

App Development Courses/Certificate Mississippi Curriculum Framework

Apple/Swift

**Same CIP as IST 11.0201 Computer Programming/
Programmer, General Same CIP as IST 11.0202
Computer Programming, Specific Applications**

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The Office of Curriculum and Instruction (OCI) was founded in 2013 under the Division of Workforce, Career, and Technical Education at the Mississippi Community College Board (MCCB). The office is funded through a partnership with The Mississippi Department of Education (MDE), who serves as Mississippi's fiscal agent for state and federal Career and Technical Education (CTE) Funds. The OCI is tasked with developing statewide CTE curriculum, programming, and professional development designed to meet the local and statewide economic demand.

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Adoption of National Certification Standards

Swift® Playgrounds is a revolutionary app for iPad that makes learning Swift® ® interactive and fun. It requires no coding knowledge, so it's perfect for students just starting out. Solve puzzles to master the basics using Swift® — a powerful programming language created by Apple® and used by the pros to build today's most popular apps.

Then take on a series of challenges and step up to more advanced playgrounds designed by Apple® ® and other leading developers.

Announced in 2014, the Swift® programming language has quickly become one of the fastest growing languages in history. Swift® makes it easy to write software that is incredibly fast and safe by design. The goals for Swift® are ambitious: they want to make programming simple things easy, and difficult things possible.

For students, learning Swift® has been a great introduction to modern programming concepts and best practices. And because it is open, their Swift® skills will be able to be applied to an even broader range of platforms, from mobile devices to the desktop to the cloud.

[Swift Playgrounds](#)

[Swift Webpage](#)

Industry Job Projection Data

A summary of occupational data is available from the Mississippi Department of Employment Security.

[MDES Labor Market Information](#)

Articulation

Check with the local community college CTE administration for articulation agreements.

Industry Credentials, Certifications, and Professional Licensure

As curricula are revised or developed for Career Technical Education (for credit) programs at Mississippi's community colleges, appropriate industry credentials/certifications/professional licensure are identified (where applicable). Each community college cooperating with businesses/industries in their college district determines if and when industry credentials/certifications/professional licensure are warranted.

Contact each community college for more information.

Dual Enrollment

See the "Procedures Manual for Dual Enrollment and Accelerated Programs"

[Dual Enrollment](#)

Research Abstract

In the spring of 2026, the office of Curriculum met with Apple Consultants and all Mississippi Community Colleges to determine the need for the apple swift courses. Two courses were developed for all students in the Information Systems Technology Programs of study to use as electives if desired. The Swift assessment can be taken for the purpose of certification in programming.

Revision History:

2019 Mississippi Community College Board

2026 Mississippi Community College Board

Program Description

The Mobile App Development curriculum is designed to help build a solid foundation in programming fundamentals using Swift as the language. Throughout this course, students will get practical experience with the tools, techniques, and concepts needed to build a basic iOS app from scratch. Students will also learn user interface design principles, which are fundamental to programming and making great apps.

Swift is a powerful and intuitive programming language created by Apple for building apps. It makes programming easier, more flexible, and more fun. Swift is not only great for getting you started with coding. It is designed to scale from writing the simplest program, like “Hello, world!” to the world’s most advanced software.

Suggested Course Sequence

15-hour Technical Certificate

			SCH Breakdown			Contact Hour Breakdown		Certification Information
Course Number	Course Name	Semester Credit Hours	Lecture	Lab	Total Contact Hours	Lecture	Lab	Certification Name
IST 1283	Programming Principles with Swift	3	2	2	60			
IST 1453	*Principles of Mobile App Development	3	2	2	60			
IST 2453	Mobile App Development	3	2	2	60			
	Electives	6	2	2	60			
	Total	15						

***Course requiring swift certification**

Information System Elective Courses

Course Number	Course Name	Semester Credit Hours
IST 2533	IT Project Management	3
IST 293 (1-3)	Special Problems in Information Systems Technology	3
	Instructor Approved Electives Per Local Community College	
	Total	

Information System Courses

Student learning outcomes and other course information for IST classes can be found at: [MCCB Curriculum](#)

Appendix A: Recommended Tools and Equipment

Capitalized Items

Mac Book Pro 2.3 GHz dual core i5, 128 GB-Space (1per student)

Non-Capitalized Items

iPad Wi-Fi 32 GB (1 per student)

Recommended Instructional Aids

Apple TV 4K 32 GB

Appendix B: Curriculum Definitions and Terms

- Course Name – A common name that will be used by all community colleges in reporting students
- Course Abbreviation – A common abbreviation that will be used by all community and junior colleges in reporting students
- Classification – Courses may be classified as the following:
 - Career Certificate Required Course – A required course for all students completing a career certificate.
 - Technical Certificate Required Course – A required course for all students completing a technical certificate.
 - Technical Elective – Elective courses that are available for colleges to offer to students.
- Description – A short narrative that includes the major purpose(s) of the course
- Prerequisites – A listing of any courses that must be taken prior to or on enrollment in the course
- Corequisites – A listing of courses that may be taken while enrolled in the course
- Student Learning Outcomes – A listing of the student outcomes (major concepts and performances) that will enable students to demonstrate mastery of these competencies

The following guidelines were used in developing the program(s) in this document and should be considered in compiling and revising course syllabi and daily lesson plans at the local level:

- The content of the courses in this document reflects approximately 75% of the time allocated to each course. The remaining 25% of each course should be developed at the local district level and may reflect the following:
 - Additional competencies and objectives within the course related to topics not found in the state framework, including activities related to specific needs of industries in the community college district
 - Activities that develop a higher level of mastery on the existing competencies and suggested objectives
 - Activities and instruction related to new technologies and concepts that were not prevalent at the time the current framework was developed or revised
 - Activities that include integration of academic and career–technical skills and course work, school-to-work transition activities, and articulation of secondary and postsecondary career–technical programs
 - Individualized learning activities, including work-site learning activities, to better prepare individuals in the courses for their chosen occupational areas
- Sequencing of the course within a program is left to the discretion of the local college. Naturally, foundation courses related to topics such as safety, tool and equipment usage, and other

fundamental skills should be taught first. Other courses related to specific skill areas and related academics, however, may be sequenced to take advantage of seasonal and climatic conditions, resources located outside of the school, and other factors. Programs that offer an Associate of Applied Science Degree must include all of the required Career Certificate courses, Technical Certificate courses **AND** a minimum of 15 semester hours of General Education Core Courses. The courses in the General Education Core may be spaced out over the entire length of the program so that students complete some academic and Career Technical courses each semester. Each community college specifies the actual courses that are required to meet the General Education Core Requirements for the Associate of Applied Science Degree at their college.

- In order to provide flexibility within the districts, individual courses within a framework may be customized by doing the following:
 - Adding new student learning outcomes to complement the existing competencies and suggested objectives in the program framework
 - Revising or extending the student learning outcomes
 - Adjusting the semester credit hours of a course to be up 1 hour or down 1 hour (after informing the Mississippi Community College Board [MCCB] of the change)

Appendix C: Textbook List

Recommended Coding (Apple App Development) Text Book List CIP:11.0201 Apple		
Book Title	Author (s)	ISBN
Everyone Can Code	Apple	eBook
Intro to App Development w/ Swift	Apple	eBook
App Development w/ Swift	Apple	eBook
AP Computer Science Principles with Swift	Apple	eBook