

COMPUTER SCIENCE AND INFORMATION TECHNOLOGY

PROGRAM MISSION STATEMENT

The mission of St. Johns River State College's computer programs is to produce graduates with the knowledge and skills essential for success in the workplace and to encourage the pursuit of academic and lifelong learning and personal growth through high quality, innovative and effective instruction.

ST. JOHNS RIVER STATE COLLEGE

COMPUTER INFORMATION TECHNOLOGY

COMPUTER NETWORK ENGINEERING
TECHNOLOGY

COMPUTER PROGRAMMING AND ANALYSIS

COMPUTER PROGRAMMER

COMPUTER PROGRAMMING SPECIALIST

DIGITAL FORENSICS

HELP DESK SUPPORT TECHNICIAN

INFORMATION TECHNOLOGY ADMINISTRATION

INFORMATION TECHNOLOGY ANALYSIS

INFORMATION TECHNOLOGY SUPPORT
SPECIALIST

INTERNET SERVICES TECHNOLOGY

MOBILE DEVICE TECHNOLOGY

NETWORK ENTERPRISE ADMINISTRATION

NETWORK INFRASTRUCTURE - CISCO

NETWORK SECURITY

ROBOTICS AND SIMULATION TECHNICIAN

WEB DEVELOPMENT SPECIALIST



Networking
Academy

SOME DEGREE SPECIFIC COURSES AVAILABLE ON THE ORANGE PARK CAMPUS ONLY

This program prepares students for employment in occupations in which they will devise efficient methods to manage a microcomputer-based work environment, develop new systems to meet projected needs, select and install information technology equipment, troubleshoot information technology equipment, manage and support information technology users. This program is also designed to provide supplemental training for persons previously or currently employed in these occupations.

If you need additional information after seeing a counselor, please send an e-mail to BCCInfo@SJRstate.edu.

GENERAL EDUCATION COURSES: 15 HOURS

	ENC	1101	Composition I.....	3
+	ENC	1102	Composition II	3
+			*General Education Mathematics.....	3
			*General Education Social Science.....	3
+			*General Education Humanities.....	3

DEGREE SPECIFIC COURSES: (42 CREDIT HOURS)

	CET	1178C	Computer Hardware Support Essentials.....	3
	CET	2179C	Computer Software Support Essentials.....	3
+	CET	2565C	Introduction to Server Operating Systems.....	3
	CET	2660C	Network Security Essentials.....	3
	CGS	1060	Introduction to Computer Concepts.....	3
	CGS	1100	Microcomputer Application Software	3
+	CGS	1560C	Microcomputer Operating Systems.....	3
+	CGS	2545	Database Concepts for Business	3
+	CNT	2500	Network/Data Communications	3
	COP	1000	Introduction to Computer Programming	3
+	COP	2822	Web Page Authoring	3
+	CTS	1142	Information Technology Project Management.....	3
+	CTS	2111C	Linux Server Administration.....	3
+	CTS	2155	Customer Support Operations	3

ELECTIVES (CHOOSE 3 CREDIT HOURS):

+	CGS	2811	Disaster Recovery Fundamentals.....	3
	CGS	2949	Computer Information Technology Capstone	3
	CIS	2321	Information Systems	3
+	COP	2701	Advanced Database concepts and programming.....	3
+	CTS	2191C	Mobile Device Concepts	3

REQUIRED TOTAL CREDIT HOURS 60

*Refer to A.A. degree general education requirements.
 +Prerequisite course required. See course descriptions in catalog.

Additional credit may be awarded for current industry certifications based on the Florida Department of Education Gold Standard Industry Certification Articulation agreements.

NOTE: The CET lab is located on the Orange Park Campus. Most of the courses requiring a lab component will be offered as hybrid classes. In hybrid courses, theory and concepts are taught online and students are required to attend campus to complete lab requirements.

NOTE: Courses are listed alphabetically. This is not the order in which the course should be taken. Please see the program plan/course rotation to see the order in which courses should be taken. This will ensure that you complete prerequisite courses and are prepared for additional courses when they are offered.



COMPUTER NETWORK ENGINEERING TECHNOLOGY (0194)

ASSOCIATE IN SCIENCE DEGREE

This program prepares students for employment as cabling specialists, PC support technicians, network control operators, data communications analysts, help desk specialists, network technicians, computer security specialists, network specialists, network managers, network systems analysts, network systems technicians, network troubleshooters, WAN/LAN managers, or network system administrators. This program also provides supplemental training for persons previously or currently employed in these occupations.

If you need additional information after seeing an advisor, please send an email to BCCInfo@SJRstate.edu.

GENERAL EDUCATION COURSES:

	ENC	1101	Composition I.....	3
+	ENC	1102	Composition II.....	3
+*	_____	_____	General Education Mathematics.....	3
+*	_____	_____	General Education Humanities.....	3
*	_____	_____	General Education Social Science.....	3

DEGREE SPECIFIC COURSES:

+	CET	1178C	Computer Hardware Support Essentials.....	3
+	CET	1600C	Network Fundamentals.....	3
+	CET	2179C	Computer Software Support Essentials.....	3
+	CET	2565C	Introduction to Server Operating Systems.....	3
+	CET	2610C	Routing Protocols and Concepts.....	3
+	CET	2615C	LAN Switching and Wireless.....	3
+	CET	2620C	Accessing the WAN.....	3
+	CET	2660C	Network Security Essentials.....	3
+	CET	2883C	Attack Prevention and Detection.....	3
+	CGS	1060	Introduction to Computer Concepts.....	3
+	CGS	1560C	Microcomputer Operating Systems.....	3
+	COP	1000	Introduction to Computer Programming.....	3
+	CTS	2111C	Linux Server Administration.....	3

ELECTIVES (CHOOSE ANY 6 CREDIT HOURS)

	CAP		(Any CAP course).....	3-6
	CET		(Any CET course).....	3-6
	CGS	1100	Microcomputer Application Software.....	3
+	CGS	2545	Database Concepts for Business.....	3
+	CGS	2811C	Disaster Recovery Fundamentals.....	3
+	CGS	2820	Web Page Design and Publishing.....	3
+	CGS	2930	Special Topics in Computer Studies.....	3
+	CGS	2949	Computer Information Technology Capstone.....	3
+	CIS	2321	Information Systems.....	3
	COP		(Any COP course).....	3-6
	CTS		(Any CTS course).....	3-6
	ETS		(Any ETS course).....	3
	GIS		(Any GIS course).....	3-6

REQUIRED TOTAL CREDIT HOURS

60

*Refer to A.A. degree general education requirements.

+Prerequisite course required. See course descriptions in catalog.

NOTE: The CISCO Lab is located on the Orange Park campus. The following courses are only taught in the CISCO Lab: CET 1600C, CET 2610C, CET 2620C, and CET 2615C. Most of the courses requiring lab component will be offered as hybrid classes. In hybrid courses, theory and concepts are taught online and students are required to attend campus to complete lab requirements.

Courses are listed alphabetically. This is not the order in which courses should be taken. Please see the program plan/course rotation to see the order in which courses should be taken.



This program prepares graduates for entry-level work as business applications programmers or analysts. Graduates possess knowledge of general computer concepts and data processing fundamentals and skills in programming, accounting, and systems analysis and design. The practical applications skills in business programming enable graduates to pursue careers in business programming, systems analysis, or management. Students who plan to pursue the B.S. degree will need additional general education courses to meet university requirements.

The Computer Programming and Analysis can be completed on campus or online.

If you need additional information after seeing a counselor, please send an e-mail to BCCInfo@sjrstate.edu.

GENERAL EDUCATION COURSES:

ENC	1101	Composition I.....	3
+ ENC	1102	Composition II.....	3
+*	_____	General Education Mathematics.....	3
+*	_____	General Education Social Science.....	3
+*	_____	General Education Humanities.....	3

DEGREE SPECIFIC COURSES:

+ CAP	2023	Introduction to Game Programming.....	3
CGS	1060	Introduction to Computer Concepts.....	3
+ COP	1000	Introduction to Computer Programming.....	3
+ CGS	2949	Computer Information Technology Capstone.....	3
+ CIS	2321	Information Systems.....	3
+ COP	2830	Web Programming in PHP, XHTML.....	3
+ COP	2822	Webpage Authoring.....	3

PROGRAMMING ELECTIVES + OPTIONS

24

Choose 1 specialization for the remaining 24 hours

OPTION A-ROBOTICS

24

+ COP	2224	Programming in C+.....	3
+ COP	2360	Programming in C#.....	3
+ COP	2220	Programming in C.....	3
+ COP	2837	Programming in Visual Basic.Net.....	3
ETS	1603C	Fundamentals of Robotics.....	3
+ ETS	1542	Programmable Logic Controllers I.....	3
+ ETS	2604C	Robotics Applications.....	3
+ ETS	2544C	Programmable Logic Controllers II.....	3

OPTION B-SOFTWARE DEVELOPER

24

+ COP	2220	Programming in C.....	3
+ COP	2224	Programming in C+.....	3
+ COP	2360	Programming in C#.....	3
+ COP	2657	Mobile App Programming.....	3
+ COP	2800	Java Programming.....	3
+ COP	2801	Programming JavaScript.....	3
+ COP	2805	Advanced Java Programming.....	3
+ COP	2837	Programming in Visual Basic.Net.....	3

OPTION C- DATABASE

24

+ CAP	2762	Introduction to Data Mining.....	3
+ CGS	2545	Database Concepts for Business.....	3
+ COP	2700	Intro to SQL.....	3
+ COP	2701	Advanced Database Concepts.....	3
+ COP	2800	Java Programming.....	3
+ COP	2801	Programming in JavaScript.....	3
+ COP	2805	Advanced Java Programming.....	3
+ COP	2657	Introduction to Mobile App Programming.....	3

REQUIRED TOTAL CREDIT HOURS

60

*Refer to A.A. degree general education requirements.

+Prerequisite course required. See course descriptions in catalog.

Additional credit may be awarded for current industry certifications based on the Florida Department of Education Gold Standard Industry Certification articulation agreements.

SOME DEGREE SPECIFIC COURSES AVAILABLE ON THE ORANGE PARK CAMPUS ONLY

This program prepares students for employment as computer programmer trainees, systems analyst trainees, microcomputer specialists and software application technicians. This program prepares individuals to use methods and procedures to automate business applications, to utilize business software applications, and to incorporate review of system and programming specifications to yield solutions to business applications problems. It also provides supplemental training for persons previously or currently employed in this occupational area.

This program is an intermediate step toward an Associate in Science degree in Computer Programming and Analysis.

If you need additional information after seeing an advisor, please send an email to BCCInfo@SJRstate.edu.

CERTIFICATE SPECIFIC COURSES:

+ CAP	2023	Introduction to Game Programming.....	3
CGS	1060	Introduction to Computer Concepts.....	3
+ CGS	2545	Database Concepts for Business	3
+ CIS	2321	Information Systems	3
+ COP	1000	Introduction to Computer Programming	3
+ COP	2224	Programming in C+.....	3
+ COP	2701	Advanced Database Concepts in Programming	3
+ COP	2800	Java Programming	3
COP	2805	Advanced Java Programming	3
+ COP	2822	Web Page Authoring	3
+ COP	2837	Introduction to Programming with Visual Basic.NET	3

REQUIRED TOTAL CREDIT HOURS **33**

+Prerequisite course required. See course descriptions in catalog.

Additional credit may be awarded for current industry certifications based on the Florida Department of Education Gold Standard Industry Certification articulation agreements.

NOTE: Courses are listed alphabetically. This is not the order in which the courses should be taken. Please see the program plan/course rotation to see the order in which courses should be taken. This will ensure that you complete prerequisite courses and are prepared for additional courses when they are offered.



COMPUTER PROGRAMMING SPECIALIST (4120)

COLLEGE CREDIT CERTIFICATE

This program prepares students for employment as entry level programmers or programmer specialists or to provide supplemental training for persons previously or currently employed in these occupations. The content prepares individuals to store, locate, and retrieve specific documents, data, and information; code into computer language; test, monitor, debug, document and maintain computer programs.

This program is an intermediate step toward an Associate in Science degree in Computer Programming and Analysis.

If you need additional information after seeing an advisor, please send an email to BCCInfo@SJRstate.edu.

CERTIFICATE SPECIFIC COURSES:

	CGS	1060	Introduction to Computer Concepts	3
+	CGS	2545	Database Concepts for Business	3
+	COP	1000	Introduction to Computer Programming	3
+	COP	2224	Programming in C+.....	3
+	COP	2822	Web Page Authoring	3
+	COP	2837	Introduction to Programming with Visual Basic.NET	3

REQUIRED TOTAL CREDIT HOURS **18**

+Prerequisite course required. See course descriptions in catalog.

Additional credit may be awarded for current industry certifications based on the Florida Department of Education Gold Standard Industry Certification articulation agreements.

NOTE: Courses are listed alphabetically. This is not the order in which the courses should be taken. Please see the program plan/course rotation to see the order in which courses should be taken. This will ensure that you complete prerequisite courses and are prepared for additional courses when they are offered.



This program prepares students for entry-level employment in the field of computer security with an emphasis on digital forensics and computer crime investigation. This program will also enhance the knowledge of those previously or currently employed in the field.

This program is an intermediate step toward the Associate in Science degree in Computer Network Engineering.

If you need additional information after seeing an advisor, please send an email to BCCInfo@SJRstate.edu.

DEGREE SPECIFIC COURSES:

+ CAP	2140	Data Forensics I	3
+ CAP	2141	Data Forensics II	3
+ CET	2660C	Network Security Essentials.....	3
+ CET	2883C	Attack Prevention and Detection	3
	CGS 1060	Introduction to Computer Concepts	3
+ COP	1000	Introduction to Computer Programming	3
+ CTS	2111C	Linux Server Administration.....	3
+ CNT	2500	Network/Data Telecommunications	3
	OR		
	CET 1600C	Network Fundamentals.....	3

REQUIRED TOTAL CREDIT HOURS **24**

+Prerequisite course required. See course descriptions in catalog.

Additional credit may be awarded for current industry certifications based on the Florida Department of Education Gold Standard Industry Certification articulation agreements.

NOTE: Most of the courses requiring a lab component will be offered as hybrid classes. In hybrid courses, theory and concepts are taught online and students are required to attend campus to complete lab requirements.

NOTE: Courses are listed alphabetically. This is not the order in which the courses should be taken. Please see the program plan/course rotation to see the order in which courses should be taken. This will ensure that you complete prerequisite courses and are prepared for additional courses when they are offered.

This college credit certificate is designed to prepare students for employment with companies that have a continuing need for trained customer support specialists to answer customer problem calls and provide assistance in solving technical problems.

This program is an intermediate step toward the Associate in Science degree in Computer Information Technology.

If you need additional information after seeing an advisor, please send an email to BCCInfo@SJRstate.edu.

CERTIFICATE SPECIFIC COURSES:

+ CET	1178C	Computer Hardware Support Essentials.....	3
+ CET	2179C	Computer Software Support Essentials.....	3
	CGS 1060	Introduction to Computer Concepts.....	3
	CGS 1100	Microcomputer Application Software.....	3
+ CNT	2500	Network/Data Communications.....	3
+ CTS	2155	Customer Support Operations.....	3

REQUIRED TOTAL CREDIT HOURS **18**

+Prerequisite course required. See course descriptions in catalog.

Additional credit may be awarded for current industry certifications based on the Florida Department of Education Gold Standard Industry Certification articulation agreements.

NOTE: The CISCO lab is located on the Orange Park Campus. The following courses are only taught in the CISCO Lab: CET 1600C, CET 2610C, CET 2620C, CET 2615C. Most of the courses requiring a lab component will be offered as hybrid classes. In hybrid courses, theory and concepts are taught online and students are required to attend campus to complete lab requirements.

NOTE: Courses are listed alphabetically. This is not the order in which the courses should be taken. Please see the program plan/course rotation to see the order in which courses should be taken. This will ensure that you complete prerequisite courses and are prepared for additional courses when they are offered.



This program prepares students for entry-level employment as Internet/intranet technicians, Web Internet/intranet developers, website developers, Internet/intranet masters, and webmasters. This program will also enhance the knowledge of those previously or currently employed in the field.

This program is an intermediate step toward an Associate in Science degree in Internet Services Technology.

If you need additional information after seeing an advisor, please send an email to BCCInfo@SJRstate.edu.

CERTIFICATE SPECIFIC COURSES:

	CGS	1060	Computer Concepts	3
	CGS	2554	Introduction to Electronic Commerce	3
+	CNT	2500	Network/Data Communications	3
+	COP	2822	Web Page Authoring	3
	DIG	1109	Digital Imaging Fundamentals	3
+	CTS	1142	Information Technology Project Management.....	3

REQUIRED TOTAL CREDIT HOURS 18

+Prerequisite course required. See course descriptions in catalog.

Additional credit may be awarded for current industry certifications based on the Florida Department of Education Gold Standard Industry Certification articulation agreements.

NOTE: Most of the courses requiring a lab component will be offered as hybrid classes. In hybrid courses, theory and concepts are taught online and students are required to attend campus to complete lab requirements.

NOTE: Courses are listed alphabetically. This is not the order in which the courses should be taken. Please see the program plan/course rotation to see the order in which courses should be taken. This will ensure that you complete prerequisite courses and are prepared for additional courses when they are offered.



INFORMATION TECHNOLOGY SUPPORT SPECIALIST (4109)

COLLEGE CREDIT CERTIFICATE

This college credit certificate is designed to prepare students for employment as technical support specialists with an IT department. Individuals in this area help IT staff analyze, troubleshoot, and evaluate computer and network problems.

This program is an intermediate step toward an Associate in Science degree in Computer Information Technology.

If you need additional information after seeing an advisor, please send an email to BCCInfo@SJRstate.edu.

CERTIFICATE SPECIFIC COURSES:

+ CET	2179C	Computer Software Support Essentials.....	3
	CGS 1060	Introduction to Computer Concepts.....	3
	CGS 1100	Microcomputer Application Software	3
+ CGS	1560C	Microcomputer Operating System.....	3
+ CNT	2500	Network/Data Communications	3
+ CTS	2155	Customer Support Operations	3

REQUIRED TOTAL CREDIT HOURS **18**

+Prerequisite course required. See course descriptions in catalog.

Additional credit may be awarded for current industry certifications based on the Florida Department of Education Gold Standard Industry Certification articulation agreements.

NOTE: The CET lab is located on the Orange Park campus. Most of the courses requiring a lab component will be offered as hybrid classes. In hybrid courses, theory and concepts are taught online and students are required to attend campus to complete lab requirements.

NOTE: Courses are listed alphabetically. This is not the order in which the courses should be taken. Please see the program plan/course rotation to see the order in which courses should be taken. This will ensure that you complete prerequisite courses and are prepared for additional courses when they are offered.



The Information Technology Analysis certificate provides graduates with opportunities to become IT Analyst professionals, also referred to as business, system, or software analysts. These workers are responsible for supporting existing systems and analyzing, making recommendations and implementing technology-based information solutions. This program is an intermediate step toward the Associate in Science degree in Computer Information Technology.

If you need additional information after seeing a counselor, please send an e-mail to BCCInfo@SJRstate.edu.

CERTIFICATE SPECIFIC COURSES:

+	CET	1178C	Computer Hardware Support Essentials.....	3
+	CET	2179C	Computer Software Support Essentials.....	3
	CGS	1060	Introduction to Computer Concepts.....	3
	CGS	1100	Microcomputer Application Software.....	3
+	CNT	2500	Network/Data Communications.....	3
+	CTS	2155	Customer Support Operations.....	3
+	CET	2660C	Network Security Essentials.....	3
+	CET	2565C	Introduction to Server Operating Systems.....	3
+	CTS	1142	Information Technology Project Management.....	3

REQUIRED TOTAL CREDIT HOURS 27

+Prerequisite course required. See course descriptions in catalog.

Additional credit may be awarded for current industry certifications based on the Florida Department of Education Gold Standard Industry Certification articulation agreements.

NOTE: Courses are listed alphabetically. This is not the order in which the courses should be taken. Please see the program plan/course rotation to see the order in which courses should be taken. This will ensure that you complete prerequisite courses and are prepared for additional courses when they are offered.



This college credit certificate is designed to prepare students for employment as technical support specialists with an IT department. Individuals in this area help IT staff analyze, troubleshoot, and evaluate computer and network problems.

This program is an intermediate step toward the Associate in Science degree in Computer Information Technology.

If you need additional information after seeing a counselor, please send an email to BCCInfo@SJRstate.edu.

CERTIFICATE SPECIFIC COURSES:

+ CET	1178C	Computer Hardware Support Essentials.....	3	
+ CET	2179C	Computer Software Support Essentials.....	3	
	CET	2660C	Network Security Essentials.....	3
	CGS	1060	Introduction to Computer Concepts.....	3
+ CGS	1560C	Microcomputer Operating Systems.....	3	
+ CNT	2500	Network/Data Communications	3	
	COP	1000	Introduction to Computer Programming	3
+ CTS	2191C	Mobile Device Concepts	3	

REQUIRED TOTAL CREDIT HOURS **24**

+Prerequisite course required. See course descriptions in catalog.

Additional credit may be awarded for current industry certifications based on the Florida Department of Education Gold Standard Industry Certification articulation agreements.

NOTE: The CET lab is located on the Orange Park Campus. Most of the courses requiring a lab component will be offered as hybrid classes. In hybrid courses, theory and concepts are taught online and students are required to attend campus to complete lab requirements.

NOTE: Courses are listed alphabetically. This is not the order in which the courses should be taken. Please see the program plan/course rotation to see the order in which courses should be taken. This will ensure that you complete prerequisite courses and are prepared for additional courses when they are offered.



This program prepares students seeking employment in areas including Web administration, webmaster, Web coordinator, Internet developer, Internet/extranet developer, Internet manager, and Web designer. The program will also enhance knowledge of persons currently employed in the field.

If you need additional information after seeing an advisor, please send an email to BCInfo@SJRstate.edu.

GENERAL EDUCATION COURSES:

ENC	1101	Composition I.....	3	
+	ENC	1102	Composition II.....	3
+	*	—	General Education Mathematics.....	3
*	—	—	General Education Social Science.....	3
+	*	—	General Education Humanities.....	3

DEGREE SPECIFIC COURSES:

CGS	1060	Computer Concepts	3	
CGS	2554	Introduction to Electronic Commerce	3	
CGS	2871	Multimedia	3	
+	CGS	2820	Web Page Design & Publishing	3
+	CNT	2500	Network/Data Communications	
	OR			
+	CET	1600C	Network Fundamentals.....	3
+	COP	1000	Introduction to Computer Programming	3
+	COP	2657	Mobile Programming.....	3
+	COP	2700	Introduction to SQL.....	3
+	COP	2800	Java Programming	3
+	COP	2801	Programming in JavaScript.....	3
+	COP	2822	Web Page Authoring	3
+	COP	2830	Web Programming Languages.....	3
+	CTS	1142	Information Technology Project Management.....	3
	DIG	1109	Digital Imaging Fundamentals	3
+	DIG	2101	Advanced Web Design.....	3
	COP/CGS		(any Computer Science course).....	3

REQUIRED TOTAL CREDIT HOURS **63**

*Refer to A.A. degree general education requirements.
 +Prerequisite courses required. See course descriptions in catalog.

Additional credit may be awarded for current industry certifications based on the Florida Department of Education Gold Standard Industry Certification articulation agreements.

NOTE: Most of the courses requiring a lab component will be offered as hybrid classes. In hybrid courses, theory and concepts are taught online and students are required to attend campus to complete lab requirements.

NOTE: Courses are listed alphabetically. This is not the order in which the courses should be taken. Please see the program plan/course rotation to see the order in which courses should be taken. This will ensure that you complete prerequisite courses and are prepared for additional courses when they are offered.

NETWORK ENTERPRISE ADMINISTRATION (4126)

COLLEGE CREDIT CERTIFICATE

This certificate is a college credit program that prepares students for jobs as trained network technicians capable of building, managing, securing, and solving intricate and dynamic technical problems of networks, especially those composed of CISCO routers and switches.

If you need additional information after seeing an advisor, please send an email to BCCInfo@SJRstate.edu.

CERTIFICATE SPECIFIC COURSES:

+ CET	1600C	Network Fundamentals	3
+ CET	2610C	Routing Protocols and Concepts	3
+ CET	2565C	Introduction to Server Operating Systems.....	3
+ CET	2620C	Accessing the WAN	3
+ CET	2660C	Network Security Essentials.....	3
+ CET	2615C	LAN Switches and Wireless	3
+ CET	2883C	Attack Prevention and Detection	3
CGS	1060	Introduction to Computer Concepts	3
+ CTS	2111C	Linux Server Administration.....	3

REQUIRED TOTAL CREDIT HOURS 27

+Prerequisite course required. See course descriptions in catalog.

Additional credit may be awarded for current industry certifications based on the Florida Department of Education Gold Standard Industry Certification articulation agreements.

NOTE: The CISCO lab is located on the Orange Park campus. The following courses are only taught in the CISCO lab: CET 1600C, CET 2610C, CET 2620C and CET 2615C.

NOTE: Most of the courses requiring a lab component will be offered as hybrid classes. In hybrid courses, theory and concepts are taught online and students are required to attend campus to complete lab requirements.

NOTE: Courses are listed alphabetically. This is not the order in which the courses should be taken. Please see the program plan/course rotation to see the order in which courses should be taken. This will ensure that you complete prerequisite courses and are prepared for additional courses when they are offered.



This college credit certificate program prepares students for jobs as trained network support technicians capable of managing, securing, and solving technical problems of networks, especially those composed of CISCO routers and switches. The curriculum covers networking fundamentals, WAN technologies, basic security and wireless concepts. In addition, completion of this certificate will prepare students for the opportunity to earn CISCO industry certifications.

If you need additional information after seeing an advisor, please send an email to BCCInfo@SJRstate.edu.

CERTIFICATE SPECIFIC COURSES:

	CGS	1060	Introduction to Computer Concepts	3
+	CET	1600C	Network Fundamentals	3
+	CET	2610C	Routing Protocols and Concepts	3
+	CET	2620C	Accessing the WAN	3
+	CET	2660C	Network Security Essentials.....	3
+	CET	2615C	LAN Switches and Wireless	3

REQUIRED TOTAL CREDIT HOURS **18**

+Prerequisite course required. See course descriptions in catalog.

Additional credit may be awarded for current industry certifications based on the Florida Department of Education Gold Standard Industry Certification articulation agreements.

Gainful employment information regarding the cost, careers, completion and placement rates associated with this program may be found at SJRstate.edu/geprograms.html.

NOTE: The CISCO lab is located on the Orange Park campus. The following courses are only taught in the CISCO lab: CET 1600C, CET 2610C, CET 2620C and CET 2615C.

PROGRAMS OF STUDY

COMPUTER SCIENCES

This certificate is a college credit program that prepares students for entry level positions in the field of network security. Students will learn and demonstrate proficiency in the following areas: operating systems, virtual machines, network design, operations, securing network infrastructure and protecting data, penetration testing, ethical hacking, cyber security incidents, basic forensic analysis, and employability skills.

If you need additional information after seeing an advisor, please send an email to BCCInfo@SJRstate.edu.

CERTIFICATE SPECIFIC COURSES:

+ CET	1600C	Network Fundamentals	3
+ CET	2565C	Introduction to Server Operating Systems.....	3
+ CET	2660C	Network Security Essentials.....	3
+ CET	2883C	Attack Prevention and Detection	3
	CGS 1060	Introduction to Computer Concepts	3
+ COP	1000	Introduction to Programming	3
+ CTS	2111C	Linux Server Administration.....	3

REQUIRED TOTAL CREDIT HOURS **21**

+Prerequisite course required. See course descriptions in catalog.

Additional credit may be awarded for current industry certifications based on the Florida Department of Education Gold Standard Industry Certification articulation agreements.

NOTE: Most of the courses requiring a lab component will be offered as hybrid classes. In hybrid courses, theory and concepts are taught online and students are required to attend campus to complete lab requirements.

NOTE: Courses are listed alphabetically. This is not the order in which the courses should be taken. Please see the program plan/course rotation to see the order in which courses should be taken. This will ensure that you complete prerequisite courses and are prepared for additional courses when they are offered.



ROBOTICS AND SIMULATION TECHNICIAN (4128)

COLLEGE CREDIT CERTIFICATE

This program prepares students for employment as entry level robotics technicians in the areas of electronics and manufacturing or to provide supplemental training for persons previously or currently employed in these occupations. The content prepares individuals in the areas of robotic applications, modeling and simulation, and virtual reality environments. Upon completion of this technical program, the student will be able to install, maintain and troubleshoot general robot systems and simulators.

If you need additional information after seeing an advisor, please send an email to BCCInfo@SJRstate.edu.

DEGREE SPECIFIC COURSES:

ETS	1603C	Fundamentals of Robotics	3
ETS	1542	Programmable Logic Controllers I	3
ETS	2544C	Programmable Logic Controllers II	3
ETS	2604	Robotics Application	3

REQUIRED TOTAL CREDIT HOURS **12**

NOTE: Courses are listed alphabetically. This is not the order in which the courses should be taken. Please see the program plan/course rotation to see the order in which courses should be taken. This will ensure that you complete prerequisite courses and are prepared for additional courses when they are offered.



This program prepares students for entry-level employment as Internet/intranet technicians, Web Internet/intranet developers, website developers, Internet/intranet masters, and webmasters. This program will also enhance the knowledge of those previously or currently employed in the field.

This program is an intermediate step toward an Associate in Science degree in Internet Services Technology.

If you need additional information after seeing an advisor, please send an email to BCCInfo@SJRstate.edu.

DEGREE SPECIFIC COURSES:

	CGS	1060	Computer Concepts	3
	CGS	2554	Introduction to Electronic Commerce	3
+	CGS	2820	Web Page Design and Publishing.....	3
	CGS	2871	Multimedia.....	3
+	CNT	2500	Network/Data Communications.....	3
+	COP	1000	Introduction to Computer Programming.....	3
+	COP	2700	Introduction to SQL	3
+	COP	2801	Programming in JavaScript.....	3
+	COP	2822	Web Page Authoring	3
	CTS	1142	Information Technology Project Management.....	3
	DIG	1109	Digital Imaging Fundamentals	3
+	DIG	2101	Advanced Web Design.....	3

REQUIRED TOTAL CREDIT HOURS 36

+Prerequisite course required. See course descriptions in catalog.

Additional credit may be awarded for current industry certifications based on the Florida Department of Education Gold Standard Industry Certification articulation agreements.

NOTE: Most of the courses requiring a lab component will be offered as hybrid classes. In hybrid courses, theory and concepts are taught online and students are required to attend campus to complete lab requirements.

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