

A close-up, shallow depth-of-field photograph of a microscope's objective lenses. The lenses are metallic and cylindrical, arranged in a row. The background is a soft, out-of-focus blue. The text 'Environmental Engineering Student Achievement' is overlaid on the left side of the image in a white, bold, sans-serif font with a thin blue outline.

Environmental Engineering Student Achievement

Degree Profile for the Environmental Engineering program

The Environmental Engineer from UDLA is a competent, enterprising professional with an international/global vision who proposes innovative solutions to the problems of environmental risk through the analysis of the behavior of pollutants and the application of environmental technologies, in accordance with national and international regulations.

The UDLA Environmental Engineer is able to diagnose environmental problems in water, soil, air, and biota through the analysis of physical, chemical, and biological parameters. He/she analyzes the behavior of pollutants through mathematical models and designs engineering processes through the implementation of applied research, qualitatively and quantitatively interpreting experimental data.

He/she designs, directs, and participates in prevention, conservation, and environmental remediation projects, using the environmental methods and technologies applied in industry and in urban and rural communities.

The Environmental Engineer from UDLA is expected to work in multidisciplinary teams, respecting the gender and cultural identity of the collective groups that require the inclusion of environmental technology, demonstrating professional ethics and environmental awareness.

Educational Objectives

The Environmental Engineering Program at UDLA expects graduates to achieve the following within a few years of graduation:

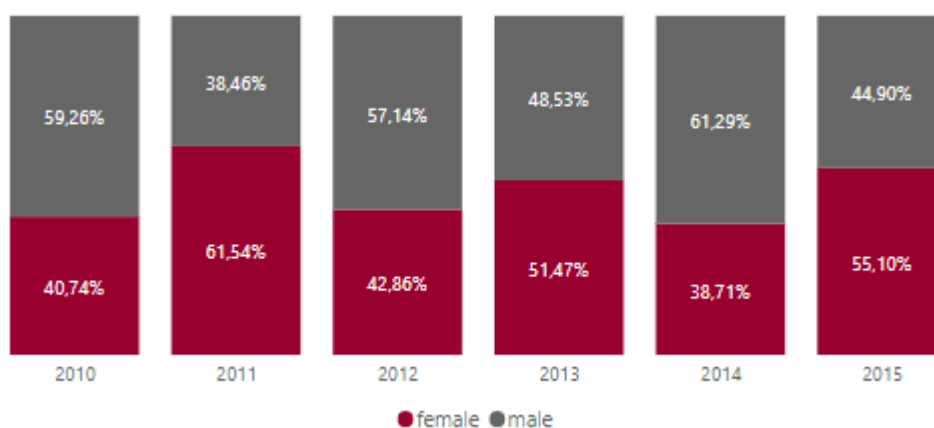
1. Design and manage technological processes to prevent and remediate environmental pollution in natural and anthropogenic settings through engineering, basic sciences, and management knowledge and skills.
2. Design and implement cost-effective and technically viable prototype environmental projects for the conservation of natural ecosystems and remediation of systems affected by anthropogenic activities in line with the country's productive matrix.
3. Develop skills according to UDLA's educational model founded on the combination of theory, practice, and applied research for preventing pollution and remedying adverse environmental effects through problem assessment methods and experimental project development.
4. Improve the citizens' quality of life through pollution prevention and remediation and ethical commitment to the community.

Program's Academic Information

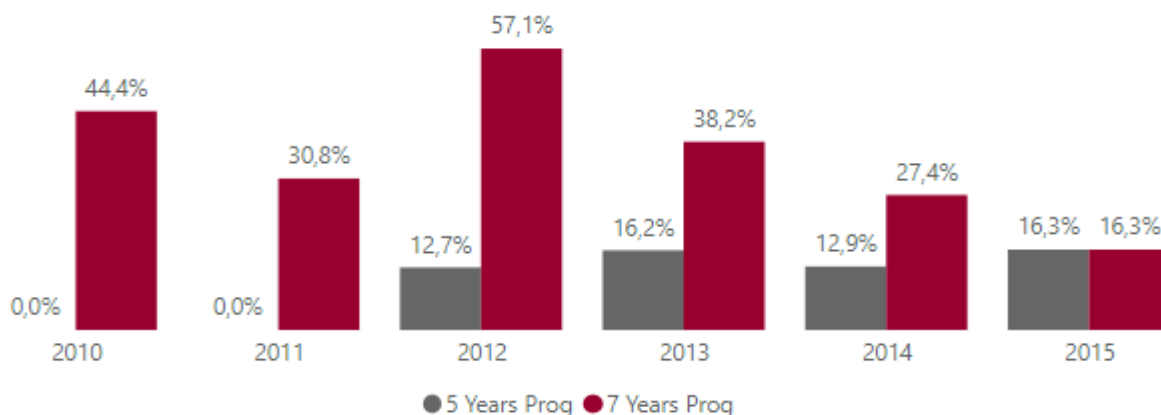
Retention and graduation rates are calculated through the 2019- 2020 academic year, based on new, first-time students entering in the fall semester, regardless of whether they enroll in the daytime or evening version of their program (if available). These rates do not consider incoming transfer students.

The duration of the Environmental Engineer program has historically been 5 years (10 semesters). Nevertheless, until Fall 2015, students had to first complete all coursework and then the capstone, which extended the time required to finish the program by at least one semester. Therefore, the graduation rate is calculated according to a duration of 5 years and 150% of that amount. The percentage of graduates in each cohort by gender considers only actual graduates, not the original makeup of the cohort.

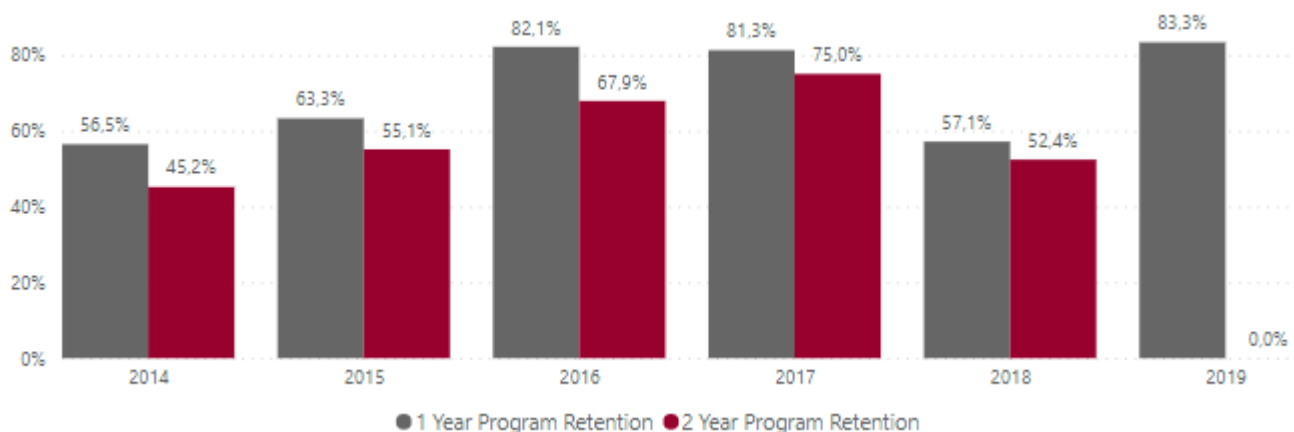
GRADUATION BY GENDER



GRADUATION



RETENTION



Program Learning Outcomes

In every semester, the program provides assessment results according to its Multiannual Assessment Plan (MAP), which typically considers one or more of its program learning outcomes (PLOs). Most programs utilize the platform Brightspace to collect and assess student work and to present the data and evidence of student achievement. These results and their analysis, with the objective of identifying areas for improvement, are presented in the program's annual assessment report.

In the graphic below, the most recent period in which a PLO has been assessed is indicated, with the percentage indicating achievement of the expected performance standard for that PLO, according to the rubric used to evaluate the student work. This standard can be designated at an introductory, intermediate, or final level, depending upon how the course learning outcomes (CLOs) align to each PLO in the program's curriculum map.

A graduate of the Environmental Engineering program will be able to:

1. Analyze environmental problems in water, soil, air, and biota, through physical, chemical, and biological parameters.
2. Analyze the behavior of pollutants in different environmental matrices through mathematical models.
3. Design engineering processes for conservation, prevention, and remediation through applied research and environmental technology.
4. Model environmental processes using developed methodologies and technologies.
5. Prepare management plans for the solution of environmental problems.
6. Design, direct, and participate in prevention, conservation, and environmental remediation projects.

