

# Opleiding: Requirements Engineering

## Overzicht

**Cursusnaam:** Requirements Engineering

**Code:** Devo\_RM\_2

**Duur:** 3 dagen

**Kosten:** Zie onze website voor de actuele prijzen ([www.devoteam.nl/academy](http://www.devoteam.nl/academy))

**Taal:** Engels of Nederlands

**Materiaal:** Engels

## Requirements Engineering

De Requirements Engineering cursus biedt een reeks belangrijke technieken voor het ontdekken, analyseren en documenteren van business en systeem requirements en plaatst deze in het kader van ons eigen Devoteam Requirements Approach (DRA). De nadruk van de cursus ligt op de praktijk. Daarom zorgen we dat deelnemers veel 'hands on' ervaring van daadwerkelijk gebruik van de technieken kunnen krijgen door middel van een realistische case study. Deze cursus wordt door een uitgebreide syllabus ondersteund. Het biedt ook een waardevol naslagwerk voor de deelnemers om te gebruiken in hun dagelijkse werkzaamheden.

Devoteam is een International Institute of Business Analysis (IIBA) Endorsed Education Provider. Dit betekent dat deze cursus is in lijn is met het IIBA BABoK versie 2.0.

## BCS Kwalificaties

Deze cursus bereidt de deelnemers voor op een uur durend, open boek, examen. Dit examen leidt tot het certificaat in Requirements Engineering aangeboden door BCS (vroeger ISEB). Dit certificaat is een core module voor het BCS Business Analysis diploma.

## Inhoud van de cursus

<p>1. Rationale for requirements engineering</p> <ul style="list-style-type: none"> <li>• Problems in developing IT systems</li> <li>• The costs of errors</li> <li>• Knowledge types – explicit and tacit</li> <li>• Definition of a 'requirement'</li> <li>• Hierarchy of requirements</li> <li>• Characteristics of requirements engineering</li> <li>• A framework for requirements engineering</li> </ul>	<p>10. Requirements analysis 3 – categorisation and organisation</p> <ul style="list-style-type: none"> <li>• Organising requirements into a hierarchy</li> <li>• Categorising requirements – functional, non-functional, technical and general</li> <li>• Structuring the requirements catalogue</li> </ul>
<p>2. The role of the analyst</p> <ul style="list-style-type: none"> <li>• Stakeholders in requirements engineering</li> <li>• Roles and responsibilities</li> <li>• User analysis</li> </ul>	<p>11. Requirements analysis 4 – necessity and feasibility checking</p> <ul style="list-style-type: none"> <li>• Checking the relevance of requirements to business goals</li> <li>• Assessing the feasibility (business, technical, financial) of requirements</li> </ul>
<p>3. Requirements planning and management</p> <ul style="list-style-type: none"> <li>• The importance of planning in requirements engineering</li> <li>• Project initiation and the project initiation document</li> <li>• Features of requirements management</li> </ul>	<p>12. Requirements analysis 5 – quality control</p> <ul style="list-style-type: none"> <li>• Checking requirements against quality criteria</li> <li>• Identifying conflicting requirements</li> <li>• Resolving requirements conflicts – negotiating skills</li> </ul>
<p>4. Requirements elicitation 1 – interviewing</p> <ul style="list-style-type: none"> <li>• Introduction to elicitation techniques</li> <li>• Interview preparation</li> <li>• Structure of an interview</li> <li>• Documenting the interview</li> </ul>	<p>13. Requirements analysis 6 – testability of requirements</p> <ul style="list-style-type: none"> <li>• Identifying acceptance criteria</li> <li>• The concept of business tolerances</li> </ul>
<p>5. Requirements elicitation 2 – workshops</p> <ul style="list-style-type: none"> <li>• What is a workshop?</li> <li>• The benefits – and limitations – of a workshop</li> <li>• Workshop roles and responsibilities</li> <li>• Preparing for the workshop</li> <li>• Techniques to elicit information</li> <li>• Techniques for documenting workshop results</li> </ul>	<p>14. Scenarios and prototyping</p> <ul style="list-style-type: none"> <li>• Purpose and use – for elicitation, clarification and validation</li> <li>• Developing scenarios</li> <li>• Diagrammatic approaches to scenario modelling</li> <li>• Use case descriptions to document scenarios</li> <li>• Rationale for prototyping</li> <li>• Throwaway versus evolutionary prototyping</li> <li>• The prototyping process</li> <li>• Scope and fidelity of prototypes</li> <li>• Dangers of prototyping</li> </ul>
<p>6. Requirements elicitation 3 – supplementary techniques</p> <ul style="list-style-type: none"> <li>• Observation, ethnographic studies and STROBE</li> <li>• Quantitative techniques – activity sampling</li> <li>• Document analysis</li> <li>• Record searching</li> </ul>	<p>15. Requirements management – recap</p> <ul style="list-style-type: none"> <li>• Recap on features of requirements management</li> <li>• Requirements traceability – importance and processes</li> <li>• Baselining and version control</li> </ul>

<ul style="list-style-type: none"> <li>• Questionnaires</li> <li>• Special purpose records</li> </ul>	<ul style="list-style-type: none"> <li>• The change control process</li> <li>• Requirements re-use</li> <li>• Support tools (Computer Aided Software Engineering)</li> <li>• Requirements patterns</li> </ul>
<p>7. Documenting requirements</p> <ul style="list-style-type: none"> <li>• What should be documented?</li> <li>• Contents of the requirements document</li> <li>• The requirements catalogue</li> </ul>	<p>16. Validating requirements</p> <ul style="list-style-type: none"> <li>• The place of validation in the requirements engineering process</li> <li>• Validation versus verification</li> <li>• Issues that can arise at validation</li> <li>• Requirements validation process and the review meeting</li> <li>• Attributes to be checked by reviewers</li> <li>• Use of prototyping to validate requirements</li> <li>• The importance of sign-off</li> </ul>
<p>8. Requirements analysis 1 – modelling the processes</p> <ul style="list-style-type: none"> <li>• What are we analysing and why?</li> <li>• Characteristics of good requirements</li> <li>• Framework for requirements analysis</li> <li>• Use case diagrams</li> <li>• Scope definition/re-definition</li> <li>• Checking use cases against requirements</li> <li>• The use of a context diagram</li> </ul>	<p>17. Delivering the requirements</p> <ul style="list-style-type: none"> <li>• The business case and the project lifecycle</li> <li>• Approaches to solution delivery – build versus buy</li> <li>• Development lifecycles</li> <li>• From analysis to design</li> <li>• Post-implementation review and benefits confirmation</li> <li>• Use of requirements in system maintenance</li> </ul>
<p>9. Requirements analysis 2 – modelling the data</p> <ul style="list-style-type: none"> <li>• Objects and classes – concepts</li> <li>• Classes and attributes</li> <li>• Associations and multiplicity</li> <li>• Building a class diagram</li> <li>• Using class diagrams to confirm business rules and data requirements</li> <li>• Checking models for consistency and completeness – the CRUD matrix</li> </ul>	<p>18. Recap and review</p> <ul style="list-style-type: none"> <li>• Recap on course contents</li> <li>• The competencies required to deliver good requirements</li> </ul>