COP 5595 Component Programming with .Net

Credits: 3 credits

Textbook, title, author, and year:
(2) Detailed documents posted on Blackboard.

Reference materials: Common Language Infrastructure (CLI)

Specific course information

Catalog description:

Microsoft .NET is explored as a component-based platform for programming Web and other applications.

Prerequisites:

COP 3530 Data Structures.
COP 5595 can be used as a technical elective in all CS and CE programs.

Specific goals for the course:

Use the .NET platform as a vehicle to master component-based and object-oriented programming, especially in the modern IT context.

An ability to apply design and development principles in the construction of software systems of varying complexity.

Brief list of topics to be covered:

Architecture of .NET as a component-based platform
Component and object-oriented programming with the C# Programming language
The Microsoft SQL Server DBMS
Embedding SQL in C# using ADO.NET and LINQ
Component-based Web programming with ASP.NET Web Forms and ASP.NET MVC
Web services with ASP.NET, WCF, and ASP.NET API