

Northwest Arkansas Community College
Business & Computer Information Systems Division

Discipline Code

PROG

Course Number

2703

Course Title

Capstone: Software Engineering Project

Catalog Description

This course is intended to develop the student's programming knowledge and skills in an applied application development environment. Students will work in teams to implement a new real-world IT system or convert legacy code to current standards. Students will develop designs, generate test cases, and build a multi-tiered, client-server application capable of being utilized on a variety of platforms. Students will also practice project management and scheduling skills and that will be used to manage project phases and keep teams on task. Students must earn a grade of C or better in this course to meet graduation requirements.

Prerequisites

Sophomore standing; minimum of 24 upper level credit hours in business.

Credit Hours

3

Contact hours

45 lecture/lab contact hours

Load hours

3 load hours

Semesters Offered

On Demand

ACTS Equivalent

N/A

Grade Mode

A-F

Learning Outcomes

Students completing this course will:

- Analyze customer requirements then recommend, design, and implement a solution using the required technologies.
- Evaluate and critique an existing product or existing software specification.
- Perform project management and project team responsibilities, including planning, scheduling, and carrying out project tasks.
- Build an application system that includes a user interface, database / web service interface, and ensure the final product has the quality expected by customer.
- Test and troubleshoot the software.
- Evaluate problems and manage issues involved in teamwork environments, project management, and software development.
- Use proper software development methodologies.

General Education Outcomes Supported

None

Standard Practices

Topics list

- Project Management
- Software Engineering Practices
- Testing and Debugging
- Solution Deployment
- End User Management
- Time Management

Learning activities

- Assignments, Projects, and Presentations

Assessments

- Written assignments, outside (customer) assessment, and presentation.

Grading guidelines

- 90-100 = A
- 80-89 = B
- 70-79 = C
- 60-69 = D
- 59 or below = F