Bachelor's degree in Data Science and Engineering
2017-2018 academic year

The bachelor's degree in Data Science and Engineering responds to the need for graduates who have a multidisciplinary view of engineering and who are able to take on the challenges posed by technological advances that are based, in large part, on computational systems that generate and analyse massive amounts of data. The degree aims to produce professionals who are experts in analysing and engineering structured and unstructured data (text, audio, video, medical tests, financial indicators, etc.) and who have a solid grounding in mathematics and the engineering skills to model and solve complex problems. Data science and engineering is an emerging field that has applications as diverse as financial analysis, the study of physical phenomena, e-commerce, smart cities, biomedical information, genomics and social networks.

**INTRODUCTION**

**Duration**
4 years

**Study load**
240 ECTS credits (including the bachelor's thesis). One credit is equivalent to a study load of 25-30 hours.

**Delivery**
Face-to-face

**Fees and grants**
Approximate fees per academic year: €2,431 (€3,646 for non-EU residents). Consult the public fees system based on income (grants and payment options).

**Double-degree agreements**
Within the framework of the courses offered by the Interdisciplinary Higher Education Centre (CFIS)
You can also take an interdisciplinary double degree coordinated by the CFIS at two UPC schools.
Further information on the CFIS website

**ADMISSION**

**Places**
50

**Registration and enrolment**
What are the requirements to enrol in a bachelor's degree course?

**Legalisation of foreign documents**
All documents issued in non-EU countries must be legalised and bear the corresponding apostille.

**PROFESSIONAL OPPORTUNITIES**

**Professional opportunities**
- Leading and managing projects in multinational companies and new, specialised companies in sectors as diverse as
finance, medicine, automotive engineering, internet distribution and sales, and video games.

- Analysing data for the financial sector and insurance companies and public administrations that work with large amounts of information.
- Optimising the use of resources and planning processes in companies, transport systems and public administrations.

ORGANISATION

Academic calendar
General academic calendar for bachelor’s, master’s and doctoral degrees courses

Academic regulations
Academic regulations for bachelor’s degree courses at the UPC

Language certification and credit recognition
Queries about language courses and certification

- School of Mathematics and Statistics (FME)
- Barcelona School of Telecommunications Engineering (ETSETB)
- Barcelona School of Informatics (FIB)

CURRICULUM

<table>
<thead>
<tr>
<th>Subjects</th>
<th>ECTS credits</th>
<th>Type</th>
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<tr>
<td><strong>FIRST SEMESTER</strong></td>
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<tr>
<td>Algebra</td>
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<td>Algorithmics and Programming I</td>
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<td>Calculus</td>
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