

UPC

Universitat
Politécnica de Catalunya
BarcelonaTech



UNIVERSITAT POLITÈCNICA
DE CATALUNYA
BARCELONATECH

2022-2023 ACADEMIC YEAR



THE UPC IN FIGURES

31,919

STUDENTS

23,990 BACHELOR'S DEGREE STUDENTS
5,822 MASTER'S DEGREE STUDENTS
2,107 DOCTORAL DEGREE STUDENTS

3,523

TEACHING AND RESEARCH
STAFF

3,595

LIFELONG LEARNING
STUDENTS

18

SCHOOLS ON 9 CAMPUSES

55%

INTERNATIONAL DOCTORAL
DEGREE STUDENTS
(79% OF THEM NON EU)

30%

INTERNATIONAL MASTER'S
DEGREE STUDENTS

2,074

ADMINISTRATIVE
AND SERVICE STAFF

65

BACHELOR'S DEGREES
2022-2023

84

MASTER'S DEGREES
2022-2023

45

DOCTORAL PROGRAMMES
2022-2023

KNOWLEDGE AREAS



**AERONAUTICAL
AND AEROSPACE
ENGINEERING**

**AGRICULTURE
AND BIOSYSTEMS
ENGINEERING**

**APPLIED SCIENCES:
MATHEMATICS, STATISTICS,
PHYSICS, OPTICS
AND PHOTONICS**

**ARCHITECTURE, URBAN
PLANNING AND BUILDING
CONSTRUCTION**

**CIVIL, ENVIRONMENTAL
AND GEOLOGICAL
ENGINEERING**

INFORMATICS ENGINEERING

**ENGINEERING FOR INDUSTRY:
ENERGY, BIOMEDICAL,
CHEMICAL, ELECTRICAL,
MECHANICAL AND MATERIALS
ENGINEERING**

**NAVAL, MARINE AND NAUTICAL
ENGINEERING**

**TELECOMMUNICATIONS
AND ELECTRONIC SYSTEMS**

TEACHING

At the UPC students are trained to become professionals in engineering, architecture, sciences and technology who have the knowledge, abilities and skills to take on new challenges in keeping with technological efficiency and sustainability criteria. The UPC teaches bachelor's, master's and doctoral degrees and continuing education courses that are complemented by international mobility and double degree programmes.

Students' participation and leadership in research projects and work placements foster their relations with the world of work and bolster their autonomy and initiative. The University is therefore a space for knowledge that stimulates learning and personal growth with a dynamic, motivating teaching model.

34

INTERNATIONAL
DOUBLE-DEGREE PROGRAMMES
WITH 26 UNIVERSITIES

5,283

STUDENTS
ON INTERNSHIP

1,640

STUDENT EXCHANGE AGREEMENTS
WITH 767 HIGHER EDUCATION
INSTITUTIONS OF 61 COUNTRIES

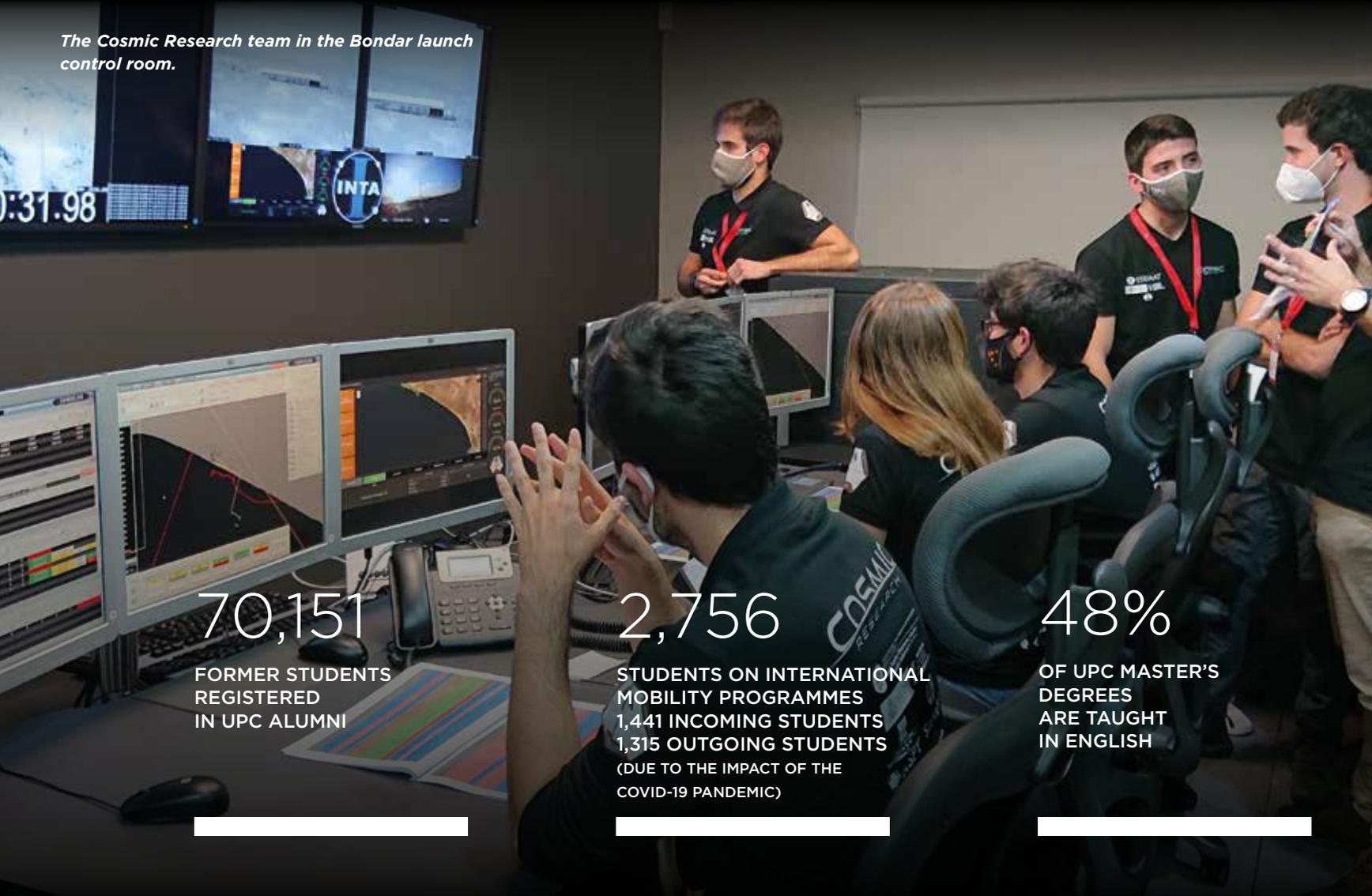
468

NEW DOCTORAL DEGREE
STUDENTS

5,859

GRADUATES OF BACHELOR'S
AND MASTER'S DEGREES

The Cosmic Research team in the Bondar launch control room.



70,151

FORMER STUDENTS
REGISTERED
IN UPC ALUMNI

2,756

STUDENTS ON INTERNATIONAL
MOBILITY PROGRAMMES
1,441 INCOMING STUDENTS
1,315 OUTGOING STUDENTS
(DUE TO THE IMPACT OF THE
COVID-19 PANDEMIC)

48%

OF UPC MASTER'S
DEGREES
ARE TAUGHT
IN ENGLISH

RESEARCH

Almost 4,000 people comprise the teaching and research staff and the staff who work exclusively in research.

Its leadership in research and innovation projects, the talent and rigour of its researchers and its network of cutting-edge facilities and equipment are the basis of the UPC's impressive positions in the main international scientific output rankings.

Over the last few years, the University has consolidated its role as a key agent in the progress of an economy that is increasingly based on knowledge and innovation and on collaboration and alliances with other research centers and researchers the world over.

23

FOCUSED RESEARCH CENTERS

5

RESEARCH INSTITUTES

15

ASSOCIATED RESEARCH CENTERS

231

DOCTORAL THESES DEFENDED

14

RESEARCH CENTERS THAT ARE MEMBERS OF THE TECNIO NETWORK

2,588

PAPERS PUBLISHED IN INDEXED JOURNALS

99

SCIENTIFIC AND TECHNICAL AWARDS RECEIVED

209

RESEARCH GROUPS



KNOWLEDGE TRANSFER

The UPC generates knowledge and transfers it to industry with the aim of increasing businesses' capacity for innovation and competitiveness. One of its most significant lines of work is forging alliances, which are often international in nature, with large companies, institutions and corporations. It also attends to the needs of small and medium-sized businesses that wish to innovate, for which cooperating with the UPC has a multiplying effect. This activity takes shape in numerous agreements and research projects, the creation of technology-based companies, the generation and exploitation of patents and the scientific and technical services and facilities that Parc UPC makes available in order to generate progress and create jobs.

2,998

COMPANIES AND ENTITIES
WITH COLLABORATION
AGREEMENTS

72,7 MEUR

INCOME FROM R&D
PROJECTS (2021)

38

PARTIALLY OWNED
TECHNOLOGY-BASED
COMPANIES

19

PATENTS REGISTERED
IN THE LAST YEAR

859

RESEARCH AGREEMENTS
AND PROJECTS SIGNED
IN THE LAST YEAR

1,854

ON-GOING RESEARCH
PROJECTS



A photograph of research taking place at the EEABB

ALLIANCES

Aerial view
of Barcelona.

The UPC has woven, through the actions of the people of which it is composed, a complex network of international alliances with other universities, research institutions and companies. These alliances lead to new projects and are the basis for a good number of initiatives in which the word 'collaboration' plays a key part. A global, interconnected world that fosters the sharing of knowledge and experiences is the setting for these alliances without borders.



Instituto Superior Técnico, Lisbon, Portugal; Grenoble Institute of Technology, France; Politecnico di Torino, Italy; Technische Universität Darmstadt, Germany; Royal Institute of Technology, Sweden; and Aalto University, Finland partner with the UPC under the European Commission's European Universities Initiative to attract and export talent.



A campus at Tongji University (China) composed of the UPC, the Technical University of Madrid, Tecnológico de Monterrey and University of Sevilla.

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ACADEMIC COOPERATION
AGREEMENTS WITH
INTERNATIONAL INSTITUTIONS

INTERNATIONAL NETWORKS



The EIT is a body of the European Union



The UPC is an active member in diverse Knowledge and Innovation Communities (KICs) founded by the European Institute of Technology. The KICs provide a framework where diverse stakeholders work in collaboration to generate innovative responses to diverse social challenges. Specifically, the UPC is a founding member of KIC Innoenergy, devoted to renewable energy and energy transition, and KIC Urban mobility, devoted to urban mobility and transition to zero carbon emissions. UPC is also an associate member of KIC Raw materials and KIC Health.

AUIP

Asociación Universitaria Iberoamericana de Postgrado

CASA

Consortium for Advanced Studies Abroad

CESAER

Conference of European Schools for Advanced Engineering Education and Research

CINDA

Centro Interuniversitario de Desarrollo

CLUSTER

Consortium Linking Universities of Science and Technology for Education and Research

EUA

European University Association

GUNI

Global University Network for Innovation

Heritage

Magalhães

RedEmprendia

RMEI

Réseau Méditerranéen des Écoles d'Ingénieurs

TELESCOPI

Red de Observatorios de Buenas Prácticas de Dirección Estratégica Universitaria en Latinoamérica y Europa

T.I.M.E.

Top Industrial Managers for Europe

UNITECH International

Universia

POSITION OF THE UPC IN THE MAIN INTERNATIONAL RANKINGS



Shanghai Global Ranking of Academic Subjects, 2022

	Instruments Science & Technology	Atmospheric Science	Mathematics	Civil Engineering	Water Resources	Transportation Science & Technology	Electrical & Electronic Engineering	Telecommunication Engineering	Metallurgical Engineering	Nanoscience & Nanotechnology	Automation & Control
World	51-75	76-100	76-100	76-100	101-150	101-150	101-150	151-200	151-200	151-200	151-200
Europe	5-8	28-42	31-46	17-20	32-48	19-34	27-47	39-52	44-56	24-37	38-49
Spain	3	1	1-2	2	1	1-2	2-3	1-2	2	2-3	3



QS World University Rankings by Subject, 2022

	Architecture & Built Environment	Civil & Structural Engineering	Mineral & Mining Engineering	Telecommunication, Electrical and Electronic Engineering	Engineering & Technology	Mechanical, Aeronautical & Manufacturing Engineering	Computer Science & Information Systems	Mathematics	Art & Design	Statistics & Operational Research	Environmental Sciences	Materials Science
World	19	29	49	52	60	78	86	113	101-150	101-150	101-150	101-150
Europe	8	8	11	19	23	29	29	42	44-63	36-58	35-57	26-45
Spain	1	1	2	1	2	2	1	2	1-3	1-2	2-3	1