

1. TITLE OF THE CERTIFICATE (ES)

**Certificado de Profesionalidad de nivel 2 en
IEXM0209 SONDEOS**

2. TRANSLATED TITLE OF THE CERTIFICATE (EN)

**Professional Certificate Level 2 in
IEXM0209 BOREHOLE CONSTRUCTION
(This translation has no legal status)**

3. PROFILE OF SKILLS AND COMPETENCES

The holder of this certificate will have acquired the **general competence** to drill boreholes for prospecting and geological, geotechnical and hydro-geological research into the subsoil, including taking samples and carrying out the corresponding tests, as well as the operation, infusion and reloading, developing the preparatory activities with respect to the equipment, supplies, work site, the tools to use and auxiliary personnel, while applying the regulations on occupational risk prevention and the environmental legislation in force. This general competence is divided into the following **skills units** (UC):

- Prepare the equipment for the borehole (UC0414_2).
- Carry out drilling (UC0415_2).
- Collect evidence, take samples and make tests and geotechnical and hydro-geological measurements (UC0416_2).

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

- Preparation of borehole (MF0414_2).
- Drilling boreholes (MF0415_2).
- Taking of samples and tests and geotechnical and hydro-geological measurements (MF0416_2).
- Practical training at the workplace in borehole construction (MP0158).

(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:

- Participate in the selection of the equipment and auxiliary material in accordance with the type of borehole to be drilled and the method of drilling chosen.
- Participate in the control of the different borehole equipment during the drilling, following established procedures to guarantee its correct execution.
- Collaborate on the process to be followed to disassemble and recover the elements of the borehole equipment, reviewing them and making them ready for transportation to another site in conditions of safety and efficiency.
- Participate in taking representative samples of soils, rotary percussion drilling, and/or rotary drilling, applying the different techniques and rules for each type.
- Take part in testing during borehole drilling.
- 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 companies dedicated to drilling research boreholes for mining, geology or geotechnical research and prospecting, or the capture of underground water, as well as boreholes for dissolution and leaching. The holder may also work in mining companies with their own borehole equipment. The holder will mainly work in the following sectors: extractive industries; construction; and the production and distribution of electrical energy, gas and water. The most pertinent occupations and positions are:

- Mining prospecting shaft driller.
- Prospection and borehole plant operator.
- Shaft boring machinery operator.
- Shaft driller (except oil and gas).
- Geotechnical bore driller.
- Rotary borehole core drill operator.
- Well acidizing operator.

Requirements for exercising the profession:

"Formación preventiva para el desempeño del puesto de trabajo" (Preventive training for the job), specified in the Complementary Technical Instruction (ITC 02.1.02) of the General Regulation on Mining Safety Rules, approved by Royal Decree 863/1985 of 2 April.

In some autonomous regions, the competent mining authority will require a specific authorisation for borehole drilling according to the type of machine, as established by Royal Decree 863/1985, approving the General Regulation on Mining Safety Rules and Complementary Technical Instructions (ITC 07.1.03).

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.

Level of the certificate

The Professional Certificate Level 2 of the National Repertoire of Professional Certificates corresponds to level 3 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 2 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.

Royal Decree 713/2011 of 20 May, establishing twelve professional certificates in the professional family Extraction Industry, which are included in the National Repertoire of Professional Certificates, and updating the professional certificates established in Royal Decree 1217/2009 of 17 July. (Appendix V, Code: IEXM0209)

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	88	610
Practical training at the workplace	12	80
Total duration of training leading to the certificate		690

Entry/access requirements:

- Compulsory Secondary Education Diploma (Lower secondary education); or
- Professional Certificate Level 1 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

