# Why Sorbonne University Abu Dhabi?

In today's fast-paced and globalised economies, knowledge and languages both serve an important role in creating progressive and vibrant societies. The French education system is known for its high level of rigorous critical thinking and debating skills, which play a significant role in developing future pioneers and leaders.

Sorbonne Abu Dhabi is a globally recognised education institution that serves as a bridge between civilisations by offering a multicultural environment, which promotes and develops a strong culture of tolerance, curiosity, harmony and cultural awareness for today's modern economy. Students have access to internationally acclaimed faculty, world-class facilities and internationally certified degrees, which places them firmly on the right path in preparation for a successful career.

This degree is officially accredited by the UAE Commission for Academic Accreditation (www.caa.ae).

#### For more information, please contact:

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# Bachelor Physics





The Bachelor in Physics is a three-year undergraduate programme taught in English. The diploma answers current and future needs of companies by enhancing students' critical thinking skills and opening a wide range of professional opportunities.

Thanks to its sound background in physics and mathematics, the Bachelor in Physics programme educates students to be critical thinkers, problem solvers and innovators. They are well prepared to enter the work force or to pursue studies in postgraduate programmes in Engineering Science, or in the different domains of Physics, as well as double major programmes.

Teaching methodology involves lectures and tutorials, laboratory sessions, projects, written technical reports, oral presentations and a mandatory internship. Language (courses), History of Sciences and career planning courses are also part of the programme.

Outgoing collaborations of the Science and Engineering Department with the Masdar Institute, the UAE Space Agency, the FANR and other companies and institutions foster the student's exposure to real-world expectations and interests.

The curriculum follows the European ECTS system and the degree is delivered by Sorbonne University in Paris.

Second Year

and rigid bodies)

History of sciences

variables)

(MATLAB)

Mathematics (differential equations,

multivariable calculus and complex

Numerical methods for engineers

Innovation and entrepreneurship

French or another foreign language

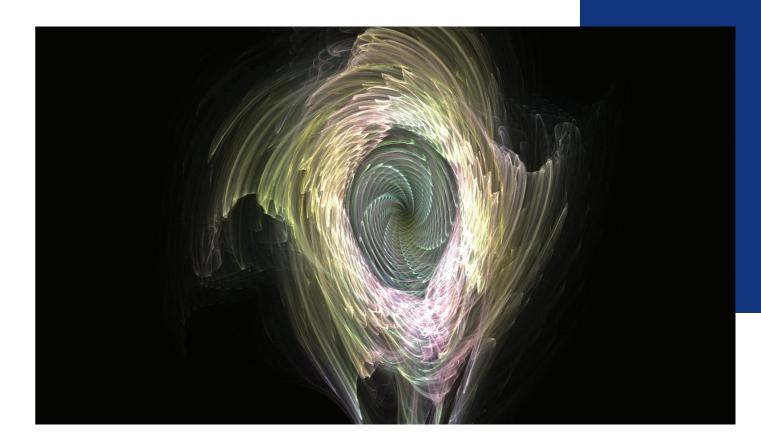
 Physics (thermodynamics, hydrostatics, waves and optics, electromagnetism

## First Year

- Mathematics (discrete mathematics, derivatives and integrals and linear algebra)
- Physics (classical physics)
- Engineering projectIntroduction to mechanics for
- engineers • Introduction to the business world
- History of sciences
- French for non francophone students or German, Arabic, Chinese or Italian for francophone students

## Third Year

- Mathematics (probability and random models in Physics)
- Physics (electromagnetism, acoustics, quanta and relativity and thermodynamics)
- Epistemology
  French for non francophone students or German, Arabic, Chinese or Italian for francophone students
- Mandatory internship: 4 to 5 weeks



## **Admission requirements**

## To be eligible for this Bachelor's degree, students must have the following:

- French Baccalaureate or High School Diploma (or equivalent)
- English Proficiency Exam: EmSAT English minimum score of 1100, TOEFL 500 (173 CBT, 61iBT) or IELTS 5.0 or City & Guilds IESOL B1/B2. Students who have graduated from countries where English is the first official language are exempted from the language proficiency exam.

To be awarded a Bachelor's degree in Physics, students must successfully complete three years of study, with the equivalent of 60 credits per year (European ECTS System).

The grading is based on regular assessments and final examinations at the end of every semester.

## **Career prospects**

### The Bachelor in Physics helps students launch successful careers in engineering, research and development, teaching and other professions.

Jobs can include an engineering associate in a laboratory, work for a government institute or major industrial firm, journalists in science and popular science and a sales representative for technical products.

Students can pursue in Masters such as engineering sciences, applied or fundamental physics, or in double majors. This degree provides graduates with several options to pursue further academic studies at Sorbonne University in Paris or any other relevant postgraduate programme in the UAE and abroad.

Tuition Fees (Including admin. fees - over 3 years) AED 215,100 (approximately US\$ 58,615)

#### Scholarship options:

- Emirati citizens receive the H.H. Sheikh Mohamed bin Zayed Al Nahyan scholarship grant covering tuition fees for the programme and a foundation year (if any).
- Other students may apply for the Academic Excellence Scholarship, that can cover up to 75% of the tuition fees