

J. Sargeant Reynolds Community College
Course Content Summary

Course Prefix and Number: ITD 295

Credits: 3

Course Title: Service Oriented Architecture (SOA) Design and Development

Course Description

Presents the principles and approach for Service Oriented Architecture (SOA) design and development to effectively decompose business processes and lower level activities into standards-based reusable and secure services. The ability to effectively manage the lifecycle and a catalog of available services is fundamental to achieving success within SOA initiatives. Prerequisite: Programming course or equivalent. Lecture 3 hours per week.

General Course Purpose

This is a popular approach in the Information Technology business community. The course can be used as an elective in the Information Technology degree program, but it being offered mainly because of the interest from the IT community.

Course Prerequisites/Corequisites Programming course or equivalent

Course Objectives

Upon completing the course, the student will be able to:

1. Define Service Oriented Architecture.
2. Describe SOA design principles.
3. Analyze and define services.
4. Create and use web services and techniques for service interactions such as transactions and security.
5. Define Web services technologies and usage for SOA implementation.
6. Define emerging SOA technologies and processes such as the Service Directory, and Enterprise Service Business.

Major Topics to be Included

1. Define Service Oriented Architecture (SOA)
2. Design principles
3. Analyzing and defining services
4. Creating and using web services and techniques
5. Service Directory
6. Enterprise Service Business

Course Effective Date: October 28, 2009