Biotechnology Engineering Student Achievement

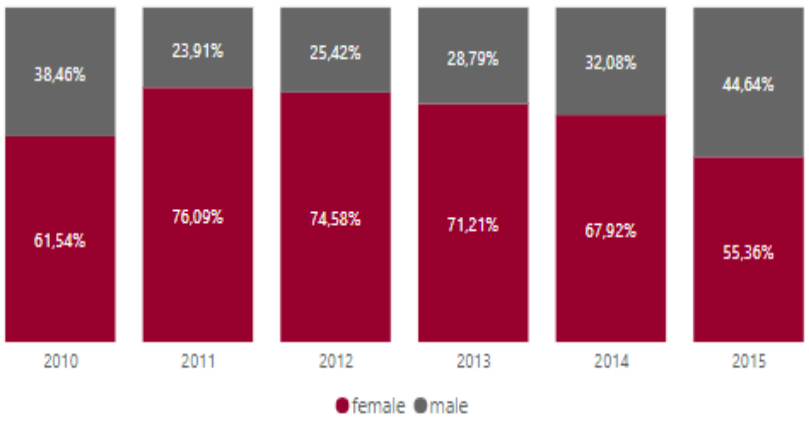
Degree Profile for the Biotechnology Engineering program

The Biotechnology Engineer from UDLA is a competent, enterprising professional with a global/international vision, capable of developing basic and applied research. He/she designs and executes biotechnological processes, performs laboratory analysis, and manages projects through technologies based on Modern Biology.

The UDLA Biotechnology Engineer researches and develops products and procedures focused on their applications through the use of biochemical tools, Molecular Biology, Genetic Engineering, and Bioengineering; designs and develops innovative biotechnological processes, using quality standards; demonstrates mastery of laboratory techniques for the analysis and development of biotechnological products; manages application projects with technical criteria, oriented to achievement; analyzes and interprets results from research and scientific publications in the areas of application of Biotechnology; and is capable of developing a viable proposal for biotechnological entrepreneurship.

The graduate of the Biotechnology Engineering program at UDLA is expected to perform different roles in multidisciplinary work teams, in national and international contexts. His/her formation is framed in the values and ethical principles of honesty and academic rigor, as well as in the development of social and environmental commitment, respectful of legislationThe graduate of the Biotechnology Engineering program at UDLA is expected to perform different roles in multidisciplinary work teams, in national and international contexts. His/her formation is framed in the values and ethical principles of honesty and academic rigor, as well as in the development of social and environmental commitment, respectful of legislation.

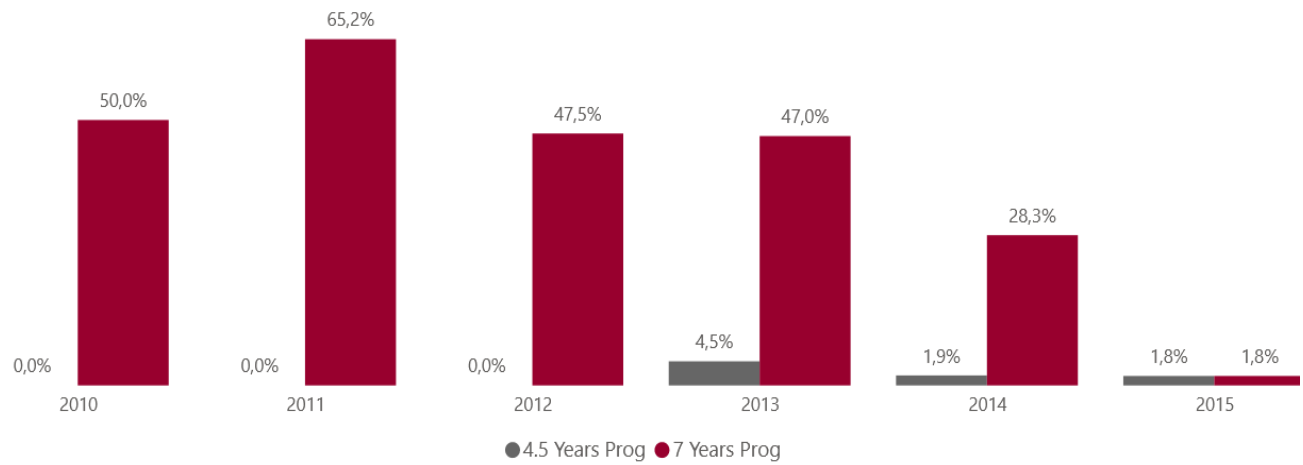
GRADUATION BY GENDER



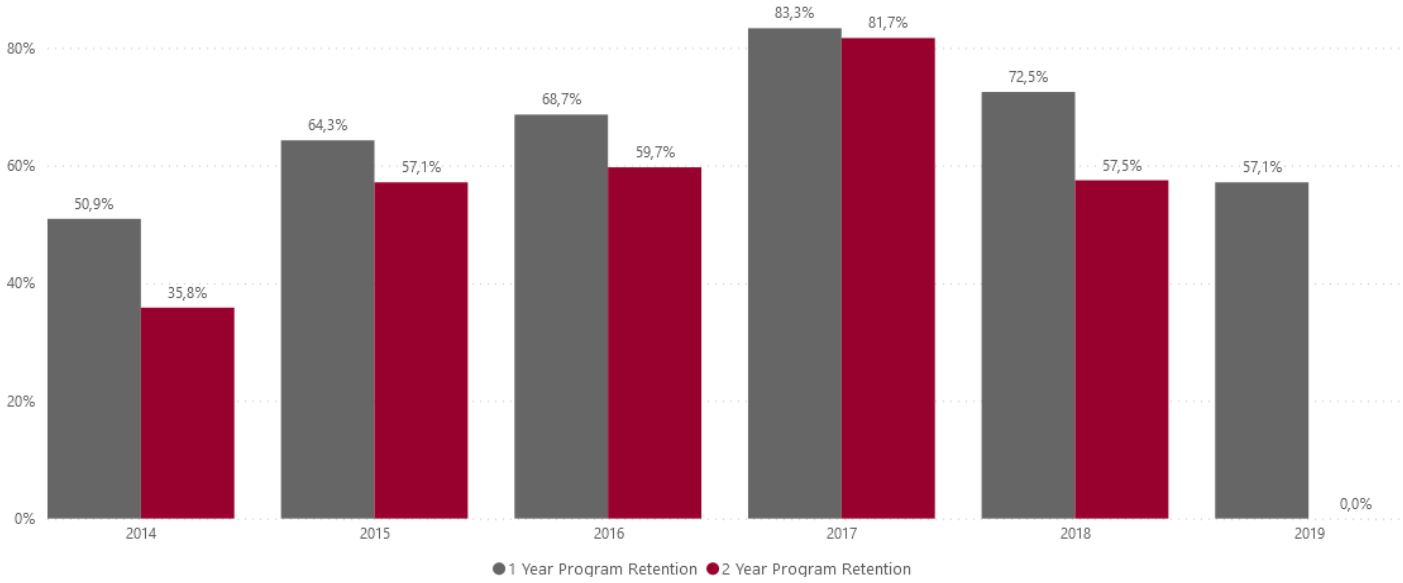
Retention and graduation rates are calculated through the 2019- 2020 academic year, based on new, first-time students entering in the fall semester, regardless of whether they enroll in the daytime or evening version of their program (if available). These rates do not consider incoming transfer students.

The duration of the Biotechnology Engineer program has historically been 4.5 years (9 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 4.5 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



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 Biotechnology Engineering program will be able to:

1. Investigate biological processes and living organisms through the application of the scientific method.
2. Develop procedures and products useful for humanity through the application of biotechnological tools, as well as viable proposals for entrepreneurship.
3. Design bioprocesses to obtain biotechnological products that contribute to sustainable development.
4. Demonstrate mastery in the application of laboratory techniques for analysis and research.
5. Communicate and present data and scientific information.
6. Apply bioinformatics tools for data analysis and visualization to explore scientific databases.