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Monograph: "EUCIP: A Model for Definition and Measurement of ICT Skills" (published jointly with Novática*)
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* This monograph will be also published in Spanish (full version printed; summary, abstracts, and some articles online) by Novática, journal of the Spanish CEPIS society AT (Asociación de Técnicos de Informática) at <http://www.ati.es/novatica/>. 
Exploring the EUCIP Certification Range and Progression Options

Paolo Schgör, Frank Mockler, and Neil Farren

This article provides an overview of the three main EUCIP certification offerings, namely, EUCIP Core, EUCIP IT Administrator and EUCIP Professional. The article also outlines the links between the certifications and the potential progression options available within the EUCIP certification model.

Keywords: Certification, EUCIP, EUCIP Core, EUCIP IT Administrator, EUCIP Professional, EUCIP Progression Options, Professional Certification.

1 Product Overview

EUCIP covers a broad range of ICT knowledge and skills on core topics relevant to ICT practitioners. There are three EUCIP certification options, which allow a candidate to progress from a solid grounding in the key areas of ICT all the way to specialised certification in a particular professional profile. The variety of options makes EUCIP an ideal qualification for a range of ICT jobs across all sectors.

There are three EUCIP certifications:
- EUCIP Core.
- EUCIP Professional.
- EUCIP IT Administrator.

1.1 EUCIP Core

The Core level certification provides students with a solid foundation for all types of ICT related work. It gives a broad knowledge of the fundamental aspects of ICT. EUCIP Core is divided into three Knowledge Areas:

Plan: The Use and Management of Information Systems. The Plan module is made up of seven categories, namely, Organisations and their Use of IT, Management of IT, Measuring the Value of IT, The Global Networked Economy, Project Management, Collaboration and Communication, and Legal and Ethical Issues.

Build: Acquisition, development and implementation of Information Systems. The Build module is made up of four categories, namely, Systems Development Process and Methods, Data Management and Databases, Programming, and User Interface and Web Design.


Typically 300 - 400 hours of study time is required to complete the EUCIP Core certification. However, various models have been employed by EUCIP Partners to prepare a candidate for the final examination. Delivery of the course can vary, with some candidates (often experienced practitioners or current/recently graduated university students) opting to take a condensed "crash course" or sit the exams...
without having attending a formal EUCIP Course. Many others sign up to a more extensive course consisting of lectures, exercises and online learning material to help them to complete the certification.

Each of the three syllabus areas is examined in a one-hour exam. The tests consist of 45 questions. The pass mark for each exam is 60% and the Candidate will only receive their certificate on completion of all three syllabus areas.

The EUCIP Core level courses are supported with courseware. Some countries (e.g. Italy & Norway) have developed books and e-Learning content in their native languages to assist Candidates doing the course.

In addition, further materials are currently being developed as part of a project part-funded by the Leonardo da Vinci programme. The project entitled "EUCIP MAT" is led by the Estonian Information Technology Society and is explored within the article by Marco Ferreti and Jaan Oruaas in this monograph.

1.2 EUCIP Professional

EUCIP Professional allows candidates to specialise in a particular role through further certification. The EUCIP Professional certification involves a candidate compiling a portfolio based around gaining credits from other courses and certifications and documenting their relevant work experience.

The main goal of the EUCIP Professional level is to provide candidates with:
- A choice of different EUCIP job profiles within IT for Certification ("EUCIP Elective Profiles").
- A choice of accredited learning elements ("EUCIP Elective Modules").
- A professional qualification that recognises that the Candidate can act effectively and consistently in their role.
- An approach to building up to a recognised EUCIP elective job certification.

EUCIP Core is a pre-requisite for EUCIP Professional. The EUCIP Professional "elective level" allows candidates to choose a specific profile that will qualify them as an ICT professional.

The candidate can define a personal "portfolio" with a relative degree of freedom to document the range of individual competences acquired through university, recognised professional courses and/or experience on the job. The chosen combination must be consistent with the relevant professional profile for which the candidate intends to acquire the EUCIP Certification. There are 21 EUCIP Professional profiles which are publicly available via the EUCIP Website [1] (see Table 1).

Each of the 21 EUCIP Professional profiles stem from one of the three EUCIP Core Knowledge Areas (Plan, Build, Operate) via 7 "branches" of IT Professional profiles. For example, the Software Designer branch is made up of 3 EUCIP Professional Profiles (Software Developer, Web & Multimedia Master and Systems Integration & Testing Engineer) and builds on the knowledge acquired from the Build area of the EUCIP Core certification.

The diagram "EUCIP Professional Profiles Map" (see Figure 1) highlights these relationships. As a candidate moves from the EUCIP Core Level (broad, fundamental knowledge of ICT) to EUCIP Professional, they move to a higher level of specialisation, focusing on developing competences relevant to a particular profile specification.

The evaluation method for obtaining the EUCIP Professional certification is based on a credit system [2] which assigns varying amounts of points to the diverse elements (courses, certifications, etc.) composing an individual's "portfolio". Among professional courses recognised by EUCIP, special attention is given to courses which allow candidates to achieve certifications from IT vendors, such as Microsoft, Oracle, SUN, Cisco, IBM, SAP, etc. The dia-

<table>
<thead>
<tr>
<th>EUCIP Professional (Elective) Profiles</th>
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<tr>
<td>Information Systems Manager</td>
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<td>Information Systems Auditor</td>
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<tr>
<td>Enterprise Solutions Consultant</td>
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<tr>
<td>Business Analyst</td>
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<td>Logistics &amp; Automation Consultant</td>
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<td>Sales and Application Consultant</td>
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<td>Client Manager</td>
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<tr>
<td>Information Systems Project Manager</td>
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Table 1: EUCIP Professional Profiles.
gram in Figure 2 highlights a selection of the "building blocks" that can be used to obtain the necessary EUCIP points required for the EUCIP Network Manager profile. The EUCIP Network Manager Profile requires the candidate to build a variety of competences, which are primarily drawn from elements relating to the "Operate" and "Build" areas, with some overlap into the "Plan" area.

Following evaluation of a candidate’s "portfolio" and the relevant compliance with the chosen EUCIP profile, an examining board consisting of two or more senior members appointed by the National EUCIP Operator, meets the candidate for a final discussion. During this oral examination the candidate will participate in a 20-30 minute discussion about his/her portfolio. This portion of the discussion also allows the examining board to evaluate the candidate’s presentation skills, as well as his/her behavioural skills. The oral examination continues with a 20-30 minute evaluation of the candidate’s knowledge and skills through questions on syllabus topics and on the general relationships between them.

Once this process has been successfully completed, the candidate will be awarded the relevant title, for example EUCIP Business Analyst, EUCIP Network Manager, etc. If the candidate meets all requirements apart from sufficient work experience, a reduced title can provisionally be awarded (e.g. Associate Network Manager): The candidate will be allowed to apply for a certification upgrade when they have accrued the required practical experience, and will then get the full EUCIP Professional title.

### 1.3 EUCIP IT Administrator

IT Administrator is a standalone certification programme that certifies practical and theoretical knowledge of computer technicians/specialists.

This certification programme covers several areas, ranging from Hardware and Operating Systems to Networks and IT Security.

Each of its five modules can be seen either as a single element of certification or as a step to achieve the complete title of EUCIP IT Administrator.

The programme is aimed at individuals working within small to medium-sized companies (including educational institutes and local branches of large organisations) that require in-house expertise in IT and also individuals who wish to broaden their IT knowledge and be able to administer systems and networks.

The candidate who has successfully completed the certification programme will be able to:
- Operate as an internal consultant for hardware, operating systems, networks and IT security.
- Follow technical developments in order to ensure effective utilisation of new technologies.
- Operate as market consultant for purchasing hardware and software for an organisation.
- Help and support network users with everyday problems.
- Ensure the safety of company data by protecting them from loss, virus attacks and hacking.
- Be able to communicate with specialised personnel from different hardware/software vendors in order to obtain proper solutions to the organisation’s needs.

The Syllabus consists of the following five modules:

Module 1: PC Hardware.
Module 2: Operating Systems.
Module 3: Local Area Network & Network Services.
Module 4: Expert Network Use.
Module 5: Security.

The tests are conducted using multiple choice theory questions and Modules 2 – 5 also contain practical exercises to be conducted on a live system, in a controlled test environment.

The pass mark in Module 1 is 60%, and in Modules 2 to 5 it is 70%. The candidate has 90 minutes to complete the Module 1 exam. In Modules 2 to 5 the candidate has 60 minutes to complete the theoretical questions and 60 minutes to complete the practical exercises.

CISCO IT Essentials I, a course aimed at preparing students for entry-level positions in IT, has been extensively mapped to the first 3 Modules of the EUCIP IT Administrator programme. This allows candidates who have completed the IT Essentials 1 course to sit EUCIP IT Administrator examinations to progress towards certification. An overview of co-operation taking place between CISCO and EUCIP is discussed in greater depth in a separate article in this issue of UPGRADE.

2 Progression Options through the Certification Range

There are several routes available to potential EUCIP candidates depending on their previous experience in the field of IT and their certification requirements. Each of the four routes is outlined below (see Figure 3).

2.1 Route 1: EUCIP Core Only

This route is particularly useful for a candidate who is interested in moving into the IT profession but does not yet have a relevant IT qualification. The candidate’s motivation is to gain the necessary skills and certification to enhance their employment prospects in the IT field.

2.2 Route 2: EUCIP IT Administrator Only

This route is suitable for individuals working within small to medium-sized companies (including educational institutes and local branches of large organisations) that require in-house expertise in IT and also individuals who wish to broaden their IT knowledge and be able to administer systems and networks.

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Figure 2: Acquiring EUCIP Points for the EUCIP Network Manager Profile.
2.3 Route 3: EUCIP Professional

This route is aimed at individuals working in the IT profession who wish to specialise in a particular role through further certification. The prospective Candidate will first complete the EUCIP Core certification. They will then select a suitable elective level profile to pursue.

2.4 Route 4: EUCIP Professional (acquiring credits from IT Administrator)

This route is similar to Route three above, however in this instance the Candidate will complete some or all modules of the EUCIP IT Administrator course to acquire some of their required elective credit "points".

For example, a Candidate who wishes to achieve the title of EUCIP Network Manager can acquire a large portion of their required credit "points" by completing modules from the IT Administrator course. The balance of the credit points can be gathered through successful completion of other university/certification studies as outlined in the profile document.

References