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Mobile Application Programming Courses

Have you completed CIT-130 *Object-Objected Programming* (or previous programming experience with an OOP language) and interested in creating mobile applications?



Did you know that CCAC offers online courses for programming in either the iOS and Android platforms?

These courses focus on the Integrated Development Environment (IDE) and Software Development Kit (SDK) technologies, Graphical User Interfaces (GUI), program design and control structures, interactive activity classes and the activity life cycle, multimedia applications, database technology and Web application publishing.

In fall semesters, **CIT-264 Mobile Apps Programming Android** will be offered and **CIT-266 Mobile Apps Programming iOS** offered in spring semesters. Both courses can also be used as restricted electives in the Software Development Degree and Certificate programs.

Schedule CIT-264 for fall semester now!

Hot certificate >>>

Multimedia Web Programming

In today's digital world, having a presence on the web is almost as essential as your resume itself. Companies and individuals alike utilize websites to do business and showcase work in forms of portfolios, testimonials, and ratings.

These websites involve a team or individual programmers who design and develop the site. Web design and development complements a variety of Computer Information Technology (CIT) degrees and certifications, providing students with another area of technology in which to expand their skills.

Students often begin with CIT-125 *Web Development* where they practice using HTML and CSS to hone their skills working with the structural and design displays of a website. CIT-125 is also a course that can be taken as a restrictive elective for the Software Development degree program.

In Multimedia Communications, students take additional courses that focus on the design of media for the web, other web programming languages, and libraries. Students taking CIT-230 *Database Systems* learn about the back-end web development used to store, display, and collect user information.

Web development certification involves, additional languages including JavaScript and several of its iterations including jQuery, AJAX and JSON.



For back-end development, students work with PHP, which also is utilized in the MMC-225 *Content Management Systems (CMS)* using WordPress, Joomla, and Drupal. Exposure to these languages and work environments round out the Web Programming Certificate, giving students exposure to performing web design and development.

In addition to acquiring development skills, students use design standards for graphics and media such as banners, logos, videos and audio. Bringing all these elements together, practice with User Experience (UX) design is implemented to help students with layout and usability of their creations.

These UX skills are developed in the MMC-228 *User Experience and Instructional Design*, an area that applies across multiple disciplines and workflows. Much of the web design and development workflow mirrors practices that other CIT areas use. **Obtaining a Multimedia Web Programming Certificate can help enhance any student's CIT associate degree.**

Program Highlight: Data Analytics



Learn how to make data-informed decisions and tell your data story with Python, R, SQL, and Tableau.

Modern organizations rely on data to drive business decisions. People with data skills are in high demand, especially within the tech sector, and to help meet that need,

CCAC now offers an Associates degree and a Certificate (4 semesters/27 credits) in Data Analytics. Data Analytics courses are project-based, using real world data, and they're offered weekday evenings and on Saturdays via Zoom.

The core Data Analytics courses consist of

- **Intro to Data Analytics** – exploratory data analysis, experimental design, basic statistical descriptions of data
- **Python 1** – an introduction to programming and to Python, with detours into command line interfaces and writing readable/reusable code
- **Python 2** – using Python and GitHub to acquire and wrangle data
- **Tabular and Linked Data** – data storage and retrieval with PostgreSQL
- **Data Visualization** – telling stories with data using tools like Tableau (students may instead take **Geospatial Data Analytics**, which focuses on geographic information systems)
- **R for Analytics** – an exploration of R as a programming language and statistical tool
- **Advanced Analytic Methods** – using R and statistical techniques to make forecasts with data
- **Project in Data Analytics** – project management techniques and the creation of a capstone project

Who might enjoy data analytics as a field?

- Anyone who enjoys mathematics and/or programming.
- Anyone who enjoyed CIT-140, CIT-155, or CIT-230 (spreadsheets and databases)
- Anyone who enjoyed MAT-161 or MAT-165 (probability and statistics)
- Scientific or procedural thinkers, detail-oriented people, and people who enjoy creating order out of chaos.

The Data Analytics program just updated most of its courses which is not reflected in the CCAC 2020-2021 catalog. If you'd like to read through the new course descriptions and view some sample lessons, please visit our unofficial departmental website at <http://ccac-data-analytics.github.io>.

CompTIA Certifications Student Discount

Students interested in taking one of the CompTIA certification exams can buy a voucher at a special discounted student rate that saves you more than 50% off the regular price.

For example, the A+ certification exam voucher, which is regularly \$232, is available for just \$106. Since an individual needs two exams for A+ certification, you would be able to take both for less than the regular cost of one exam.

Discounted voucher information can be found at <https://academic-store.comptia.org>.

If you are taking a CIT-115 course using TestOut IT Fundamentals Pro, CIT-150 using TestOut PC Pro, or CIT-220 using TestOut Linux Pro, a free TestOut certification exam attempt is included in your purchased license for this product. If you are interested, contact your instructor regarding details on how to schedule a TestOut certification exam.

IT Certifications and CCAC CIT Course Equivalency

Did you know that if you already hold a recognized IT certification that you can use your demonstrated knowledge as course credit toward one of our CIT degree or certificate programs?

The following is a list of recognized IT certifications and their CIT course equivalents. Bring your proof of certification to a CCAC Advisor for details.

CompTIA IT Fundamentals or TestOut IT Fundamentals Pro	CIT-115 Information Technology Fundamentals
CompTIA Network+	CIT-120 Networking Concepts
Microsoft Office Specialist (MOS): Microsoft Office Excel Expert and Microsoft Office Access (both exams)	CIT-140 Office Productivity Applications
Microsoft Office Specialist (MOS): Microsoft Office Word Expert	CIT-141 Word Processing
CompTIA A+	CIT-150 Computer Configuration and Support
CompTIA Security+	CIT-182 Principles of Cybersecurity
CompTIA Project+	CIT-215 Systems Analysis and Design
CompTIA Linux+	CIT-220 Linux System Administration
Cisco Certified Technician (CCT) Routers and Switches	CIT-250 Network Routing and Switching
Microsoft Technology Associate (MTA) Windows Server Administration	CIT-251 Windows Server Administration
EC-Council Certified Ethical Hacker	CIT-254 Ethical Hacking

2021 Fall Semester: CIT Program Changes

CYBERSECURITY DEGREE AND CERTIFICATE PROGRAM DELETION

As documented in the previous Spring 2021 *Bits and Bytes* newsletter, the *Cybersecurity* Associate Degree program will no longer be offered to new students. Courses CIT-175, CIT-181, CIT-185, CIT-186 and CIT-282 will no longer be offered after the summer 2022 session. Depending on how far along students in the program are, students currently pursuing this program have several choices:

1. Complete **all** of the required cybersecurity courses CIT-175, CIT-181, CIT-185, CIT-186 and CIT-285 in their Cybersecurity program by the end of summer 2022, or
2. Complete **some** of the required cybersecurity courses by the end of summer 2022 and take designated substitute courses after summer 2022 with advisor/dean approval, or
3. **Change their program designation** to the new program 790 *Cybersecurity and IT Support Specialist* Associate Degree and complete its required courses going forward. **This option is strongly recommended** for students who took CIT-115 and possibly CIT-175 (but not other cybersecurity courses) prior to the start of the fall 2021 semester.

Students in the *Cybersecurity* Certificate program are also affected and have similar choices. Depending on where they are in their program, consideration may also be given to changing to the new program 791 *Cybersecurity Support Specialist*.

IT SUPPORT DEGREE AND CERTIFICATE PROGRAM DELETION

As documented in the previous Spring 2021 *Bits and Bytes* newsletter, the *IT Support* Associate Degree and Certificate programs will no longer be offered to new students. With the exception of CIT-181 (one of several restricted electives) no longer being offered after spring 2022, students currently in these programs can continue and complete their program.

Some students may be interested in changing to the new *Cybersecurity and IT Support Specialist* Associate Degree program, which has the following differences.

1. There are no restricted CIT electives—all specified CIT courses (particularly those related to networking and operating systems such as CIT-220, CIT-250, CIT-251) are required.
2. Four cybersecurity-related courses are required (CIT-182, CIT-253, CIT-254 and CIT-282).
3. CIT courses related to programming (CIT-130 or 161), Systems Analysis (CIT-215) and Database Systems (CIT-230) are no longer required.
4. A General Elective course of the student's choosing is required.

QUESTIONS?

A complete description of the *Cybersecurity and IT Support Specialist* Associate Degree, *Cybersecurity Support Specialist* Certificate and *Network Support Specialist* Certificate along with descriptions of required CIT courses can be found at [Fall 2021 Cybersecurity and IT Support Specialist Programs and Courses](#).

If you have any questions, please contact an advisor, a CIT faculty member or send an email to CIT@ccac.edu.

IT in the News:

Click and check out these articles on the Web



[iPhone 13 rumors: What Apple needs for its next phone to succeed](#)

Every year at this time, there are an ever-increasing number of rumors about the next iPhone and 2021 is no exception. The iPhone 12 family is five months old and yet there are already a plethora of leaks and speculation about the next iPhone, which may be known as the iPhone 13...

[To fix the cybersecurity talent shortage, we need smarter product design](#)

"We need more people" is a constant refrain in cybersecurity (just as it is in other global sectors like healthcare and transportation). But the supply-side characterization misses the mark on the industry's primary challenge—figuring out how to design security products that work with minimal human participation...

[Remote work 2.0 - when WFH really means 'work from anywhere'](#)

When the COVID-19 pandemic forced a rush to remote work in early 2020, it merely accelerated an existing trend. The rise in remote work didn't exist in a vacuum. It was part of a larger trend toward the rise of flexible work, where many computer-using professionals found themselves working at times off-site and after-hours.

[Bitcoin consumes 'more electricity than Argentina'](#)

Bitcoin uses more electricity annually than the whole of Argentina, analysis by Cambridge University suggests. "Mining" for the cryptocurrency is power-hungry, involving heavy computer calculations to verify transactions. Cambridge researchers say it consumes around 121.36 terawatt-hours (TWh) a year - and is unlikely to fall unless the value of the currency slumps...

[The Silver \(Tech\) Lining To 2020](#)

You'd be hard-pressed to find anyone willing to say that 2020 was a "good" year. In fact, for many people, it was one of the hardest years of their lives. As we continue into 2021 and dream of better days on the horizon, it's important that we reflect on the bits of good that came out of such a monumentally difficult year...