COMPUTER INFORMATION SYSTEMS

(Applications Option--110301701)
(Programming Option--110301702)
(Web Business Applications Option--110301703)

Note: This curriculum guide is for CIS majors who entered the program prior to Fall 2012 and who have maintained a continuous enrollment in the program (excluding summer). New majors need to follow under the new CIT curriculum guides

Associate in Applied Science Degree

This program includes an Applications Option, a Programming Option, and a Web Business Applications Option with a core of courses common to all three. The core includes a general education component central to a collegiate education and technical courses. In addition to the core courses, students take specialty courses for the option selected.

The **Applications Option** is designed to train students to operate a wide variety of software packages and to assist businesses in developing and maintaining databases, producing financial statements, and developing applications using various software packages. **Students are required to take Co-op or Internship to gain work experience that will improve their job marketability.** Students completing this option are prepared to work with microcomputer-based systems in business and industry.

The **Programming Option** provides students with an introduction to at least three programming languages with one of the languages studied at the intermediate level. **Students are required to take Co-op or Internship to gain work experience that will improve their job marketability.** Students completing this option are prepared for the entry-level position of computer programmer.

The **Web Business Applications Option** trains students to develop state-of-the-art web pages for business and industry. **Students are required to take Co-op or Internship to gain work experience that will improve their job marketability.** Students completing this option are prepared to develop and work with web-based systems in business and industry.

Admissions Policy:
As an open admissions community college, JCC accepts high school or GED graduates or individuals eligible to take the GED.

Application Procedure:
Submit the following:
1. College application form
2. Scores from the American College Test (ACT). ACT scores are not required for students with previous college credit (Advanced Standing).
3. Official transcripts of college work completed.

For Financial Assistance Contact:
Financial Aid Office
Jefferson Education Center
Jefferson Community and Technical College
109 East Broadway
Louisville, KY 40202
Phone: (502) 213-2137

For Further Information Contact:
CIS Program Coordinator, Prof. Robert Riedling
Business Division, VTI 224
Jefferson and Technical College
109 East Broadway
Louisville, KY 40202
Phone: (502) 213-2387

Jefferson Community and Technical College does not discriminate on the basis of race, color, national origin, religion, marital status, sex or handicap in employment, educational programs or activities as set forth in Title IX, Title VI and Section 504. Jefferson Community and Technical College will comply with Section 504 of the Rehabilitation Act and Title IX. Disabled students can receive individual assistance by contacting the college's handicapable services counselors.

General Education Requirements

____	150 MAT	College Algebra (Prerequisite: One of the following: 1. Math ACTE scores of 20 or above. 2. Math ACTE scores of 18 or 19 with concurrent MT 100 workshop. 3. MT 120 or MT 122 or MT 125. 4. KCTCS placement exam recommendation)	(3)
____	_____	Heritage Humanities Course	3
____	_____	Science Course	3
____	_____	Social Interaction Course	3
____	101 ENG	Writing I (Prerequisite: ACT verbal score greater than 18 or COMPASS test placement)	3
____	102 ENG	Writing II (Prerequisite: ENG 102)	3
____	181 COM	Basic Public Speaking **or**	3
	252 COM	Introduction to Interpersonal Communications	(3)
____	100 CIS/ 105 CIT	Introduction to Computers (Prerequisite: Basic keyboarding skills recommended)	3
		or equivalent	(3)
		Total General Education Requirements	**24**

CIS Core Requirements

____	110 CIS/ 111 CIT	Operating Systems Concepts (Prerequisite: Computer Literacy Course or consent of instructor)	3
		or Computer Hardware and Software (Prerequisite: CIT 105 or CIS 100 and MAT 150 or consent of instructor)	4
____	120 CIS/ 120 CIT	or Program Design & Development (Prerequisite: Computer Literacy Course or consent of instructor)	3
		Computational Thinking (Prerequisite: MAT 120 or consent of instructor	3
____	130 CIS/	Microcomputer Applications & Development (Prerequisite: Computer Literacy course or consent of instructor)	3
	130 CIT	or Productivity Software (Prerequisite: CIT 105 or CIS 100 or consent of instructor	3
____	147 CIS/ 171 CIT	Query Programming (Prerequisite: CIS 110, CIS 120, and CIS 130)	3
		or SQL 1 (Prerequisite: CIT 120 or CIS 120 or consent of instructor)	3
____	210 CIS/ 160 CIT	Communications & Networking (Prerequisite: CIS 110 and CIS 130 or equivalent)	3
		or Level 1 Networking Course (Prerequisite: CIT 111 or consent of instructor)	4
____	220 CIS/ 291 CIT	Systems Analysis & Design (Prerequisite: ENG 102 and CIS 120)	3
		or CIT Capstone Course (Prerequisite: CIT 120 or CIS 120 or consent of instructor	3
____	270 CIS/ 170 CIT	Database Management Systems (Prerequisite: CIS 147 and CIS 220)	3
		or Database Design Fundamentals (Prerequisites: CIT 105 or CIS 100 and MAT 150)	3
____	_____	Programming Language I (Prerequisite: CIS 120 or CIT 120 or consent of instructor)	3
____	_____	Accounting Course (Accounting 201 requires a Sophomore standing)	3
____	_____	Management Course (Web Business Applications Option majors required to take BA 282)	3
____	280 CIS	Internship or	
	290 CIT	Internship or	
____	199 COE	Co-op (Note: If an internship or Co-Op is not available, then an additional class may be taken at the discretion of the CIS Academic Program Coordinator)	3
____	160 BAS	Introduction to Business	3
		Total CIS Core Requirements	**36-38**

Applications Option Course Requirements

____	230 CIS/ 234 CIT and 236 CIT	Advanced Microcomputer Applications (Prerequisite: CIS 130 or consent of instructor)	3
		or Advanced Productivity Software and Adv. Data Organization (2 courses)	6
____	132 IT/ 150 CIT	Web Page Development (Prerequisite: CIS 100 or consent of instructor)	3
		or Internet Technologies	3
		Total Applications Option	**6-9/9**

Programming Option Requirements

____	_____	Programming Language I (in addition to CIS core) (Prerequisite: CIS 120 or consent of instructor)	3
____	_____	Programming Language II (Prerequisite: Subsequent level one course or consent of instructor)	3
		Total Programming Option	**6**

Web Business Applications Option Requirements

____	132 IT/	Web Page Development..(Prerequisite: CIS 100 or consent of instructor)	3
	150 CIT	or Internet Technologies	3
____	230 IT	Advanced Web Page Development (Prerequisite: IT 132 and a scripting language or consent of instructor)	3
		Total Web Business Applications Option	**6**

TOTAL AAS CIS DEGREE REQUIREMENTS **66-71**

Programming Language I

143 CIS	COBOL Programming	3
148 CIS	Visual Basic I	3
149 CIS	JAVA Programming I	3
152 NIS	Javascript	3
155 CIS	Introduction to C/C++	3
140 CIT	JavaScript I	3
141 CIT	PHP I	3
142 CIT	C++ I	3
145 CIT	Perl I	3
147 CIT	Programming I Language	3
148 CIT	Visual Basic I	3
149 CIT	Java I	3
171 CIT	SQL 1	3
	University Level I programming Languages as approved by local Program Coordinator	3-4

Programming Language II

232 CIS	Programming for Windows Environments	3
248 CIS	Visual Basic II	3
249 CIS	JAVA Programming II	3
252 CIS	Intermediate C ++	3
241 CIT	PHP II	3
242 CIT	C++ II	3
246 CIT	2D Game Development: Language	3
247 CIT	Programming II: Language	3
248 CIT	Visual Basic II	3
249 CIT	Java II	3
271 CIT	SQL II	3
	University Level II programming Language as approved by local Program Coordinator	3-4

Management Courses

200 BAS	Small Business Management	3
274 BAS	Human Resources Management	3
282 BAS	Principles of Marketing (Web Business Applications Option requirement)	3
283 BAS	Principles of Management	3
287 BAS	Supervisory Management	3
288 BAS	Personal and Organizational Leadership	3
275 OST	Office Management	3
101 QMS	Quality Management	3

CIS/CIT crosswalk of classes for current CIS majors

CIS class	CIT class	Notes
CIS 100 (Introduction to Computers)	CIT 105 (Introduction to Computers)	
CIS 110 (Operating Systems Concepts)	CIT 111 (Computer Hardware and Software)	Note that a CIS student can count CIT 111 in place of CIS 110 but a CIT student would need to take CIT 111 if he/she has not had an equivalent hardware course. The last time that CIS 110 will be taught will be in the summer 2012.
CIS 120 (Program Design and Development)	CIT 120 (Computational Thinking)	
CIS 130 (Microcomputer Applications	CIT 130 (Productivity Software)	
CIS 147 (Query Programming)	CIT 171 (SQL 1)	
CIS 148 (Visual Basic 1	CIT 148 (Visual Basic 1)	
CIS 149 (Java Programming 1)	CIT 149 (Java 1)	
CIS 155 (Intro to C/C++)	CIT 142 (C++ I)	
IT 132 (Web Page Design)	CIT 150 (Internet Technologies)	
CIS 210 (Communications and Networking)	CIT 160 (Introduction to Networking Concepts)	
CIS 220 (Systems Analysis & Design)	CIT 291 (Capstone course)	
CIS 230 (Advanced Microcomputer Applications)	CIT 234/CIT 236(Advanced Productivity Software/Adv Data Organization)	Note: there is no equivalent single course for the new CIT 234/CIT 236 classes. CIS 230 will continue to be offered through the Spring 2013 semester. After that, a current CIS major would need to complete CIT 234 and CIT 236 to satisfy this requirement.
CIS 248(Visual Basic II)	CIT 248(Visual Basic II)	
CIS 249(Java Programming II)	CIT 249(Java II)	
CIS 252(Intermediate C/C++)	CIT 242 (C++ II)	
CIS 270 (Database Management Systems)	CIT 170(Database Design Fundamentals)	
CIS 280 (Internship)	CIT 290(Internship)	