

Programming

Curriculum Plan 2022-2023

Area of Concentration: N3

CTSO: BPA

Program Courses

EMIS Course Code	Course Name	Grade	Is this course a CTAG?
145005	Information Technology	10	No
145060	Programming	11	Yes
145065	Object Oriented Programming	11	No
145090	Game Design	12	No
145015	IT Capstone	12	N/A

Industry Credentials/Certifications

Industry Credentials Offered	ODE Points Available	Completed during Grade
TBD		

College Credit Opportunities

Course Name	College	Credit Hours	Completed during Grade
CTPROG001 Computer Logic	CTAG	3	11
CTPROG002 Java Programming	CTAG	3	11

Work-Based Learning Opportunities

CTSO Competitions	
On the job placement opportunities	

Tasks

- Modify software programs to improve performance.
- Write computer programming code.
- Test software performance.
- Resolve computer software problems.
- Collaborate with others to resolve information technology issues.
- Develop diagrams or flow charts of system operation.
- Develop models of information or communications systems.
- Document design or development procedures.
- Train others in computer interface or software use.
- Test computer system operations to ensure proper functioning.
- Prepare instruction manuals.
- Assign duties or work schedules to employees.
- Manage information technology projects or system activities.
- Supervise information technology personnel.
- Design websites or web applications.
- Develop computer or online applications.
- Teach others to use computer equipment or hardware.
- Coordinate project activities with other personnel or departments.

PROGRAMMING AND GAME DESIGN

Program of Study

Aligned with Sinclair – Computer Information Systems/Software Development
SODE.S.AAS

Secondary	9	English 9	Algebra I or Geometry	Physical Science	World History	PE/PE	Health/ Career Exploration	Elective
	10	English 10	Geometry or Algebra II	Biology	U.S. History	Elective	Information Technology 145005	
	11	English 11	Algebra II or Pre-Calculus	Chemistry or Environmental Science	American Government	Elective	Programming 145060	Animation 145115
	12	English 12	Adv Math	Elective	Elective	Elective	Game Design 145090	IT Capstone 145015

Post-Secondary	Fall Year 1	CIS 1107 Intro Operating Systems	CIS 1130 Network Fundamentals	ENG 1101 English Composition I	MAT 1120 Business Math	BIS 1120 Intro to Software Apps	SCC 1101 First Year Experience
	Spring Year 1	CIS 1111 Intro Prob Solv Comp Prog	CIS 1350 Web Dev HTML & CSS	MAN 2150 Management & Org Behavior	ECO 2160 Macroeconomics	COM 2225 Small Group Communication	
	Fall Year 2	CIS 1202 C++ Software Devel	CIS 2212 Java Software Dev I	CIS 1140 Info Sys Analysis & Desn	CIS 2165 Database Management	ACC 1100 Small Business Accounting	
	Spring Year 2	CIS 2217 Java Software Dev II	CIS 222 ASP.NET with C#	CIS 2170 CIS Internship	CIS 2268 Intro to Oracle	HUM 1130 Humanity & Technology	

Key	Required Course	Recommended Elective Courses	High School Career-Technical Courses Bold =College Credit Opportunity
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