



THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

Distributed Enterprise Computing

CSE 5234

Credit Hours:

3.00

Course Levels:

Undergraduate (1000-5000 level)

Graduate (5000-8000 level)

Course Components:

Lecture

Course Description:

Current application and middleware frameworks for distributed enterprise computing; XML; Enterprise Java; SOAP and REST web services; AJAX and JSON; enterprise service bus; Hadoop; mobile computing.

Prerequisites and Co-requisites:

Prereq: 2431 or 5431 (660).

Course Goals / Objectives:

- Be competent with the technologies of enterprise computing that are most important in the software industry
 - Be competent with the advantages of architectures, specifically three tier architectures over two tier architectures
 - Be competent with how to build scalable distributed systems
 - Be competent with standards in describing data
 - Be familiar with how to apply enterprise computing to scientific problems
 - Be familiar with the importance of distributed computing through hands on experience
 - Be familiar with the issues involved in enterprise mission critical applications
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Course Topics:

- Introduction to Distributed Enterprise Systems
 - Overview of the technologies used for distributed enterprise systems
 - XML
 - Javascript, AJAX and JSON
 - Object-relational mapping (ORM)
 - Enterprise Java
 - Designing enterprise applications
 - SOAP and REST Web Services
 - Enterprise integration via the Enterprise Service Bus
 - Cloud computing toolkits
 - Mobile and edge computing
 - High-volume computing on mainframe computers
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Designation:

Elective