Computer Education & Training Center
in West County

UNIVERSITY OF MISSOURI – ST. LOUIS

WINTER
JANUARY–APRIL 2019

UMSL

Chancellor's Certificate
Computer Classes

Computer Education & Training Center
January–April 2019

REGISTRATION IS NOW OPEN

New Certificate in Data Analysis

With the amount of data available to organizations, there is a need for software tools that provide effective analysis, visualizations, and information for decision-making. Whether you are in Marketing/Sales, Human Resources, Accounting/Finance, Operations, Customer Service, or Administration, data analysis will touch your job.

The Chancellor's Certificate in Data Analysis is designed to help you understand and use the tools you need for making sense of your data. The certificate's three areas—core classes, data analysis & visualization, and electives—give you the flexibility to choose the path that applies to your experience level and job category.

You'll learn:

▶ Practical skills with writing effective SQL queries and handling data with SQL.

▶ How to use the data analysis software tools in demand by businesses and employers.

▶ How to design visuals to add impact to your data and to tell your story.

▶ An understanding of how data is organized and how to manage relationships between sets of data.

http://www.cetc.umsl.edu/dafacts.html

Computer Lab and Classroom Rentals

Do you need computer lab space for a class, training session, professional development, or other training not offered by CETC? We can create a solution that will meet your unique needs by offering:

- A highly flexible and professional training environment

- Half-day, full-day, and weekly computer lab and classroom rentals

- On-site technical assistance and staff support

- Convenient West County location near major highways

- For more information, contact Kate Moore at 314-984-9000 or kate@cetc.umsl.edu

University of Missouri–St. Louis
Convenient West County Location

UMSL's Computer Education & Training Center (CETC) is conveniently located in West County, near the intersection of Interstate 270 and Manchester Road. All classes in this catalog are held at **CETC** in West County.

Check out our current offerings, covering a wide range of computer skills. Whether you are an artist or an engineer, a novice or an expert, we are constantly developing new computer courses to help you keep up with the latest technology trends in your field.
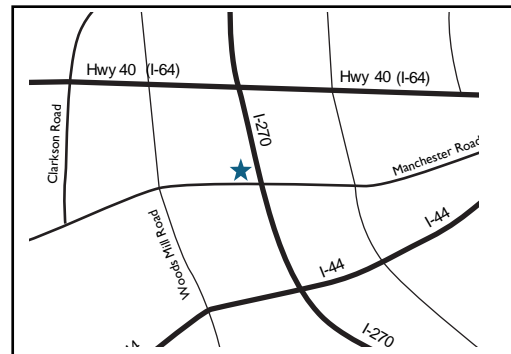
12837 Flushing Meadows Drive
St. Louis, MO 63131
See detailed map on p. 24

CUSTOM AND GROUP TRAINING AT A DISCOUNT

We are committed to supporting the growth of St. Louis businesses by providing high-quality computer training classes. Our team will work with you to identify your training needs and recommend effective and affordable solutions, customized to your requirements.

You will receive:
- Curriculum designed to meet business-specific goals
- Flexible delivery options at CETC or your location
- Hands-on classes using practical business examples
- Group rates and discounted training

With CETC training, you will have the essential tools to grow your workforce, increase your productivity, and expand your business. Whether you are upgrading to a new software version or need training in a new application, let us help you design the right class.

For more information, contact Kate Moore at 314-984-9000 or kate@cetc.umsl.edu

REGISTRATION SYSTEM

You can use our online registration system to register and pay, view your upcoming classes, or check your transcript. Go to http://www.cetc.umsl.edu/regonline.html for more information. If you need assistance or want to register by phone, please call us at 314-984-9000.

**January–
April 2019**

Computer Education
& Training Center
(314) 984-9000
www.cetc.umsl.edu

General Sections

Courses

Course Listings

Courses are shown with the program code, day & date, and the name of the instructor.

All courses are held at the West County Computer Education Center. See p. 24 for map and facility information.

www.cetc.umsl.edu

Computer Education
& Training Center

For the most up-to-date class schedules and additional informa-tion about our courses, certificates, and all our student services, visit our Web site.

WINDOWS AND FILE MANAGEMENT

Office 365/OneDrive

OneDrive lets you store files in the cloud, share files with other users, and sync files on all your devices. OneDrive is a cloud storage service available in Windows, Office 365, and to anyone with a Microsoft account. If you are working in Office 365, you'll want to master using the cloud so that you can work productively and access your Excel files, Word files, and other documents whenever and wherever you need them.

Introduction to Office 365 and OneDrive

(Prerequisite: Experience with Windows.) Learn the basics of managing files and organizing your documents in the Office 365/OneDrive cloud environment. Understand how to navigate the interface and explore the content within OneDrive. Learn to upload, delete, rename, copy, and move files as well as how to create and arrange folders in order to manage documents. Understand best practices in organizing OneDrive. Learn to download PDF files from the web and store them on OneDrive, and practice saving files from other applications to OneDrive. Discover how to share files with others, collaborate on documents, and learn to establish permissions on documents and folders. Additional topics include using OneDrive for Windows locally, and syncing files with the cloud.
Fee: $99
Half-Day Class Meets 8:30am-11:30am (3 hours)

E9310	Tues., Jan. 29	Mark Ratliff
E9600	Fri., Apr. 26	Mark Ratliff

File Management with Windows 10

Learn the basics of managing files and organizing your computer in the Windows 10 environment. Explore ways to create and arrange folders in order to manage documents using the new file explorer ribbon. Sort and filter by file properties to focus on specific types of documents. Discover how to configure your workspace by resizing, moving, and tiling windows, arranging icons, and creating shortcuts. Engage the search function to find specific files by name. Additional topics include creating, moving, copying, deleting, and renaming files and folders; using the default libraries; viewing properties and features of the recycle bin; and customizing the desktop environment.
Fee: $99
Half-Day Class Meets 8:30am-11:30am (3 hours)

E9314	Fri., Feb. 22	Mark Ratliff

IPAD TRAINING

Although the iPad classes are taught using an iPad, almost all of the topics would also apply to an iPhone.

iPad Productivity and Document Management

Learn to be more productive with your iPad, discover the hidden tips and tricks that can make you more effective, and save time with common tasks. Learn to copy and share content, links, and files as well as how to customize the share button. Understand how content matters in sharing. Master using the browser to locate the information you need and learn to use the available browser options and appropriate security settings. Understand how documents are stored on the iPad, how to locate your documents, how file type affects your options, and how to best share documents with others on collaborative projects. Discover the magic behind the cloud, how to use iCloud Drive to your advantage, and how to integrate the iPad with other cloud storage platforms. Topics include sharing files and data with apps and other people, syncing, working with office documents, transferring files wirelessly, document management strategies, and collaboration using cloud storage. Additional topics include note-taking, traveling tips, keyboard shortcuts, and other productivity tips.
Fee: $199
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9650	Thurs., Mar. 14	Allan Crean

EMAIL AND TIME MANAGEMENT

Microsoft Outlook

Time Management Using Outlook

(Prerequisite: Experience with Windows.) Learn to manage your schedule and communications with Outlook. Use the Contacts feature to keep track of people, phone numbers, and addresses; set up meetings and appointments using the Calendar; and create a "to-do" list or delegate tasks using the Tasks feature. Learn Outlook's e-mail tools, including flagging messages for follow-up, attaching files, and using the Out-of-Office Assistant. Discover how to stay organized using folders and categories, and customize your workspace to increase your efficiency.
Fee: $99
Half-Day Class Meets 8:30am-11:30am (3 hours)

E9470	Thurs., Feb. 21	Beth Arrowsmith

Group Training & Custom Classes
We can provide any of the classes listed in this catalog, or we can customize and target the features used in your business.

Classroom/Computer Lab Rental
We offer a convenient location for your next training or meeting. Classrooms and computer labs are available for half-day, full-day, weekly, and monthly rentals.

Class Discounts
Save with our Volume Discounts. Also save with our Group rates.

For more information, contact *Kate Moore at 314.984-9000 or info@cetc.umsl.edu*

CORPORATE SERVICES

DESKTOP PUBLISHING

Adobe InDesign

Introduction to Desktop Publishing Using InDesign

(Prerequisite: Experience with Windows or Mac OS X.) Learn the basics of InDesign and develop the skills you need to design and produce camera-ready copy for simple publications. This course will guide you through creating basic text frames; typing and importing text into the frames; and selecting, editing, formatting, and checking spelling. Learn to thread overset text from frame to frame and set tabs and hanging indents. Use the Pages panel to move around in a document. You will create shapes and apply strokes and fills to add color to your pages; layer, align, and group objects; and create documents with multiple columns. Additional topics include basic printing options, and how to use master pages to number pages automatically.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9321	Fri., Jan. 11	Nancy Haupt
E9519	Tues., Feb. 19	Nancy Haupt
E9551	Wed., Apr. 10	Nancy Haupt

Intermediate Applications of InDesign

(Prerequisite: Introduction to Desktop Publishing Using InDesign or equivalent experience.) Learn to import graphics and then crop, manipulate, and automatically resize graphics to fit inside their frames. Discover how to add elements to your page, such as text wrap around graphics, type on a path, gradients, and tables. Work with text graphically by converting it to paths. Additional topics include find and change format settings, working with master pages, dividing a document into sections, saving a file as a template, and printing options such as thumbnails and tiling.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9322	Thurs., Jan. 17	Nancy Haupt
E9520	Wed., Feb. 20	Nancy Haupt
E9552	Wed., Apr. 17	Nancy Haupt

Advanced Applications of InDesign

(Prerequisite: Intermediate Applications of InDesign or equivalent experience.) Learn to apply sophisticated text effects, such as hanging punctuation and decorative initial capital letters. Use the commands that give you precise control over hyphenation, justification, and paragraph composition. Increase your efficiency and ensure consistency by setting up styles and libraries. In class, you will create a book with a table of contents, as well as discuss preparing a document for output using the Preflight and Package plug-ins.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9323	Thurs., Jan. 24	Nancy Haupt
E9521	Tues., Feb. 26	Nancy Haupt
E9553	Wed., Apr. 24	Nancy Haupt

DESIGN PRINCIPLES

Desktop Publishing Design Using Adobe InDesign

The following course teaches the principles of page layout and design using hands-on projects to reinforce the concepts.

Design Principles for Desktop Publishing

(Prerequisite: Intermediate Applications of InDesign or equivalent experience.) This course teaches you how to combine the electronic capabilities of InDesign with established principles of design and layout. Topics include using a grid, call outs, and optical center. Other topics include page flow, typography, white space, paper and ink selection, planning for multi-page documents, and using spot color. Learn to prepare your documents for a commercial printer or service bureau.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9522	Wed., Feb. 27	Nancy Haupt

E-LEARNING TOOLS

Adobe Captivate

Adobe Captivate is used to create a variety of electronic-learning projects, including software simulations and scenario-based training.

Introduction to Captivate

(Prerequisite: Experience with Windows or Mac OS X.) Discover how Adobe Captivate allows you to create effective e-learning modules from start to finish. Learn how to create projects from scratch, record and edit software demonstrations, and incorporate interactive quizzes. Find out how to publish these e- learning projects as Flash or video files. Additional topics include working with the timeline, importing files from PowerPoint, using master slides, and manipulating slides and objects.

Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9401   Tues., Mar. 5   Beth Arrowsmith

Intermediate Applications of Captivate

(Prerequisite: Introduction to Captivate or equivalent experience.) Learn how to record and edit interactive simulations for training or evaluation, add audio to projects, and use interactive objects to control project navigation. Discover how to manage the project size using the Library and save time by using the built-in Widgets. Additional topics include inserting rollover slidelets, creating project templates, and customizing the player interface.

Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9402   Tues., Mar. 12   Beth Arrowsmith

Advanced Applications of Captivate

(Prerequisite: Intermediate Applications of Captivate or equivalent experience.) Discover how to manipulate system variables to manage project behavior and create your own advanced actions. Practice working with branched projects, randomize your quizzes by including Question Pools, and take advantage of the Adobe Review Cycle to collect feedback before publishing. Learn how to combine multiple projects using the Aggregator. Additional topics include importing Photoshop images and working with Effects.

Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9403   Tues., Mar. 19   Beth Arrowsmith

Macintosh Users Welcome!

Our Adobe courses, including Illustrator, Photoshop, InDesign, Premiere, and After Effects are taught using Windows. If you use a Macintosh, you can apply what you've learned in class. The programs are identical, with only slight keyboard differences.

GRAPHIC DESIGN & ARTWORK

Adobe Illustrator

Adobe Illustrator is the industry standard for creating artwork for print, multimedia, and the Web.

Introduction to Computer Graphics Using Illustrator

(Prerequisite: Experience with Windows or Mac OS S.) Learn the capabilities of Illustrator as you create your own artwork. Topics include using tools and menus and creating special typographical effects. Learn how to scale, stretch, and rotate type and objects. Other topics include grouping, locking, layering, creating Bezier paths, using the transformation tools, and working with Live Paint and Live Trace.

Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9356   Wed., Feb. 6   Dick Koerper
E9444   Tues., Apr. 23   Dick Koerper

Intermediate Applications of Illustrator

(Prerequisite: Introduction to Computer Graphics Using Illustrator or equivalent experience.) This course concentrates on more advanced drawing techniques, such as developing a precise way to draw by identifying and altering path points and working with Bezier curves. Learn to blend shapes and paths, create and apply patterns, and make object masks. Topics include importing images and using the image filters to enhance bitmap images. Additional topics include creating and importing custom colors, making compound paths, and applying special type effects.

Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9357   Thurs., Feb. 7   Dick Koerper
E9445   Tues., Apr. 30   Dick Koerper

Advanced Applications of Illustrator

(Prerequisite: Intermediate Applications of Illustrator or equivalent experience. You should be familiar with all the drawing and transformation tools, as well as layering, masking, and compound paths.) This course presents advanced techniques using Illustrator, as you plan, design, and execute one project throughout the day. Topics include making curved gradations of color, masking type with a Photoshop file, creating interlocked stroked objects, and creating faded lines. Other topics include constructing grids, 3-D objects, and transparent shadows. Learn to use filters and brushes on paths and shapes, import Photoshop layer comps, and optimize graphics for the Web.

Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9358   Fri., Feb. 8   Dick Koerper
E9446   Tues., May 7   Dick Koerper

Intensive Illustrator Training. Join us for Illustrator week in February.

Intro to Computer Graphics Using Illustrator, Wed., Feb. 6
Intermediate Applications of Illustrator, Thurs., Feb. 7
Advanced Applications of Illustrator, Fri., Feb. 8

DIGITAL IMAGING

Adobe Photoshop

Introduction to Image Editing Using Photoshop
(Prerequisite: Experience with Windows or Mac OS X.) Alter and enhance images using various tools from the Photoshop toolbox, while becoming familiar with the tool options bar. Create special effects using the Filter and Image menus. Isolate areas of your image using the various selection tools. Use the eraser tool to delete pixels and the history brush tool to "undo" changes to an image. Crop and resize images, create custom brushes, and learn the basics of layers.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9366   Wed., Mar. 6   Dick Koerper

Intermediate Applications of Photoshop
(Prerequisite: Introduction to Image Editing Using Photoshop or equivalent experience.) Add to your Photoshop skills by learning to clean up and fine-tune digital images. Create quick masks and permanent channels to isolate areas of your image for editing or manipulation. Use the selection tools to create and save paths, the vector drawing tools to add a variety of shapes to an image, and the type tool to add text to your image. Repair images with the clone stamp, healing brush, and patch tools. Change selection borders, choose painting colors, and look at scanning issues. Additional topics include the spot healing brush and the red-eye removal tool.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9367   Thurs., Mar. 7   Dick Koerper

Advanced Applications of Photoshop
(Prerequisite: Intermediate Applications of Photoshop or equivalent experience.) Learn to use channels, calculations, layer styles, and different image modes for special effects. Work more extensively with layers, learning adjustment layers, fill layers, layer comps, and how to apply a layer blending mode. Find out how to apply pixel masks and add background effects in images. Additional topics include the vanishing point filter, image warping, and smart objects.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9368   Fri., Mar. 8   Dick Koerper

Intensive Photoshop Training
Do you want three days of intensive Photoshop training?

Introduction to Image Editing Using Photoshop, Wed., Mar. 6
Intermediate Applications of Photoshop, Thurs., Mar. 7
Advanced Applications of Photoshop, Fri., Mar. 8

DIGITAL VIDEO

Create and edit video, including transitions and audio, using Premiere.

Adobe Premiere Pro

Introduction to Digital Editing Using Premiere Pro
(Prerequisite: Experience with Windows or Mac OS X.) Discover the power of video editing with Premiere Pro. Experience the tools used in integrating audio, video, and still pictures into a quality video production. Learn how to import clips (stills, movies, and audio), add them to a timeline, apply special effects, insert titles, and use visual transitions. Witness the ease of editing clips, deleting video frames, cutting one clip into two, and changing clip speed. Understand video production concepts and post-production terminology while creating videos.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9311   Wed., Jan. 30   Mark Ratliff

Intermediate Applications of Premiere Pro
(Prerequisite: Introduction to Digital Editing Using Premiere Pro or equivalent experience.) Refine your skills in video editing by using the power of visual special effects and transitions. Take your ordinary video production and make it extraordinary with tricks like editing out the background color of your "green screen" videos using the Ultra Key tool. Use the basic audio mixer to enhance audio tracks and audio special effects. Apply special effects to your video by including color, adding page peel, motion and lighting, Track Matte, and Mosaic. Compress and prepare files for output for the desired presentation format by using the Adobe Media Encoder.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9312   Tues., Feb. 5   Mark Ratliff

Adobe After Effects

Adobe After Effects is a digital motion graphics and compositing software in video post-production.

Introduction to After Effects
(Prerequisite: Experience with Windows or Mac OS X.) Learn to use Adobe After Effects for the creation of Motion Graphics and special effects including basic animation and visual effects compositing. Discover how to import footage and create a new project. Understand how to use animations, add visual flair with effects, use audio effectively, and work with masks. Topics include layers, keyframes, masking, and media management. Additional topics include image adjustment, color correction, and output settings for different media.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9313   Wed., Feb. 13   Mark Ratliff

WORKGROUP AND COLLABORATION

Microsoft SharePoint

Introduction to SharePoint
(Prerequisite: Experience with Windows. Some experience with Microsoft Office applications and basic email skills are also recommended.) Discover how SharePoint can create Web-based environments (SharePoint sites) that enhance the productivity of work groups, teams, and other collaborative groups. Learn to navigate through the SharePoint environment and create your own subsites for specific work teams. Find out how to use, modify, and create SharePoint lists (such as announcements, calendars, and contacts) to stay connected to other group members and more effectively share data. Discover how to create and use libraries to store, retrieve, and share documents on the SharePoint server. Additional topics include creating custom lists, working with column validation, using the recycle bin, and creating sub-sites.
Fee: $239
SharePoint 2013
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9447   Mon., Mar. 4   Allan Crean
SharePoint Online
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9371   Fri., Jan. 25   Allan Crean

Intermediate Applications of SharePoint
(Prerequisite: Introduction to SharePoint or equivalent experience.) Explore features of SharePoint that will enhance your workgroup productivity. Discover how to create pages to present and enhance site content and manage links between pages to find information. Learn to improve site navigation by modifying the Quick Launch and Top Link bar. Use metadata to sort and filter content in your lists/libraries. Understand how to customize metadata for a document library to help you organize your files. Learn to create views to examine and present your documents and lists in different ways. Discover how to create lists based on Excel and Access data and link SharePoint content to Excel and Access files.
Fee: $239
SharePoint 2013
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9448   Tues., Mar. 12   Allan Crean
SharePoint Online
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9372   Fri., Feb. 1   Allan Crean

Advanced Applications of SharePoint
(Prerequisite: Intermediate Applications of SharePoint or equivalent experience.) Discover the advanced features of SharePoint that can enhance your sites and help you be more efficient with content creation. Learn how galleries can make customized content (such as columns, Web parts, and site templates) available throughout your site collection. Learn to use site content types and metadata to effectively manage your document libraries. Find out how to use standard workflows to route documents or list items through approval and feedback processes. Understand permissions, how to customize permissions, and how to set up groups to provide appropriate access to your site. Additional topics include working with content types and building custom search centers to find content.
Fee: $239
SharePoint 2013
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9449   Tues., Mar. 26   Allan Crean
SharePoint Online
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9373   Fri., Feb. 8   Allan Crean

SharePoint Designer

SharePoint Designer can be used with SharePoint Online, SharePoint 2013, 2016, and 2019 to design unique workflows and add other custom features to your SharePoint site.

Introduction to SharePoint Designer
(Prerequisite: Introduction to SharePoint or equivalent experience.) Learn to use SharePoint Designer to design workflows and to customize your SharePoint site beyond the capabilities of the Web browser. Learn how to create and use Data View Web Parts in order to customize your views and connect to other types of data, including XML files. Use Business Connectivity Services to create an External Content type that can be used within the browser to create lists. Design custom workflows that extend beyond the capabilities of the default workflows.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9460   Tues., Apr. 2   Allan Crean

Our SharePoint classes are offered in versions 2013 and SharePoint Online/Office 365 version. If you are using SharePoint 2010, you should take the SharePoint 2013 classes.

If you are using SharePoint 2016 or SharePoint 2019, you should take the SharePoint Online/Office 365 classes.

PROJECT MANAGEMENT

Whether you run a small business or you are a project director in a large corporation, Microsoft Project can help you manage your organization's resources and schedules.

Microsoft Project

Introduction to Project
(Prerequisite: Experience with Windows.) Learn to use Microsoft Project to organize your project's tasks, resources, and schedule. Create a Gantt planning chart from scratch by identifying and entering tasks, creating task dependencies/constraints, assigning resources, and printing the finished chart. Establish the project calendar, determine and change task durations, view and check your project schedule, and use the schedule to track project status. You will also learn about the Critical Path and its importance in project management.
Fee: $239
Project 2013
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9319	Thurs., Feb. 7	Mark Ratliff
E9615	Mon., Apr. 15	Mark Ratliff

Intermediate Applications of Project
(Prerequisite: Introduction to Project or equivalent experience.) Learn to handle multiple projects. Practice entering fixed costs, such as material/subcontract costs, and creating/assigning resources across several projects. Learn how to combine multiple projects into one consolidated master schedule. Topics include splitting tasks, as well as assigning priorities to tasks and subtasks. Additional topics include the various resource options, such as resource leveling, resource contouring, work assignment delays or overtime, resource loading, and assigning more than one resource value to a single resource.
Fee: $239
Project 2013
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9320	Thurs., Feb. 14	Mark Ratliff
E9616	Tues., Apr. 16	Mark Ratliff

ACCOUNTING AND BOOKKEEPING

QuickBooks Pro

Introduction to QuickBooks
(Prerequisite: Experience with Windows.) Discover how QuickBooks can help you manage your business finances and perform day-to-day bookkeeping tasks more effectively and efficiently. Learn how to set up your chart of accounts and create lists to keep track of customers, vendors, and other information. Additional topics include working with invoices and payments, tracking sales and expenses, and paying bills.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9375	Fri., Feb. 22	Dick Koerper

Intermediate Applications of QuickBooks
(Prerequisite: Introduction to QuickBooks or equivalent experience.) Further your understanding of QuickBooks to handle more sophisticated bookkeeping tasks. Learn to keep track of employee information, produce a variety of reports to help you summarize and analyze your business data, and set up and manage a budget. You'll also learn how to communicate with business associates by merging QuickBooks data into form letters.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9376	Fri., Mar. 1	Dick Koerper

FLOW CHART & DIAGRAM TOOLS

Communicate ideas visually through Microsoft Visio drawings, including flowcharts, maps, and network diagrams.

Microsoft Visio

Introduction to Visio
(Prerequisite: Experience with Windows.) Communicate complex business information and ideas with clarity using Visio diagrams. This course covers what you need to know to create effective diagrams, including flowcharts and block diagrams. Learn to use the tools and diagram types designed for specific disciplines and businesses, the predefined SmartShapes that can save you time and effort, connection points, gridlines, and alignment options. Personalize your diagrams with backgrounds, color coding, borders, formatted text, as well as your own custom shapes and designs.
Fee: $239
Visio 2016
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9369	Fri., Feb. 22	Beth Arrowsmith

Intermediate Applications of Visio
(Prerequisite: Introduction to Visio or equivalent experience.) In this course, you'll go beyond the basics and discover how to create custom templates and use styles to quickly update shapes. Learn how to add behaviors to shapes and link your diagrams to external data sources. Create reports in a variety of formats, including HTML, to summarize information in your drawings. Other topics include importing special graphics files, using custom shape properties, and exploring different types of drawings, such as network diagrams and maps.
Fee: $239
Visio 2016
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9370	Thurs., Feb. 28	Beth Arrowsmith

Visio courses are taught with Visio 2016. Students using Visio 2010, 2013, or 2016 could take these classes, since the versions are similar.

Did you know we offer a Chancellor's Certificate in Business Applications?

This Chancellor's Certificate program allows you to become proficient in a variety of office applications, focusing on the use of spreadsheet, database management, and office productivity software.

For more information, visit our Web site at http://www.cetc.umsl.edu/bafacts.html

WORD PROCESSING

Microsoft Word

Introduction to Word
(Prerequisite: Experience with Windows.) Learn to use Microsoft Word to create and save word-processing documents. Learn to enter and edit text, control line spacing, format a document, and use non-printing characters. Discover the ease of making changes by moving, copying, and pasting text. Understand the difference between Save and Save As and how to set up documents for printing. Learn how to apply paragraph formatting in your documents, including properly setting paragraph indents and tabs and centering text. Other topics include changing the type style, inserting the date, and using the Find and Replace commands to make global changes.
Fee: $199
Word 2016
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9391   Thurs., Jan. 31   Nancy Haupt

Intermediate Applications of Word
(Prerequisite: Introduction to Word or equivalent experience.) Further your Word skills as you learn about formatting, tables, and mail merge. Discover how to create tables to format data and text on your page. Table topics include inserting and deleting rows and columns, editing tables, creating borders, and other formatting techniques. Understand how to insert section breaks in a document in order to format specific areas or customize page numbering. Learn to create personalized form letters and perform queries using Mail Merge. Other topics include headers and footers; text flow options, such as widow/orphan control; and the Paste Special feature.
Fee: $199
Word 2016
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9392   Wed., Feb. 6   Nancy Haupt

Advanced Applications of Word
(Prerequisite: Intermediate Applications of Word or equivalent experience.) Learn to create sophisticated documents that feature multi-column, newspaper-style formats. Discover how to import graphics and artwork and integrate graphics and columns. Learn how to define styles and templates for document formats that you frequently use. Create and run simple macros for automating repetitive tasks. Use the features that make it easier to share documents with others, including adding comments and tracking changes.
Fee: $199
Word 2016
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9393   Thurs., Feb. 14   Nancy Haupt

Our Word courses are taught with Version 2016. Students who use Versions 2010, 2013, 2016, or Office 365 could take these classes, since the versions (2010, 2013, 2016, and Office 365) are similar.

PRESENTATION GRAPHICS

Microsoft PowerPoint

Introduction to PowerPoint
(Prerequisite: Experience with Windows.) Learn to use PowerPoint to create effective presentations, from start to finish. Master the skills necessary to plan and develop presentations, including starting a presentation, editing text, reorganizing slides, adding multiple-level bulleted entries, and setting up a slide show. Learn how to use slide masters to make slide templates that are consistent in appearance. Additional topics include using drawing tools, clip art, and photos to add impact to your presentation.
Fee: $199
PowerPoint 2016
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9414   Thurs., Apr. 4   Nancy Haupt

Intermediate Applications of PowerPoint
(Prerequisite: Introduction to PowerPoint or equivalent experience.) Learn more advanced features of PowerPoint, including charts, templates, and presentation techniques. Learn to create effective charts and graphs by keying in your data or by importing charts from other programs using PowerPoint's built-in datasheet capability. Learn to create hierarchical structures, like organizational charts. Discover how to alter the design templates' color schemes and create custom templates. Other topics include creating tables and linking between different Microsoft Office programs.
Fee: $199
PowerPoint 2016
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9415   Thurs., Apr. 11   Nancy Haupt

Advanced Applications of PowerPoint
(Prerequisite: Intermediate Applications of PowerPoint or equivalent experience.) Learn to create hyperlinks that connect one slide to another, to a Web page, or to another file. Investigate how to insert movies and sounds into your presentations and create action buttons to play these sounds and movies. Use the ruler and guides to position elements, such as graphics and buttons, precisely on a slide. Additional topics include inserting comments to proof the presentation, learning how to run presentations on computers that don't have PowerPoint installed, and creating custom shows.
Fee: $199
PowerPoint 2016
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9416   Thurs., Apr. 18   Nancy Haupt

Our PowerPoint courses are taught with Version 2016. Students who use Versions 2010, 2013, 2016, or Office 365 could take these classes, since the versions (2010, 2013, 2016, and Office 365) are similar.

SPREADSHEET

Microsoft Excel

Introduction to Excel

(Prerequisite: Experience with Windows.) Use Excel to create spreadsheets for accounting, budgeting, expense tracking, and other applications. Learn to set up and format worksheets and enter labels, values, and formulas. Discover how to select data, restrict data entry, adjust column widths, and move around the worksheet. Other topics include using simple statistical functions, editing and deleting data, moving and copying cell contents, understanding absolute and relative references, setting up worksheet pages, and printing.

Fee: $199
Excel 2013
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

| E9493 | Thurs., Feb. 14 | Tina Wolk Hefner |
| E9626 | Fri., Apr. 26 | Tina Wolk Hefner |

Excel 2016
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9439	Wed., Jan. 16	Nancy Haupt
E9487	Mon., Feb. 4	Nancy Haupt
E9511	Fri., Mar. 1	Tina Wolk Hefner
E9527	Thurs., Mar. 21	Tina Wolk Hefner
E9572	Wed., Apr. 3	Nancy Haupt

Intermediate Applications of Excel

(Prerequisite: Introduction to Excel or equivalent experience. You should know how to create formulas using the formula bar and understand absolute and relative references.) Learn to design effective spreadsheets that others can use and interpret easily. Practice applying effective design techniques, including naming cells, protecting cells, and making your spreadsheets easy to read. Additional topics include working with multiple worksheets, creating templates, rounding data, using conditional functions, and applying conditional formatting.

Fee: $199
Excel 2013
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

| E9494 | Thurs., Feb. 21 | Tina Wolk Hefner |
| E9627 | Fri., May 3 | Tina Wolk Hefner |

Excel 2016
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9440	Wed., Jan. 23	Nancy Haupt
E9488	Tues., Feb. 12	Nancy Haupt
E9512	Fri., Mar. 8	Nancy Haupt
E9528	Thurs., Mar. 28	Tina Wolk Hefner
E9573	Wed., Apr. 10	Tina Wolk Hefner

Advanced Applications of Excel

(Prerequisite: Intermediate Applications of Excel or equivalent experience.) Learn advanced functions and database management techniques, including sorting and filtering data, using database statistical functions. Get the most out of your Excel applications by linking data between worksheets and workbooks. Other topics include using lookup tables and performing what-if analysis using Goal Seek and scenarios.

Fee: $199
Excel 2013
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

| E9419 | Thurs., Jan. 17 | Tina Wolk Hefner |
| E9628 | Thurs., May 9 | Tina Wolk Hefner |

Excel 2016
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9441	Wed., Jan. 30	Nancy Haupt
E9489	Tues., Feb. 19	Tina Wolk Hefner
E9513	Wed., Mar. 13	Nancy Haupt
E9529	Thurs., Apr. 4	Tina Wolk Hefner
E9574	Wed., Apr. 17	Tina Wolk Hefner

Excel Formulas and Functions

(Prerequisite: Intermediate Applications of Excel or equivalent experience.) This course concentrates on Excel functions and formulas. Look at commonly used text and data functions, including changing the case of text, combining text cell contents (e.g., first and last names), and comparing cell contents. Work with date and time functions and logical functions. Other topics will include using simple form fields to select items from a list (note that this will not cover creation of custom forms, as that requires VBA), using the formula editing toolbar to check your data and solve formula errors, and working with arrays.

Fee: $199
Excel 2016
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

| E9610 | Fri., Feb. 15 | Mark Ratliff |

Excel Data Manipulation

(Prerequisite: Intermediate Applications of Excel or equivalent experience.) Discover ways to save time and increase your efficiency, whether you are working with one large spreadsheet or multiple tables. Find out how you can combine portions of several lists or tables into one consolidated table. Learn how to navigate with hyperlinks through multiple sheets of a workbook, multiple workbooks, or even to other programs. Save valuable time by accessing custom-made views of your spreadsheet. Topics include how to eliminate repetitive typing by creating, modifying, and printing comments for compressed notations on spreadsheets; and use Group and Outline to quickly show and print totals in sections of your spreadsheet.

Fee: $199
Excel 2016
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

| E9499 | Tues., Feb. 5 | Bill Barry |
| E9640 | Tues., Apr. 16 | Bill Barry |

Data Visualization: Charts

Creating Charts with Excel

(Prerequisite: Intermediate Applications of Excel or equivalent experience.) Learn to use Excel to create powerful graphic presentations, including bar graphs, pie charts, exploded pies, line graphs, scatter plots, and combination charts. Discover how to scale and format graphs, select data ranges, add titles and labels, set up legends, use grids and color, and make other graphic enhancements. Learn to select the appropriate graph type for your data and to alter that graph for your specific needs. Other topics include principles of graphing, printing graphs, and effective spreadsheet design to aid in graphing.

Fee: $199
Excel 2016
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

| E9495 | Tues., Mar. 5 | Nancy Haupt |

Our Microsoft Excel courses, Introduction through Advanced, are taught with Excel 2013 and Excel 2016. Students who use Excel 2010, 2013, 2016, or Office 365 could take any of these classes, since the versions Office 365) are similar.

The courses, Excel Formulas and Functions, Excel Data Manipulation, Creating Charts with Excel use Excel 2016. Students who use Excel 2010, 2013, 2016, or Office 365 could take these classes, since the versions (Excel 2010, 2013, 2016, and Office 365) are similar.

Data Analysis Using Excel

Excel PivotTables

(Prerequisite: Intermediate Applications of Excel or equivalent experience.) Learn how to save time extracting, organizing, and summarizing meaningful data from Excel spreadsheets or other sources by creating interactive PivotTables/PivotCharts. Explore creating and customizing a PivotTable, view subsets of data, and show or hide details. Discover how to create and design a PivotChart to view summarized data in graphical format. Understand how to create PivotTables from multiple consolidation ranges, use macros to refresh data, and synchronize multiple tables. Set up a PivotTable from a large database to view specific data and work with calculation/date fields.

Fee: $199
Excel 2013
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9515	Fri., Jan. 18	Mark Ratliff

Excel 2016
E9575	Mon., Mar. 25	Mark Ratliff

Intermediate Excel PivotTables

(Prerequisites: Introduction to PivotTables or equivalent experience) Build on your knowledge of PivotTable capabilities to understand and visualize your data more effectively. Organize your data through customized grouping, and quickly view date ranges using Timeline slicers. Include calculated fields to give you new insights about your data. Understand how conditional formatting interacts with PivotTables, giving you more options on how to present your data. Additional topics include creating more useful PivotTables with KPI indicators, working with standard deviation, and using IF statements.

Fee: $199
Excel 2013
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9516	Fri., Jan. 25	Mark Ratliff

Excel 2016
E9576	Tues., Mar. 26	Mark Ratliff

PowerPivot is a free add-on for Excel that helps you develop more powerful Business Intelligence solutions

Introduction to PowerPivot

(Prerequisite: Excel PivotTables or equivalent experience.) Learn more advanced techniques to analyze your data including advanced PivotTable formatting and creating PivotTables from imported and related tables. Discover how the PowerPivot add-on allows you to import large quantities of data, create relationship between tables, and build calculated columns. Topics include importing, using queries, linking tables, filtering data, creating data models, establishing table relationships, creating hierarchies, using the PowerPivot ribbon, and using DAX (data analysis expressions).

Fee: $199
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9517	Fri., Feb. 1	Mark Ratliff

Intermediate PowerPivot

(Prerequisite: Introduction to PowerPivot or equivalent experience.) Build upon previous Excel knowledge calculating columns and fields by using Count, Text, Date and Format DAX expressions. Take these expressions further by extracting, comparing, and making sense of critical business data. Discover new, efficient ways to pinpoint trends and goals with Key Performance Indicators. Streamline business processes and workflows using the Related expression. PowerPivot energizes data giving you the tools to make informed decisions that will impact business.

Fee: $199
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9518	Fri., Feb. 8	Mark Ratliff

Excel VBA

Excel Macros Using VBA

(Prerequisites: Significant Excel experience and Intermediate Applications of Excel or equivalent experience. Students should have a solid knowledge of Excel, a strong background using conditional statements, and substantial experience working with spreadsheets before taking this class.) In this two-day class, discover the power of macros by using Visual Basic for Applications to automate your Excel applications. Visual Basic terminology, such as procedures, methods, properties, and objects, will be introduced and used to create and edit Excel macros. Understand how to modify recorded macros and write original macros using Visual Basic in order to customize your interface and create dialog boxes for input and messages. Additional topics include using control structures, such as conditionals and loops.

Fee: $399
Excel 2013
Two-Day Class Meets 8:30am-4:00pm (13 hours)
E9410	Wed., Jan. 16 & Thurs., Jan. 17	Bill Barry

Excel 2016
Two-Day Class Meets 8:30am-4:00pm (13 hours)
E9598	Tues., Apr. 9 & Wed., Apr. 10	Bill Barry

Intermediate Excel VBA

(Prerequisite: Excel Macros Using VBA or equivalent experience.) Explore Excel VBA in more depth with this second level class and build on your skills by learning how macros can interact with a wide variety of Excel objects. Understand how your macros can be used and learn different trouble-shooting strategies to avoid problems. Master using arrays to manage multiple elements, learn to automate and manage PivotTables, and understand how to interact with Excel charts. Learn to incorporate other Office software such as Word and PowerPoint into your Excel VBA workflow. Discover how to make external connections to data and pull information into an Excel spreadsheet using VBA. Topics include creating a custom user form, handling controls, working with arrays, interacting with pivottables and charts, using SQL commands in macros, using VBA with other office software, and cleaning up data with VBA.

Fee: $399
Excel 2013
Two-Day Class Meets 8:30am-4:00pm (13 hours)
E9411	Wed., Jan. 30 & Thurs., Jan. 31	Bill Barry

Excel 2016
Two-Day Class Meets 8:30am-4:00pm (13 hours)
E9599	Tues., Apr. 23 & Wed., Apr. 24	Bill Barry

The Excel VBA courses are taught in Excel 2013 and Excel 2016. Students who use Excel 2010, 2013, 2016, or Office 365 could take either of these classes, since the versions (Excel 2010, 2013, 2016, and Office 365) are similar.

The PivotTables and PowerPivot courses are taught in Excel 2013 and Excel 2016. Students who use Excel 2010, 2013, 2016, or Office 365 could take these classes, since the versions (Excel 2010, 2013, 2016, and Office 365) are similar.

DATABASE

Microsoft Access

Introduction to Access
(Prerequisite: Experience with Windows.) Learn to use the Microsoft Access database system to keep track of inventory, update mailing lists, and manage information files. Master the skills necessary to plan and design a table, as well as add, change, and delete data. Learn to perform queries on single and multiple tables to find and display data. Discover how to generate simple forms and reports to access or print out the information that you need. Additional topics include global changes, sorting data, date arithmetic, modifying the table structure, and database management.
Fee: $399
Access 2013
Two-Day Class Meets 8:30am-4:00pm (13 hours)
E9471   Wed., Jan. 23 & Thurs., Jan. 24   Bill Barry
Access 2016
Two-Day Class Meets 8:30am-4:00pm (13 hours)
E9581   Mon., Apr. 8 & Tues., Apr. 9   Mark Ratliff

Intermediate Applications of Access
(Prerequisite: Introduction to Access or equivalent experience.) This course covers creating effective tables, forms, and reports. Learn to design forms so you can enter, edit, and delete information. Examine the principles of data validation and how to error-trap inputs. Learn special techniques for creating sophisticated reports, grouping data for subtotals, and generating mailing labels. Other topics include understanding field properties, working with indexes and primary keys, using functions in queries/reports, and summary reports.
Fee: $399
Access 2013
Two-Day Class Meets 8:30am-4:00pm (13 hours)
E9472   Wed., Feb. 6 & Thurs., Feb. 7   Bill Barry
Access 2016
Two-Day Class Meets 8:30am-4:00pm (13 hours)
E9582   Tues., Apr. 23 & Wed., Apr. 24   Mark Ratliff

Advanced Applications of Access
(Prerequisite: Intermediate Applications of Access or equivalent experience.) This course covers a variety of advanced tips and techniques for designing and using Access databases. Learn to write special purpose queries, including crosstab and union queries, and design reports that include running sums and conditional formatting. Practice using text, date, and conditional functions to manipulate data. Create complex parameter queries and custom forms to supply parameter values. Additional topics include inserting subreports and using PivotTables and PivotCharts to summarize your data.
Fee: $399
Access 2016
Two-Day Class Meets 8:30am-4:00pm (13 hours)
E9583   Mon., May 6 & Tues., May 7   Mark Ratliff

Advanced Topics in Access: Database Design
(Prerequisite: Intermediate Applications of Access or equivalent experience.) Learn to effectively manage a relational database system and work with multiple tables simultaneously. Discover how to identify items to be stored in a database, establish relationships between the items, and group the items in the appropriate tables. Topics include linking database tables, generating reports from multiple tables, querying multiple tables, and updating tables. Strong emphasis will be placed on effective database design and deciding how to structure tables within the database.
Fee: $399
Access 2013
Two-Day Class Meets 8:30am-4:00pm (13 hours)
E9473   Wed., Feb. 20 & Thurs., Feb. 21   Mark Ratliff

Access VBA

Programming Applications of Access VBA: Level 1
(Prerequisite: Intermediate Applications of Access and Introduction to Programming Concepts or equivalent experience.) Increase the speed and efficiency of your databases and create customized applications through Access VBA (Visual Basic for Applications). Learn the basics of using Access VBA to automate your database application which can potentially reduce your database size, lessen memory usage, and make using the database more efficient and user-friendly. Topics include an introduction to events and understanding the difference between the various programming modules to help in deciding where to write your VBA code. Additional topics include the use of variables and constants, how to programmatically open forms reports, queries, built-in functions such as the Nz function, the difference between sub-procedures and functions, basic error trapping, and filtering the forms and reports opened by your VBA code. The use of an Option Group properties is also discussed.
Fee: $399
Two-Day Class Meets 8:30am-4:00pm (13 hours)
E9450   Mon., Mar. 4 & Tues., Mar. 5   Frank Richey

Programming Applications of Access VBA: Level 2
(Prerequisite: Programming Applications of Access: Level 1 or equivalent experience.) Build on your knowledge of Access programming using more advanced VBA programming code. Learn how to use ActiveX Data Objects (ADO) coding techniques and Recordset objects to work with your data. Develop error-free applications using formal error-trapping techniques to trap, collect, and respond to errors. Additional topics include using loops to repeat operations and programming your applications using ActiveX controls.
Fee: $399
Two-Day Class Meets 8:30am-4:00pm (13 hours)
E9451   Mon., Mar. 18 & Tues., Mar. 19   Frank Richey

Programming Applications of Access VBA: Level 3
(Prerequisite: Programming Applications of Access: Level 2 or equivalent experience.) Learn to code more efficiently, expand your knowledge of VBA ADO coding techniques using recordsets, and save time and effort through automation. Understand how to use recordsets to modify record data record-by-record, as well as make bulk record changes, create and delete objects using code, and establish relationships between objects using VBA code. Examine useful application optimization techniques, such as variable arrays, connection objects, and constants. Other topics include importing data from an external database, text file, or Excel spreadsheet and automating by creating and controlling Excel and Outlook from an Access database.
Fee: $399
Two-Day Class Meets 8:30am-4:00pm (13 hours)
E9452   Mon., Apr. 1 & Tues., Apr. 2   Frank Richey

Our Access courses are taught with Access 2013 and Access 2016. Students who use Access 2010, 2013, 2016, or Office 365 could take these classes, since the versions (2010, 2013, 2016, and Office 365) are similar.

The Access Visual Basic for Applications (VBA) classes use Access 2013. Students using either Access 2010, 2013, 2016 or Office 365 could also take the courses, since the Access versions (2010, 2013, 2016 & Office 365) are similar.

CLIENT SERVER

Our SQL language courses are taught using Microsoft SQL Server. The courses cover generic syntax, so it does not matter which version (SQL Server, Oracle, MySQL, etc.) you are using.

SQL

Introduction to SQL
(Prerequisite: Introduction to Access or equivalent experience with another database.) This course introduces SQL using Microsoft SQL Server to demonstrate generic SQL commands that can be used with a variety of client/server database systems. Learn how to do ad-hoc queries on a database to select the information you need. Topics include SQL syntax, data definition language, and data manipulation language. Learn how to create and update tables, as well as order data, group data, and generate totals.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9421	Tues., Jan. 15	Bill Barry
E9406	Wed., Feb. 6	Beth Arrowsmith
E9477	Wed., Feb. 20	Bill Barry
E9484	Thurs., Mar. 14	Beth Arrowsmith
E9536	Tues., Mar. 26	Bill Barry
E9569	Tues., Apr. 2	Bill Barry
E9631	Wed., Apr. 17	Bill Barry

Intermediate Applications of SQL
(Prerequisite: Introduction to SQL or equivalent experience.) This course is designed for those who want to use more advanced SQL commands and work with data in multiple tables. This course uses Microsoft SQL Server to demonstrate generic SQL commands that can be used with a variety of client/server database systems. Learn how to do more complicated queries on a database to select the information you need. Understand how to specify multiple criteria, work with the various clauses, use the aggregate functions, sort data, and eliminate duplicate values. Learn about different types of joins, such as inner joins, outer joins, and Cartesian products. Additional topics include creating views, changing tables, copying data between tables, and working with date data.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9422	Tues., Jan. 22	Bill Barry
E9407	Thurs., Feb. 7	Beth Arrowsmith
E9478	Wed., Feb. 27	Beth Arrowsmith
E9485	Fri., Mar. 15	Mark Ratliff
E9537	Wed., Mar. 27	Bill Barry
E9570	Wed., Apr. 3	Bill Barry
E9632	Thurs., Apr. 25	Bill Barry

Advanced Applications of SQL
(Prerequisite: Intermediate Applications of SQL or equivalent experience.) This course uses Microsoft SQL Server to demonstrate generic SQL commands that can be used with a variety of client/server database systems. Learn how to properly design a relational database and structure tables within the database. Learn the purpose of and how to specify primary and foreign keys. Understand the advantages of referential integrity and how it can affect data maintenance and prevent errors. Additional topics include creating indexes, using the UNION operation to combine the results of two queries into a single result set, and using ROLLUP and CUBE to summarize data.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9423	Tues., Jan. 29	Bill Barry
E9479	Wed., Mar. 6	Beth Arrowsmith
E9571	Thurs., Apr. 11	Beth Arrowsmith

Advanced SQL Queries: Level 1
(Prerequisite: Intermediate Applications of SQL or equivalent experience.) Continue your path to mastery of SQL Commands with more complex queries and advanced features of SQL to access information from a relational database. Work with complex joins from multiple tables, three or more table queries, and learn to reference the same data set multiple times. Understand how to do sub-queries to handle multi-table tasks and when to use sub-queries versus using joins. Review Date Queries and understand how to use the Datename and Datepart functions. Topics include working with aggregate data and using the Over(), Group By, and Having clauses. Additional topics include Top Record/Top Percent queries and using the Rank() and Dense_Rank() functions.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9412	Tues., Feb. 12	Bill Barry
E9509	Tues., Mar. 19	Bill Barry

Advanced SQL Queries: Level 2
(Prerequisite: Advanced SQL Queries: Level 1 or equivalent experience.) Take your SQL skills to the next level and learn to write more advanced select queries. Building on the skills learned in the prior SQL classes, enhance your queries with date and string functions. Learn special purpose, irregular pattern, and top value queries. Use correlated subqueries to create running totals and subtotals. Explore metadata queries and schemabinding. Pivoting query results will also be covered.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9413	Wed., Feb. 13	Bill Barry
E9510	Wed., Mar. 20	Bill Barry

Microsoft Transact-SQL Programming

Transact-SQL is Microsoft's extension to the SQL language and can help increase the flexibility of your database applications.

SQL Programming: Level 1
(Prerequisite: Intermediate Applications of SQL or equivalent experience. If you do not have any programming experience, it is recommended that you take the Introduction to Programming Concepts course.) This course introduces SQL Server programming using Transact-SQL. Learn how Transact-SQL can help you increase the flexibility and usefulness of your database applications. Write and execute blocks of code that interact with your SQL Server data by combining SQL statements with Transact-SQL programming constructs. Learn how to declare and reference variables and use cursors to process rows returned by a query. Additional topics include writing conditional and looping structures to control the flow of your statements and using the Try...Catch construct to handle exceptions.
Fee: $399
Two-Day Class Meets 8:30am-4:00pm (13 hours)

E9620	Thurs., Mar. 21 & Fri., Mar. 22	Beth Arrowsmith

SQL Programming: Level 2
(Prerequisite: SQL Programming: Level 1 or equivalent experience.) Extend and apply your knowledge of Transact-SQL by incorporating common programming constructs with various SQL commands and functions. Learn to write practical, reusable functions and call these user-defined functions from SQL expressions. Understand how to use triggers and practice writing triggers that respond to data manipulation events, such as inserting, updating, and deleting records. Additional topics include using output parameters and working with dynamic SQL.
Fee: $399
Two-Day Class Meets 8:30am-4:00pm (13 hours)

E9621	Wed., Apr. 3 & Thurs., Apr. 4	Beth Arrowsmith

SQL Server Reporting Services (SSRS)

Introduction to SQL Server Reporting Services
(Prerequisite: Introduction to SQL or equivalent experience.) Learn to create professional-quality reports from SQL Server and other ODBC-compliant databases. Discover how to create both standard and ad-hoc reports and deliver them via print, web, email, and PDF files. Create an environment where users can design their own reports with limited database knowledge. Learn to build and format reports with headers, footers, titles, totals, and calculations. The reports you create can contain tables, charts (or both), and can drill-down to other reports for greater detail.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9505   Tues., Feb. 19   Bill Barry

Intermediate SQL Server Reporting Services
(Prerequisite: Introduction to SQL Server Reporting Services and Intermediate Applications of SQL or knowledge of joins, or equivalent experience.) Create sophisticated reports that are customized for your specific needs. Learn to display multiple data sets on one report and combine graphics with and without data for visual impact. Other topics include using multi-value parameters and preparing matrix (cross-tab) reports with drill-down capabilities. Learn how to protect your data through model item security, security filters, and opaque expressions. Generate practical reports that display the information needed for decision-making.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9506   Tues., Feb. 26   Bill Barry

Advanced SQL Server Reporting Services
(Prerequisite: Intermediate SQL Server Reporting Services or equivalent experience.) Learn the techniques to make your reports more flexible and efficient. Topics include creating drill-down reports to display detail, either from other reports or from charts, and using lists for flexibility in arranging data on reports. Discover how subreports can increase your efficiency by reusing code, allow you to display reports inside the current report, and enable use of multiple data sources.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9507   Tues., Mar. 5   Bill Barry

Did you know we offer a Chancellor's Certificate in Data Analysis?
This Chancellor's Certificate program is designed to help you use the tools needed to do effective data analysis, create visualizations, and gather information for decision-making.

For more information, visit our web site at http://www.cetc.umsl.edu/dafacts.html

SQL Server Integration Services (SSIS)

Introduction to SQL Server Integration Services
(Prerequisite: Introduction to SQL or equivalent experience.) This course introduces the Business Intelligence Development Studio within SQL Server Data Tools and the use of various elements in building an ETL package, including Control Flow elements, Data Flow tasks, and Connection Managers. Topics include building an SSIS package using Control Flow tasks, Data Flow tasks and Connection Managers. You will also work with Derived Column Transformation to concatenate data located in multiple columns. Other topics include Sequence Containers, Conditional Split Transformations, and Data Viewers.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9424   Mon., Feb. 4   Frank Richey
E9565   Thurs., Apr. 25   Frank Richey

Intermediate SQL Server Integration Services
(Prerequisites: Introduction to SSIS or equivalent experience.) In this class, you will build on the skills gained in the introductory SSIS course. Learn to work with SSIS variables, parameters and expressions to add flexibility to the Data Flow tasks and connection managers. Discover how to build an in-memory recordset using the Recordset Destination. Understand how to use the data values of an in memory recordset to loop through a second recordset using a Foreach Loop to perform actions on or with the records of the second recordset. Investigate how to use the Row Count Transformation and a precedent constraint to control the package control flow.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9425   Tues., Feb. 5   Frank Richey
E9566   Fri., Apr. 26   Frank Richey

Advanced SQL Server Integration Services
(Prerequisite: Intermediate SSIS or equivalent experience.) Learn the techniques of processing incoming data from one or more sources with the intent of cleansing the data prior to loading the cleansed data into your companys production tables. You will tackle the skills necessary with building or adding to a SSIS package for the purpose data deduplication and correction. Learn how to use the Merge, Merge Join or Union All Transformations to join multiple SQL Server or non-SQL Server data sources. Discover how to use the Lookup and Fuzzy Lookup transformations to locate exact matches between the rows of incoming and existing data sources.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9426   Wed., Feb. 20   Frank Richey
E9567   Thurs., May 9   Frank Richey

Data Cleansing Using DQS and SSIS
(Prerequisite: Introduction to SSIS or equivalent experience.) Discover how to improve the quality of critical business data through the implementation of SQL Server Data Quality Services (DQS) and Integration Services (SSIS). This course introduces the concepts of improving data quality through data profiling, cleansing, and matching. Learn how to profile the data to aid in identifying any data quality issues that may be present within the data and how to create and manage the knowledge bases which are used in the data quality improvement processes. Additional topics include utilizing data matching to discover and eliminate duplicate data, and using knowledge bases to cleanse and standardize the data in DQS and Integration Services packages.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9427   Thurs., Feb. 21   Frank Richey
E9568   Fri., May 10   Frank Richey
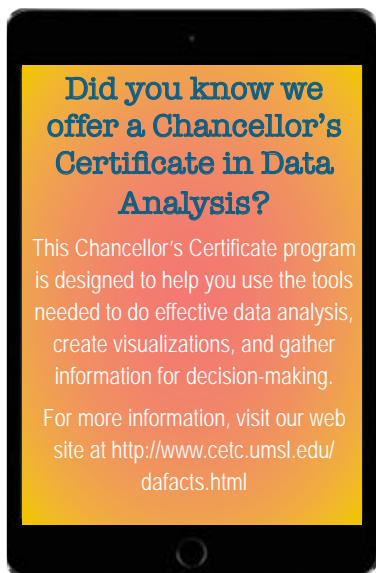
SQL Server System Administration

Introduction to SQL Server System Administration

(Prerequisite: Intermediate Applications of SQL or equivalent experience.) Learn the basics of installing, configuring, and administering Microsoft SQL Server. Get an overview of SQL Server and how the current version differs from previous versions and differences among editions. Install and configure Microsoft SQL Server Enterprise Edition, and investigate how to troubleshoot your installation, along with how to install and troubleshoot the client tools used to connect to SQL Server. Learn about some of the common tools and utilities, such as the SQL Server Management Studio, that come with the program and can assist you in managing your database. Discuss SQL Server security from the standpoint of creating and working with user logon accounts and setting database security through database permissions.

Fee: $399

Two-Day Class Meets 8:30am-4:00pm (13 hours)
E9360   Mon., Jan. 28 & Tues., Jan. 29   Frank Richey

Intermediate SQL Server System Administration

(Prerequisite: Introduction to SQL Server System Administration or equivalent experience.) This course emphasizes maintenance, optimization, and performance tuning of a SQL Server database. Explore the space saving techniques of data compression. Learn to use the Database Engine Tuning Advisor in obtaining index recommendations. Investigate optimization techniques including the use of indexing, index defragmentation, and statistical queries. Learn to use the various SQL Server tools for performing backup and restore operations, automating database administration tasks, and basics of the transaction log file.

Fee: $399

Two-Day Class Meets 8:30am-4:00pm (13 hours)
E9361   Mon., Feb. 11 & Tues., Feb. 12   Frank Richey

Advanced SQL Server System Administration

(Prerequisite: Intermediate SQL Server System Administration or equivalent experience.) Explore advanced techniques using SQL Server to store and retrieve data from other SQL Server and other heterogeneous data sources. Probe deeper into the administration of SQL Server with a discussion of the Microsoft Distributed Transaction Coordinator and distributed transactions. Learn the concepts and how to set up SQL Server AlwaysOn Availability Groups. Investigate various methods of storing and retrieving data from multiple locations, including linked servers, data replication, and log shipping. Learn how to configure snapshot, transactional, and merge replication and the advantages and disadvantages of each.

Fee: $399

Two-Day Class Meets 8:30am-4:00pm (13 hours)
E9362   Mon., Feb. 25 & Tues., Feb. 26   Frank Richey

Oracle

Fundamentals of SQL Using Oracle: Level 1

(Prerequisite: Introduction to Windows and Introduction to Access or equivalent experience with another database.) This course introduces a variety of SQL commands useful in working with Oracle databases. Learn to create effective queries by using SQL SELECT statements to retrieve and sort records from your tables. Work with comparison and logical operators to display only records that meet certain criteria. Practice creating tables and inserting, updating, and deleting records. Additional topics include deleting, renaming, and truncating tables and controlling transactions by committing and reversing database changes.

Fee: $239

One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9436   Tues., Feb. 12   Beth Arrowsmith

Fundamentals of SQL Using Oracle: Level 2

(Prerequisite: Fundamentals of SQL Using Oracle: Level 1 or equivalent experience.) Further your SQL skills using Oracle by refining your queries to retrieve the information you need from single and multiple tables. Understand the different types of joins and how to use them to display data from multiple tables. Learn to use a variety of SQL functions to replace null values, perform calculations, and customize the format of date data. Practice using SQL group functions to count records, determine minimum and maximum values, calculate sums and averages, and display subtotals. Additional topics include creating and understanding the appropriate uses of views and subqueries.

Fee: $239

One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9437   Tues., Feb. 19   Beth Arrowsmith

Fundamentals of SQL Using Oracle: Level 3

(Prerequisite: Fundamentals of SQL Using Oracle: Level 2 or equivalent experience.) This course focuses on advanced applications of SQL in an Oracle environment, including managing tables and users. Practice creating sophisticated tables that include constraints to validate your data. Understand the rules of referential integrity and how to create primary and foreign keys that enforce these rules. Learn to modify the structure of existing tables by adding, deleting, and renaming columns. Control database access by creating users and roles and granting object and system privileges. Additional topics include writing and executing SQL scripts and creating and maintaining indexes, sequences, and synonyms.

Fee: $239

One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9438   Tues., Feb. 26   Beth Arrowsmith

While it is easy to start querying your SQL database, mastering the nuances of the language for more advanced queries takes skill and practice. Explore "under the hood" with our Advanced SQL Queries classes and develop the SQL skills to extract the exact information you need from your data tables. See page 13 for complete course descriptions.

BUSINESS INTELLIGENCE

Power BI

Power BI is a set of software analytical tools to help you gain insights into your data. It can be used to bring together data from a variety of sources and create interactive reports, visualizations, and dashboards to share with others.

Introduction to Power BI

(Prerequisite: Intermediate Excel and Introduction to SQL or experience with any database.) Power BI allows users to bring their business information to life. Visualize data through interactive tools designed to deliver fast, meaningful insights into the needs and goals of an organization. Discover how to connect to a wide variety of data sources. Learn the terminology associated with data analysis and explore the Power BI interface. Manage data in workbooks containing multiple worksheets, each displaying a different visualization. Explore ways to sort and filter a variety of data types. Manipulate date data to further enhance data analysis. Turn information into maps based on geographical data. Display data visualizations in interactive dashboards for a quick, easy view of what matters most.
Fee: $279

One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9525	Tues., Jan. 8	Mark Ratliff
E9547	Thurs., Feb. 28	Mark Ratliff
E9584	Fri., Apr. 5	Mark Ratliff

Intermediate Power BI

(Prerequisite: Introduction to Power BI or equivalent experience.) Improve your Power BI skills as you work with more complex data. Learn to use Data Modeling in Power BI to create the foundation for your reports and visualizations as well as to manage your data relationships. Understand naming conventions and best practices for importing your data. Use the Query editor to shape, cleanse, and query your data. Learn how to import Data Models from PowerPivot. Incorporate date and time intelligence to filter your data and discover how key metrics change over time. Understand how to work with dates and calculate month-to-date or year-to-date sales or compare similar time periods between two years. Additional topics include grouping data, and working with visualizations including dual axis charts, scatter charts, and gauges.
Fee: $279

One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9526	Tues., Jan. 15	Mark Ratliff
E9548	Wed., Mar. 6	Mark Ratliff
E9585	Fri., Apr. 12	Mark Ratliff

Advanced Power BI

(Prerequisite: Intermediate Power BI or equivalent experience.) Use Power BI to shape and cleanse data, preparing it for output to visualizations and reports. Learn to work with more advanced data models, and to create and use data hierarchies. Understand how to create/apply reference lines using the Analytics panel, and how to create and use measures. Learn to make calculated columns using Data Analysis Expression (DAX) functions and to use DAX to calculate across multiple tables. Discover the CALCULATE function to generate multiple criteria filters, the RANK function to order data, and other functions to manage date arithmetic. Learn to use logical functions to create alerts and custom groups. Topics include in-depth calculated columns and measures, and creating end-user parameter controls. Additional topics include advanced aggregation and filtering using the "X" functions (SUMX, AVERAGEX, MINX, MAXX, and COUNTX).
Fee: $279

One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9549	Tues., Mar. 12	Mark Ratliff
E9586	Thurs., Apr. 18	Mark Ratliff

Data Visualization with Tableau

Tableau is a key software tool that allows you to analyze and visualize your data. It can pull data from a variety of sources and help you visualize that data in order to effectively tell your story.

Introduction to Tableau

(Prerequisite: Introduction to SQL or equivalent experience.) Discover how to glean insights and meaning from your data using the data visualization tool Tableau. Learn to connect to various data sources and gather data you need. Understand Tableau terminology and how to navigate the interface. Learn to manage Tableau worksheets, workbooks, and dashboards; set filters; and do basic calculations. Understand how to represent data with different visualization types and dashboard actions. Topics include terminology, data layout and formatting, organizing sheets, creating dashboards, analyzing data, working with geographical data, and basic chart types. Additional topics include managing data sources and visualizations, dimensions and measures, and sorting and filtering Tableau data.
Fee: $279

One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9386	Thurs., Jan. 10	Mark Ratliff
E9428	Mon., Mar. 18	Mark Ratliff

Intermediate Applications of Tableau

(Prerequisite: Introduction to Tableau or equivalent experience.) Build on your Tableau skills as you move into deeper analysis and more powerful visualization techniques. Discover how to aggregate data together from separate tables and disparate sources. Understand how to handle changes in your data source and join data sets. Learn how to connect various data sources, edit data connections, and blend data. Additional topics include adding reference lines to visualizations, working with shared and dual axis charts, creating combination charts, distributing and publishing data, interacting with the Analysis Menu, and creating data stories.
Fee: $279

One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9387	Wed., Jan. 16	Mark Ratliff
E9429	Tues., Mar. 19	Mark Ratliff

Advanced Applications of Tableau: Level 1

(Prerequisite: Intermediate Applications of Tableau or equivalent experience.) Learn more advanced visualization and analytical methods. Discover how to order and group data with Bins, Sorts, Groups and Sets. Understand how to manipulate data with advanced techniques, Boolean fields, and context filters. Develop more complex calculations using strings, custom aggregations, and logical and conditional calculations. Additional topics include parameters and creating advanced visualizations like histograms, control charts, KPI charts, and Pareto charts.
Fee: $279

One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9388	Tues., Jan. 22	Mark Ratliff
E9430	Mon., Apr. 1	Mark Ratliff

Advanced Applications of Tableau: Level 2

(Prerequisite: Intermediate Applications of Tableau or equivalent experience.) Take your Tableau skills to the next level. Understand how to create more advanced visualizations such as Histograms, Control Charts, Pareto Charts, and Market Basket Analysis. Harness the power of Waterfall visualizations to show incremental changes in data over time. Discover how specific data ranks across different measures over time using Bump charts. Additional topics include creating infographics and data journalism.
Fee: $279

One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9389	Thurs., Jan. 31	Mark Ratliff
E9431	Tues., Apr. 2	Mark Ratliff

R Studio

R is a programmable environment to analyze data. You can use it to pull data from a variety of sources and create visualizations. It supports command-line scripting that allows you to reuse your work for repeat analysis and handle more complex projects.

Introduction to R

(Prerequisite: Intermediate Applications of SQL or equivalent experience.) Discover how to glean insights and meaning from your data using the R data analysis tool. Understand R terminology, the R approach, RStudio, and how to navigate the interface. Work with R syntax and learn to manipulate R objects. Discover how to import working data into R. Develop the skills to work with variable assignments, vectors, and data frames and how to perform operations on all three. Learn to access information in a data frame and how to index, filter, and order your data to generate output. Understand how to represent data with different visualization types and do calculations. Topics include terminology, data layout, pulling stats from your data frame, understanding your data objects structure, vectorized functions, recycling, sorting, ranking, conditionals, and extracting summaries.
Fee: $279
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9344   Fri., Mar. 1   Mark Ratliff

Intermediate Applications of R

(Prerequisite: Introduction to R or equivalent experience.) Build on your R analysis skills as you move into more complex data manipulation and data analysis. Learn how to manipulate, arrange, sort, merge, and summarize your data. Understand how to shape your dataset, combine data tables, and transpose data. Apply the filter function to select the appropriate data for analysis. Learn to aggregate your data and then find totals, averages, minimums, and maximums. Explore manipulating rows and columns with dplyr. Discover group processing to pull out the top three of a category or to rank items within a category, Learn to combine rows and columns, delete columns, and delete dataframes. Understand how to query your data with SQL syntax. Topics include chaining, data aggregation, summarizing data, and using the dplyr library. Additional topics include importing Excel files, ranking data, working with data relationships, merging dataframes, and working with slices or subsets of data.
Fee: $279
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9345   Fri., Mar. 8   Mark Ratliff

Advanced Applications of R: Level 1

(Prerequisite: Intermediate Applications of R or equivalent experience.) Explore data analysis using the more powerful tools available in R. Learn to reshape tables and go from wide to long format and back again. Understand another way to work with categories using factors to manage data that is described in words rather than numerical values. Discover the power of performing interactive data analysis by creating tabular data using factors or categorical variables. Gain insights as you look at levels when you peek under the hood of a factor. Understand dates, date formats, date arithmetic, times, and time zones pulling out date and time elements. Unlock the keys to managing your data to handle missing values, select the correct format, and ensure that your data is imported properly into R. Work with graphs and visualizations. Learn to handle more dimensions as you explore multidimensional arrays and matrices. Topics include character and string manipulation, text extraction, POSIX, and date conversion. Additional topics include specifying data type during imports, logical expressions, mixing objects, and explicit coercion.
Fee: $279
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9346   Thurs., Mar. 14   Mark Ratliff

Advanced Applications of R: Level 2

(Prerequisite: Advanced Applications of R: Level 1 or equivalent experience.) Understand lists and list structure, and how it adds more power to R. Work with regular expressions for text extraction to manipulate your data. Learn to write your own functions to handle special situations. Discover the apply family of functions and how they provide powerful and efficient looping mechanisms. Set up basic scripts for repeatable analysis and understand how to use control structures within the scripts. Topics include checking quartiles, finding the center of your data, describing distributions, tracking correlations, plotting densities, and creating box plots. Additional topics include working with graphics, creating different types of plots, manipulating files, and producing reports.
Fee: $279
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9347   Fri., Mar. 22   Mark Ratliff

Crystal Reports

Introduction to Crystal Reports

(Prerequisite: Experience with Windows, and an understanding of basic database concepts.) Learn to use Crystal Reports to create meaningful, dynamic reports from your raw data. Practice connecting to a variety of data sources to retrieve data for your reports. Learn to use Crystal Reports' filtering capabilities to select specific records, based on criteria you provide. Organize and summarize your data by sorting and grouping records. Set up simple formula fields to manipulate text and string data. Additional topics include inserting text objects and special fields and applying basic formatting to customize the appearance of your reports.
Fee: $279
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9474   Thurs., Feb. 14   Bill Barry

Intermediate Applications of Crystal Reports

(Prerequisite: Introduction to Crystal Reports or equivalent experience.) Explore the flexibility and control of Crystal Reports, as you learn to manipulate report data and create sophisticated, customized reports. Discover how to write formulas to insert derived data, customize group names, and isolate the information you need. Additional topics include connecting to multiple data sources and adding running total fields.
Fee: $279
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9475   Thurs., Feb. 21   Bill Barry

Advanced Applications of Crystal Reports

(Prerequisite: Intermediate Applications of Crystal Reports or equivalent experience.) Learn to use parameters to insert or select data "on the fly," write advanced formulas, and create subreports to include multiple reports within one report document. Find out how Crystal Reports uses SQL commands to select report data, and learn to write your own simple SQL statements to select data for your reports. You'll also learn to create cross-tab reports to group and summarize data in two directions.
Fee: $279
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9476   Thurs., Mar. 7   Bill Barry

WEB DESIGN & DEVELOPMENT

If you are interested in Web design or development, we have a wide range of courses for you to choose from. Learn how to create page structure using HTML (p. 18), incorporate formatting and layout with Cascading Style Sheets (p. 18), and include interactivity with JavaScript (p. 19). For classes using a Content Management System (CMS) for the Web, see the WordPress classes (p.19). If you are interested in Responsive Design, see our Responsive Design with HTML5 and CSS3 class (p. 19). For e-Learning projects, you can learn Adobe Captivate (p. 5).

HTML5

Our HTML classes teach you how to create web pages, or to adjust pages you have generated in another application.

Introduction to HTML

(Prerequisite: Experience with Windows. Students should be familiar with the Windows interface and be able to copy and paste material from one document to another, as well as move, change, resize, and manage multiple windows.) This course introduces the basics of creating Web pages using Hypertext Markup Language (HTML). Understand the philosophy of HTML, effective Web page design, and how a markup language works. Learn the basic HTML document elements, tags, and structures. Topics include titles, headings, paragraphs, nested lists, horizontal rules, line breaks, basic formatting techniques, and changing text appearance and color. Additional topics include using special characters, placing graphics in Web-compatible formats, and setting up hypertext links on Web pages. Although the focus of this class is on HTML, some CSS is introduced to help in understanding the relationship between structure and presentation in modern web design.
Fee: $199
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9363	Tues., Jan. 22	Allan Crean
E9453	Wed., Mar. 6	Bill Barry

Intermediate Applications of HTML

(Prerequisite: Introduction to HTML or equivalent experience.) This course covers techniques for planning and creating attractive Web pages that combine text and images. Discover how to create tables to display data and use the table features to align images with text, create newspaper-style columns, and insert side heads. Work with referencing sections of a Web page for hyperlinks and using image maps for navigation. Learn techniques for designing Web pages effectively and understand different ways to publish your website. Additional topics include adding meta and base tags.
Fee: $199
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9364	Wed., Jan. 30	Allan Crean
E9454	Thurs., Mar. 21	Bill Barry

Advanced Applications of HTML

Enhance the design and effectiveness of your web pages using the advanced features of HTML. Learn to use the new HTML5 semantic tags and their role in modern web page design. Understand basic design techniques to improve search engine optimization. Learn proper ways to use attributes and global attributes. Learn basic CSS code for formatting text and the DIV tag for page layout. Create forms that include multiple-choice questions, comment boxes, and buttons so your users can interact with your site and you can gather useful information and feedback. Understand microformats and when you might use them. Discover how you can include media, both audio and video, in your website.
Fee: $199
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9455	Thurs., Mar. 28	Bill Barry

CSS3 (Cascading Style Sheets)

Our CSS series of classes include CSS3.The Introductory and Intermediate classes cover features common to all versions of CSS, while the Advanced class focuses on the features available in CSS3.

Introduction to CSS

(Prerequisite: Introduction to HTML or equivalent experience.) Learn to use Cascading Style Sheets (CSS) to effectively and efficiently format and position Web page elements. Create CSS to add presentation-type effects, visual qualities, and layout options to your Web pages. Learn to create drop caps, insert page breaks for printing, place images and other Web elements on your page, incorporate links that change color as the mouse passes over them, and access additional text and font properties. Understand how to create style sheets that are embedded in a particular page and external style sheets that can be used by multiple pages. Topics include the STYLE, LINK, and @import tags and the style attribute of standard HTML tags. Additional topics include font, text, color, background, and positioning properties unavailable with standard HTML attributes and tags. Inline styles, style classes and rules of precedence for overlapping styles will also be covered.
Fee: $199
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9456	Thurs., Apr. 4	Bill Barry

Intermediate Applications of CSS

(Prerequisite: Introduction to CSS or equivalent experience.) Learn to create page layouts and multiple-column designs using CSS and DIV tags. This class will show you how to use floats to position items and wrap text, nest floats, use negative margins, and create fixed and liquid layouts. Learn to build horizontal and vertical navigation bars with rollover features. Other topics include formatting tables with CSS, working with graphics, and adding styles to links. Learn some of the challenges posed by different browsers and the troubleshooting techniques that fix common browser bugs.
Fee: $199
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9457	Thurs., Apr. 11	Bill Barry

Advanced Applications of CSS

(Prerequisite: Intermediate Applications of CSS or equivalent experience.) With CSS, you can control the appearance and layout of your Web pages. The developing standard CSS3 expands the options available for selecting elements and dramatically increases the graphical options available through CSS alone. With CSS3, you can create visually stunning pages that include opacity, shadows, gradients, rounded corners, and specialized fonts, all without requiring image files. With the new selectors, you can easily select subsets of page elements to quickly style your pages. Learn how to make your layouts more flexible with media queries, which can provide different style sheets optimized for different media, making it easier for you to ensure that users on any kind of device are able to see and use your page. Additional topics include creating animations and 2-D transformations.
Fee: $199
One-Day Class Meets 8:30am-4:00pm (6.5 hours)

E9458	Thurs., Apr. 18	Bill Barry

Responsive Design

Responsive Design has become a popular strategy for handling the growth in mobile devices. While a website may look spectacular when viewed on a desktop computer with a large screen, those same pages may be unreadable or difficult to view on a phone or tablet. HTML5 and CSS3 provide the tools you need to adapt a Web page's appearance to the viewing device.

Responsive Web Design with HTML5 and CSS3

(Prerequisite: Intermediate Applications of HTML and Advanced Applications of CSS or equivalent experience.) Understand the concept of responsive design and how to apply it to design Web pages that automatically adjust based on the available screen size (viewport). Discover the power of media queries to determine the viewport of the requesting device (mobile, tablet, or desktop). Create pages using a flexible grid layout that adjusts the number of columns in the layout depending on the size of the viewing screen. Learn strategies for using HTML5 to handle the structure of the document and using CSS3 to craft the design and appearance of the page. Topics include fluid grids, re-arranging content, re-sizing elements, media queries, and flexible images. Build your skills to effectively design websites that support both desktops and mobile devices.
Fee: $199
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9459	Fri., May 10	Allan Crean

WordPress

WordPress was designed to make it easy to set up a blog on the web. It has evolved into an effective content management system that can be used to create a complete website.

Introduction to WordPress

(Prerequisites: Introduction to HTML or equivalent experience.) Understand the concepts of WordPress, a content management system, for handling your website. Use the WordPress built-in editor to create new pages and posts, and add pictures, video, audio, links, and text to your site. Help your readers find posted information by organizing your site with categories and tags. Explore how to improve the appearance of your site by using WordPress' standard themes and customizing visual themes. Learn to manage and moderate reader comments, install and use plugins to add functionality, and importing, exporting and deleting tools. Other topics discussed include configuring WordPress settings and working with the dashboard.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9377	Tues., Jan. 29	Allan Crean
E9523	Fri., Apr. 5	Allan Crean

Intermediate WordPress

(Prerequisites: Introduction to WordPress or equivalent experience.) Extend your knowledge of WordPress and understand how to enhance a site to meet your needs. Learn to add widgets to WordPress sidebars to enhance the experience of your visitors. Understand how to create audio and video playlists and add them to your site. Learn to maintain and add users, update user profiles, work with roles, and handle other administrative tasks. Discover how to create a custom navigation menu and enhance your site with plugins and widgets. Understand basic security steps you can take with your site. Topics include working with widgets, custom menus, and spell-checking and proofing your content. Addtional topics include theme enhancement, custom content types, monitoring site traffic, and sharing site content among social media sites.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9378	Tues., Feb. 5	Allan Crean
E9524	Fri., Apr. 12	Allan Crean

Web Scripting – JavaScript and AJAX

JavaScript is a scripting language that you can use on your Web pages to add dynamic and interactive features. With JavaScript, you can run calculations, check forms for errors, and create special effects and animations.

Introduction to JavaScript

(Prerequisite: Introduction to HTML or equivalent experience.). Learn how this powerful scripting language can work with HTML, CSS, and other Web technologies to enhance the user experience on your Web pages. This course introduces you to the basic commands and structure of the language, including variables, expressions, and functions. Practice incorporating calculations into your pages, and display the current date on your page using the built-in Date object. Learn how to create scripts that respond to different events such as button clicks or other user interaction. Additional topics include strategies for reusing scripts and adding alert boxes.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9587	Wed., Apr. 10	Beth Arrowsmith

Intermediate Applications of JavaScript

(Prerequisite: Introduction to JavaScript or equivalent experience). Build on the skills practiced in the introductory class. Discover how JavaScript can help to validate HTML forms, providing immediate feedback when the user omits required information or makes other validation errors. Create conditional scripts that will only perform actions when certain criteria are met, and build loops to run statements repeatedly. Learn how tools like arrays can help you store and use multiple pieces of information without requiring extra variables. Additional topics include using loops with arrays and creating regular expressions to check that form data matches a particular pattern.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9588	Wed., Apr. 17	Beth Arrowsmith

Advanced Applications of JavaScript and AJAX

(Prerequisite: Intermediate Applications of JavaScript or equivalent experience.) In this class, you will learn how to create an automatically-rotating slide show or a clock by using JavaScript to control timing on your Web pages. Create cookies to store information between visits to the page, so that returning users can maintain preferences or customization. Understand how to use AJAX (Asynchronous JavaScript and XML) combining client-side JavaScript with the power of XML. Using AJAX, web pages are much more responsive, because not all data needs to be transferred between the server and browser. Learn how to use AJAX to create drop-down form menus that are automatically populated based on your users' input. Learn the Document Object Model, XML Document Object Model, JavaScript Document Object Model, and various AJAX frameworks.This course also introduces the popular JavaScript library jQuery, which allows you to quickly and gracefully select portions of the document, dynamically show or hide content, add animations and effects, and easily handle cross-browser compatibility concerns.
Fee: $239
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9589	Thurs., Apr. 25	Beth Arrowsmith

WINDOWS ADMINISTRATION

PowerShell Scripting

Windows PowerShell is a command-line shell and scripting language designed to assist you in managing a Windows environment. Built on the .Net framework, PowerShell allows you to control the Windows operating system and the applications that run on Windows. PowerShell commands are called cmdlets and give you command-line access to Windows. PowerShell is also a complete scripting language.

Basic PowerShell Scripting

(Prerequisite: Experience with Windows Server. This course introduces basic scripting techniques in PowerShell for those with a limited programming background. Students who have extensive programming experience may want to enroll in the Introduction to PowerShell System Administration class.) Learn the basics of PowerShell scripting including syntax, variables, assignment operators, lists, object members, and scope. Understand the concepts behind Windows PowerShell, how to work with output, and how the pipeline works. Learn to manage conditionals and use looping constructs including Do While and For Each. Additional topics include functions and passing parameters.
Fee: $279
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9480   Fri., Mar. 15   Frank Richey

Introduction to PowerShell System Administration

(Prerequisite: Experience with Windows Server.) Learn to automate repetitive tasks and more efficiently handle system administration of your Windows server environment with PowerShell. This class is designed for technical professionals who wish to make the most from the command line on Microsoft operating systems. It begins with a refresher on using the standard Microsoft command line, and then introduces new PowerShell tools that expand capabilities. Topics include choosing a PowerShell host, and working with members, properties, methods, and events. Additional topics include basic object concepts, scripts and functions, and using PowerShell to perform common administrative tasks.
Fee: $279
One-Day Class Meets 8:30am-4:00pm (6.5 hours)
E9481   Fri., Mar. 22   Dennis Graham

UNIX/Linux

Linux was developed as a version of UNIX, for use on personal computers. Its syntax, kernal compilation, and environment are very similar to other versions of UNIX. Students interested in Linux can take the UNIX series of classes to learn the basics of the operating system.

Introduction to UNIX/Linux

This course introduces the UNIX operating system, focusing on the essential components of UNIX in the context of the overall operating system structure. Explore the UNIX file system and learn techniques and commands for managing files, including copying, renaming, and deleting files. Learn how to create and edit files using the vi editor. Understand the concept of a shell, along with specific aspects of the Bourne shell and K shell. Additional topics include working with foreground and background processes, using pipes and wildcards, interpreting file access permissions, setting default file and directory permissions and changing file ownership, and linking files.
Fee: $399
Two-Day Class Meets 8:30am-4:00pm (13 hours)
E9482   Wed., Mar. 27 & Thurs., Mar. 28   Frank Richey

Intermediate Commands of UNIX/Linux

(Prerequisite: Introduction to UNIX/Linux or equivalent experience. Students should already have experience with basic UNIX file commands, such as ls, pwd, cd, rm, cp, mv, grep, and sort.) Learn about file security, shell commands, and file manipulation utilities. Compare several popular shells (Bourne shell, Korn shell, C shell, and Bourne Again shell) and learn about specific capabilities of each shell, including creating regular and environment variables, setting up aliases, and rerunning commands in your history. Learn to use a variety of tools to manipulate and filter files, including head, tail, grep, sed, and awk. Additional topics include scheduling processes, archiving and compressing files, and using the find command to locate files that meet specific criteria.
Fee: $399
Two-Day Class Meets 8:30am-4:00pm (13 hours)
E9483   Thurs., Apr. 11 & Fri., Apr. 12   Frank Richey

PROGRAMMING

Programming Concepts

Introduction to Programming Concepts
This course covers the fundamentals of computer programming. Develop a better understanding of how computer applications work by learning to write your own simple programs in the VBScript scripting language. Learn the basic programming structures that are common to many programming languages, including input and output statements, constants, assignment statements, string and numeric variables, conditionals, and branching and looping control structures. Programming techniques covered include counting, averaging, rounding, the use of random numbers, and numerous tips on developing a good programming style.
Fee: $399
Two-Day Class Meets 8:30am-4:00pm (13 hours)

E9400	Wed., Jan. 9 & Thurs., Jan. 10	Beth Arrowsmith
E9540	Mon., Apr. 8 & Tues., Apr. 9	Beth Arrowsmith

DATA VISUALIZATION & DATA ANALYTICS

Use the world's most popular software tools to aggregate and analyze your data, and learn meaningful ways to present your findings and bring your data to life.

Python

Python is an object-oriented language with a syntax that emphasizes code readability. It is used in data analysis, web development, desktop apps, scientific computing, and many other areas.

Introduction to Python Programming

(Prerequisite: Introduction to Programming Concepts or equivalent experience with another programming language.) This course introduces Python, an interpreted, object-oriented programming language gaining in popularity. Learn to design and write basic Python applications that incorporate fundamental programming concepts and accepted programming techniques. Understand basic Python syntax, variables and datatypes, scope, statements, and expressions. Learn control structures including conditionals and loops to control the flow of your application. Topics include functions, strings, and string functions. Additional topics include relational and logical operators, lists, multi-dimensional lists, subscripts, and wildcards. Other topics include an introduction to classes and methods using fundamental classes in Python.
Fee: $399
Two-Day Class Meets 8:30am-4:00pm (13 hours)

E9351	Thurs., Jan. 17 & Fri., Jan. 18	Beth Arrowsmith
E9577	Tues., Apr. 23 & Wed., Apr. 24	Beth Arrowsmith

Intermediate Python Programming

(Prerequisite: Introduction to Python Programming or equivalent experience.) Explore Python's object-oriented features, with the goal of making your programs more reliable, efficient, and reusable. Learn to write classes that include variables, constructors, and methods. Understand how to use regular expressions for pattern matching, string manipulation, and data validation. Learn to error trap using exceptions to keep your programs from crashing. Use Python to work with a database and read, write, edit, and delete records. Discover Pythons File I/O capabilities and learn to read and write binary and text files. Topics include opening/closing files, checking to see if a file exists, file operations, and reading/writing files. Additional topics include working with critical functions such as lambda, map and filter, manipulating date and time data, and iterators and generators.
Fee: $399
Two-Day Class Meets 8:30am-4:00pm (13 hours)

E9352	Thurs., Jan. 31 & Fri., Feb. 1	Beth Arrowsmith
E9578	Mon., May 6 & Tues., May 7	Beth Arrowsmith

Advanced Python Programming: Data Analysis

(Prerequisite: Intermediate Python Programming or equivalent experience.) Expand your Python coding knowledge and take it to the next level. Explore using Python for data analysis and visualization. Learn to use libraries to solve common problems. Understand how to use the numpy, matplotlib, and seaborn modules for statistical analysis and visualization. Discover Pandas for data manipulation and work with its data structure and functions to filter, select, group, and aggregate data. Additional topics include learning to parse HTML, XML, and JSON data.
Fee: $399
Two-Day Class Meets 8:30am-4:00pm (13 hours)

E9353	Thurs., Feb. 14 & Fri., Feb. 15	Beth Arrowsmith
E9579	Mon., May 20 & Tues., May 21	Beth Arrowsmith

Microsoft Visual C# .NET

Introduction to Visual C# .NET Programming

(Prerequisite: Introduction to Programming Concepts or equivalent experience with another programming language.) This course, intended for students with no previous C# experience, introduces the Visual Studio development environment and fundamental C# programming statements. Learn to use Visual Studio to design professional user interfaces that feature a variety of Windows controls, including buttons, text boxes, combo boxes, and radio buttons. Add C# code behind your Windows forms to interact with users and add logic to your applications. Review essential programming concepts, including variable declarations, conditional statements, loops, and arrays, using the C# syntax. Other topics include an introduction to classes and methods using fundamental classes in the .NET Framework.
Fee: $399
Two-Day Class Meets 8:30am-4:00pm (13 hours)
E9461   Mon., Jan. 28 & Tues., Jan. 29   Don McPherson

Intermediate Visual C# .NET Programming

(Prerequisite: Introduction to Visual C# .NET Programming or equivalent experience.) Streamline your C# projects by creating your own user-defined classes. This course will review and expand on the object-oriented programming concepts presented in the introductory C# course, and guide you through creating and instantiating user-defined classes with user-defined properties, methods, and constructors. Discover tips on searching Visual Studio documentation to locate and use classes and methods provided by the .NET Framework to perform necessary tasks. Learn to declare and use overloaded methods and static members. Use collections to work with groups of objects. Consider the principles of good object-oriented design in your C# programs. Practice inheritance to extend the functionality of existing classes, and then take advantage of inheritance using polymorphic variables and methods.
Fee: $399
Two-Day Class Meets 8:30am-4:00pm (13 hours)
E9462   Mon., Feb. 11 & Tues., Feb. 12   Don McPherson

Advanced Topics in Visual C# .NET: Data Access

(Prerequisite: Intermediate Visual C# .NET Programming or equivalent experience. Experience with a database is also recommended.) Learn to create Windows forms that access data using the Visual C# programming language and the Visual Studio development environment. Configure data sources and data-related components using a variety of tools, including the Data Source Configuration Wizard, the Dataset Designer, and the TableAdapter Configuration Wizard. Take advantage of the Data Sources window and Visual Studio's drag-and- drop data-binding capabilities to build data-centric forms. Set up datasets that include data from related tables by creating relationships and establishing foreign keys. Learn techniques to validate data and make updates to the underlying database. Other topics include creating reports and using the BindingSource component to navigate through, sort, and filter data.
Fee: $399
Two-Day Class Meets 8:30am-4:00pm (13 hours)
E9463   Mon., Feb. 25 & Tues., Feb. 26   Don McPherson

Java

Introduction to Java Programming

(This course is intended for students with very little programming experience. Introduction to Programming Concepts is recommended as a prerequisite for students with no exposure to programming concepts. Students who have practical experience using a C-style programming language and an understanding of object-oriented programming concepts are encouraged to enroll in Intermediate Java Programming.) This course introduces Java, one of today's most popular programming languages. Learn to design, write, compile, and run basic Java applications that incorporate fundamental programming concepts and accepted programming techniques. Learn to declare and use variables of different data types to store information in your programs. Practice using control structures, such as if statements, switch statements, and loops, to control the flow of your applications. Learn to interpret Java's online documentation to make use of the features included in Java's class libraries. Additional topics include relational and logical operators, String and Math methods, and arrays.
Fee: $399
Two-Day Class Meets 8:30am-4:00pm (13 hours)
E9433   Tues., Feb. 19 & Wed., Feb. 20   Don McPherson

Intermediate Java Programming

(Prerequisite: Introduction to Java Programming or equivalent experience with Java, C, or C++.) Explore Java's object-oriented features, with the goal of making your programs more reliable, efficient, and reusable. Write classes that include variables, constructors, and methods, and learn to create objects based on your own classes and classes included in Java's class libraries. Examine the concepts of inheritance and class hierarchy, and learn to design classes that inherit and extend existing functionality. Practice applying effective object-oriented design strategies and writing useful class documentation. Additional topics include formatting numeric and date data, overloading methods and constructors, managing flexible-size collections, working with polymorphic variables, and organizing your classes into packages.
Fee: $399
Two-Day Class Meets 8:30am-4:00pm (13 hours)
E9434   Mon., Mar. 4 & Tues., Mar. 5   Don McPherson

Advanced Java Programming

(Prerequisite: Intermediate Java Programming or equivalent experience.) Create graphical user interfaces that incorporate components of Swing and the Abstract Windowing Toolkit. Learn to apply practical exception-handling techniques to deal with errors generated when you run your programs. Other topics include using input and output streams to interact with external data and laying out your GUI applications effectively.
Fee: $399
Two-Day Class Meets 8:30am-4:00pm (13 hours)
E9435   Mon., Mar. 18 & Tues., Mar. 19   Don McPherson

Course Information

Course Listings
Courses are shown with the program code, fee, day/date, and name of the instructor. Course outlines for most classes are available on our Web site.

Prerequisites
Prerequisites are important to ensure the experience level of the student is adequately matched with the content level of the class. If you are not sure you have all the prerequisites listed for a class, or have questions concerning the prerequisites and level of class, take advantage of our program advising service.

Call (314) 984-9000 or e-mail info@cetc.umsl.edu to discuss your questions.

Let us help you take the right class that fits your needs and experience!

Disability Access
The University of Missouri complies with the Americans with Disabilities Act of 1990. Persons requiring auxiliary aids should contact the Director of Disability Access Services, (314) 516-5228, at least two weeks prior to the first class session for assessment and assistance.

Alumni Association Member Discount
Become a member of the University of Missouri-St. Louis Alumni Association and receive a 10% discount on Computer Education & Training Center classes. Call (314) 516-5833 for more information.

Bringing Your Own Flash Drive
In order to save your class work, you may bring your own USB flash drive.

Transcript Requests
Our registration system allows you to view your course transcript. For more information, go to:

www.cetc.umsl.edu/regonline.html.

If you have not registered recently, you may need to set up an account. If you have taken classes prior to September 2016, we can consolidate your prior courses with your new account. Please call us at (314) 984-9000, or e-mail info@cetc.umsl.edu and we will be happy to assist you.

If you would like a printed copy of your transcript on official letterhead, contact the registration office. Written authorization is required for an official transcript.

Enrollment Confirmation
Upon receipt of your registration, you will receive a confirmation notice by e-mail with a link to a map for directions. Please register early to ensure timely receipt of this information.

Registrations that include all information are normally processed the same day they are received, and confirmations are e-mailed the same day as well.

Registration & Payment

How to Register
The registration office is located at 12837 Flushing Meadows Drive, St. Louis, MO 63131.

The registration office is open from 8:00 a.m. to 5:30 p.m. Monday through Thursday, and from 8:00 a.m. to 5:00 p.m. on Friday.

Complete the registration form on the back page and send it with full payment.

MAIL:	University of Missouri–St. Louis Computer Education & Training Center 12837 Flushing Meadows Drive St. Louis, MO 63131
PHONE:	Charge with MasterCard, Visa, Discover, or American Express by calling (314) 984-9000.
FAX :	Fax by dialing (314) 966-0409.
WEB:	www.cetc.umsl.edu/regonline.html

No enrollments are accepted without a registration form.

Payment of Fees
The registration fee for each course is shown below the course description. Checks should be made payable to the University of Missouri–St. Louis. MasterCard, Visa, American Express, and Discover are also accepted.

Please note that payment of fees is due in full prior to the start of your class. You are not officially registered until your payment has been received. Course fees include all course materials. No additional purchases are required.

Invoicing
In order to be invoiced, please include authorization and billing information, including the name and signature of the person responsible for payment.

Please note the cancellation and refund policies. Non-payment or failure to abide by payment policies will result in loss of invoicing rights.

Cancellation, Withdrawal & Refunds
The University reserves the right to cancel any program. In the event of cancellation, you will be notified immediately, and course fees will be refunded or applied to a future program at your request.

If you must cancel your registration or if you want to transfer to another class, call (314) 984-9000 by 9:00 a.m. two business days prior to the start of a day class and by 5:00 p.m. two business days prior to the start of an evening class to guarantee a refund or to ensure a transfer. Your student number is required to process a refund. Refunds will not be given after a course begins. There is a limit of one transfer per class.

Substitutions are allowed at any time prior to the beginning of the course. If you are unable to attend but would like another employee to attend in your place, contact the registration office with the information to make the change.
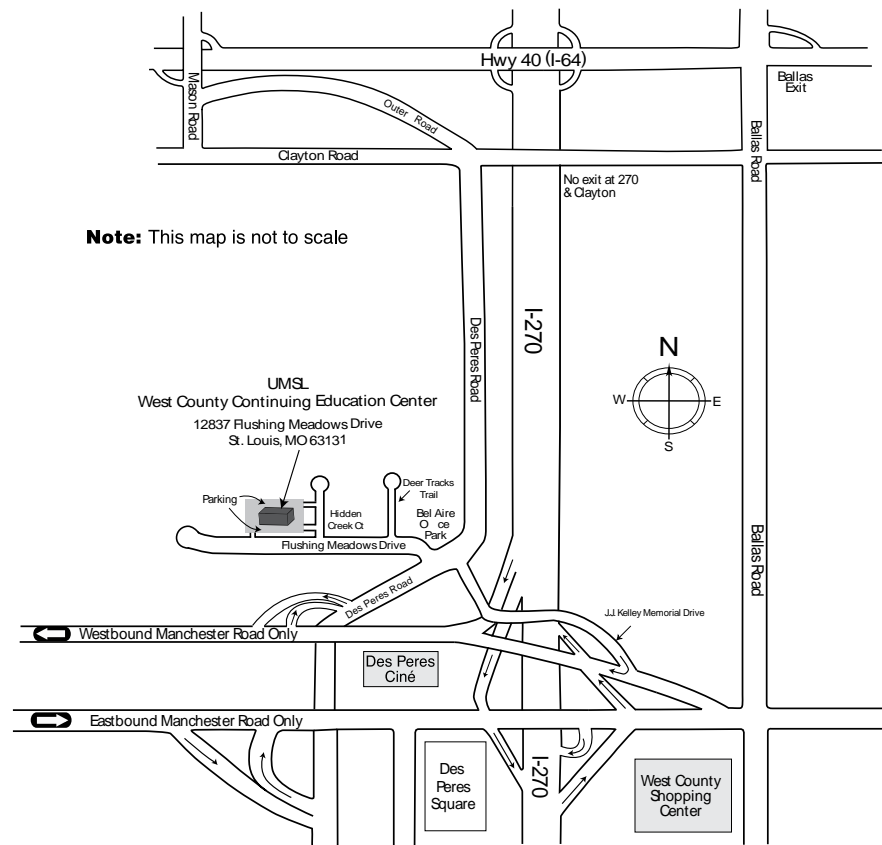
West County Computer Education Center

The Computer Education & Training Center moved in 2009 to new facilities in West County at 12837 Flushing Meadows Drive. This is minutes away from our prior location.

The Center is located in the Bel Aire Office Park, near the intersection of I–270 and Manchester Road, just down Des Peres Road from the Des Peres Ciné.

From Des Peres Road, turn west onto Flushing Meadows Drive. Go approximately two blocks past Deer Tracks Trail. The Center is a brown building on your right.

Registration is on the first floor, in the center of the building.

Note: This map is not to scale

Parking

Course fees include all parking charges for Computer Education & Training Center courses. No permit is required for the West County Computer Education Center.

Parking can be accessed off Flushing Meadows Drive or two entrances off Hidden Creek Court. Parking is available both in front and behind the building. Handicap-accessible parking is located at the front of the building.

Check-In

Please arrive 10 to 15 minutes early for your first class session to check in and receive your course materials. Day class check-in begins at 7:45 a.m. Evening class check-in begins at 5:30 p.m. Go to the registration area on the first floor in the center of the building.

The Facility

You will be given an hour for lunch. Restaurants are located nearby (within a 5- to 10-minute drive). There are vending machines and a small student lounge in the building for eating lunch.

No child-care facilities are available. Children who are not registered for a class cannot accompany students to classes or be left unattended at the facilities during classes.

Inclement Weather

In the event of inclement weather, notices of class cancellations are given on major television and radio stations.

Chancellor's Certificate & CEUs

By completing 96 hours of classroom work (9.6 CEUs), you receive the Chancellor's Certificate on the Computer. This certificate provides recognition for the time and effort you spent to expand your computer knowledge. In addition, Continuing Education Units (CEUs) are offered for participation in these courses and are kept on record at the University. CEUs (one for each 10 class hours) record your efforts toward personal and professional growth. For more information, contact Paul Westermann at (314) 984-9000, or info@cetc.umsl.edu.

For More Information

To register, find out if a class is full, or request a catalog (314) 984-9000

Course & Certificate advice
Paul Westermann (314) 984-9000

For information on our PrePurchase program, group training, or room rentals
Kate Moore (314) 984-9000

SPECIALIZED CERTIFICATE PROGRAMS

Earning a certification is a great way to boost your resume or advance your career

Chancellor's Certificate in Data Analysis is designed to help you understand and use the tools needed for making sense of your data. The certificate's three areas - core classes, data analysis & visualization, and electives - give you the flexibility to choose the path that applies to your experience level and job category.

Chancellor's Certificate in Web Page Design provides you with the tools you need to design, develop, and maintain attractive and effective Web pages.

Chancellor's Certificate in Database Technology provides you with an understanding of database technology and database design, development, and implementation.

Chancellor's Certificate in Business Applications helps develop computer skills and proficiency in a variety of software applications that are essential for success in today's office environment.

Chancellor's Certificate in Programming teaches you fundamental programming concepts and how they apply to procedural and object-oriented languages, as well as the standard techniques and programming logic that will help you solve practical problems.

Chancellor's Certificate in Electronic Art and Publishing is for designers, editors, desktop publishers, and others responsible for producing layout and artwork for distribution through a conventional printing process or electronically via the Web.

Chancellor's Certificate in Digital Graphics is for traditional designers who are going digital, as well as those with experience working in a digital environment, including graphic designers, illustrators, desktop publishers, Web designers, and photographers.

Chancellor's Certificate in Excel is for anyone using Excel to input and manage data and who wants to learn the Excel features that automate your work, prevent errors, and make data entry easier.

Chancellor's Certificate in SharePoint covers the collaboration features of SharePoint, as well as how to integrate with Office products, store and secure data, customize lists, and manage user access.

For more information, go to our certificate page: www.cetc.umsl.edu/ webfacts.html

5 Reasons to Pursue a Specialized Certificate

1. Learn specific, targeted computer skills and earn credentials for proof of concentrated study.
2. Explore a new career or a career change.
3. Use the certificate program as a guide for a course of study.
4. Update and strengthen your current computing knowledge and increase your value to your organization.
5. Demonstrate your computer skills to current and potential employers.

University of Missouri-St. Louis
Computer Education & Training Center
One University Boulevard
St. Louis, MO 63121-4400

Computer Education
& Training Center

VISIT OUR WEB SITE AT www.cetc.umsl.edu

Computer Education & Training Center Classes

JANUARY – APRIL 2019

name _____ student # (if known) _____

employer _____

address for mailing confirmation _____

city _____ state _____ zip _____

address for billing (if different from address for confirmation) _____

city _____ state _____ zip _____

phone: business _____ home/cell _____ fax _____

e-mail address (to e-mail you a confirmation of your class registration) _____

course _____ course code _____ fee _____

course _____ course code _____ fee _____

course _____ course code _____ fee _____

Fees are payable by check or charge. To charge, fill in: MasterCard/Visa/American Express/Discover #

_____

amount paid _____ exp. date _____ signature _____

☐ I do not want to register for a course right now, but please keep me on your mailing list for future course catalogs.

☐ Coming from a distance? Please check here and we'll send you hotel information, or you can visit our Web site: http://www.cetc.umsl.edu/hotels.pdf

☐ Please enroll me in the following specialized certificate program(s). Please add a $25 processing fee for each specialized certificate.

Complete the application form on the left and enclose full payment with registration.

Please fax or mail the entire page, including the mailing label.

Confirmation and map will be mailed (or e-mailed) on receipt of registration.

To register or check if a class is full:
(314) 984-9000

For course content information:
(314) 984-9000

By Mail: University of Missouri-St. Louis, 12837 Flushing Meadows Dr., St. Louis, MO 63131-1824

By Phone: Charge with MasterCard, VISA, American Express, or Discover by calling (314) 984-9000

By Web: www.cetc.umsl.edu

FAX: (314) 966-0409

FOR INVOICING: In order to be invoiced, please fill out the registration form and attach authorization and billing information, including the name and signature of the person responsible for payment.

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