



# DD2388 Program System Construction using .NET Framework 7.5 credits

Programsystemkonstruktion med .NET Framework

This is a translation of the Swedish, legally binding, course syllabus.

## Establishment

Course syllabus for DD2388 valid from Autumn 2009

## Grading scale

A, B, C, D, E, FX, F

## Education cycle

Second cycle

## Main field of study

## Specific prerequisites

Single course students: 90 university credits including 45 university credits in Mathematics or Information Technology. English B, or equivalent and Swedish B or equivalent.

## Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

## Intended learning outcomes

Upon completing this course, the student should be able to

- use the C# language to develop software
- explain the difference between C#, C++, Java, assembler and IL
- use Visual Studio as development environment
- use MSDN as knowledge base
- look up answers in the .NET API
- use the GUI builder for rapid development
- develop web software with ASP.NET
- use XML as data source
- develop web services
- automatically generate and use client code for web services
- write web pages that interacts with web services

## Course contents

The C# language, compiling and IL.

Visual Studio as GUI builder - strength and weaknesses.

Connecting and storing to database. Transaction security.

ASP.NET web technology.

XML as data carrier - how is it used in the industry. Advantages and disadvantages with XML.

Web services.

## Course literature

Pro C# 2008 and the .NET 3.5 Platform, Fourth Edition av Andrew Troelsen

## Examination

- LAB2 - Laboratory Work, 4.5 credits, grading scale: A, B, C, D, E, FX, F
- LAB1 - Laboratory Work, 3.0 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

In this course all the regulations of the code of honor at the School of Computer science and Communication apply, see: [http://www.kth.se/csc/student/heder-skodex/1.17237?l=en\\_UK](http://www.kth.se/csc/student/heder-skodex/1.17237?l=en_UK).

## Other requirements for final grade

Laboratory assignments (LAB1; 3 university credits, LAB2; 4,5 university credits)

## Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.