

LANSING COMMUNITY COLLEGE

CURRICULUM GUIDE

Computer Programmer/Analyst
Associate in Business Degree

Curriculum Code: 0113 (Effective Fall 2009 – Summer 2014)

Programmer/analysts plan, develop, test, and document computer programs at the request of a specific user, applying knowledge of programming techniques and computer systems. They may evaluate user requests to determine feasibility, cost, and time required, as well as compatibility with current system and computer capabilities. In addition, they read manuals, periodicals, and technical reports to develop programs that meet user requirements. They formulate a plan outlining steps required to develop programs and convert project specifications into program source instructions which are entered into the computer system and tested. They may write documentation and the user manual. **Not all courses in this program transfer to all colleges.** Students planning to transfer should see an academic advisor or counselor before enrolling in any course.

PREREQUISITES

Students should see *Course Descriptions* or *Course Offerings* for course prerequisite information. See the *Assessment and Placement Testing* section for skills assessment and advising information.

INFORMATION

Contact the Media, Art, and Information Technologies Department, Gannon Building, Room 131, telephone number (517) 483-1546 (Website: www.lcc.edu/mait/) or Counseling and Advising Centers, Gannon Building, Room 204, telephone number (517) 483-1904.

REQUIREMENTS

REQUIREMENTS		TOTAL: 27 CREDITS
CODE	TITLE	CREDIT HOURS
BUSN 118	Introduction to Business	3
CITD 120	SQL Concepts	2
CITF 108	Microsoft Windows	2
CITF 110	Intro Computer Info Systems	3
CITF 240	IT Project Management	3
CITF 260	Systems Analysis and Design	4
CITP 110	Intro to Computer Programming	4
CITP 295	Programming Internship (See Note 1)	3
CITW 150	Internet Literacy	3

LIMITED CHOICE REQUIREMENTS**TOTAL: 35–43 CREDITS**Complete the indicated number of credits from **EACH CHOICE** listed below.**CHOICE 1: General Education Core Areas****15–21 Credits***(See General Education Core Requirements for information on how to fulfill these requirements.**Core area proficiency exams, where appropriate, are available for each core area.)*

Communication Core Area	3–4
Global Perspectives and Diversity Core Area	3–4
Mathematics Core Area	3–4
Science Core Area	3–5
Writing Core Area	3–4

CHOICE 2: Programming Tracks (Choose two subchoices)**14–16 Credits****Subchoice 2A: Visual Basic Programming Track**

CITP 150	Intro to VB.Net Programming	4
CITP 250	Advanced VB.Net Programming	4

Subchoice 2B: Internet Programming Track (See Note 2)

CITW 165	Advanced Web Development	3
CITW 180	ASP.NET Web Development	4

Subchoice 2C: Java Programming Track

CITP 190	Intro to Programming in JAVA	3
CITP 290	Adv JAVA Programming for Busn	4

Subchoice 2D: C# Programming Track

CITP 180	Intro to C#.NET Programming	4
CITP 280	Advanced C#.NET Programming	4

CHOICE 3: Computer Related Choices (See Note 3)**6 Credits**

CITD 140	Advanced SQL	3
CITD 250	Database Concepts	3
CITF 120	Operating Systems Concepts	3
CITF 140	Information Technology Ethics	3
CITF 200	Info Sys Tech/Problem Solving	3
CITN 120	Introduction to Networking	3
CITW 160	Developing Pages for the Web	3

MINIMUM TOTAL**62**

NOTES:

1. Students with appropriate IT work experience may be able to substitute another CIT course. Please see a CIT program advisor.
2. Students will need Subchoice 2A as well as CITW 160 from CHOICE 3 as prerequisites for this subchoice.
3. Additional courses from CHOICE 2 may be used for CHOICE 3.
4. For graduation from this program, a student must have earned a minimum 2.0 grade in each course with a CIT_ prefix.

SUGGESTED COURSE SEQUENCE

Students should see course descriptions to find out when departments plan to offer courses. Students who for any reason are unable to follow the course sequence suggested below (for example, those who are part-time, have transferred in courses from another school, or have prerequisites to fulfill) should contact an academic advisor or counselor for help with adjustments.

I	II	III	IV
CITF 108	CITD 120	Lim.Ch.1	CITF240
CITF 110	CITW 150	Lim.Ch.1	CITF260
CITP 110	Lim.Ch.1	Lim.Ch.2	Lim.Ch.2
Lim.Ch.1	Lim.Ch.2	Lim.Ch.3	Lim.Ch.2
V			
BUSN 118			
CITP 295			
Lim.Ch.1			
Lim.Ch.3			