Organization

UPC:

- Castelldefels School of Technology
- 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

More Information

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http://mastersdegrees.upc.edu/mast/

Sponsored by:

MINISTERIO DE CIENCIA E INNOVACIÓN

In collaboration with:

UAB Universitat Autònoma de Barcelona

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IEEC

INSTITUT DE GEOMÀTICA

Master's Degrees

MASTER IN AEROSPACE SCIENCE AND TECHNOLOGY

2009 - 2010

Master in Aerospace Science & Technology

MAST

UPC – Universitat Politècnica de Catalunya

UPC UNIVERSITAT POLITÈCNICA DE CATALUNYA

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 both September (mostly recommended) or February

Studies terms: 3 semesters

ECTS credits: 90

Site: UPC campus in Castelldefels (mainly)

Fees: 30€ per credit

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)
- Computational Fluid Dynamics in Aerospace Engineering (5)
- Numerical Methods for Systems of Aerospace Engineering (5)

Second semester (30 credits): Elective courses

- Astrodynamics (5)
- Architecture of Nano and Picosatellites (2.5)
- Aviation Weather (5)
- Composite Materials for Aerospace Applications (5)
- Digital Avionic Systems (5)
- Geomatics Seminars (2.5)
- Integrated Electronic Systems for Aerospace Applications (5)
- Introduction to UAV (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)
- Space Systems Engineering (5)
- Test and Instrumentation Systems in Aerospace Applications (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.