High School

Computer Information Systems/Technology   Industrial and Engineering Pathway

This program of study should serve as a guide, along with other career planning materials, as you continue your career path.

Courses listed within this plan are only recommended coursework and should be individualized coursework to meet each learner's educational and career goals.

Key

Key	
Carrer PAthway Academic Required Courses	
Career Pathway Recommended Courses/Learner Activities	
Articulated Courses	
1-year Certificate	
AAS Degree	
University	
Proposed Pathway Course	

Education Levels	Grade	English / Language Arts	Math	Science	Social Studies / Sciences	Other Required Courses and Electives	Career Pathway Core Classes	Recommended Courses and/or Learning Activities	Degree or Diploma
	Grade Level	PROGRAM OF STUDY							
	9	English Language Arts 9	Algebra 1	Intergrated Science	World Studies	PE 1	Intro Infromation Tech		Diploma
	10	English Language Arts 10	Geometry	Biology	American Studies	Health and PE 2	Game Design 1 / Web Design 1 / Robotics 1		
	11	English Language Arts 11	Algebra 2	Physics	Computer Technology	World Language	Game Design 2 / Web Design 2 / Robotics 2	Java Programming	
HS	12	English Language Arts 12 or Humanities	Post Secondary Prep -Additional Year or semester of Math	Post Secondary Prep -Additional Year or semester of Science	Government/ Economics	World Language	Java Programing or Comuter Science Design	Java Programming; C++ and Data Structures (Dual Credit)	
	TERM	PROGRAM OF STUDY						Certificates/Degrees/Occupations	
	FIRST TERM	CIS 120 Computer Concepts I	CIS 121 Computer Concepts II	CIS 122 Introduction to Programming Logic					
	SECOND TERM	CIS 140M Operating Systems I: Microsoft	PSY 201A Introduction to Psychology - Part 1	WR 121 English Composition				**1-year Certificate** Minimu 47 credits hese certificates begin at an advanced level and are designed for individuals already working in, or have worked in, an information technology position. Students must satisfactorily complete all courses with a CIS and CS prefix with a grade of "C" or "P" or better. Students must contact a CIS advisor for correct	
		WR 122	CIS Program	CIS Program					

	TERM	PROGRAM OF STUDY					TERM	Certificates/Degrees/Occupations
PCC	THIRD TERM	WR 122 English Composition	CIS Program Elective	CIS Program Elective			Web Application Development includes 12 credits including CIS 133W, CIS 135M, and CIS 195P	placement in any of these certificate programs. Reading, writing and math readiness is critical for all Computer Information System (CIS) degrees and certificates. Talk to a CIS Department advisor for clarification regarding what constitutes math competency. Students with insufficient preparation to enter at this level may need to extend the time it takes to complete the program. CIS Department advisors will provide information regarding options to those students who may need to take preparatory course work.
	FOURTH TERM	CIS Program Elective	IS Program Electiv	CIS Program Business Elective				
	FIRST TERM	CIS 120 Computer Concepts I	CIS 121 Computer Concepts II	CIS 122 Introduction to Programming Logic				**Associate of Applied Science**
	SECOND TERM	CIS 140M Operating Systems I: Microsoft	CIS 179 Data Communication Concepts I	CIS 244 Systems Analysis	CIS Program Business Elective			Minimum of 94 credits his degree prepares students for computer information systems related careers. Students will take classes in the CIS Department that include software analysis, design, programming (in two or more languages), database modeling, Windows or Unix operating systems, data communications and an extensive selection of electives. Emphasis is on developing enduring skills and knowledge, rather than on training students to use specific tools and applications that may be "fashionable," but that haven't established a foothold in industry.
	THIRD TERM	CIS 275 Data Modeling and SQL Introduction	WR 121 English Composition	WR 227 Technical and Professional Writing 1	CIS Program Elective			
	FOURTH TERM	CIS Program Elective	CIS Program Elective	General Education	General Education			
	FIFTH TERM	CIS Program Elective	CIS Program Elective	CIS Program Elective	CIS Program Business Elective			
PCC	SIXTH TERM	CIS Program Elective	CIS Program Elective	CIS Program Elective				
UNI								