

The profession of Civil Engineer, over 150 years serving Spanish society

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The profession of Civil Engineer is more than 150 years old. In the Spanish university system, the **Bachelor in Civil Engineering** allows the performance of the profession.

In terms of Civil Engineering, the professional orientation points to the consultancy, analysis, planning, design, calculation, project, direction, construction, management, maintenance, preservation and exploitation of the works.

According to the Spanish Professional Competence Act 12/1986 of April 1st and the act 33/1992 of 9th December, interpreted by the Supreme Court on January 20th 2000, the Spanish Technical Civl Engineer has the following competencies:

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- a) The **drafting** and **signing** of projects aimed at the construction, alteration, repair, maintenance, demolition, manufacturing, assembly, installation or operation of movable or fixed, in their respective cases, both primary and secondary, always which fall in its nature and the technical characteristics specific to each degree.
- b) Management of the activities described here above.
- c) Production of **measurements**, calculations, assessments, appraisals, surveys, studies, reports, plans of work and similar work.
- d) The practice of **teaching** in different levels in the cases and terms stipulated in the regulations and, in particular, pursuant to the provisions of University Reform Act 11/1983, of August 25th (RCL 1983 \ 1856).
- e) The management of all types of industries or operations and general practice of any of the activities referred to in the preceding paragraphs.

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The profession of Civil Engineer

Working fields:

•**Roads** (highways, roads, service roads, driveways, signage, parking, traffic studies, service areas ...)

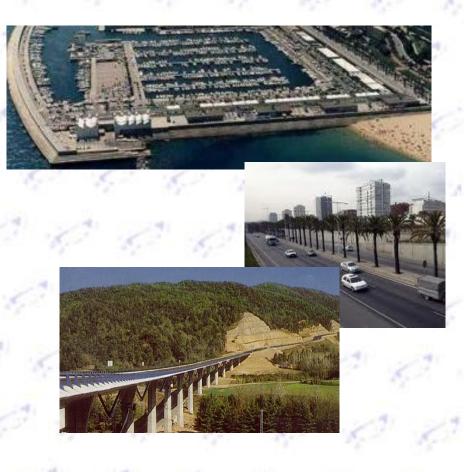
•**Transport** (railways, underground lines, terminals, works and transport facilities, transport by pipeline, management and operation of transport...)

•Structures (bridges, walkways, retaining walls, tanks...)

•Geotechnical and ground engineering (foundations, tunnels and underground constructions, land treatment, earthworks, quarrying and extraction of aggregates for construction works ...)

•Maritime (ports, dams, dredging, etc.)

•Hydraulic and hydrological works (dams, canals, water supply and distribution, pumping stations, hydraulic and hydrological studies, exploitation of water, management and planning of water resources.)





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•Environmental health engineering (sewage and sanitation stations, wastewater treatment and drinking water treatments. Desalination, fish farms, incinerators, defence and regeneration of coastline and beaches ...)

•Regeneration works (developments and master planning, water, sewer, gas, electricity, lighting, telephone, etc... Management and regulation of urban traffic, urban transport ...)

•Energy (hydroelectric, wind turbines, wind farms...)

•Health and Safety (Prevention of occupational hazards, Health and Safety in construction...)

•Ecology and Environment (Environmental audits, environmental impact assessment...)

•Other civil works







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Civil Engineers in Spain:

Spanish professional associations members' profile

т	otal		Gender	N	%
13762	6	100%	Male	11161	81%
			Female	2601	19%
12 1	92	11	191 10	1	-
Employment situation	N	%	Years of membership	N	%
Salaried employee	6707	49%	0-5	3284	24%
Freelance	1086	8%	6-10	2827	21%
Civil servant	1626	12%	11-15	2737	20%
Retired	1325	10%	16-20	1315	9%
Unemployed	1175	8%	21-25	596	4%
Other	1843	13%	+25	3003	22%

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	Age	N	%
	-25	350	2%
-	25-30	1550	11%
	31-35	2731	20%
	36-40	3275	24%
	41-45	1553	11%
	46-50	917	7%
	51-55	645	5%
	56-60	530	4%
	60-65	794	6%
	+65	1417	10%



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