Master’s Degree in Aeronautical and Space Engineering

The Master’s Degree in Aeronautical and Space Engineering curriculum includes:

- **Core Courses (15 ECTS)**
- **Elective Courses (31 ECTS)**
- **Master Thesis (14 ECTS)**

<table>
<thead>
<tr>
<th>S1</th>
<th>Core courses (5 ECTS)</th>
<th>Elective courses (25 ECTS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2</td>
<td>Core courses (10 ECTS)</td>
<td>Elective courses (6) ECTS</td>
</tr>
</tbody>
</table>

**CORE COURSES**

- Computational Engineering - 5 ECTS (Semester 1)
- Research Management and Aerospace Projects - 10 ECTS (Semester 2)

**ELECTIVE COURSES**

- Airport Operations – 5 ECTS (Semester 1)
- Space Propulsion - 5 ECTS (Semester 1)
- Extension of Rocket Engines - 5 ECTS (Semester 1)
- Internal Aerodynamics and Aeroelasticity of Turbomachines - 5 ECTS (Semester 1)
- Extension of jet Engines - 5 ECTS (Semester 1)
- Advanced Propulsion - 5 ECTS (Semester 1)
- Aerospace Laboratories - 5 ECTS (Semester 1)
- Advanced Aeroelasticity - 5 ECTS (Semester 1)
- Advanced Aerodynamics - 5 ECTS (Semester 1)
- Architecture and Aircraft Systems - 5 ECTS (Semester 1)
- Business Management Airport - 5 ECTS (Semester 1)
- Extension of Space Propulsion - 3 ECTS (Semester 2)
- Applications for Planetary Exploration - 3 ECTS (Semester 2)
- Design and Use of UAV for remote sensing of the environment - 3 ECTS (Semester 2)
- Thermal Turbomachine and Combustion - 3 ECTS (Semester 2)
- Acoustics - 3 ECTS (Semester 2)
- Structures of New Generation - 3 ECTS (Semester 2)
- Surface Engineering - 3 ECTS (Semester 2)
- Science and Technology Communication Through Media - 3 ECTS (Semester 2)

**MASTER THESIS - 14 ECTS**

Students shall work on a research project granting them 14 ECTS out of the total required. The Master Thesis is meant to train the student in rigorous and critical thinking, data analysis, and independent problem-solving in preparation for their professional (industrial or academic) careers. The outcome of the work will be compiled into a final dissertation. The student shall also make a short public presentation of the most relevant aspects of his/her work. Upon reviewing the dissertation and attending the presentation, an appointed member of the faculty will award the final grade.