

CSI 1200: Introduction to Computers and Programming with Excel

Credits Hours: 4 credits, 3.57 contact hours/week.

Instructor: Preston Brooks, M.S.

Text book: “Exploring Excel 2016 Comprehensive”, Poatsy, Mary Anne, ISBN 978-0-13-447944-6, Pearson, 2017

Specific course information

An introduction to computers and programming. It introduces algorithms for applications that contain integrated development environments (IDEs) such as Microsoft Excel's IDE for Visual Basic for Applications (VBA) Algorithmic topics include repetitive and decision structures, functions, subroutines, and ActiveX controls. Programming topics include application automation and presenting information programmatically.

Prerequisites: N/A

Required course for IT major.

Course Objectives: Upon successful completion of this course, students should be able to

- Use basic Excel operations including functions and charts [ABET IT: (a)]
- Represent information in computers including number systems and logic operations [ABET IT: (a)]
- Describe concepts of algorithms and problem solving strategies [ABET IT: (a)]
- Use text, dates and time in Excel [ABET IT: (a)]
- Use tables in Excel [ABET IT: (a)]
- Perform simulation using Excel [ABET IT: (i, j)]
- Write event driven procedures in VBA [ABET IT: (a, c)]
- Write macros and custom functions using Excel functions in VBA [ABET IT: (a, c)]
- Use program flow control in VBA [ABET IT: (a)]
- Write Excel VBA examples with buttons [ABET IT: (a, c)]

List of Topics:

- Office Fundamentals
- Excel Formulas
- Formulas and Functions
- Problem Solving
- Data Sets & Tables
- Pivot Tables, and Pivot Charts
- Specialized Functions
- Templates, Text, Date and Time functions

- Number Systems and Simulation
- Macros
- VBA