

TM



EUCIP

European Certification of
Informatics Professionals

EUCIP IT Trainer

Elective Level Profile Specification

Version 2.4, February 2007

Short Description

A EUCIP IT Trainer is expected to be very effective in communicating IT concepts, training users and motivating them to make the most of IT systems; requirements include a broad ICT culture, a focus on a specific technology (context-dependent, e.g. groupware products), excellent presentation skills and proficiency in training techniques, including design and preparation of effective courseware.

This profile requires a minimum work experience of **24** months in a compatible job role; if this requirement is not fulfilled, the candidate might be certified as an **Associate** IT Trainer.

Tasks Overview

According to the scope of the training programmes approved by the management, identifies specific learning needs in the client organisation and in the target audience, designs and delivers a training project, evaluates results both in terms of learning progress, behavioural enhancement and customer satisfaction.

Identifies cultural, organisational and business constraints affecting options for change, and supports the importance of corporate values and standards.

Directly contributes to innovation by participating in programmes and projects for the enhancement of information systems and organisational performance.

Works within client organisation (either as an employee or as an external provider) to assess internal competences and issues in the exploitation of IT systems, and supports the definition of improvement plans.

Defines a suitable set of training subjects and checks the entry requirements of the intended audience.

Working alone or in a team (depending both on size and scope of the project in terms of training subjects), selects, adapts or – if required – develops from scratch a complete set of training materials and learning aids to ensure effectiveness in learning.

Organises a training project and directly contributes to delivering it, either as a mentor for e-learning, or as an instructor in a traditional training environment.

Identifies an appropriate mix and sequence of different activities, including the usage of standard e-learning modules, face-to-face lectures, case studies showing real experience, open question-and-answer sessions, individual exercises / tasks, business games, collaborative project works and other practical activities.

Prepares written documents, presentations, audio-visual files and practical exercises to support both classroom training and individual study / review.

Provides references to external support material to be used for in-depth analyses and clarification of possible doubts in the practical application of the learned contents. If required, contributes to the development and quality review of user manuals for IT systems.

Manages effective communication sessions (i.e. various types of formal and informal training, meetings, presentations, demonstrations, etc.) showing strong relational skills, goal-orientation, a problem solving attitude and a full mastery of communication techniques.

Selects, adapts or develops from scratch assessment forms and materials, including tests and procedures for objective evaluation of individual results.

Prepares forms for training evaluation by the client organisation and collects feedbacks on quality and satisfaction.

Advises the organisation on the effective use of ICT/IS, and highlights best practices in similar/relevant industries.

Communicates both with IT staff and with target users of IT systems to assess the level of mutual understanding; contributes to the creation of a shared view on IT services.

Essential Behavioural Skills [5]¹

The IT Trainer role requires a good general knowledge, a strong will to understand each learner's issues, excellent oral and written expression, and a very wide range of more specific behavioural skills.

Attention to the person, interaction, ability to transmit information, plus keen organisational sensitivity are required to understand quickly the learner's needs and to adapt the form of teaching.

A persistent goal-driven approach, flexibility, determination, planning and control aptitude, teambuilding, leadership and authoritativeness are required to achieve effectiveness in training and in facilitating the adoption of new technology solutions.

¹ numbers in brackets represent EUCIP points

Detailed Skills Required

Deep competence level [11] as specified below + [10]² context-related

Remark: the first 4 competence categories below (*A1.12, A5.14, A6.07, A6.08*) correspond to the units B, C, D and E in the Certified Training Professional (CTP) Programme proposed by the ECDL Foundation. Category *A1.12* is partially covered by unit A.

A1.12 Training needs analysis [2]

- Analyse client organisation training needs:
 - o Gathering information on training needs.
 - o Determining client needs that can be addressed in training.
 - o Identifying appropriate training methods for client.
- Analyse client organisation reporting needs:
 - o Gathering information on reporting needs.
 - o Agreeing appropriate reporting mechanism for client.
- Analyse learners' needs:
 - o Gathering information about individual learners' training needs.
 - o Analysing learners' needs.
- Identify suitable learning objectives:
 - o Setting learning objectives for the training group.
- Analyse special needs:
 - o Adapting training methods to accommodate learners with special needs.

A5.14 Training programme design [2]

- Develop a training programme course plan:
 - o Writing course overview.
 - o Describing the training group.
 - o Setting course aims and objectives.
 - o Developing a course schedule.
 - o Selecting appropriate training methods.
 - o Identifying resource requirements.
- Develop a training programme module plan:
 - o Writing Module Aims and Objectives.
 - o Dividing module into logical units.
 - o Sequencing content units.
 - o Developing a training timetable.
 - o Selecting training methods.
 - o Identifying resource requirements.
- Develop session plans:
 - o Defining objectives for each training session.

² this special EUCIP profile requires a deep competence in a specific IT matter that depends on the target context; 10 EUCIP points are therefore allocated for this set of variable subjects, and the candidate will be allowed to fulfil this requirement through any accredited module that can reasonably be associated with his/her own area of expertise.

- Designing the session structure to include Instruction, Practice and Review.
- Selecting appropriate training methods for the session.
- Developing practical activities for the session.
- Develop training resources:
 - Developing resources for effective practical activities.
 - Developing candidate handouts to reinforce training sessions.
 - Preparing hardware and software for the training session.
 - Addressing health and safety issues in the training room.

A6.07 Training delivery [2,5]

- Manage session introductions:
 - Trainer introduction, establishing initial trainer-learner relationship.
 - Learner introductions, enabling learners to become familiar with each other.
 - Maintenance.
 - Ensuring learners are aware of timetabling, services etc.
- Enforce trainer credibility through proper manner and appearance:
 - Displaying confident, relaxed and friendly manner.
 - Presenting a professional appearance.
 - Content Expertise
 - Demonstrating expertise and understanding of training content.
 - Ability to relate concepts to the experience of the training group.
- Enforce trainer credibility through proper management of the group:
 - Motivating the training group.
 - Building learners' confidence.
 - Handling interruptions effectively.
- Clarify Session Objectives:
 - Outlining the session objectives for the group.
 - Placing the session in the context of the training programme.
- Adhere to Session Structure:
 - Implementing the instruction, practice and review phases.
 - Managing the transition from phase to phase.
 - Managing the time allocation in the session plan.
- Respond to unexpected training needs:
 - Showing flexibility in the delivery of the session to respond to unexpected individual training needs.
- Apply communication skills, in particular the ability to articulate clearly:
 - Demonstrating good language skills.
 - Speaking clearly using pace, pitch and intonation to stimulate learner interest.
- Appreciate non-verbal communication:
 - Using non-verbal methods to enhance communication.
 - Recognising barriers to effective communication.
- Appreciate the importance of listening to assist communication:
 - Monitoring learners' comprehension.

- Responding to the learner's need for clarification.
- Apply instructional skills to session opening:
 - Providing a strong session opening to generate interest and confidence.
- Use instructional techniques:
 - Demonstrating use of varied instructional techniques.
 - Providing instruction appropriate to learners' ability.
 - Following logical sequence of instruction.
- Maintain learner involvement:
 - Using questions to engage learners in the instruction process.
 - Providing feedback to learners to maintain interest and motivation.
- Apply instructional skills to session closing:
 - Reviewing session to reinforce learning and provide feedback.
 - Previewing further sessions to maintain learners' interest and motivation.
- Organise training activities to support the learning process.
- Develop an Appropriate Activity:
 - Selecting an activity relevant to the session and the training group.
 - Setting the activity at an appropriate level of difficulty.
- Manage the activity phase:
 - Explaining the activity to the group.
 - Monitoring learners' progress.
 - Providing appropriate intervention.
- End the activity phase:
 - Managing the allocated activity time.
 - Regaining the group's attention for activity review.

A6.08 Training evaluation [1,5]

- Manage continuous informal evaluation.
- Monitor learners' progress and comprehension:
 - Using pauses and observation during instruction phase.
 - Using questions to measure comprehension.
 - Monitoring learner's progress during activity phase.
- Adapt the session to respond to the needs of the training group:
 - Adapting the instruction phase of the session.
 - Adapting the activity phase of the session.
- Manage formal evaluation feedback.
- Identify appropriate evaluation measures for the training programme:
 - Applying different levels of evaluation to the training programme.
- Gather feedback from learners:
 - Designing an end-of-course feedback form.
 - Designing a learner's training evaluation form.
 - Evaluating learner's feedback.
- Gather feedback from the client organisation:
 - Designing a client organisation training evaluation form.
 - Evaluating the client organisation's feedback.

A1.13 Knowledge and skills assessments [2]

- Appreciate the importance of a rigorous assessment of individual knowledge and skills both for preliminary calibration of the learning process and for final qualification of each learner.
- Describe the advantages and disadvantages of the main types of assessment, such as Multiple-Choice-Question testing, simulations and other forms of automated testing, written exercises, oral interviews, role-play tests etc.
- Understand how different assessment techniques fit with different training goals (theoretical knowledge, deeper comprehension, practical skills, behavioural skills...).
- Identify appropriate assessment techniques and tools for a given learning subject in a specific context.
- Define the organisational conditions for an objective measurement of individual knowledge and skills, including procedures for honest classroom testing.
- Design specific tests for a target training environment.
- Review the quality of a test in terms of coverage, level of testing, fair questioning, time allowed, score calculation, thresholds, statistical significance and power.
- Use authoring tools to prepare a simple automated test.
- Use an automated tool to deliver a test.
- Organise and conduct a test session.

A7.01 Health and safety [1]

- Apply the special H&S considerations pertinent to hardware.
- Plan actions to minimise or eliminate potential H&S hazards.
- Observe the main relevant EU and national H&S legislation and directives.

Incisive competence level [6]

B4.04 Image editing [1]

- Understand main concepts underlying digital images (colour model, graphic format, pixel and resolution,...)
- Capture an image with a scanner or a digital camera
- Use an image editing application:
 - o Manipulate an image
 - o Use layers
 - o Format text
 - o Create drawn objects
 - o Paint on an image
 - o Use effects and filters
- Prepare an image for printing or publishing on World Wide Web or on a multimedia application

B4.05 Multimedia editing [1,5]

- Understand main concepts underlying video (pixel, frame, interlacing, refresh frequency)
- Understand the differences between television standards (PAL, NTSC, SECAM), analog standards (i.e. VHS, S-VHS, Video8), digital standards for reproduction (i.e. DV, miniDV, DivX, XviD, DVD) and for compression (i.e. MPEG-1, MPEG-2, MPEG-3, MPEG-4)
- Recognize the different signal representations (i.e. frequency, amplitude, spectrum, harmonics, bitrate)
- Apply specific techniques for audio editing (i.e. sampling, binary coding, analog-to-digital and digital-to-analog conversions, compression methods)
- Prepare a storyboard for designing movies and animations
- Configure the hardware for manipulating audio, video and the peripherals for capturing, acquiring and playing audio tracks and video
- Use an animation editing application:
 - o Use techniques as layers, keyframes, libraries, texts and fonts
 - o Create symbols
 - o Create and modify animations
 - o Export animation
- Use a video editing application:
 - o Capture and video acquiring
 - o Cutting
 - o Apply effects and transitions
 - o Make colour correction
 - o Export video
- Use an audio editing application:
 - o Capture and audio acquiring
 - o Cutting
 - o Mixing
 - o Apply effects
 - o Export audio
- Conduct the authoring phase of a video editing project
- Prepare the output for external supports like tapes, CDs, DVDs, portable digital players
- Integrate movies and audio into web pages and applications

A6.01 Managing business change [1]

- Develop a communication plan to facilitate organizational changes
- Foster innovation by an appropriate evaluation system for IT staff
- Promote training to facilitate the change
- Identify organizational and technological drivers of resistance to change
- Understand human behaviour and its impact on business change
- Create a plan to overcome resistance to change from the business, including “selling” the benefits of new technology

- Make effective use of Audio-Visual tools in making the case for change within an organisation
- Explain to non-IT staff the role of IT in achieving corporate aims, and its place within the organisation
- Ensure that the case for change is presented effectively, using modern delivery techniques
- Evaluate the Impact of an IT solution on the Business, its Customers/Suppliers, Staff, Internal processes etc
- Select between Programmes and Projects for Business Change
- Organise the delivery of user training for both new business processes and the use of any underpinning ICT services
- Control the interfaces between Business Change projects and enabling IT projects
- Identify cultural, organisational and business constraints affecting options for change
- Establish an understanding of business aims and develop alternative processes to achieve them
- Assess the risks, costs and potential benefits of alternative business process designs.

B3.08 Writing technical documentation and procedures [1]

- Understand documentation writing in multicultural and multilingual environments.
- Observe and make the most effective use of corporate standards for documents.
- Prepare templates for shared documents.
- Define naming conventions and classification criteria.
- Write and proof read software documentation.
- Write processes and procedures descriptions.
- Compose and publish information manuals.
- Develop software product and project presentations.
- Publish documentation on a web.

A5.01 Project Management essentials [1,5]

- Define the role of the various specialists in a typical project organisation structure (e.g. Rational Unified Process, PRINCE2, etc.).
- Contribute to the IS project plan for a given business scenario.
- Contribute to risk analysis of a project proposal, concentrating on business risk.
- Use standard approaches to evaluate a project plan from the business viewpoint.
- Assist in defining the phases within a project and the role of the business analyst in those phases.
- Assist in the creation of constraints and the definition of milestones, checkpoints and reviews for a project.
- Define Corporate Standards for the documentation of business analysis deliverables in a project.

- Contribute to quality assurance processes within a project, from a business perspective.

External references to SFIA[®] version 3 by the SFIA Foundation

Skill 72: Education and Training Management

“The overall management responsibility for the development and provision of education or training covering relevant SFIA skills and levels.”

Level 5

Skill 73: Training Materials Creation and Maintenance

“The creation of training materials for use by teachers or students covering any subject within the scope of SFIA.”

Levels 4 and 5

Skill 74: Education and Training Delivery

“The teaching of knowledge and techniques and skills training relevant to SFIA content.”

Levels 4 and 5

External references to AITTS by the German Government – *Arbeitsprozessorientierten Weiterbildung in der IT-Branche*

Profil 6.2: IT Trainer (IT-Trainer/in)

“IT Trainer planen und organisieren Aus- und Weiterbildungseinheiten aus dem Bereich Informations- und Kommunikationstechnologie, führen sie durch und bereiten sie nach.”

External references to *Nomenclature 2005* by CIGREF (club informatique des grandes entreprises françaises)

(?)Métier 2.1a : Assistant Fonctionnel

“Il apporte à l'utilisateur final une aide en matière d'utilisation de logiciels, en période de déploiement ou en régime de croisière, et contribue à résoudre toute difficulté que celui-ci rencontre. Plutôt spécialisé sur un métier ou un processus, il aide et conseille l'utilisateur final à bien utiliser ses outils logiciels. À la jonction de la DSI (maître d'oeuvre) et du client (direction, maîtrise d'ouvrage, utilisateurs), il intervient directement auprès des utilisateurs.”

(??)Métier 5.1 : Expert Système d'Exploitation

“Il assure un rôle de conseil, d'assistance, d'information, de formation et d'alerte. Il peut intervenir directement sur tout ou partie d'un projet qui relève de son domaine d'expertise.

L'expert système d'exploitation effectue une veille technologique, il participe aux études de l'architecture technique générale et de son évolution ainsi qu'à la qualification des plateformes informatiques.

Il est l'interface reconnue des experts externes.”

Remark : Training tasks in the CIGREF Nomenclature are often associated with a particular expertise: e.g. the security manager (Responsable Sécurité des Systèmes d'Information) is also responsible for informing, training and coaching users. As a consequence, no specific role matches appropriately with the EUCIP IT Trainer.