

1. TITLE OF THE CERTIFICATE (ES)

**Certificado de Profesionalidad de nivel 3 en
FMEC0208 DISEÑO DE CALDERERÍA Y ESTRUCTURAS METÁLICAS**

2. TRANSLATED TITLE OF THE CERTIFICATE (EN)

**Professional Certificate Level 3 in
FMEC0208 DESIGN OF METAL FABRICATION AND METAL STRUCTURES
(This translation has no legal status)**

3. PROFILE OF SKILLS AND COMPETENCES

The holder of this certificate will have acquired the **general competence** to design and prepare technical documentation on metal fabrication products and metal structures, based on prior designs and basic engineering instructions, while complying with regulations and following quality, safety and environmental protection criteria. This general competence is divided into the following **skills units** (UC):

- Design metal fabrication products (UC1145_3).
- Design metal structure products (UC1146_3).
- Make calculations and testing plans in metal fabrication and metal structures (UC1147_3).
- Prepare the technical documentation of metal construction products (UC1148_3).

The professional skills are acquired through the **learning outcomes** defined within the related Training Modules (MF):

- Metal fabrication products design (MF1145_3).
- Metal structure products design (MF1146_3).
- Calculus for metal fabrication and metal structures (MF1147_3).
- Technical documentation for metallic construction products (MF1148_3).
- Practical training at the workplace in Design of metal fabrication and metal structures (MP0127)

(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:

- Prepare plans for disassembly and assembly of metal fabrication products and/or metal structures using the 2D design and modelling software, based on technical documentation and complying with standards governing quality and prevention of occupational and environmental risks.
- Decide on the materials needed for the manufacture of metal fabrication products and/or metal structures, based on technical documentation, and complying with standards on quality and occupational and environmental prevention.
- Prepare the technical documentation for the manufacture of metal fabrication products and/or metal structures, complying with standards governing quality and occupational and environmental prevention.
- 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 in the specific area of industrial design applied to the technical development of projects for metal fabrication and metal structures. The main subsectors in which the holder may work are: manufacture of structural metal products, construction of large deposits, thick metal fabrication, structures associated with construction of machinery, construction of bodywork, trailers and dumper trucks, naval construction and repair, construction and repair of railway material, construction of bicycles and motorcycles and constructions of other transport material. The most pertinent occupations and positions are:

- Design draughtsman for metal fabrication and metal structures.
- CAD technician for metal fabrication and metal structures.
- Technical designer for metal fabrication and metal structures.
- Design draughtsman.
- Technical industrial designer.
- Metal fabrication technician.

5. OFFICIAL BASIS OF THE CERTIFICATE
<p style="text-align: center;">Name and status of the national/regional authority providing accreditation/recognition of the certificate</p> <p>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.</p>
<p style="text-align: center;">Level of the certificate</p> <p>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).</p> <p>The European Qualification Framework (EQF) level:</p>
<p style="text-align: center;">Grading scale/Pass requirements</p> <p>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.</p> <p>The grading system is as follows:</p> <ul style="list-style-type: none"> - FAIL: 0 to 4.9 - PASS-SATISFACTORY: 5 to 6.9 - PASS-GOOD: 7 to 8.9 - PASS-EXCELLENT: 9 to 10
<p style="text-align: center;">Access to next level of education/training</p> <p>This Professional Certificate Level 3 gives access to Professional Certificate Level 3 within the same professional area and family.</p> <p>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.</p>
<p style="text-align: center;">Legal basis</p> <p>Royal Decree 684/2011 of 13 May, establishing twelve professional certificates in the professional family Metal working, which are included in the National Repertoire of Professional Certificates. (Appendix V, Code: FMEC0208)</p>

6. OFFICIALLY RECOGNISED WAYS OF ACQUIRING THE CERTIFICATE		
<p>This certificate may be acquired by:</p> <ol style="list-style-type: none"> 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. <p>The training method (number 1 above) requires successful completion of the training modules and the practical training at the workplace:</p>		
Description of vocational training received	Percentage of total programme (%)	Duration (hours)
Training modules	97	620
Practical training at the workplace	3	40
Total duration of training leading to the certificate		660

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>

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

