings Information

For career information related to this program, please visit **O\*Net OnLine** (<https://www.onetonline.org/>).

## Contacts

### Future Students

To learn more about this program, contact Enrollment Services at [enrollment@valenciacollege.edu](mailto:enrollment@valenciacollege.edu) or call 407-582-1507 or visit [valenciacollege.edu/computer-information/](https://valenciacollege.edu/computer-information/) (<https://valenciacollege.edu/computer-information/>)

### Current Students

Your Student Success Coach contact information can be found in MyVC. Log into MyVC, click on the Courses tab, and check your Academic Profile information to find a link to your Coach.

### East Campus Faculty Program Chair

Sanika Paranjape: 407-582-2351  
[sparanjape@valenciacollege.edu](mailto:sparanjape@valenciacollege.edu) ([dbrunick@valenciacollege.edu](mailto:dbrunick@valenciacollege.edu))

### West Campus Faculty Program Chair

Joan Alexander: 407-582-1542  
[jalexander@valenciacollege.edu](mailto:jalexander@valenciacollege.edu)

### Osceola Campus Faculty Program Chair

Denise Ross: 407-582-4818  
[deross@valenciacollege.edu](mailto:deross@valenciacollege.edu)

## Internship and Workforce Services

If you need assistance with job resources or in locating an internship, please visit: [valenciacollege.edu/internship](https://valenciacollege.edu/internship) (<https://valenciacollege.edu/internship/>).

## Program Outcomes

- Analyze technical problems as related to customer requirements.
- Design a logical plan for the development of technical requirements.

- Develop resources to meet technical requirements.
- Implement computer systems solutions including documentation.
- Evaluate computer systems problems, plans, and solutions for correctness and appropriateness.
- Communicate effectively with technical and non-technical audiences.

**Foundation Courses**

ENC 1101	FRESHMAN COMPOSITION I <sup>++~</sup>	3
Mathematics	See Gen. Ed. Core Requirement <sup>++~</sup>	3
Science	See Gen. Ed. Core Requirement <sup>~</sup>	3
Humanities	See Gen. Ed. Core Requirement <sup>~</sup>	3
CTS 1134C	NETWORK ESSENTIALS <sup>+N1</sup>	3
CGS 2100C	COMPUTER FUNDAMENTALS AND APPLICATIONS <sup>+</sup>	3
CTS 1131C	COMPUTER MAINTENANCE ESSENTIALS <sup>+A1</sup>	3
COP 1000C	INTRODUCTION TO PROGRAMMING CONCEPTS <sup>+4</sup>	3
GEB 1011	INTRODUCTION TO BUSINESS	3

**Intermediate Courses**

CTS 1142C	INFORMATION TECHNOLOGY PROJECT MANAGEMENT <sup>++P1</sup>	3
CET 2792C	INSTALLING AND CONFIGURING WINDOWS SERVER <sup>++</sup>	3
CTS 1120C	INTRODUCTION TO NETWORK SECURITY <sup>++S1</sup>	3
COP 2822C	WEB DEVELOPMENT I <sup>+C1</sup>	3
CGS 2545C	DATABASE MANAGEMENT SYSTEMS <sup>+3</sup>	3
POS 2041	U.S. GOVERNMENT <sup>++~</sup>	3
or AMH 2010	UNITED STATES HISTORY TO 1877	
or AMH 2020	U.S. HISTORY 1877 TO PRESENT	

**Advanced Courses**

CGS 2091C	SOCIAL, LEGAL AND ETHICAL ISSUES IN INFORMATION TECHNOLOGY <sup>+</sup>	3
CET 2793C	ADMINISTERING WINDOWS SERVER <sup>++</sup>	3
CIS 2910C	IT CAPSTONE <sup>++2</sup>	3
CIS 2943	INTERNSHIP IN COMPUTER INFORMATION TECHNOLOGY <sup>++</sup>	1
or CGS 2650	SOCIAL NETWORKING FOR JOB SEARCH	
Computer Information Technology Electives <sup>1</sup>		5

**Total Credit Hours** **60**

<sup>+</sup> This course must be completed with a grade of C or better.

<sup>\*</sup> This course has a prerequisite; check description in Valencia catalog.

<sup>~</sup> This is a general education course.

<sup>1</sup> Any course with a subject prefix of CAI, CAP, CET, CNT, CGS (except CGS 1060C), CTS, CIS, COP, or COT not already used to satisfy program requirements

<sup>2</sup> CIS 2910C IT CAPSTONE is taken in last semester or with department approval, and satisfactory completion of all mandated discipline specific foundation and intermediate technical courses.

<sup>3</sup> Recommend CGS 2100C COMPUTER FUNDAMENTALS AND APPLICATIONS be taken first

<sup>4</sup> Students with prior programming experience will be allowed to substitute a higher-level course for this course, with departmental approval.

A1 This course is part of a sequence which prepares students for a CompTIA A+ certification examination.

C1 This course is part of a sequence which prepares students for a C1W Foundations certificate examination

N1 This course is part of a sequence which prepares students for a Network + certification examination

P1 This course is part of a sequence which prepares students for a Project + certification examination.

S1 This course is part of a sequence which prepares students for a Security + certification examination

(GB) denotes a Gordon Rule course.

**Notes:**

Specialized courses may not be offered every session or on every campus.

Expand your career opportunities with a Bachelor's Degree in Computing Technology and Software Development from Valencia. This degree builds on your skills, and prepares you for a highly specialized, in-demand career as a software developer. For more information, go to: Bachelor's Degree in Computing Technology and Software Development (<https://catalog.valenciacollege.edu/degrees/bachelorofscience/computingtechnologyandsoftwaredesign/>). Students who wish to continue their education should consult with a Student Success Coach to discuss transfer options and requirements, and determine the best education plan for their career goals.

Students wishing to transfer credits from this program to another institution must accept responsibility for securing approval from the transfer institution for acceptance of this degree.

## Computer Information Data Specialist

This certificate prepares students with foundation skills in computer maintenance, network essentials and database management.

**Technical Certificate****Program Outcomes**

- Design a logical plan for the development of technical requirements
- Develop resources to meet technical requirements

CTS 1131C	COMPUTER MAINTENANCE ESSENTIALS <sup>A1</sup>	3
CTS 1134C	NETWORK ESSENTIALS <sup>A2</sup>	3
CGS 2545C	DATABASE MANAGEMENT SYSTEMS	3

**Total Credit Hours** **9**

<sup>A1</sup> This course is part of a sequence which prepares students for a CompTIA A+ certification examination

<sup>A2</sup> This course is part of a sequence which prepares students for a Network + certification examination

## Computer Information Technology Analyst with Specializations in:

- IT Security
- IT Support

**Technical Certificate****Foundation Courses**

CGS 2100C	COMPUTER FUNDAMENTALS AND APPLICATIONS	3
CTS 1131C	COMPUTER MAINTENANCE ESSENTIALS A1	3
CTS 1142C	INFORMATION TECHNOLOGY PROJECT MANAGEMENT *	3
CTS 1134C	NETWORK ESSENTIALS N1	3
CTS 1120C	INTRODUCTION TO NETWORK SECURITY *S1	3
CTS 2321C	LINUX SYSTEM ADMINISTRATION * L1	3
COP 2341C	LINUX SHELL SCRIPTING + L1	3
Computer Information Technology Electives 1		3
<b>Specialization (See below)</b>		<b>3</b>
<b>Total Credit Hours</b>		<b>27</b>

**IT Security Specialization**

This program prepares students to provide IT Security support which includes developing plans and resources to meet technical requirements, analyzing computer systems problems and implementing effective solutions.

**Program Outcomes**

- Design a logical plan for the development of technical requirements.
- Develop resources to meet technical requirements.
- Evaluate computer systems problems, plans, and solutions for correctness and appropriateness.
- Implement computer systems solutions including documentation.

CTS 2317C	ADVANCED NETWORK SECURITY *	3
<b>Total Credit Hours</b>		<b>3</b>

**IT Support Specialization**

This program prepares students to provide IT support which includes analyzing technical problems and computer systems problems, and implementing solutions to address customer and user needs.

**Program Outcomes**

- Analyze technical problems as related to customer requests.
- Evaluate computer systems problems, plans, and solutions for correctness and appropriateness.
- Communicate effectively with technical and non-technical audiences.

CTS 1155C	INTRODUCTION TO CUSTOMER SERVICE AND HELP DESK CONCEPTS	3
<b>Total Credit Hours</b>		<b>3</b>

**Computer Information Technology Specialist****Technical Certificate**

This program prepares students to provide IT customer support which includes a basic knowledge and understanding of software applications, networking technologies and hardware configuration, troubleshooting and correcting problems.

**Program Outcomes**

- Design a logical plan for the development of technical requirements
- Evaluate computer systems problems, plans, and solutions for correctness and appropriateness.

CGS 2100C	COMPUTER FUNDAMENTALS AND APPLICATIONS	3
CTS 1142C	INFORMATION TECHNOLOGY PROJECT MANAGEMENT *	3
CTS 1131C	COMPUTER MAINTENANCE ESSENTIALS A1	3
CTS 1134C	NETWORK ESSENTIALS N1	3
CTS 1120C	INTRODUCTION TO NETWORK SECURITY *S1	3
Computer Information Technology Electives 1		3
<b>Total Credit Hours</b>		<b>18</b>

\* This course has a prerequisite; check description in Valencia catalog.

1 Any course with a subject prefix of CET, CGS (except CGS 1060C INTRODUCTION TO COMPUTERS), CTS, CAP, CIS, COP, or COT not already used to satisfy program requirements

A1 This course is part of a sequence which prepares students for a CompTIA A+ certification examination.

N1 This course is part of a sequence which prepares students for a Network + certification examination.

S1 This course is part of a sequence which prepares students for a Security + certification examination.

P1 This course is part of a sequence which prepares students for a Project + certification examination.

L1 This course is part of a sequence which prepares students for a Linux + certification examination.

**Notes:**

Specialized courses may not be offered every session or on every campus.