COMPUTER INFORMATION TECHNOLOGY - DEVELOPER, ASSOCIATE IN APPLIED SCIENCE DEGREE

NMC Code 108

As everyone and everything becomes networked, the demand for software applications continues to expand. The CIT Developer program targets this need by producing graduates who are effective programmers and solution architects. Courses in the Developer Program utilize various languages, frameworks, and technologies to deliver practical knowledge of application development and data access. The program's focus on a solid understanding of good design practices enables students to easily transition into new development environments. Students considering transfer should see an advisor.

Program Notes

- Some CIT courses include industry certification exams. See the current course descriptions.
- Some advanced CIT courses require students to bring their own Windows computer. See course descriptions.
- Transfer students should consult with their university advisor about the best choice of electives.
- This program requires a minimum of 60 credits. Courses tested out or waived must be replaced with approved program electives.

Requirements
Major Requirements

Course	Title	Credits
General Education Requirements		
ENG 111	English Composition	4
ENG 112	English Composition	3-4
or ENG 220	Technical Writing	
PHL 105	Critical Thinking	3
or PHL 202	Contemporary Ethical Dilemmas	
Math Competency [1]		
Any Group 1 Science course with lab		4
Any Group 1 Social Sciences course		3
Occupational Specialty Courses		
CIT 110	Programming Logic and Design	3
CIT 178	Relational Databases	3
CIT 180	Web Development	3
CIT 190	JavaScript Programming	3
CIT 195	Application Development	3
CIT 213	Networking Technologies [2]	4
CIT 218	Web Application Development	3
CIT 228	Advanced Database Systems	3
CIT 255	Object-Oriented Programming	3
CIT 280	Systems Analysis and Design	4
CIT 290	CIT Internship [3]	3
Occupational Specialty Electives		
Select a combination of courses from the list		5-6
Directed Elective		
Select one course from the list		3-4
Total Credits		**60-63**

[1] Placement into MTH 121 (https://catalog.nmc.edu/archives/2020-2021/search/?P=MTH%20121) College Algebra or higher, or completion of MTH 111 (https://catalog.nmc.edu/archives/2020-2021/search/?P=MTH%20111) Intermediate Algebra. The four credits of MTH 111 (https://catalog.nmc.edu/archives/2020-2021/search/?P=MTH%20111) Intermediate Algebra do *not* count toward total CIT program credits.

[2] Microsoft Technology Associate Certification Exams included.

[3] Students planning to take the internship class require department approval and are required to have a GPA of 3.0 in their CIT classes. It is also recommended that students have 20 credits in CIT classes and an overall GPA of 2.0. *While a 3.0 GPA in CIT classes is required for this internship, an alternative, campus-based internship opportunity is available for students who do not meet this requirement*.

Directed electives

Course	Title	Credits
ACC 121	Accounting Principles I	4
BUS 155	Interpersonal Communications	3
BUS 231	Professional Communications	3
COM 111	Public Speaking	4

Occupational specialty electives

Course	Title	Credits
Any CIT Courses		2-4
MKT 208	Digital Marketing	2
VCA 125	Typography I	3
VCA 127	Digital Imaging	3
VCA 150	Digital Graphics Design I	3

Course Sequence Guide

Course	Title	Credits
Year 1		
Fall		
CIT 110	Programming Logic and Design	3
CIT 178	Relational Databases	3
CIT 180	Web Development	3
ENG 111	English Composition	4
Math Competency [1]		
	Credits	**13**
Spring		
CIT 190	JavaScript Programming	3
CIT 195	Application Development	3
CIT 213	Networking Technologies [2]	4
CIT 228	Advanced Database Systems	3
ENG 112	English Composition	3-4
or ENG 220	or Technical Writing	
	Credits	**16-17**

Year 2

Fall

Select two of the following Occupational Specialty Electives:		5-6
Any CIT course		
MKT 208	Digital Marketing	
VCA 125	Typography I	
VCA 127	Digital Imaging	
VCA 150	Digital Graphics Design I	
CIT 218	Web Application Development	3
CIT 255	Object-Oriented Programming	3
Select one of the following Directed Electives:		3-4
ACC 121	Accounting Principles I	
BUS 155	Interpersonal Communications	
BUS 231	Professional Communications	
COM 111	Public Speaking	
Science with lab (see Gen Ed requirements) [2]		4
	Credits	**18-20**

Spring

CIT 280	Systems Analysis and Design	4
CIT 290	CIT Internship [3]	3
PHL 105 or PHL 202	Critical Thinking or Contemporary Ethical Dilemmas	3
Social Science (see Gen Ed Requirements) [2]		3
	Credits	**13**
	Total Credits	**60-63**

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[2] Microsoft Technology Associate Certification Exams included.

[3] Students planning to take the internship class require department approval and are required to have a GPA of 3.0 in their CIT classes. It is also recommended that students have 20 credits in CIT classes and an overall GPA of 2.0. *While a 3.0 GPA in CIT classes is required for this internship, an alternative, campus-based internship opportunity is available for students who do not meet this requirement*.