Course Number and Title	IT190 Introduction to Programming in Visual C++

Credit Hours	3

Course Description	This course is an introduction to programming using Visual C++ software. The course begins with a language neutral coverage of programming theory and various program structures. The course continues with programming of theory concepts using Visual C++. Programming concepts covered include sequence, selection, repetition, files, arrays, and linked lists. Students will use concepts to create programs manipulating simple and complex data structures.

Prerequisite(s) and/or Corequisite(s)	MT 121 or MT 121E or BU 115

Required Textbooks/References/Course Materials:
None.

	General Education Outcomes
1	Utilize written and verbal language to discuss and comprehend information, incorporating a variety of technologies, such as text, data, and images (written language, verbal language, and information technology).
2	Identify and interpret relevant information in order to formulate an opinion or conclusion (critical thinking).
3	Demonstrate and communicate computational methods and mathematical reasoning in a variety of formats (using words, tables, graphs, mathematical equations, etc., as appropriate) (quantitative literacy and fluency).
4	Communicate in appropriate ways with those who are culturally diverse (intercultural competence).

	Program/Department Outcomes
1	Discuss and evaluate potential technology related ethical dilemmas and apply decision-making techniques to resolve them.
2	Demonstrate proficiency in selecting, implementing, and operating information technology solutions to meet project requirements.
3	Apply essential IT support skills in order to install, configure, secure, and troubleshoot operating systems, programs, networks, and pc hardware.
4	Prepared to take and pass industry standard certification exams.
5	Develop the ability to use oral and written communication effectively with clients and other industry professionals.
6	Engage in teams to develop and/or implement IT-based project solutions.
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	Course Outcomes (CO)	Bloom's Domain for CO (C, A, P), Category, and Level	Program/ Department Outcome(s)	Written Language	Verbal Language	Information Technology	Critical Thinking	Quantitative Literacy and Fluency	Intercultural Competence
1	Utilize a control structure	Cognitive Applying (3)	2,3,5	2	1	2	2	1	0
2	Use problem solving strategies to think critically	Cognitive Analyzing (4)	2,3,5	2	2	2	2	1	0
3	Use basic programming logic skills	Cognitive Applying (4)	2,3,5	2	2	2	2	2	0
4	Create an Application	Cognitive Creating (6)	1,2,3,5	2	2	2	2	2	0
5	Determine variables	Cognitive Evaluating (5)	2,3,5	2	1	2	2	2	0
6	Learn to store data using variables and constants	Cognitive Analyzing (4)	2,3,5	2	2	2	2	2	0
7	Demonstrate the debugging process	Cognitive Analyzing (4)	2,3,5	2	2	2	2	1	0
8	Use decision making processes	Cognitive Evaluating (5)	2,3,5	2	2	2	2	1	0
9	Determine program functionality	Cognitive Creating (6)	1,2,3,5	2	1	2	2	2	0
10									

Bloom's Domain Legend
C = Cognitive
A = Affective
P = Psychomotor

General Education Outcome Legend
2 = Included and Measurable
1 = Introduced and/or Minimally Addressed and Not Measurable
0 = Not included

Approved: May 2021
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