



**JAVA Development and Programming**  
 Career and Technical Education  
*Your Future Starts Here – Unlock Your Potential!*  
 2023-24 SY



<b>Career Cluster:</b> Information Technology		<b>CTE Program:</b> Secondary JAVA Development and Programming (9007200) Bean Center <b>Postsecondary:</b> FSCJ, UNF, JU, UF, FSU						
<b>Career Cluster Pathway:</b> Programming and Coding		<b>Industry Certification: Secondary:</b> Information Technology Specialist – Javascript CERTI010; Information Technology Specialist – Java CERTI1013; JavaScript Coding Specialist KNOWL004; Oracle Certified Associate ORACL004; Oracle Certified Professional ORACL005, ITS Python						
		<b>16 CORE CURRICULUM CREDITS</b>				<b>8 ADDITIONAL CREDITS</b>		
		<b>ENGLISH</b> 4 credits	<b>MATH</b> 4 credits	<b>SCIENCE</b> 3 credits, 2 with lab	<b>SOCIAL STUDIES</b> 3 credits	<b>OTHER REQUIRED COURSES</b> <b>FINE ARTS</b> (1 credit) <b>PHYSICAL EDUCATION</b> (1 credit)	<b>CAREER AND TECHNICAL EDUCATION COURSES</b>	<b>RECOMMENDED ELECTIVES</b>
<b>HIGH SCHOOL</b>	<ul style="list-style-type: none"> <li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements. The Bright Futures Gold Seal CAPE Scholars award requires at least 5 postsecondary credit hours through CAPE industry certifications. For further details, refer to the Bright Futures Student Handbook.</li> </ul>							
	<b>9<sup>th</sup></b>	English 1 or English 1 Honors	Algebra I (or Honors) or Geometry (or Honors)	Environmental Science or Biology (or Bio Honors)	AP Human Geography or Elective	HOPE – Health Opportunities through Physical Education	Foundations of Programming 9007210 (Honors Credit)	Digital Information Technology
	<b>10<sup>th</sup></b>	English 2 or English 2 Honors	Geometry or Algebra II (or Honors)	Biology, Chemistry, Physics, Anatomy (or Honors Level)	World History (or Honors or AP)	Fine or Practical Arts	Procedural Programming 9007220 (Honors Credit)	AP Computer Science Principles
	<b>11<sup>th</sup></b>	English 3 or English 3 Honors	Algebra II, Math for College Liberal Arts, Math for College Algebra, Pre-Calculus	Chemistry, Physics, Anatomy (or Honors Level)	US History or US History Honors or APUSH	Elective or World Language	Object-Oriented Programming Fundamentals 9007230 (Honors Credit)	Elective
	<b>12<sup>th</sup></b>	English 4 or English 4 Honors or AP Eng. Literature	Math for Data & Financial Literacy, Math for College Algebra, or AP Calculus	Marine Science, Earth/Space, Physics, AP Physics, AP Biology	American Government .5 + Economics .5 or AP Microeconomics and AP Government	Elective or World Language	AP Computer Science A (Honors Credit)	Elective
<b>POSTSECONDARY</b>	<b>Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.</b>							
	<b>TECHNICAL CENTER PROGRAM(S)</b>		<b>COMMUNITY COLLEGE PROGRAM(S)</b>			<b>UNIVERSITY PROGRAM(S)</b>		
	<b>Florida State College at Jacksonville:</b> Technical Certificates in Computer Programming Specialist, Database Development Specialist, Network Enterprise Administration, Network Infrastructure, Network Support Technician, Digital Forensics, Information Technology Analysis, Information Technology Support Specialist		<b>Florida State College at Jacksonville:</b> Associate in Science Degrees in Information Systems Technology, Computer Information Technology, IT Security, Network Systems Technology			<b>FSCJ-</b> Computer Systems Networking, Information Systems Technology <b>UNF, JU, UF, FSU, UCF</b> Numerous Information Technology and Networking Degrees		
<b>CAREER</b>	<b>Sample Career Specialties – Careers from the Targeted Occupations List are in bold.</b>							
	Coding and Programming		Coding and Programming, Web Design			Information Technology/Network Engineer and Project Manager		
<b>Career and Technical Student Association or Suggested Extracurricular Activity</b>								
Future Business Leaders of America, Robotics Club, e-Sports								