Acquire a solid grounding in structural and construction engineering

You can carry out the master's thesis on an innovative and creative subject in one of the areas of knowledge

Your talent, leading your future
The master’s degree in Structural and Construction Engineering provides comprehensive training in the field of structural and construction engineering. Students conduct detailed study of topics such as the resistance mechanisms of structures, construction materials and processes, materials-related durability and technology, construction processes and organisational methods, the effective management of construction projects, the environmental and socioeconomic impact of construction work, safety, quality, and sustainability.

Professional opportunities
Graduates of the master’s degree may find employment in structural analysis, structural design and technology and construction engineering, primarily in the fields of civil engineering and building construction. They may also work in project and process development engineering firms; companies carrying out project and works management and site supervision; construction companies; companies dealing with infrastructure management and use; public administrations and companies carrying out planning, design, execution and operation of civil engineering works and buildings; technological and research centres; and universities.

Languages
Face-to-face teaching is in Spanish or Catalan, although some subjects may be taught in English.

Work placement
You can go on work placement at national or international companies and institutions to gain professional experience.

International recognition
The QS World University Rankings by Subject ranks the top 200 universities in the world according to their reputation and scientific output and impact. In the fields of civil and structural engineering, the UPC is first in Spain, and 39th Worldwide, according to the 2016 edition of the ranking.

Research
All of the lectures have PhDs, and they have all published their work in international journals and received awards and distinctions for their research. They also act as advisors on structural and constructive issues related to landmark buildings and large-scale infrastructure. Lecturers carry out their research through research groups and laboratories.

Master’s thesis
The master’s thesis is oriented towards professional practice or research on a subject of the degree. The student must make an original contribution to the subject or devise a new application for an aspect of it. If your master’s thesis has an experimental component, you will carry it out in laboratories, which promotes the acquisition of knowledge in experimental techniques and structural monitoring.

Specific requirements
To gain admission to the master’s degree, you will need previous training in basic sciences, as well as basic training in areas directly related to civil engineering, structural engineering and building and public works construction.

The master’s degree is aimed at graduates of bachelor’s degrees in civil engineering, public works, geological, industrial technology, mechanical, architectural technology and building construction.

For further information on these requirements, visit the master’s degree website:
www.camins.upc.edu/estudis

Which subjects will you choose?

<table>
<thead>
<tr>
<th>SUBJECT AREA 1</th>
<th>Compulsory subjects</th>
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<tr>
<td>Structural Engineering / Fundamentals of Structural Design / Construction Management / Seminars and Workshops</td>
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<th>SUBJECT AREA 2</th>
<th>Analysis, Technology and Construction subjects</th>
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<th>SUBJECT AREA 3</th>
<th>Analysis, Technology and/or Construction subjects</th>
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<td>Credits can be taken from any of the three academic pathways</td>
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MASTERS THESIS

90 ECTS

Consult the curriculum on the master’s degree website:
www.camins.upc.edu/estudis
39th Master's Degree in Structural and Construction Engineering

The master's degree, which has the International Master's Programme distinction, is aimed at candidates with an academic or professional background in structural and construction engineering, including but not limited to graduates in civil engineering, public works, geological engineering, industrial engineering, architecture, technical architecture and equivalent fields in Europe and across the globe.

Professional opportunities
Graduates of the master's degree may find employment in structural analysis, structural design and technology and construction engineering, primarily in the fields of civil engineering and building construction. They may also work in project and process development engineering firms, companies carrying out project and works management and site supervision; construction companies; companies dealing with infrastructure management and use; public administrations and companies carrying out planning, design, execution and operation of civil engineering works and buildings; technological and research centres; and universities.

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Research
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Master's thesis
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Further information:
www.camins.upc.edu
area.academica@upc.edu
www.upc.edu/sri/en/students

ESCOLA DE CAMINS
Barcelona School of Civil Engineering

MASTER’S DEGREE IN
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AND
CONSTRUCTION
ENGINEERING