

# software architect

## Professionals

Information and communications technology professionals

Software and applications developers and analysts

Software developers

software architect

## Description

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### Code

2512.2

### Description

Software architects create the technical design and the functional model of a software system, based on functional specifications. They also design the architecture of the system or different modules and components related to the business' or customer requirements, technical platform, computer language or development environment.

Scope note

Excludes people performing programming and coding activities.

### Alternative Labels

application architect

software architects

software designer

### Regulatory Aspect

To see if and how this occupation is regulated in EU Member States, EEA countries or Switzerland please consult the Regulated Professions Database of the Commission.

Regulated Professions Database:

[http://ec.europa.eu/growth/single-market/services/free-movement-professionals/qualifications-recognition\\_en](http://ec.europa.eu/growth/single-market/services/free-movement-professionals/qualifications-recognition_en)

## Skills & Competences

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### Essential Skills and Competences

[align software with system architectures](#) [analyse business requirements](#) [analyse software specifications](#) [build business relationships](#) [collect customer feedback on applications](#) [create flowchart diagram](#) [create software design](#) [define software architecture](#) [define technical requirements](#) [design process](#) [oversee development of software](#) [provide cost benefit analysis reports](#) [provide technical documentation](#)

## Essential Knowledge

[business process modelling](#) [object-oriented modelling](#) [systems development life-cycle](#) [tools for software configuration management](#) [unified modelling language](#)

## Optional Skills and Competences

[apply ICT systems theory](#) [design database scheme](#) [develop software prototype](#) [implement data warehousing techniques](#) [manage staff](#) [perform ICT troubleshooting](#) [perform resource planning](#) [perform risk analysis](#) [provide ICT consulting advice](#) [use markup languages](#) [utilise computer-aided software engineering tools](#)

## Optional Knowledge

[ABAP](#) [AJAX](#) [APL](#) [ASP.NET](#) [Agile project management](#) [Ansible](#) [Apache Maven](#) [Assembly \(computer programming\)](#) [C#](#) [C++](#) [COBOL](#) [CoffeeScript](#) [Common Lisp](#) [Erlang](#) [Groovy](#) [Haskell](#) [ICT project management methodologies](#) [ICT security legislation](#) [Java \(computer programming\)](#) [JavaScript](#) [Jenkins \(tools for software configuration management\)](#) [Lean project management](#) [Lisp](#) [MATLAB](#) [ML \(computer programming\)](#) [Microsoft Visual C++](#) [Objective-C](#) [OpenEdge Advanced Business Language](#) [PHP](#) [Pascal \(computer programming\)](#) [Perl](#) [Process-based management](#) [Prolog \(computer programming\)](#) [Puppet \(tools for software configuration management\)](#) [Python \(computer programming\)](#) [R](#) [Ruby \(computer programming\)](#) [SAP R3](#) [SAS language](#) [STAF](#) [Salt \(tools for software configuration management\)](#) [Scala](#) [Scratch \(computer programming\)](#) [Smalltalk \(computer programming\)](#) [Swift \(computer programming\)](#) [TypeScript](#) [VBScript](#) [Visual Studio .NET](#) [computer programming](#) [systems theory](#) [task algorithmisation](#) [web programming](#)

## Concept URI

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## Concept Uri

<http://data.europa.eu/esco/occupation/d0aa0792-4345-474b-9365-686cf4869d2e>

## Status

released

## Change log

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From v1.0.8 to v1.1.0: