MULTIPLATFORM SOFTWARE DEVELOPMENT CONCENTRATION OVERVIEW

The Bachelor of Science in Information Technology with a concentration in multiplatform software development provides you with an in-depth understanding of software development practices. You'll study a wide variety of platforms, including web, mobile, and traditional applications.

As a student, you'll learn the fundamental, intermediate, and advanced concepts of software development. In each course, you'll have the chance to apply these concepts in one or more programming languages, including C#, Java, Javascript, PHP, and HTML/CSS.

This concentration includes a mini-capstone where teams of students use their software development skills to create a real-world application.

Upon graduation, you'll be prepared for the workplace with practical skills, including:
- Developing stand-alone computer programs
- Developing mobile applications
- Developing websites
- Debugging computer programs
- Maintaining computer programs
- Working with teams to create applications

Real-World Connections

Students who complete this program will have created a working mobile application and have worked with a team to create an application that may be marketed to the general public.

Professional Competencies of Graduate

Courses within the concentration could help students develop the following skills:
- Leadership and communication
- Problem solving and critical thinking
- Personal presentation
- Understand concepts of multiculturalism and diversity

COURSE OUTCOMES

- Develop fundamental programs using concepts such as declaring and initializing variables and constants
- Create fundamental programs using concepts such as decision statements and iteration
- Devise plans for programs using an understanding of historical development of programming techniques and appropriate modeling techniques
• Build fundamental programs using concepts such as functions and arrays
• Apply the debugging and testing processes to programs containing fundamental concepts such as decision statements, iteration, functions, and arrays
• Explore various software process models
• Compose software using advanced interface and program design techniques
• Select appropriate secure data handling techniques
• Construct software test plan for validation and verification of design requirements
• Examine object-oriented programming concepts
• Apply the common linear structures of lists, stacks, and queues
• Develop procedures to solve data structures and algorithm problems
• Analyze best practices for interactive user interface design
• Analyze the client/server relationship
• Evaluate Web services
• Design interactive Web applications or mobile applications
• Describe distributed and collaborative development concepts

• Implement a database schema with security and optimization
• Plan system testing and quality assurance activities
• Implement algorithms that allow analysis and optimization
• Integrate the best practices of software development
• Prepare software for distribution
• Determine agile development practices
• Engage in agile project teamwork and communication
• Demonstrate software development skills in a continuous integration environment
• Apply integration and system testing skills in an agile environment
• Create a software application from a concept to a finished product
• Create a distribution package of software product for release to end-users

Professional Certifications
Learn more about external certifications associated with this concentration:
• C#–Microsoft Certified System Developer
• Java – Oracle Certification
• Web Languages – W3Schools Certification

JOB OUTLOOK FOR CAREERS IN MULTIPLATFORM SOFTWARE DEVELOPMENT*
• Software Developers: employment is expected to grow 17% between 2014 and 2024, much faster than average
• Computer Support Specialists: employment is expected to grow 12% between 2014 and 2024, faster than average
• Web Developers: employment is expected to grow 27% between 2014 and 2024, much faster than average

JOB TITLES ASSOCIATED WITH MULTIPLATFORM SOFTWARE DEVELOPMENT†
• IT Help-Desk Technician
• Desktop Support Specialist
• IT Support Specialist
• Service Desk Technician
• Software Developers, Applications
• Computer Programmer
• Web Developer

To learn more about the Bachelor of Science in Information Technology click here or call 866.827.5268 (Toll Free).

For comprehensive consumer information, visit kaplan.edu/info.


† Kaplan University’s programs are designed to prepare graduates to pursue the stated positions, which have varying responsibilities. However, the University cannot guarantee employment or career advancement. Additional training or certification may be required. In addition, job titles and responsibilities may vary from organization to organization.