visure

IREB Certified Professional for Requirements Engineering (CPRE)

IREB
Recognized
Training Provider
2014

Course objectives

The main goal of the course is to prepare candidates for the IREB International Certification. Additionally, once the course has been completed, participants will have gained extensive knowledge of Requirements Engineering and the role of this discipline in the life-cycle of a project, regardless of the industry.

Holders of this certificate will be able to confidently apply the most appropriate requirements engineering processes and techniques to given situations. They will also be to justify their choice.

The following are the priorities of this certification level:

- Acquire practical knowledge necessary for success in the area of Requirements Engineering through exercises which are especially designed to show the most common problems this discipline involves.

- Demonstrate an approach to requirements engineering that is independent of any specific methodology or market sector.

- Show established and proven methods, techniques and practices in Requirements Engineering.

CPRE Overview

Since its inception, the CPRE Foundation Level certification has evolved to become the most achieved certificate in Requirements Engineering worldwide. Over 14,500 people have been certified worldwide in more than 45 countries.

In 2006, the International Requirements Engineering Board (IREB) was founded by renowned Requirements Engineering representatives from business, consulting, education, research and science. The intention of IREB to improve the knowledge in Requirements Engineering and its application and to create an international accepted basis for communication in this field.

Requirements Definition and Management has become a major success factor of projects and must be conducted in a complex technical and business environment.

The goal of Requirements Engineering is not only documenting the requirements, but also acquiring knowledge in the areas of data collection, well-structured specifications, traceability, review and change management. All of these aspects are covered in the course.

The Foundation Level focuses on the advanced beginner and, together with the Advanced Level modules and the planned Expert Level, it offers a comprehensive career path for Requirements Engineers and Business Analysts. Professionals can start their qualification by achieving a CPRE Foundation Level certificate and then progressing to the CPRE Advanced Level or the BCS Diploma in Business Analysis.

Visure Solutions is an official Training Provider of the International Requirements Engineering Board and is authorised by them to provide Foundation and Advanced Level training Worldwide.

The Visure Solutions training courses for the CPRE have been developed in conjunction with Capiro - The Requirements Consultancy Specialists.
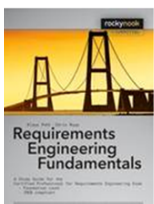
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CPRE Foundation Level

The content of the Foundation Level course is based on the official syllabus for the "Certified Professional for Requirements Engineering, Foundation Level" International Certification. The focus is on the acquisition of sound, practical knowledge of Requirements Engineering concepts and methods. Participants will learn good practices that are applicable to any field. There is a strong emphasis on applying, by means of practical exercises, thoroughly tested methods for the development, documentation and validation of requirements.

Target Audience

- Analysts and consultants.

- Project managers, Quality Managers, Test Managers.

- All those interested in obtaining the IREB Professional Requirements Engineering Certification.

- All those interested in obtaining the BCS Business Analysis Diploma and seek an alternative to the BCS Requirements module. Requirements Engineering is a mandatory core course module within the BCS International Diploma in Business Analysis. In recognition of the status of IREB's syllabus, candidates that have completed the IREB's CPRE Foundation Level are exempt from taking the BCS Certificate in Requirements Engineering to achieve their Diploma.

- By completing this course in conjunction with other International Software Testing Qualifications Board (ISTQB) courses and work experience, testers are able to certify their skills globally with the Quality Assurance Management Professional (QAMP) Certification.

Course Material

We also provide a copy of the official reference book for the certification - "Requirements Engineering Fundamentals" by Pohl and Rupp.

Each attendee receives:

- A comprehensive course workbook containing detailed notes and explanations of the instructor's slides.

- Examination style multi-choice questions.

- A case study that runs throughout the course, containing a scenario, questions and model answers.

Sample from course workbook

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Syllabus

The CPRE Foundation Level syllabus covers the most important topics of Requirements Engineering:

- **Introduction and foundations:** Many of the problems in the software development cycle have their origin in requirements engineering. This section highlights the important role of requirements engineering in software and systems development. It offers definitions for the most important terms in requirements engineering and provides fundamentals of communication theory and requirements types.

- **System and System Context:** How to define the scope of the proposed system by clearly separating the relevant from the irrelevant aspects of the environment.

- **Requirements Elicitation:** How to identify stakeholders and how to manage them. Introduction to different types of elicitation techniques and how and in which context they should be used.

- **Requirements Documentation:** Importance of requirements documentation, basic rules, structure and quality criteria for requirements documents. Introduction to different types of requirements documents and importance of a glossary.

- **Documentation of Requirements Using Natural Language:** Effects of natural language and how to use templates to avoid the problems commonly associated with using prose to document requirements.

- **Model-based Documentation of Requirements:** Documenting requirements with models; different types of models and how and when to use them.

- **Requirements Validation and Negotiation:** How to ensure that the documented requirements meet the predetermined quality criteria such as correctness and agreement. Identifying conflicts between stakeholders and resolving them.

- **Requirements Management:** Assigning attributes to requirements, defining views on requirements, prioritizing requirements, and tracing requirements as well as versioning requirements and managing requirement changes. These techniques are applicable to individual requirements as well as complete requirements documents.

- **Tool Support:** Tools are often used to support the requirements process. Discussion of different types of tools and how to evaluate and introduce them.

Certification

The examination for the Foundation Level certificate can either be taken at the end of the training class, or if further study time is required, at a later date. There is also the option of taking the examination online at a certification centre. The cost for the examination is in addition to the course fees.

The examination comprises 45 multiple choice questions to be answered in 75 minutes. The questions are of varying levels of difficulty and therefore assigned differing amounts of points. The candidate must achieve at least 60% of the total score possible to be awarded the certificate.

Contrary to other certification schemes, exams are neither conducted by the holder of the certification scheme itself (IREB) nor by the employees of a training provider. Exams are conducted by independent certification bodies as personally and organizationally independent organizations. This model ensures fairness and neutrality of the examinations and avoids conflicts of interests.

Course Duration

24 Hours typically spread over three days, plus some additional exercises to be completed as homework.

There is a regular schedule of public courses available. Onsite courses can also be run on request at a corporate facility and even tailored to your requirements.

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CPRE Advanced Level

The modular concept of the CPRE Advanced Level addresses the fact that not every subdomain of requirements engineering is relevant for every specialized profession. Specialization and practicality are the hallmarks of the Advanced Level modules, combined within a sound general framework.

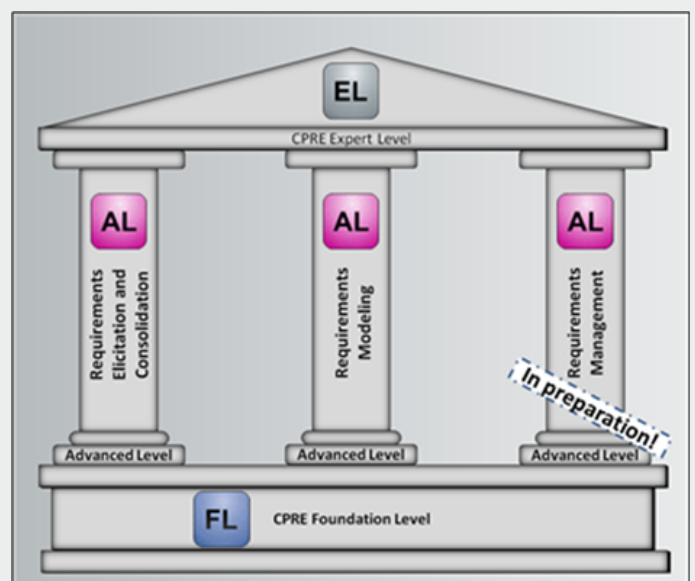A single AL module focuses on a specific aspect, a technique, a task, a domain or a process.

The holder of a CPRE AL certificate

■ is familiar with the specific terminology within the field covered by the Advanced Level module

■ is mastering the specific techniques and methods of the partial discipline of Requirements Engineering covered by the Advanced Level module

■ possesses sound knowledge within the partial discipline of Requirements Engineering covered by the Advanced Level module and has proven that in a practical examination

Currently two modules are published.

■ Requirements Elicitation & Consolidation: Different sources of requirements are discussed along with many elicitation techniques such as questioning, observation, creativity and artefact-based. Conflict resolution is supported by a variety of consolidation techniques and clear guidelines as to which situation to use which technique.

■ Requirements Modelling: How to use models for requirements elicitation and documentation. The main focus is on modelling of information structures, functions, behaviour and scenarios in Requirements Engineering.

Certification for the Advanced Level modules consists of a multi-choice question examination and a written assignment. The written assignment must be completed within 12 months of passing the examination and consists of a written study on a predefined group of topics. The context of the written assignment can be freely chosen by the candidate and must represent a realistic project situation from their working environment.

The structure of the CPRE certification scheme

More Information

http://www.visuresolutions.com/ireb-certification
http://www.ireb.org/

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