

# COMPUTERS & TECHNOLOGY

## Programming and Database

### COBOL Programming Fundamentals

**NEW**

CEU 1.2

COBOL (COMmon Business-Oriented Language), created in 1959, is one of the oldest and most established programming languages. It is said that COBOL is everywhere, as it runs over 70 percent of the world's business transactions and it is not going away anytime soon. IBM estimates that more than 200 billion lines of COBOL code are being used today across industries such as banking, insurance and retail. Since COBOL programmers are in demand, COBOL is a great skill to add to your toolkit.

If you are a new or experienced programmer, enroll in this course and learn how to get a COBOL development environment up and running, and how to start programming.

Topics include: COBOL's data types and constants, control structures, file storage and processing methods, tables and strings. Challenges issued along the way will help you practice what you have learned.

**Recommended book:** Murach's Mainframe COBOL, ISBN-10: 1890774243 ISBN-13: 978-1890774240

**Prerequisite:** Basic knowledge of Information Systems or any programming language.

**Instructor:** M. DeFeo

**Tuition:** \$150 + general fee \$49. Total \$199

**COBL 001-01** Tuesdays, 6:30-9:30 p.m., September 12, 19, 26, October 3



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732.906.4681,  
[ndematteo@middlesexcc.edu](mailto:ndematteo@middlesexcc.edu)

# COMPUTERS & TECHNOLOGY

## PHP Programming and Database Certificate

If you are a current web developer or interested in enhancing your web-related programming skills, join us for this unique certificate program. Gain marketable skills to design and build dynamic and customizable web services through effective integration of Structure Query Language (SQL) database functionalities and PHP programming capabilities.

### Certificate Requirements:

Qualify for this Certificate by completing three required courses: Database Concepts and Development, PHP Programming and PHP and SQL Database.

### Payment Options

**Discount:** Total Certificate Program cost \$499 (Save \$84)

*Savings are available to students who register, with payment, for the complete certificate program.*

### Individual Pricing:

*3 required courses: \$583 if paid separately*

### Instructor:

G. Zahid



### HTML and CSS

**PLEASE NOTE:** This course is not part of the certificate program but it is **HIGHLY RECOMMENDED**. CEU 1.2

Learn how to create websites by structuring and styling your pages with HTML and CSS. Topics include HTML and CSS structure, table, div and ID, element and alignment positioning using CSS, HTML and CSS tags description and use, and creating a sample website.

**PLEASE NOTE:** This class is not included in the cost of the certificate.

**Tuition:** \$88 + general fee \$13 + laboratory fee \$132. Total \$233

**WEBD 036-09** Tuesdays & Thursdays, 6:30-9:30 p.m., September 19, 21, 26, 28

### Database Concepts and Development

CEU 1.2

Learn how to design and manage a relational database using the MySQL relational database system. Receive hands-on instruction to design and build databases including how to create table structures, apply data types, and manage information through insert, update, deletion of records, and more. Focus specifically on designing business related information services.

**Required:** Bring USB flash drive to class. **Textbook required, available at College Bookstore.**

**Prerequisite:** HTML and CSS class or equivalent knowledge.

**Tuition:** \$65 + general fee \$7 + laboratory fee \$103. Total \$175

**WEBP 004-39** Tuesdays & Thursdays, 6:30-9:30 p.m., October 3, 5, 10, 12



## PHP Programming

CEU 1.2

PHP: Hypertext Processor has emerged as a popular server-side programming language used by many businesses to enhance their websites through unique functionalities that enhance a user's experience. Learn the basics of PHP syntax and integration of HTML coding to create dynamic web pages by applying variables, expressions, functions, methods and cookies to make a website more than just text and graphics.

**Required:** Bring USB flash drive to class. **Textbook required, available at College Bookstore.**

**Prerequisite:** Experience working with HTML programming and related web authoring software.

**Tuition:** \$65 + general fee \$7 + laboratory fee \$103. Total \$175

**WEBP 005-39** Thursdays & Tuesdays, 6:30-9:30 p.m., October 19, 24, 26, 31

## PHP and SQL Database

CEU 1.5

Gain an understanding of how bringing together the power of PHP and integration with MySQL database creates a dynamic web service. Gain hands-on experience building PHP web pages that take advantage of database-driven information delivery and customizable content.

**Required:** Bring USB flash drive to class. **Textbook required, available at College Bookstore.**

**Prerequisites:** Experience working with HTML programming and related web-authoring software, Database Concepts & Development and PHP Programming.

**Tuition:** \$88 + general fee \$13 + laboratory fee \$132. Total \$233

**WEBP 006-39** Thursdays & Tuesdays 6:30-9:30 p.m., November 2, 7, 9, 14, 16



## Enhance Your Present Career Prepare for a New Career

### The Career Training Center offers:

- Skills businesses demand
- Computerized Medical Office
- Computerized Accounting (QuickBooks, Sage50)
- Software Technology Specialist
- Professional/Career Development

Call **732.906.4231** for details.

See courses on page 52-54

Approved provider for training grants sponsored by the Middlesex County Workforce Development Board (WDB).

# COMPUTERS & TECHNOLOGY



If you have little or no computer knowledge, Computer Confidence I, II and III are for you. Once you successfully complete all three courses, you may wish to move on to Microsoft Comprehensives and learn about additional features, tips and tools. Please note and comply with any listed prerequisites.

## Computer Confidence I

CEU 1.5

Welcome all beginners, including the computer phobic, the first-time user and those with a tiny bit of computer knowledge! In this hands-on course, gain an understanding of what you need to know to be on your way to developing computer confidence! View Microsoft applications such as Word, Excel, PowerPoint and Access. Learn to search the internet, and how to create, save and print documents.

**Prerequisite:** None

**Tuition:** \$99 + general fee \$31 + laboratory fee \$69.  
Total \$199

**JCSC 365-82 Instructor:** B. Frank, Tuesdays & Thursdays, 6:45-9:45 p.m. September 12-28 (no class September 21) (5 sessions)

**JCSC 365-83 Instructor:** S. Kapadia, Saturdays, 9 a.m.-12:45 p.m., September 16, 23, October 7, 14

## Computer Confidence II

CEU 1.5

Increase your effectiveness and efficiency on the computer. Learn more about spreadsheets, word processing and file manipulation using computer commands. Build a household budget using Excel, and create a basic letter and small newsletter using Clip Art and other functions in Word.

**Prerequisite:** Computer Confidence I or equivalent knowledge.

**Tuition:** \$99 + general fee \$31 + laboratory fee \$69.  
Total \$199

**JCSC 366-68 Instructor:** B. Frank, Tuesdays & Thursdays, 6:45-9:45 p.m., October 3-17 (5 sessions)

**JCSC 366-69 Instructor:** S. Kapadia, Saturdays, 9 a.m.-12:45 p.m., October 21, 28, November 4, 11

**REGISTER  
NOW!**

Register now with your  
Visa, Master Card, Discover/Novus

**Call 732.906.2556**



# COMPUTERS & TECHNOLOGY



## Microsoft Office 2016

Make yourself more marketable and efficient. If you have little or no knowledge of MS Office products and want to learn more about MS Office, this comprehensive series is for you. Classes meet on the MCC Edison campus unless otherwise noted. Please note and comply with any listed prerequisites.

### Word 2016: Level I

CEU 1.2

Master the basics of MS Word and stand out from the crowd! If you are a relatively new computer user or an experienced one who wants to learn about MS Word from the ground up, become familiar with beginning-level skills. Topics include the Ribbon interface, working with text, printing, using proofreading tools, creating bulleted and numbered lists, tables and forms, and more. Successfully complete this course and be ready to face the challenges presented in MS Word 2016: Level 2.

**Prerequisite:** Familiarity with computers or Computer Confidence I and II.

**Instructor:** B. Frank

**Tuition:** \$109 + general fee 30 + laboratory fee \$20.  
Total \$159

**JCSC 453-01** Mondays & Wednesdays,  
6:45-9:45 p.m., October 23, 25, 30, November 1

### Word 2016: Level II

CEU 1.2

Bring your best ideas to life in this course. Become familiar with more complex skills than those presented in Level 1, Topics include: newsletter columns, WordArt and clip art, document themes, styles, picture editing, mail merge, footnotes and endnotes, headers and footers, templates, tables of contents and indexes, and more.

**Prerequisite:** Successful completion of Word 2016: Level I or equivalent knowledge.

**Instructor:** B. Frank

**Tuition:** \$109 + general fee 30 + laboratory fee \$20.  
Total \$159

**JCSC 454-01** Mondays & Wednesdays,  
6:45-9:45 p.m., November 6, 8, 13, 15

### Excel 2016: Level I

CEU 1.2

Get on the road to turning complexity into clarity with the new visualization tools of Excel 2016. If you are a relatively new computer user or an experienced one who wants to learn about MS Excel from the ground up, gain an understanding of beginning-level skills. Topics include the improved Ribbon interface, entering and editing data, selecting cells and ranges, creating formulas and functions, formatting cell contents, inserting and deleting columns, charts, and rows and cells.

**Prerequisite:** Familiarity with computers or Computer Confidence I and II.

**Instructor:** B. Frank

**Tuition:** \$109 + general fee 30 + laboratory fee \$20.  
Total \$159

**JCSC 455-01** Tuesdays & Thursdays, 6:45-9:45 p.m.,  
October 24, 26, 31, November 2



## Excel 2016: Level II

CEU 1.2

Learn how to access the right tools, at the right time, in this intermediate Excel course that covers large worksheets and workbooks, tables, outlines, inserting clip art, pictures and SmartArt; templates, digital signatures and adding graphics to worksheets.

Complete this course successfully and be ready to face the challenges presented in MS Excel 2016: Level 3.

**Prerequisite:** Successful completion of Excel 2016: Level I, or equivalent knowledge.

**Instructor:** B. Frank

**Tuition:** \$109 + general fee 30 + laboratory fee \$20.  
Total \$159

**JCSC 456-01** Tuesdays & Thursdays, 6:45-9:45 p.m.,  
November 7, 9, 14, 16

## Excel 2016: Level III

CEU 1.2

Discover how to create fast and effective comparisons from lists of data and construct workbooks with more visual impact with tiny charts called Sparklines. Sparklines create a visual summary of your analysis alongside numeric values. Additional topics include PivotTables and macros, financial functions, data analysis, auditing, advanced formatting and analysis tools, collaboration and integration. The new and improved tools of MS Excel may help you be more productive, but only if you are able to find them when you need them!

**Prerequisite:** Successful completion of Excel 2016: Level II, or equivalent knowledge.

**Instructor:** B. Frank

**Tuition:** \$109 + general fee 30 + laboratory fee \$20.  
Total \$159

**JCSC 457-01** Tuesdays & Thursdays, 6:45-9:45 p.m.,  
November 28, 30, December 5, 7

## Access 2016: Level I

CEU 1.2

MS Access allows you to make the most of your information – even if you’re not a database expert. Topics include the Ribbon interface, creating tables in Datasheet view, previewing and printing data, designing databases, creating database objects, formatting tables, lookup fields, field properties, queries and more.

**Prerequisite:** Familiarity with computers or Computer Confidence I and II.

**Instructor:** B. Frank

**Tuition:** \$109 + general fee 30 + laboratory fee \$20.  
Total \$159

**JCSC 458-01** Mondays & Wednesdays, 6:45-9:45 p.m.,  
November 27, 29, December 4, 6

## PowerPoint 2016: Level I

CEU 1.2

MS PowerPoint gives you the ability to create and deliver dynamic presentations. Topics include how to add slide transitions with animation; sound, clip art and graphics; the ribbon interface; document themes; charts and bulleted lists; and how to format text.

**Prerequisite:** Familiarity with computers or Computer Confidence I and II.

**Instructor:** B. Frank

**Tuition:** \$109 + general fee 30 + laboratory fee \$20.  
Total \$159

**JCSC 459-01** Mondays & Wednesdays, 6:45-9:45 p.m.,  
December 11, 13, 18, 20

# COMPUTERS & TECHNOLOGY

## QuickBooks Certificate

Gain comprehensive skills in computerized accounting procedures with QuickBooks. Enroll in individual or all the courses. Please note and comply with any listed prerequisites. Qualify for the QuickBooks Certificate by completing three required courses: QuickBooks Level I, Level II and Level III.

### Prerequisites:

Before enrolling in QuickBooks Level I, you must be familiar with basic accounting principles and have experience working on a PC. A brief, recommended **Basic Principles of Accounting** course is listed below for those without an accounting background.

### Payment Options

**Discount:** Total Certificate Program cost \$498 (Save \$99)

### Please Note:

Does not include **Basic Principles of Accounting**. Savings are available to students who enroll, with payment, for the three required certificate courses.

### Individual Pricing:

Three required courses if paid separately: \$597 (\$199 per course)

### Instructor:

N. Thakkar



## MCC'S COLLEGE BOOKSTORE CARRIES REQUIRED BOOKS!

**For current operating hours:** Call 732.906.2540

**For general information:** Call 732.906.2539

**To purchase books online:** Go to [middlesexcc.bncollege.com](http://middlesexcc.bncollege.com)

See page 95 for detailed instructions.



## Basic Principles of Accounting Recommended

CEU 1.8

Understand the fundamental principles of accounting. Topics include: basic principles of a transaction, recording and posting into a general ledger, preparing basic financial statements and more. Successfully complete this course and be ready to move on to QuickBooks Level I.

**Required:** Textbook required, available at the College Bookstore.

**PLEASE NOTE:** This course is not part of the certificate discount.

**Tuition:** \$100 + general fee \$71. Total \$171

**JCSC 854-31** Saturdays, 9 a.m.-4 p.m.,  
September 9, 16, 23

## QuickBooks: Level I

CEU 1.2

Gain an understanding of the features of QuickBooks. Topics include how to set up a QuickBooks company, transactions and data, working with customers, printer settings and options, data management and security.

**Required:** Bring USB flash drive to class. Textbook required, available at College Bookstore.

**Prerequisites:** Knowledge of basic principles of accounting and PC experience

**Tuition:** \$100 + general fee \$40 + laboratory fee \$59. Total \$199

**JCSC 460-01** Saturdays, 9 a.m.-1 p.m.,  
October 7, 14, 21

**JCSC 460-02** Tuesdays, 6-10 p.m.,  
October 17, 24, 31



### QuickBooks: Level II

CEU 1.2

Continue your study of QuickBooks and learn to work with physical inventory. Become familiar with using QuickBooks for payroll and working with estimates, time tracking, balance sheet accounting, as well as how to correct and customize QuickBooks.

**Required:** Bring USB flash drive to class. **Textbook required, available at the College Bookstore.**

**Prerequisites:** Successful completion of QuickBooks Level I or equivalent.

**Tuition:** \$100 + general fee \$40 + laboratory fee \$59. Total \$199

**JCSC 461-01** Saturdays, 9 a.m.-1 p.m.,  
October 28, November 4, 11

**JCSC 461-02** Tuesdays, 6-10 p.m.,  
November 7, 14, 21

### QuickBooks: Level III

CEU 1.2

Understand how to set-up, run a payroll, and manage payroll deductions, errors and corrections. Topics include: estimates and tracking; working with balance sheet accounts and budgets; and reporting, closing the books and adjusting entries.

**Required:** Bring USB flash drive to class. **Textbook required, available at College Bookstore.**

**Prerequisites:** Successful completion of QuickBooks; Level II or equivalent knowledge.

**Tuition:** \$100 + general fee \$40 + laboratory fee \$59. Total \$199

**JCSC 462-01** Saturdays, 9 a.m.-1 p.m.,  
November 18, December 2, 16

**JCSC 462-02** Tuesdays, 6-10 p.m.,  
November 28, December 12, 19



**For Certified  
NJ Teachers**

### Content Specialty Program - Continuing Education Certificate

Gain content specialty training in order to teach upper elementary and middle school content -- English, science, history, and math. This program is ideal for teachers who want to become qualified to teach Middle School and broaden their employment prospects. Courses may be taken during the Spring, Summer and Fall semesters.

**Continuing Education Certificate Program** Spring 2018 enrollment starts 10/02/17 and ends 1/16/18. For Summer Sessions, enrollment begins 3/05/18. Summer I enrollment ends 5/01/18 and Summer II enrollment ends 7/02/17. Enrollment for Fall 2018 begins 3/26/18 and ends 8/01/18.

For more information, send an email to [cgreen@middlesexcc.edu](mailto:cgreen@middlesexcc.edu) or call 732.906.4677. Provide your name, address, phone number, and email address.

# COMPUTERS & TECHNOLOGY

## The Career Training Center (CTC)



### Microsoft Office Applications Specialist

Master the complete Microsoft Office Suite 2013 (Word, Excel, Access and PowerPoint) beginning with basic concepts. Training includes webpage design using HTML and career development. Gain an understanding of:

- Microsoft Word: Create and enhance documents, process mail merge, insert bookmarks and hyperlinks, create tables of contents, and create a master document with subdocuments inserted.
- Microsoft Excel: Understand spreadsheet layout, develop basic to advanced formulas including IF and nested IF statements, payment functions, VLOOKUP, what IF analysis and Macros.
- Microsoft Access: Receive an introduction to the functions of database, including tables, query tables, forms, reports, Macros and switchboard. Learn about relational query tables and formulas.
- Microsoft PowerPoint: Become familiar with how to customize and animate presentations.
- Microsoft Outlook: Learn how to maintain schedules, navigate emails & organize contact lists.
- HTML: Develop, design and publish a webpage.

Textbook is included.

Total Program Length: 225 hours

Tuition: \$1,200 + general fee \$250 + lab fee \$700 + materials fee \$150. Total \$2,300

**CSTC 239-01** Monday-Friday, 9 a.m.-2:30 p.m., September 6-November 8

**CSTC 239-02** Monday-Friday, 9 a.m.-2:30 p.m., November 13-January 29, 2018

### Microsoft Office with Accounts Receivable and Accounts Payable

Prepare for workforce demands as you become proficient with Microsoft Office 2013 (Word, Excel, Access, PowerPoint and Outlook) as well as accounts receivable and accounts payable, using QuickBooks 2015. Gain an understanding of:

- Microsoft Word: Create, enhance and save documents.
- Microsoft Excel: Open workbooks, develop spreadsheets, create basic formulas including IF statements.
- Microsoft Access: Create databases, tables, queries, forms, & reports.
- Microsoft PowerPoint: Become familiar with how to customize and animate presentations.
- Microsoft Outlook: Learn how to maintain schedules, navigate emails & organize contact lists.
- Accounts Receivable, Accounts Payable and QuickBooks 2015: Learn about T accounts, accounts receivable, accounts payable, bank reconciliation and financial statements.

Textbook is included.

Total Program Length: 225 hours

Tuition: \$1,200 + general fee \$250 + lab fee \$700 + materials fee \$150. Total \$2,300

**CSTC 237-01** Monday-Friday, 9 a.m.-2:30 p.m., September 6-November 8

**CSTC 237-02** Monday-Friday, 9 a.m.-2:30 p.m., November 13-January 29, 2018



### Computerized Medical Office Program

Successfully complete this course and become qualified to begin a career as an entry-level medical office specialist. Topics include: Medical terminology with basic anatomy and physiology (covering all body systems); introduction to pharmacology; medical billing and insurance; law and ethics; ICD-10-CM and CPT4 coding; Medisoft medical billing/ accounting software, including appointment scheduling, basic office procedures and career development. Learn basic bookkeeping for the medical office using QuickBooks 2015. Prepare for workforce demands as you become proficient with Microsoft Office 2013 (Word, Excel, Access, and Outlook).

Textbooks included.

Total Program Length: 450 hours

Tuition: \$2,600 + general fee \$250 + lab fee \$800 + materials fee \$350. Total \$4,000

**CSTC 334-63** Monday- Friday, 9 a.m.-2:30 p.m., September 6-January 29, 2018

**CSTC 334-64** Monday-Friday, 9 a.m.-2:30 p.m., November 13-April 6, 2018

### Computerized Medical Office Assistant

Successfully complete this course and become qualified to begin a career as an entry-level medical office specialist. The program includes: Medical terminology with basic anatomy and physiology (covering all body systems); introduction to pharmacology; medical billing and insurance; law and ethics; ICD-10-CM and CPT4 coding; Medisoft medical billing/ accounting software program including appointment scheduling, basic office procedures and career development.

Textbooks included.

Total Program Length: 225 hours

Tuition: \$1,200 + general fee \$250 + lab fee \$600 + materials fee \$250. Total \$2,300

**CSTC 234-62** Monday-Friday, 9 a.m.-2:30 p.m., September 6-November 8

**CSTC 234-63** Monday-Friday, 9 a.m.-2:30 p.m., November 13-January 29, 2018

### Computerized Accounting Program

Learn accounting and bookkeeping principles. Topics include: Accounting terminology, accounts receivable and payable, transaction analysis, general journal and general ledger postings, financial statements, payroll and recording transactions. Gain comprehensive skills in computerized accounting procedures with QuickBooks 2015 and Sage 50 2016. Prepare for workforce demands and become proficient with Microsoft Office 2013 (Word, Excel, Access, PowerPoint and Outlook).

Textbooks included.

Total Program Length: 450 hours

Tuition: \$2,600 + general fee \$250 + lab fee \$800 + materials fee \$350. Total \$4,000

**CSTC 333-68** Monday-Friday, 9 a.m.-2:30 p.m., September 6-January 29, 2018

**CSTC 333-69** Monday-Friday, 9 a.m.-2:30 p.m., November 13-April 6, 2018

## NEW THIS FALL....

### Adult Basic Skills and Integrated English Literacy and Civics Education Grant Program

- Improve your literacy and acquire the knowledge and skills you need to obtain/retain employment.
- Prepare to complete your secondary school education or an industry valued credential.
- Gain the necessary skills to become a partner in the education of your children.

You may be eligible for grant-funded courses in Adult Secondary Education and English Literacy/ Civics Education at no cost to you.

For more information and to find out if you qualify, contact the **MCC Career Training Center** at 732.906.4231.



## Computerized Accounting Systems

Learn accounting and bookkeeping principles. Topics include: Accounting terminology, accounts receivable and payable, transaction analysis, general journal and general ledger postings, financial statements, payroll and recording transactions. Acquire comprehensive skills in computerized accounting procedures with QuickBooks 2015 and Sage 50 2016.

Textbooks included.

**Total Program Length:** 225 hours

**Tuition:** \$1,200 + general fee \$250 + lab fee \$600 + materials fee \$250. Total \$2,300

**CSTC 233-66** Monday-Friday, 9 a.m.-2:30 p.m.,  
September 6-November 8

**CSTC 233-67** Monday-Friday, 9 a.m.-2:30 p.m.,  
November 13-January 29, 2018

## QuickBooks and Sage Applications with Microsoft Office

Gain comprehensive skills in computerized accounting procedures with QuickBooks 2015 and Sage 50 2016. Topics include creating a company, generating accounting reports, reconciling accounts, posting transactions and information, managing accounts receivable and payable, maintaining payroll information and processing checks, and preparing and analyzing financial reports. Prepare for workforce demands and become proficient with Microsoft Office 2013 (Word, Excel, Access, PowerPoint and Outlook).

Textbooks included.

**Total Program Length:** 375 hours

**Prerequisite:** Knowledge of accounting principles.

**Tuition:** \$1,900 + general fee \$200 + lab fee \$600 + materials fee \$300. Total \$3,000

**CSTC 433-08** Monday-Friday, 9 a.m.-2:30 p.m.,  
September 28-January 29, 2018

**CSTC 433-09** Monday-Friday, 9 a.m.-2:30 p.m.,  
December 7-April 6, 2018

## QuickBooks and Sage Applications

Gain comprehensive skills in computerized accounting procedures with QuickBooks 2015 and Sage 50 2016, including creating a company, generating accounting reports, reconciling accounts, posting transactions and information, managing accounts receivable and payable, maintaining payroll information and processing checks, and preparing and analyzing financial reports.

Textbooks included.

**Total Program Length:** 150 hours

**Prerequisite:** Knowledge of accounting principles.

**Tuition:** \$600 + general fee \$100 + lab fee \$500 + materials fee \$200. Total \$1,400

**CSTC 533-08** Monday-Friday, 9 a.m.-2:30 p.m.,  
September 28-November 8

**CSTC 533-09** Monday-Friday, 9 a.m.-2:30 p.m.,  
December 7-January 29, 2018