# CS405 Introduction to Empirical Modelling

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What's it all about?

Classical Computer Science

Emerging Computer Science

## Classical Computer Science

Topics such as :

Algorithms and data structures

Models of computation: formal languages and automata

Specification, design, implementation of complex systems

## Emerging Computer Science

Topics such as :

Agile methods of development, open source software

Mark-up languages, tagging notations such as XML, cascading style sheets, dependency injection

Web technologies, HTML 5, Javascript, adaptive hypermedia, Web 2.0, social networking, collaborative environments

Multimedia, multi-core processing, grid and cloud computing

Wireless sensor networks, machine learning, data mining ...

## What is Empirical Modelling?

A new framework of principles and concepts, of tools and techniques, for the construction of **interactive artefacts** that embody personal understanding.

It is a broad perspective, drawing on both history and philosophy, able to give account of classical computer science **and** emerging computer science.

It addresses the current tensions between theory and practice in computer science and contributes to both.

## Major themes of the EM module

Experiential and human aspects of computing: the notion of 'construal'

Modelling tools and programming

Concurrency and applications

EM perspective on Computer Science

## What can I do today?

Make sure you are registered with ITS and have a DCS account too. Look at the EM website:

www.dcs.warwick.ac.uk/modelling

Follow the tab at the top Teaching (follow links), and on the right CS405 (link to Lab 1 – it's tomorrow!).

## What can I do tomorrow?

Come to the opening of CS405 at 12.00 noon in CS104 followed by the first lab session downstairs in CS001.