1. TITLE OF THE CERTIFICATE (ES)
Certificado de Profesionalidad de nivel 3 en IFCT0609 PROGRAMACIÓN DE SISTEMAS INFORMÁTICOS

2. TRANSLATED TITLE OF THE CERTIFICATE (EN)
Professional Certificate Level 3 in IFCT0609 PROGRAMMING OF COMPUTER SYSTEMS (This translation has no legal status)

3. PROFILE OF SKILLS AND COMPETENCES

The holder of this certificate will have acquired the **general competence** to develop software components based on concrete specifications, providing administration and supervision functions of the operating system, for the management of resources of a computer system and the interaction with other systems, using object and component-oriented development technologies. This general competence is divided into the following **skills units** (UC):
 	
  – Manage services in the computer system (UC0490_3).
  – Create software elements for the management of the system and its resources (UC0964_3).
  – Develop software elements with component-based programming technologies (UC0965_3).
 	
The professional skills are acquired through the **learning outcomes** defined within the related Training Modules (MF):
 	
  – Management of services in the computer system (MF0490_3).
  – Development of software elements for systems management (MF0964_3).
  – Software development based on component-oriented technologies (MF0965_3).
  – Practical training at the workplace in Programming of computer systems (MP0274)
 	
(See legal basis for all learning outcomes information acquired by the holder of this Certificate in each MF).
 	
As a reference the learning outcomes include in the Practical training at the workplace that complete and reinforce the learning outcomes acquired in the other training modules, are:
 	
  - Collaborate on the development and analysis of computer systems.
  - Audit the quality and security of software systems.
  - Take part in the company's working processes, following the rules and instructions established at the workplace.

4. RANGE OF OCCUPATIONS ACCESSIBLE TO THE HOLDER OF THIS CERTIFICATE

The holder of this certificate may work above all in the service sector, and mainly in companies or organisations that use computer systems for their administration; companies whose business purpose is the sale of computer application analysis, design and construction services; or large organisations, as part of the computer systems programming and maintenance team. The most pertinent occupations and positions are:
 	
  – Systems analyst, higher level.
  – Analyst/programmer, medium level.
  – Applications analyst, middle level.
  – Computer application programmer.
  – Systems programmer.
  – Component programmer.

5. OFFICIAL BASIS OF THE CERTIFICATE
Name and status of the national/regional authority providing accreditation/recognition of the certificate The Ministry of Employment and Social Security or the corresponding autonomous regional administration within the scope of its competence, in the name of the King. The certificate is valid throughout Spain.

Version: December 2013

5. OFFICIAL BASIS OF THE CERTIFICATE

Level of the certificate

The Professional Certificate Level 3 of the National Repertoire of Professional Certificates corresponds to level 4 of the International Standard Classification of Education (ISCED-P 2011).

The European Qualification Framework (EQF) level:

Grading scale/Pass requirements

The grading scale and pass level of the training modules are expressed on a scale of 0 to 10. The minimum score for a pass is 5 in every training module including a pass in the practical training at the workplace module.
The grading system is as follows:
- FAIL: 0 to 4.9
- PASS-SATISFACTORY: 5 to 6.9
- PASS-GOOD: 7 to 8.9
- PASS-EXCELLENT: 9 to 10

Access to next level of education/training

This Professional Certificate Level 3 gives access to Professional Certificate Level 3 within the same professional area and family.

For validation purposes, the educational authorities will recognise the professional module or modules of the VET diplomas corresponding to the skills units included in the training modules of this certificate.

Legal basis

Royal Decree 686/2011 of 13 May, establishing six professional certificates in the professional Information and Communications technology family, which are included in the National Repertoire of Professional Certificates.
(Appendix VI, Code: IFCT0609)

Amended by Royal Decree 628/2013 of 2 August, establishing four professional certificates in the professional family Information and Communications technology, which are included in the National Repertoire of Professional Certificates, and updating the professional certificates established as Appendices I, II, III, IV, V, VI, VII, VIII, IX, X, XI and XII of Royal Decree 1531/2011 of 31 October, and as Appendices I, II, III, IV, V and VI of Royal Decree 686/2011 of 13 May.

6. OFFICIALLY RECOGNISED WAYS OF ACQUIRING THE CERTIFICATE

This certificate may be acquired by:
1. Training: Completion with a pass grade of the face-to-face or online training programme.
2. Recognition of the professional skills acquired through professional experience or non-formal training (prior learning): Completion of a process of skills evaluation and accreditation in all the skills units making up the professional certificate.
3. Dual training: Completion of a training and apprenticeship contract, which may range from 1 year (or 6 months, if stipulated as such in the collective agreement) to 3 years, during which effective working time is combined with time dedicated to training under the training programme for the professional certificate.

The training method (number 1 above) requires successful completion of the training modules and the practical training at the workplace:

Description of vocational training received	Percentage of total programme (%)	Duration (hours)
Training modules	86	510
Practical training at the workplace	14	80
Total duration of training leading to the certificate		**590**

Version: December 2013

Entry/access requirements:
- *Bachiller* Diploma (upper secondary education); or
- Professional Certificate Level 2 in the same professional area.
- If neither of the above or higher certifications are held, a pass in the key skills tests.

Additional information: Professional certificates are instruments for official accreditation of the professional qualifications in the National Catalogue of Professional Qualifications for all economic activities, within the scope of the labour administration. The National Repertoire of Professional Certificates is divided into three qualification levels (Level 1, Level 2 and Level 3), and by sectors into 26 professional families and 102 professional areas. More information is available at: www.sepe.es

National Europass Centre: www.oapee.es

(*) **Explanatory note:** This document is designed to provide additional information about the specified certificate, but has no legal status in itself. The format of the description is based on the following texts: Council Resolution 93/C 49/01 of 3 December 1992 on the transparency of qualifications; Council Resolution 96/C 224/04 of 15 July 1996 on the transparency of vocational training certificates; and Recommendation 2001/613/EC of the European Parliament and of the Council of 10 July 2001 on mobility within the Community for students, persons undergoing training, volunteers, teachers and trainers.

More information is available at: http://europass.cedefop.eu.int

Version: December 2013

Information on Professional Certificates of the Map of Qualifications and Vocational Training in Spain