CPE COMPUTER TRAINING (LCT)

LCT 0050 - Big Data Analytics (1 Credit)
1 lecture, 0 lab, 0 clinical/other, 1 total contact hours
With the growth of smart devices and the huge amounts of data they generate, plus the ability of computers to digest and learn from this data, Big Data Analytics has become a critical area of focus for most businesses. Students will learn about predictive models that create business value from Big Data solutions, the technology (databases, query languages, architectures), and statistical techniques of Big Data Analytics. Prerequisites: basic understanding of statistics, databases, and data management.

LCT 0051 - Introduction To R Programming (1 Credit)
1 lecture, 0 lab, 1 total contact hours
Learn R programming, and become skilled in this open source language and software environment for statistical computing and graphics. R programs are used by statisticians and data miners to facilitate data analysis and visualization and help build predictive models. In this class, you will learn how to define a predictive modeling problem to study; learn R commands for data analysis, program a real-time predictive tool. and apply your approach to different predictive problems as part of class projects.

LCT 0054 - Web Maintenance and Management (2 Credits)
2 lecture, 2 total contact hours
Teaches essential web page development skills and how to work as a productive member of a website development team. Develops websites using Hypertext Markup Language version 5 (HTML5) and Cascading Style Sheets (CSS). Teaches writing code manually, as well as use graphical user interface (GUI) authoring tools. Use Application Programming Interfaces (APIs) to extend functionality of web pages. Validates HTML code and recognize the importance of search engine optimization (SEO). Demonstrates how websites are developed as managed projects and identifies e-commerce solutions. Recommended: Intermediate computer user skills and knowledge of internet concepts.

LCT 0155 - Adobe Illustrator CC II (0.1-900 Credits)
0 - 900 lecture, 0 - 900 lab, 0 - 900 clinical/other, 0 - 900 total contact hours
This class is geared for the student who is already familiar with the Adobe workspace, setting up files and the different tools in the tool palette. Continue working with the different features of Adobe Illustrator. Learn how to create and manipulate type, become a master with the pen tool and tracing placed images, work with layers, create blends and gradients, use the brush tool to create artwork and complete an in-class project. Prerequisite: Adobe Illustrator CC I or comparable Adobe Illustrator experience.

LCT 0550 - Internet of Things (IOT) (0-900 Credits)
0 - 900 lecture, 0 - 900 lab, 0 - 900 clinical/other, 0 - 900 total contact hours
This course will provide students with a holistic view of the Internet of Things (IoT) and IoT digital transformation through various industrial use cases (Smarter City, Industrial 4.0, Healthcare, etc). The topics include IoT business ideas, use cases, solution architectures and ecosystems. This course also includes an optional lab where students can implement the Internet of Things value chain from a simulated sensor device, and then upload the data to the cloud platform.

LCT 8001 - Introduction To MySQL (1 Credit)
.5 lecture, 1 lab, 0 clinical/other, 1.5 total contact hours
Designed specifically as a web back end, MySQL is a database management system that powers many of today's high-traffic websites such as YouTube, Facebook, Flickr, and Yahoo. This course will show you how to quickly and efficiently set up and administer a MySQL database. Using real-world exercises, you will become proficient in running SQL queries against the server and in customizing an SQL database using the tools in the MySQL tool kit. Prerequisites: LCT0193 Intro to JavaScript Programming and LCT0292 Intro to PHP or equivalent experience.

LCT 8003 - Web Coding Boot Camp (0.5 Credits)
.5 lecture, 0 lab, .5 total contact hours
Explores the basics of web design and web development skills including HTML, CSS, JavaScript, and jQuery. Demonstrates how they are used together on a website. Prerequisite: Introduction to Computers Using Windows or equivalent experience.
Typically offered: Fall, Spring, Summer

LCT 8009 - Web Design Essentials (3 Credits)
2 lecture, 2 lab, 4 total contact hours
This course introduces the foundational skills needed to create web pages utilizing HyperText Markup Language (HTML), Cascading Style Sheets (CSS), and an overview of the JavaScript language. Topics include web design best practices, web site hosting, internet protocols, graphics, media and security. Student will create a business-oriented web site as a class project.

LCT 8012 - Foundations of Web Development (1 Credit)
1 lecture, 1 total contact hours
Covers the essentials and terminology of web design and web development skills, including HTML, CSS, and JavaScript. Explores how different tools are used together on a website. Delves into potential career trajectories and explores the existing education and certification pathways available in the field of web development.
Typically offered: Fall, Spring

LCT 8090 - Career Development For Immigrant Professionals (1 Credit)
1 lecture, 0 lab, 1 total contact hours
Equips skilled immigrants and refugees with the tools and knowledge to navigate the U.S. professional job market and higher education systems effectively. Helps participants develop personal and professional narratives, understand cultural and legal contexts, and deploy digital research tools for career advancement. Guides students to create actionable career plans, improve job application materials, and explore alternative career options while leveraging available resources. Enhances networking and communication skills through practical exercises and continuous feedback. Prerequisites: Immigrant or refugee participants with professional work experience and degrees/licenses from outside the U.S.; completed résumé in English prior to first class session; English proficiency (Harper College Adult Education ELA 9 or higher; proficiency with computer systems: Word, PowerPoint, and email; ability to create web-based user accounts and build online profiles.

LCT 8095 - Conducting an Online Job Search (1 Credit)
1 lecture, 0 lab, 1 total contact hours
This course will teach participants the strategies and techniques needed to conduct a successful online job search. Participants will learn how to use online job search tools and resources to find job opportunities that match their skills and interests, and how to effectively communicate their qualifications to potential employers. The course will cover a variety of topics, including resume writing, online networking, job search websites and applications, and interview preparation. By the end of this course, participants will have a solid understanding of how to conduct an effective online job search and be prepared to successfully navigate the job market.

LCT 8100 - Workplace Computer Skills (1.5 Credits)
1 lecture, 1 lab, 2 total contact hours
Introduces the use of computer, digital and information literacy skills in the workplace for Continuing Professional Education students. Focuses on familiarizing learners with very basic keyboarding functions and word processing. Introduces components of the Web and accessing a website using a browser such as Internet Explorer or Google Chrome. Develops critical thinking skills by evaluating online sources of information, comparing styles of communication and group problem-solving and discussion. Topics may include work readiness skills, workplace communication, job search and interview process and workforce/career preparation.

LCT 8101 - Graphic Arts Fundamentals (3 Credits)
2 lecture, 2 lab, 0 clinical/other, 4 total contact hours
Teaches the fundamentals of the graphic arts industry. Uses industry based software to create professional layouts for print media. Introduces basic operations of Adobe Photoshop, Illustrator and InDesign will allow for the hands-on development of documents. Explores graphic arts workflow, various printing methods, typography, design elements, color management and the many career possibilities the industry has to offer.

LCT 8103 - Digital Imaging I (3 Credits)
2 lecture, 2 lab, 3 total contact hours
Covers fundamentals of professional digital image-editing software (Adobe Photoshop). Emphasizes skills to manipulate photos using current software tools and special effects filters. Explores program tools, color correction, channels, layers, and masks. Computer skills are required for success in this course. Upon request this course can be converted to college credit for course GRA103.

LCT 8105 - Professional Illustration Software (3 Credits)
3 lecture, 0 lab, 0 clinical/other, 3 total contact hours
Describes tools and functions within the current software. Demonstrates creating illustrations, working with type, color, and all tools needed to create multi-colored illustration and separation. Applies techniques to create illustration files for use in digital print production. Applies vector graphics software and its applications to the graphic arts industry. Computer skills are required for success in this course.

LCT 8108 - Photography Fundamentals (2 Credits)
2 lecture, 2 total contact hours
Explores beginning fundamentals of photography, its history, and the development of photography in both commercial and creative usage. Presents a past and present use of photography focusing on techniques and applications in a conventional camera-based environment emphasizing the digital photographic arena.

LCT 8350 - Foundations of Data Analysis (0.5 Credits)
.5 lecture, 0 lab, .5 total contact hours
This course covers essential skills in data analytics and lays the groundwork for exploring and implementing advanced big data technologies. Students will delve into potential career trajectories and explore the existing education and certification pathways available in the field of data analytics.
Typically offered: Fall, Spring, Summer

LCT 8375 - Statistics and Data Analysis Essentials (3 Credits)
3 lecture, 3 total contact hours
This course provides an essential foundation in statistics and data analysis, covering topics such as statistics, variables, and probability. Participants will learn to apply statistical principles such as central tendency measurement and distributions. This course demonstrates how to handle data, the central limit theorem (CLT), analysis, regression and statistical forecasting, and provides a fundamental grasp of statistical methods with practical applications.
Typically offered: Spring, Summer

LCT 8400 - Predictive Analytics Using Big Data (1 Credit)
1 lecture, 0 lab, 0 clinical/other, 1 total contact hours
Understands how the growth of smart devices and the huge data they generate, along with the significant increase in the ability of computers to digest and learn from data, has led to Predictive Analytics becoming a critical area of focus for most businesses. Explores the three dimensions of Predictive Analytics. Studies technology (databases, query languages, R language, architectures) and statistical techniques of Big Data Analytics. Learns the statistical techniques underpinning Predictive Analytics, such as regression and correlation. Applies Predictive Analytics to a real-life domain situation. Recommended: Basic understanding of statistics, databases and data management.
Typically offered: Fall, Spring

LCT 8600 - Introduction to R Programming (1 Credit)
1 lecture, 0 lab, 0 clinical/other, 1 total contact hours
Learn R programming, and become skilled in this open source language and software environment for statistical computing and graphics. R programs are used by statisticians and data miners to facilitate data analysis and visualization and help build predictive models. In this class, you will learn how to define a predictive modeling problem to study; learn R commands for data analysis, program a real-time predictive tool. and apply your approach to different predictive problems as part of class projects.
Typically offered: Spring

LCT 8900 - Microsoft Azure Fundamentals (0.5 Credits)
.5 lecture, 0 lab, .5 total contact hours
Identify foundational level knowledge of cloud services and how those services are provided with Microsoft Azure. Learn about cloud services and Microsoft Azure. Cover general cloud computing concepts as well as general cloud computing models and services such as Public, Private and Hybrid cloud and Infrastructure-as-a-Service (IaaS), Platform-as-a-Service(PaaS) and Software-as-a-Service (SaaS). Explore some core Azure services and solutions, as well as key Azure pillar services concerning security, privacy, compliance and trust. Prepares for Microsoft certification exam AZ-900.
Typically offered: Fall, Spring, Summer