

Addendum to 2022-2023 Course Catalog

10/1/2022 – Addition of Certificate of Technology option

AUTOMOTIVE MAINTENANCE TECHNOLOGY (PG. 30)

CERTIFIED DEALERSHIP TECHNICIAN PROGRAMS

ASSOCIATE OF TECHNOLOGY, ASSOCIATE OF SCIENCE, OR CERTIFICATE OF TECHNOLOGY (GM ASEP)

GENERAL EDUCATION COURSES (CERTIFICATE OF TECHNOLOGY)			HOURS	PREREQUISITES
First and Second Semester	COM 1080	Technical Communications	3	
	BUS 1000	Career Success Skills	3	

1/9/2023–Change to technical course requirements (AWD 1115)

APPLICATION & WEB DEVELOPMENT TECHNOLOGY (PG. 83)

ASSOCIATE OF TECHNOLOGY OR ASSOCIATE OF SCIENCE

Ranken's Application and Web Development Technology is designed to prepare the students for employment with companies that develop business applications and/or websites. The curriculum utilizes industry standard tools such as Visual Studio, MERN Technology stack, .NET Technology stack and Git. Each semester consists of project-based curriculum developed around real world scenarios that help to build a web portfolio for each student.

DAY PROGRAM COURSES			HOURS	PREREQUISITES
First and Second Semester	AWD 1000	Web Development Technologies	14	
	AWD 1100	Programming Fundamentals with C#	14	
Third and Fourth Semester	AWD 1111	Database-Driven Web Development	14	AWD 1000, AWD 1100
	AWD 1115	Database-Driven Web Development II	14	AWD 1000, AWD 1100
Total Technical Credit Hours Required			56	

Important Note: Students may complete the first and second semester in any order and the third and fourth semester in any order; however, both the first and second semester must be complete before advancing to the third or fourth.

AWD1000 Web Development Technologies

This web-based course includes the technologies needed to develop modern, mobile websites. Students get hands-on experience in the latest HTML, CSS and JavaScript technologies. This course will introduce and cover current content management systems, accessibility concepts, web ethics, e-commerce, website search engine optimization, and mobile website technologies. The focus is to build students' abilities and confidence through hands-on exercises and real world projects. This course will provide the base for a strong future in web development. *Fourteen credit hours*

AWD1100 Programming Fundamentals with C#

This course offers an introduction to writing programs that demonstrate C# and object-oriented programming concepts and logic focused problem solving skills that will translate to real world applications. This course will also help students begin to understand and demonstrate code debugging skills that will be pivotal in the development field. Hands-on applications of coding, utilizing modern developer tools will allow students to get the foundation needed for application development. Fourteen credit hours

AWD1111 Database-Driven Web Development

Modern web applications must be scalable to handle thousands of concurrent users. Node.js is a good fit for this environment because it enables developers to build lightweight, flexible, and high-performance web applications in the popular JavaScript programming language. Students will learn to build full-stack web applications with Node.js, Express.js, and modern JavaScript syntax. They will learn to persist, manipulate, and query user data with popular Database Management Systems. Students will get an introduction to both Relational and No-SQL databases, to prepare them for modern high-performance web applications. *Fourteen credit hours*

AWD1115 Database-Driven Web Development II

Students will delve deeper into web application development as they use industry standard tools to design, code, and test multi-page web applications. Students will implement the Model View Controller (MVC) pattern, work with relational databases, and make full stack web apps with standard features that look great and act responsively. This will widen students' understanding of core programming concepts and web application development. *Fourteen credit hours*