Organization

UPC

- Castelldefels School of Telecommunication and Aerospace Engineering
- Terrassa School of Industrial and Aeronautical Engineering
- Aeronautics and Space Research Center

UAB

- Space Studies and Research Center

Course Director

Dr. Ricard González Cinca

Administrative Manager

Ms. Imma Durán Vicente

Pre-Enrolment Period

Academic year 2012-2013 (fall semester)

FROM: 15/03/2012

TO: 12/07/2012

Information

E-mail: master.aerospace@upc.edu

http://mast.masters.upc.edu

Sponsored by:

GOBIERNO DE ESPAÑA
MINISTERIO DE EDUCACIÓN, CULTURA Y DEPORTE

In collaboration with:

UAB Universitat Autònoma de Barcelona

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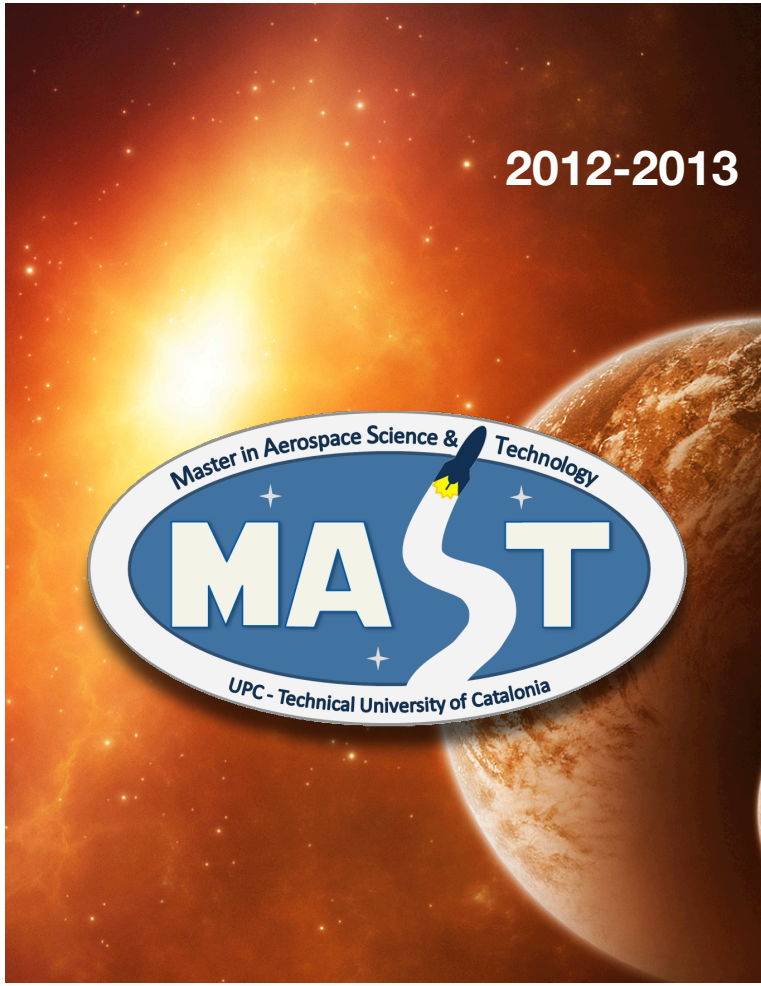
CENTRE NATIONAL D'ÉTUDES SPATIALES

Master in Aerospace Science and Technology



UNIVERSITAT POLITÈCNICA DE CATALUNYA
BARCELONATECH

Master in Aerospace Science and Technology

Basic Information

This Master's Degree provides advanced training in the sciences and technology that are most used in the fields of aeronautics and space. It includes the study of theoretical and practical groundwork, techniques, methods and processes of current use in aerospace research.

This master is addressed to recent graduates and professionals aiming to:

- Perform a PhD thesis in the aerospace discipline
- Join a R&D&I department in the aerospace industry

Beginning: The course can be started in September (mostly recommended) or February

Studies terms: 3 semesters

ECTS credits: 90

Site: UPC campus in Castelldefels

Fees: approximately 32€ (year 2011-2012)

Entry places: 25 students

Study Program

First Semester (30 credits): Mandatory Courses

- Aerospace Materials (5)
- Aerospace Seminars (5)
- Analog and Digital Signal Processing in Aerospace Applications (5)
- Broadening of Fundamentals in Aerospace Science and Technology (5)
- Numerical Methods for Systems of Aerospace Engineering (5)
- Space Systems Engineering (5)

Second Semester (30 credits): Elective Courses

- Astrodynamics (5)
- Architecture of Nano and Picosatellites (5)
- Aviation Weather (5)
- Composite Materials for Aerospace Applications (5)
- Computational Fluid Dynamics in Aerospace Engineering
- Digital Avionic Systems (5)
- Integrated Electronic Systems for Aerospace Applications (5)
- Life Support Systems in Space (5)
- Multivariable Control (5)
- Nanotechnologies for Space Applications (5)
- Radionavigation (5)
- Satellite Communication Principles (5)
- Satellite and Hybrid Networks (5)
- Science in Microgravity (5)
- Test and Instrumentation Systems in Aerospace Applications (5)
- Unmaned Aerial Vehicles (5)

Third Semester (30 credits): Master Thesis

Other Information

This course is addressed to Bachelor degrees in scientific disciplines (Physics, Chemistry, Mathematics, Geology), engineering disciplines (such as Aeronautics, Industrial, Telecommunications, Mechanical), and Technical Aeronautical Engineering degree.