



SCIENCE, ENGINEERING & TECHNOLOGY

Course in Requirements Engineering (18 – 26 August 2015)

BRIEF DESCRIPTION

Almost all system failures can be traced back to a problem with the system's requirements. Such failures are usually attributed to poor requirements engineering practices and requirements management. In many instances engineers believe that they have developed "good" requirements without realizing that they have in fact not developed requirements at all but instead have confused requirements with a solution. Even worse, many a system is the result of poor understanding of the actual need or problem that must be solved by the system. No wonder then that so many projects end in failure.

This certificate course will provide delegates with the necessary insight, understanding and skills to effectively elicit a customer's need and convert this into feasible and realistic system

COURSE CONTENT

The certificate comprises of the following modules and related content:

Writing Effective Specifications (3 days)

- Why does a specification matter?
- Impact of poor specifications on tenders and contracts
- Introduction to specification types
- Structuring a specification; what should a specification contain?
- Appropriate language and style; terminology to avoid
- Good specification processes
- Allocating responsibilities; who remains accountable?
- Case studies and practice sessions

Requirements Engineering (2 days)

- Identifying who the stakeholders are; stakeholder analysis

- Analysing the customer's need; elicitation techniques
- The requirements analysis process; how does it fit into the system life cycle?
- Requirement types
- What constitutes a requirement?
- Transforming a customer need to an engineering requirement
- Overview of different requirements engineering tools
- Analysing risk
- Case studies

Managing Specifications (2 days)

- Specification tree; how to develop one
- Specification planning and plans
- Reviewing a specification; checklists
- Configuration and change control
- Maintaining traceability
- Case study

LEARNING OUTCOMES

After successfully completing these three modules, delegates will:

- Understand the importance, roles and purpose of writing clear and unambiguous specifications
- Understand the contractual implications of poor specifications
- Be able to develop a specification hierarchy
- Be able to define a project-specific process of moving from project requirements to specifications, including the implied translation process from requirement to specification
- Be provided with a framework of what constitutes good specifications
- Understand what constitutes good specifications
- Understand the tools and processes needed to properly structure and develop specifications
- Know most common types of specifications
- Be able to organise and manage appropriate specification reviews



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- Be able to manage the change of specifications as the project progresses
- Know appropriate specification standards

DELIVERY MODE OF COURSE

Class contact sessions

ASSESSMENT

Group assignments and an individual assignment

CPD ACCREDITATION

This course is accredited by the Engineering Council of South Africa (ECSA) and course participants will be eligible to claim 5 Continued Professional Development (CPD) points. The verification number is P003314-2015.

COURSE FEE

R21, 945.00 (VAT inclusive) per participant

The fee includes:

Extensive course notes for each module

Refreshments and lunch

Suitable training venue

The full fee should be paid at least two weeks before commencement of class.

CONTACT DETAILS

Registration and Enquiries

Course Coordinator

Nocwaka Combo

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For Course Content Information

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