

Label	EUR-ACE®
<b>Higher Education Institution</b>	<b>Universidad Rey Juan Carlos</b>
<b>Country</b>	<i>Spain</i>
<b>State/Province</b>	<i>Madrid</i>
<b>Name of the Programme</b>	<i>Environmental Engineering Degree</i>
<b>Degree Awarded</b>	<i>Bachelor of Engineering</i>
<b>Qualification Level</b>	<i>First Cycle</i>
<b>Programme Objectives; Profile</b>	<p><i>The main educational objective of the Environmental Engineering degree at URJC is understanding biological, chemical, ecological, economical, physical and social processes occurring when humans interact with the environment. Thus, graduate students will be able to design units, equipment and installations for reducing the environmental impacts caused by industrial activities and re-designing process and products looking for a sustainable development.</i></p> <p><i>The formative program of the Environmental Engineering Degree allows reaching the following specific objectives (directly related to the usual activities of Environmental Engineers):</i></p> <ul style="list-style-type: none"> <li><i>• Preventing environmental damages, ensuring environmental protection and improving the environmental quality, taking into account problems associated with the increase of the life quality and population such as a higher waste generation and the growing pollution of water, air and soil.</i></li> <li><i>• Designing, planning and operating installations for a better use of natural resources, minimizing pollutant emissions.</i></li> <li><i>• Proposing alternatives for avoiding pollution in different forms by developing clean technologies that involve modifications of existing processes and designing recycling and reuse operations.</i></li> </ul> <p><i>To achieve these goals it is essential an adequate understanding of the scientific basis of the environment, a global knowledge of the existing pollution problems and environmental quality and, specifically, handling and applying suitable treatment technologies.</i></p>

<b>Programme Duration</b>	8 semesters (4 years)
<b>Total Number of ECTS Credits Awarded</b>	240 ECTS
<b>Brief Description of the Programme</b>	<p>The curriculum is structured in diverse modules which are formed by different subjects. The distribution of modules and subjects is as follows:</p> <p><b>MODULE 1. BASIC SCIENCES (36 ECTS, 15%)</b></p> <ul style="list-style-type: none"> <li>- Mathematics (15 ECTS, 6.2%)</li> <li>- Physics (12 ECTS, 5%)</li> <li>- Chemistry (9 ECTS, 3.8%)</li> </ul> <p><b>MODULE 2. BASIC SCIENCES OF THE NATURAL ENVIRONMENT (25.5 ECTS, 10.6%)</b></p> <ul style="list-style-type: none"> <li>- Biology (15 ECTS, 6.2%)</li> <li>- Geology (10.5 ECTS, 4.4%)</li> </ul> <p><b>MODULE 3. PRINCIPLES OF ENGINEERING (48 ECTS, 20%)</b></p> <ul style="list-style-type: none"> <li>- Engineering graphics (6 ECTS, 2.5%)</li> <li>- Thermal engineering (4.5 ECTS, 1.9%)</li> <li>- Fluids engineering (6 ECTS, 2.5%)</li> <li>- Computer science (6 ECTS, 2.5%)</li> <li>- Statistics (6 ECTS, 2.5%)</li> <li>- Materials (9 ECTS, 3.8%)</li> <li>- Engineering project (6 ECTS, 2.5%)</li> <li>- Processes control and simulation (4.5 ECTS, 1.9%)</li> </ul> <p><b>MODULE 4. ENVIRONMENTAL ENGINEERING (28.5 ECTS, 11.9%)</b></p> <ul style="list-style-type: none"> <li>- Principles of depuration operations (7.5 ECTS, 3.1%)</li> <li>- Treatment processes engineering (21 ECTS, 8.8%)</li> </ul> <p><b>MODULE 5. TECHNICAL-ENVIRONMENTAL COMPLEMENTS (30 ECTS, 12.5%)</b></p> <ul style="list-style-type: none"> <li>- Transportation of pollutants (10.5 ECTS, 4.4%)</li> <li>- Technical analysis and regional planning (6 ECTS, 2.5%)</li> <li>- Environmental management systems (4.5 ECTS, 1.9%)</li> <li>- Environmental impact assessment (4.5 ECTS, 1.9%)</li> <li>- Environmental design of processes and products (4.5 ECTS, 1.9%)</li> </ul> <p><b>MÓDULO 6. SOCIAL SCIENCES, LAW AND BUSINESS (24 ECTS, 10%)</b></p>

	<ul style="list-style-type: none"> <li>- Foreign language (6 ECTS, 2.5%)</li> <li>- Social sciences (6 ECTS, 2.5%)</li> <li>- Business administration (6 ECTS, 2.5%)</li> <li>- Law (6 ECTS, 2.5%)</li> </ul> <p>MODULES 7 (INDUSTRIAL ENVIRONMENTAL MANAGEMENT), 8 (PROCESSES) and 9 (BUSINESS AND ENVIRONMENT): optional subjects (to choose 12 ECTS, 5 %)</p> <p>MODULE 10. FINAL DEGREE PROJECT (12 ECTS, 5 %)</p> <p>MODULE 11. ENGINEERING PRACTICE (18 ECTS, 7.5 %)</p> <p>ACADEMIC CREDITS TRANSFER (6 ECTS, 2.5 %) for students participation in cultural events, sports programs, workshops, etc.</p>
<p><b>Examples of Very Good Practice</b></p>	<p>The major strengths and best practices of the degree are the following:</p> <ul style="list-style-type: none"> <li>- The Internal System of Quality Assurance excellently performs and is a powerful tool that facilitates tracking the alumni learning process, allowing a rapid detection of problems and weaknesses of the formative program and their adequate solution.</li> <li>- The availability and use of demonstration plants at real scale such as those located at the "Centro de Apoyo Tecnológico" of the University Rey Juan Carlos.</li> </ul>
<p><b>Accredited without / with Adjustment Requirements</b></p>	<p>Accredited without adjustment requirements</p>
<p><b>Adjustment Requirements</b></p>	<p>(Where applicable)</p>
<p><b>Accredited by</b></p>	<p><b>ANECA-III</b></p>
<p><b>Accredited</b></p>	<p>From 14 July 2016 to 14 July 2022</p>