

Buenos Aires, December 16th 2020

To whom it may correspond
Dear Sir or Madam,

One of our students of the *Licenciatura en Física*, Leila Rocío Prélat, has told me she is interested in pursuing her studies in your institution. The intent of this letter is to briefly explain her academic credentials

The degree of *Licenciatura en Física* consists of 6 courses in an introductory first year (common to the degree of the *Licenciatura* for many sciences), and then 24 courses plus 15 credits in elective courses (as a reference, each elective course has a maximum of 5 credits). Each course spans an entire semester, and the program is such that it takes a total of 6.5 years to obtain the degree.

Our University does not have an intermediate-level (Bachelor) degree, nor does it have any other degree at the level of a Master in Physics besides the *Licenciatura en Física*. The students must take all courses to obtain the degree of *Licenciado*. The courses in the first three years are at the level of Bachelor or undergraduate courses in other universities, and cover topics such as calculus, complex analysis, classical mechanics, optics, electrodynamics, thermodynamics and quantum mechanics (with both theoretical and laboratory courses). Next, the students take courses in which the bibliography is at the level often found in graduate level courses (as examples, a second course on electrodynamics uses Jackson's book as part of the bibliography, the advanced course on Quantum Mechanics uses Sakurai's book, and the students also have mandatory courses in fluid mechanics, condensed matter, molecular physics, and particle physics, besides elective courses in topics such as biophysics, cosmology, general relativity, complex systems, nanophotonics, and plasma physics).

Besides these courses, the students must take two special courses in the last two years and before they obtain the degree. The first (namely, "Laboratorio 6 & 7") corresponds to an experimental project that the students must develop in a research laboratory (or in a research and development lab in a company) during two semesters, with a commitment of 10 hours per week. The project is carried under the guidance of a researcher in the host laboratory, and supervised by an independent professor of our department who also determines the final grading of the course. This project must be experimental, and must involve either the development, construction, or calibration of a device as part of a broader scientific project in the research lab.

The second special course corresponds to the thesis of *Licenciatura*, equivalent to a Master thesis. It can be theoretical or experimental, must be done under the supervision of a professor, and requires a minimum of 9 months of work with a commitment of 20 hours per week. The final report is presented in an oral dissertation to the thesis supervisor, the thesis coordinator, and a committee of three professors or scientists working in the field (members of the committee can be professors or scientists from other universities or institutions).

Students who obtain the degree of *Licenciado* are accepted in the PhD programs of our national universities without further requirements, and can obtain national PhD fellowships. Our students have also been considered for PhD programs and successfully obtained their PhDs in many countries in the past, including

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UK, Spain, France, other EU countries, Australia, and the US.

Hoping to have made the nature and the structure of our degree clear, I kindly ask you to consider the degree of *Licenciatura en Física* as equivalent to a Master's degree, as well as valid and sufficient for a PhD program application or for all purposes relating thereto. If needed, a syllabus with a detailed outline and description of all courses is available from our University. If you need further details, please feel free to contact me by phone at (++ 54 11) 5285-7530, or by e-mail to secretaria@df.uba.ar.

Sincerelly yours,

Prof. Rodolfo Sassot
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