

Prepared by the Department of Business

Date of Departmental Approval: November 4, 2013

Date Approved by Curriculum and Programs: November 6, 2013

Effective: Spring 2014

1. **Course Number:** BIT175
Course Title: Visual Basic Programming
2. **Description:** Students learn the design processes and development tools available in Visual Basic using the .NET Framework. This knowledge is applied to build and execute Windows-based applications. Screen design, process controls and software interfacing are covered in addition to Visual Basic syntax.
3. **Student Learning Outcomes:** Upon successful completion of this course, students are able to do the following:
 - explain the role users and programmers play in developing microcomputer-based applications
 - demonstrate the attitude, procedures and techniques necessary for gaining an understanding and expertise in new software environments
 - install VB.NET and the MSDN library
 - design and create an original user interface using Microsoft GUI standards
 - evaluate and use the systems development procedures relevant to building computer-based applications
 - develop and execute program logic (including sequence, iteration, and selection structures, subprocedures, functions, arrays, string manipulation, and data conversion functions) using Visual Basic.Net for windows-based applications
 - debug existing Visual Basic.Net programs
 - evaluate the role Visual Basic plays in serving as an interface to other software
 - use standard business English to write user manuals (hard copy and electronic) to accompany windows-based applications
 - use .NET language reference materials
 - communicate with end-users to test and implement software
4. **Credits:** Three credits
5. **Satisfies a General Education Requirement:** General Education Elective (Interdisciplinary Studies)
6. **Prerequisite:** (MAT030 or MAT035) or satisfactory basic skills assessment score and GIT110
7. **Semesters Offered:** Fall and Spring
8. **Suggested General Guidelines for Evaluation:** Written assignments outside of class, computer programs, class participation, midterm examination and comprehensive final examination. Evaluation includes theory and problem analysis and interpretation.
9. **General Topical Outline:** Program development life cycle, the .NET Framework, screen design strategies, application development standards, application testing, data validation, menu/input/output design considerations, logic control procedures, file processing requirements, and object linking and embedding.