WEB APPLICATION DEVELOPER

This credential is designed to prepare students for a career in Web Application development. Educational and financial institutions and small businesses of all types have expressed this need. This 16-credit program is designed to fit within SUNY Ulster's Network A.S. Computer Science and A.S. Computer Science (Online) degree programs. The program curriculum is made up of two courses in Computer Science and two courses in Web Development.

(SU) COMPUTER SCIENCE I
This course will be offered Fall 2018.

COMPUTER SCIENCE II

This course covers the fundamentals of algorithms and object oriented software development. Topics include: modern IDE for software development, primitive and reference data types, encapsulation, information hiding, selection, iteration, functions/methods, parameters, recursion, exception handling, generic linear data structures (arrays, records/structs) and maps, file types, file I/O, simple GUIs with event handling, programming to an interface, lambda expressions, semantics of inheritance and use of polymorphism, relation with subtyping, search (sequential, binary), select (min, max), and sort (bubble, insertion, selection) algorithms, complexity notation, documentation using standard tools, program testing (unit testing) and debugging, reasoning about control flow in a program, and societal impacts related to computing and software. Prerequisite: CSC 150 with a C- or better or permission of the instructor. **Price includes fees.**

CSC 180-01B	M/W/F	1/22-5/16	noon-12:55pm	SRC	$780
CSC 180-S01	ONLINE	1/22-5/16			$820
CSC 180-S02	ONLINE	1/22-5/16			$820

WEB APPLICATION DEVELOPER I

This course will be offered Fall 2018.

WEB APPLICATION DEVELOPER II

This course covers advanced web application development frameworks, languages and techniques such as Ruby on Rails, jQuery, AngularJS, PHP, and Node.js or equivalent. Students work in teams to develop real-world web application projects. Topics include an overview of the Model-View-Controller (MVC) software architectural pattern and database fundamentals using MySQL or equivalent. Prerequisite: CSC 131 with a grade of C- or better or permission of the instructor. **Price includes fees.**

CSC 132-01B	M/W/F	1/22-5/16	10:55-11:50am	SRC	$780
CSC 132-S01	ONLINE	1/22-5/16			$820

For non-credit options for the 4-credit CSC courses, please contact Barbara Reer SUNY Ulster at reerb@sunyulster.edu or 845-802-7171.

(SU) MOBILE APPLICATION DEVELOPER CREDENTIAL
16 credits

This credential is designed to prepare students for a career in developing mobile applications for tablets and smartphones using both the Android and Apple iOS Operating Systems. This 16-credit program is designed to fit within SUNY Ulster's Network A.S. Computer Science and A.S. Computer Science (Online) degree programs. The program curriculum is made up of two courses in Computer Science and two courses in Mobile Application Development.

ANDROID APP DEVELOPMENT

This course will be offered in Fall 2018.

APPLE IOS DEVELOPMENT

This course prepares the student to be a mobile application developer for Apple iOS devices such as the iPhone and iPad using Swift, a new programming language from Apple. Concepts and techniques introduced in this course include: Introduction to the Apple Xcode application environment; The Swift Programming Language; Differences between iPhone and iPad Development; Animation and simple game development; Apple guidelines for publishing apps on the Apple App Store. Co-rerequisite: CSC 180 or permission of the instructor. Students will need a MAC computer for the course. **Price includes fees.**

CSC 215-S01	ONLINE	1/22-5/16		$820

For a non-credit option for the 4-credit CSC course, please contact Barbara Reer SUNY Ulster at reerb@sunyulster.edu or 845-802-7171.

DID YOU KNOW THIS ABOUT **SUNY ULSTER...**

SUNY Ulster ranked 12th as one of 2018 Most Affordable Online Colleges for an Associate in Computer Science.

Great Value Colleges named SUNY Ulster #8 in their Top Ten Online Associate degrees in Computer Science nationally. SUNY Ulster is the only college within New York State to be listed.

SUNY Ulster has been ranked by Computer Science Zone as #3 nationally for our Online Associate degree in Computer Science.

M - MONDAY • T - TUESDAY • W - WEDNESDAY • R - THURSDAY • F - FRIDAY • S - SATURDAY • U - SUNDAY

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WEB DEVELOPMENT MINI BOOT CAMP

Each course in this mini bootcamp delivers real-world skills essential in website development. Courses can be taken separately based on your previous experience, but no experience is necessary. Taken all together, these courses will provide a solid foundation in website development and the holistic business perspective one needs to implement a truly effective online business strategy, for your own project or for clients.

All our instructors are local, experienced professionals in the field of website development and technology, and are passionately involved in growing the local tech community. The technology skills presented in these courses are current, relevant to today's job market, and based on industry best practices.

(SU) PLANNING YOUR WEBSITE FOR MAXIMUM SUCCESS

Not all websites are created equal. For your online business presence to yield maximum benefit to your business, all content on the site must be designed to communicate value to your ideal customer in an easy and natural way. In this course, students will learn how to define and plan their website content for the optimal conversion to business goals. This course covers: content blocks and flow, user journey, graphic branding, calls to action, online marketing strategy, mockups and wireframes.
Instructor: Y. Ovchinnikova

DCB 2170-02	R	1/25-2/15	6-8pm	KSU	$199

LEARN TO BUILD A WEBSITE - PART I

Students are provided with a hands-on introduction to the universal architecture of the web. This course covers website construction with HTML5 and CSS, design and usability concepts, website hosting and administration. Students will learn how to build a simple, professional-class website.
Instructor: S. White

DCB 2171-02	M	2/26-4/2	6-9pm	KSU	$499

No class 3/12

LEARN TO BUILD A WEBSITE - PART II

In this course, students will extend their knowledge of HTML5 and CSS in building multipage websites. Students will explore file structure and hierarchy, CSS strategies for managing multi-column layout, CSS drop-down menus, tables, forms and multimedia. Optional: Students who take Designing Your Business Website Content for Maximum Success can use their own business content from that course to develop their own professional multi-page website in this course. Prerequisite: Learn to Build a Website–Part I or equivalent knowledge (instructor-approved) **Instructor: S. White**

DCB 2172-02	M	1/8-2/12	6-9pm	SRC	$499

No class 1/15

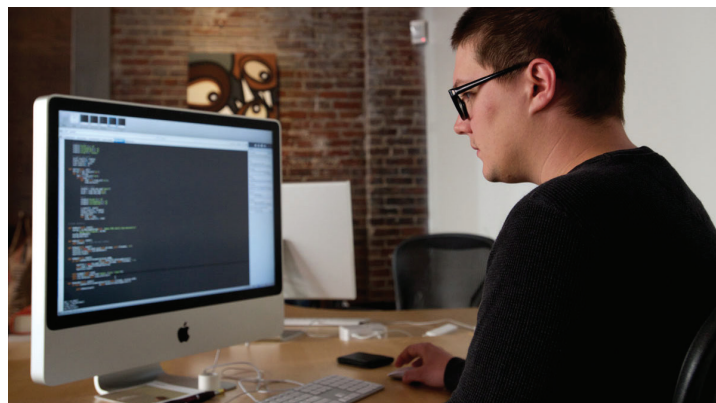|					
DCB 2172-02	M	4/9-5/7	6-9pm	KSU	$499

INTRODUCTION TO JAVASCRIPT & JQUERY

This course is designed for JavaScript novices who have little or no experience with the language. Students will learn the structure of JavaScript - variables, scope, control flow and functions. Students will create code that interacts with DOM and adds interactive behavior to a website. The course will discuss best practices and introduce jQuery – a widely used JavaScript library. Prerequisite: knowledge of HTML and CSS or Learn to Build a Website - Part I. **Instructor: D. Pavlov**

DCB 2173-01	R	3/1-29	6-9pm	KSU	$399

No class 3/15

DCB 2173-02	R	5/10-31	6-9pm	KSU	$399

WEBSITE OPTIMIZATION FOR GOOGLE

This course examines the interplay between clear business messaging and search engine optimization. Principles covered include: Niche Service, Location, Speed, Proper Website Structure, Blogs, Target Keywords, Tags, Metadata, Google Analytics basics, Google Search Console basics, AdWords basics and Tips and Tricks. **Instructor: Y. Ovchinnikova**

DCB 2174-01	R	4/5-26	6-8pm	KSU	$259
DCB 2174-02	R	6/7-28	6-8pm	KSU	$259

(SU) COMPUTER GAME DESIGN CREDENTIAL
16 credits

This credential is designed to prepare students for a career in designing and developing computer games. This 16-credit program is designed to fit within SUNY Ulster's Network A.S. Computer Science and A.S. Computer Science (Online) degree programs. The program curriculum is made up of two courses in Computer Science and two courses in Mobile Application Development.

COMPUTER GAME DESIGN I

This course is an introduction to the principles of computer game development. As such, it draws on the student's background in math and physics and enables a creative expression in addition to building on computer science concepts of object oriented programming. It covers the main concepts, principles, and techniques for designing playable computer games. Students will study and learn to utilize a variety of technologies relevant to games including tools and frameworks for game development; languages to manipulate game elements, 3 dimensional modeling, the physical principles of game object behavior, principles of scene lighting and sound effects. Computer simulation is the fundamental technology underlying all of these principles. Basic game theory and concepts will be studied and used in the projects developed during the course. Co-requisite: CSC 180 or permission of the instructor. **Price includes fees.**
For non-credit option for the 4-credit CSC courses, please contact Barbara Reer, SUNY Ulster at reerb@sunyulster.edu or 845-802-7171.

CSC 220-01B	T/R	1/22-5/16	10:10-11:30am	SRC	$780
CSC 220-S01	ONLINE	1/22-5/16			$820

COMPUTER GAME DESIGN II - This course will be offered in Fall 2018.

M - MONDAY • T - TUESDAY • W - WEDNESDAY • R - THURSDAY • F - FRIDAY • S - SATURDAY • U - SUNDAY