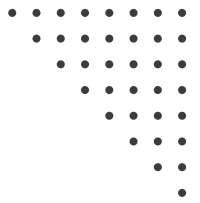


**NOVA**

**IMS**

Information  
Management  
School



# The jobs of the Future



# are here!



**UNDERGRADUATE COURSES**  
**2023/24**



# We are pioneers in converting data into value.



**100%**  
employment rate<sup>(1),(2)</sup>

**1.394€**  
average monthly net salary<sup>(1)</sup>

**34**  
programs  
3 Undergraduate, 21 Postgraduate,  
9 Master and 1 Doctoral

**3.200**  
students from 81 nations



(1) Independent ObipNOVA report on NOVA IMS undergraduates in 2019.  
(2) Employment rate measured according to active graduates.  
(3) International organization that brings together leading universities in research and teaching of information sciences.  
(4) International agency that publishes the annual ranking of the best Masters and MBAs in the world.  
(5) North American Accreditation Agency, world leader in quality certification and in encouraging innovation in academic programs in applied science, computing, engineering and technology related fields.



**#1**  
in several international recognitions



We were the 1<sup>st</sup> institution in the Iberian Peninsula to join iSchools<sup>(3)</sup>



Seven of our Master and Postgraduate Programs were classified by Eduniversal in the TOP Ranking of the Best Masters 2022<sup>(4)</sup>



Computing Accreditation Commission

We have the 1<sup>st</sup> degree in Europe to be accredited in Information Systems by ABET<sup>(5)</sup>



We are recognized by the world leader in process mining as a center of excellence in this area

Choosing the course and institution of higher education to attend is a significant decision.

NOVA IMS, the School of Information Management and Data Science at the NOVA University of Lisbon, is a national and international reference in our field of intervention, with recognized scientific and pedagogical expertise.

We are especially geared towards facing the future of organizations and society, through training leaders of digital transformation and data-based management in our three undergraduate degrees, helping to generate high quality professionals with 100% employability levels. Our courses are accredited and lead international rankings.

Meritocracy and the quality of everything we do is taken very seriously at NOVA IMS and we have a wide range of scholarships and awards designed to recognize the success of our students.

Do not hesitate to contact us as a potential new student, with the certainty that you will always be welcome here!

**Miguel de Castro Neto**  
NOVA IMS Dean



# UNDERGRADUATE DEGREE IN Data Science



**Course Code:** L188

**Entry Exams Subjects** (1 of the following sets):  
19 Mathematics A  
19 Mathematics A + 04 Economy  
19 Mathematics A + 10 Descriptive Geometry

**Exams to be carried out** (1 of the following sets):  
635 Mathematics A  
635 Mathematics A + 712 Economia A  
635 Mathematics A + 708 Descriptive Geometry A

**Last Placement of the General Quota\***  
1<sup>st</sup> Phase - 168,8  
2<sup>nd</sup> Phase - 172,6

\*rankings for the 2022-23 academic year



[www.novaims.unl.pt/lcd](http://www.novaims.unl.pt/lcd)

**In the Data Science undergraduate degree, students learn state-of-the-art artificial intelligence and machine learning techniques for analyzing large volumes of data (big data). They will become true data scientists - considered the sexiest profession of the 21<sup>st</sup> century by the Harvard Business Review.**

**The main objective of this course is to train future professionals capable of understanding, developing, and using models, algorithms, and the most advanced data science techniques to analyze and extract knowledge from Big Data.**

## CAREER OPPORTUNITIES

- » Data Scientist;
- » Big Data Analyst;
- » Data Engineer;
- » Specialist in Artificial Intelligence Systems;
- » Specialist in Machine Learning;
- » Specialist in the development of Automatic Learning Algorithms.

**Sectors of Activity:** IT Companies; Banking; Communications Companies; Insurance; Retail; Telecommunications; Biomedical Companies; Pharmaceuticals; Public Administration; Utilities; Industry.

## STUDY PLAN

### 1<sup>ST</sup> YEAR

Algorithms and Data Structures
Computers' Architecture
Foundational Aspects of Data Science
Information Systems
Introduction to Artificial Intelligence
Introduction to Computational Thinking and DS
Introduction to Programming
Linear Algebra
Mathematical Analysis II
Mathematical Analysis I
Personal Development I
Statistics and Probability Distributions

### 2<sup>ND</sup> YEAR

Big Data Storage
Data Pre-processing and Visualization
Databases
Forecasting Methods
Machine Learning I
Machine Learning II
Optimization Algorithms
Programming for Data Science
Regression Analysis
Statistical Inference



**I can assure you that the bachelor's degree in Data Science at NOVA IMS is incredibly useful and enriching. In addition to being extremely practical, the teachers are always available to help, prioritizing the interaction and interest of the students.**

**Carolina Braziel Shaul**  
Student of the 2<sup>nd</sup> year



### 3<sup>RD</sup> YEAR

Big Data Analysis
Capstone Project
Deep Learning
Ethic, Social and Legal Aspects of AI
Personal Development II
Text Mining
Digital Innovation Projects*
Entrepreneurship and Project Analysis*
Geospatial Analytics*
Informatics and Information Law*
Information Systems Seminar*
Network Analysis*
Process Intelligence*
Risk Management*
Web Analytics*
Web Marketing & E-Commerce*

\*Optional Curricular Units: students must choose 30 ECTS in curricular units according to their interests.

# UNDERGRADUATE DEGREE IN Information Management



**Course Code:** 9155

**Entry Exams Subjects** (1 of the following):  
04 Economy  
16 Mathematics

**Exams to be carried out** (1 of the following):  
712 Economy A  
635 Mathematics A or 735 Mathematics B

**Last Placement of the General Quota\***  
1<sup>st</sup> Phase - 174,0  
2<sup>nd</sup> Phase - 176,6

\*rankings for the 2022-23 academic year



[www.novaims.unl.pt/lgi](http://www.novaims.unl.pt/lgi)

**The Degree in Information Management combines management with data science. It prepares students to be managers of the new generation, capable of understanding business and the current challenges of modern management, transforming data into information. There is a high demand for professionals with skills in the information management area in today's society, capable of using the most modern techniques and analytical tools to support decision-making.**

## CAREER OPPORTUNITIES

- » Information Manager;
  - » Data Analyst;
  - » Business Analyst;
  - » Specialist in Data Science applied to Management;
  - » Specialist in Analytical Marketing;
  - » Specialist in Decision Support Systems.
  - » Business Process Manager.
- Sectors of Activity:** IT Companies; Banking; Insurance; Health; Telecommunications; Logistics/Distribution; Marketing and Market Research; Consulting; Public Administration.

## STUDY PLAN

### 1<sup>ST</sup> YEAR

Business Management
Computation I
Economic Analysis
Foundational Aspects of Information
Information Systems
Linear Algebra
Marketing
Mathematical Analysis I
Mathematical Analysis II
Personal Development I
Programming for Business
Statistics and Probability Distributions

### 2<sup>ND</sup> YEAR

Business Intelligence
Computational Methods for Optimization
Data Analysis
Data Preprocessing
Databases I
Econometrics I
Financial Analysis and Management Control
Geospatial Intelligence
Machine Learning
Nonparametric and Computational Statistics
Statistical Inference
Survey Methodology

“



**This bachelor allows us to explore the most diverse areas related to Data and Innovation. In addition to developing technical skills necessary for the demands of the job market, it is noteworthy the proximity between teachers and students, the spirit of mutual help that is felt among students and also the growing offer of extracurricular activities.**

**Dniela Marques**  
Data Design Analyst - Vodafone

”

### 3<sup>RD</sup> YEAR

Business Process Management
Business Strategy and Digital Transformation
Econometrics II
Enterprise Information Systems
Market Research
Personal Development II
Applied Economy*
Business Law*
Digital Innovation Projects*
Entrepreneurship and Project Analysis*
Financial Calculus*
Forecasting Methods*
Geospatial Analytics*
Information and Informatics Law*
Information Systems Seminar*
Location Based Services*
People Management and Leadership*
Project Management*
Remote Sensing*
Risk Management*
Smart and Sustainable Cities*
Web Analytics*
Web Marketing and E-Commerce*

\*Optional Curricular Units: students must choose 30 ECTS in curricular units according to their interests.

# UNDERGRADUATE DEGREE IN Information Systems



**Course Code:** 8259

**Entry Exams Subjects** (1 of the following):  
04 Economy  
16 Mathematics

**Exams to be carried out** (1 of the following):  
712 Economy A  
635 Mathematics A or 735 Mathematics B

**Last Placement of the General Quota\***  
1<sup>st</sup> Phase - 167,8  
2<sup>nd</sup> Phase - 170,6

\*rankings for the 2022-23 academic year

In the Information Systems and Technologies Degree, students learn to analyze, design, and implement information systems fundamental in modern organizations, including artificial intelligence, new programming languages, development of apps and web systems, and mobile computing, among other subjects. They also acquire a set of tools that support companies' business processes.



## CAREER OPPORTUNITIES

- » Systems Analyst;
- » Specialist in the development of Artificial Intelligence Systems;
- » Database Administrator and Programmer;
- » Consultant in Information Systems and Technologies;
- » Specialist in the implementation of Information Systems;
- » Information Systems Project Manager;
- » Software Developer.

**Sectors of Activity:** IT Companies; Banking; Insurance; Health; Telecommunications; Logistics/Distribution; E-Business; Consulting; Public Administration.

## STUDY PLAN

### 1<sup>ST</sup> YEAR

Business Management
Computation I
Computation II
Information Systems
Linear Algebra
Mathematical Analysis I
Mathematical Analysis II
Organizations Behavior
Personal Development I
Statistics and Probability Distributions
Technologies and Web Apps
Theory and Practice of Information Systems

### 2<sup>ND</sup> YEAR

Computation III
Computer Networks & Cloud Computing
Databases I
Databases II
Human-Computer Interaction
Informations Technologies Hardware and Software
Information Systems Project Management
Mobile Apps Development
Statistical Inference
Systems Analysis
Web Marketing and E-business

“



This bachelor's degree at NOVA IMS allowed for an easier adaptation to the job market due to the important practical component that characterizes it. From the teachers to the community, the entire faculty is made up of excellent and competent professionals, which greatly facilitates the learning process.

**Gonçalo Mena**  
Backend Engineer  
Philip Morris International

”

### 3<sup>RD</sup> YEAR

Artificial Intelligence
Business Process Management
Cybersecurity
Geospatial Intelligence
Project of Information Systems powered by Webasto
Personal Development II
Applied Cybersecurity*
Computational Methods for Optimization*
Enterprise Information Systems*
Entrepreneurship and Project Analysis*
Geospatial Analytics*
Informatics and Information Law*
Information Systems Project II*
Information Systems Seminar*
Information Technologies, Governance and Service*
Machine Learning*
Nonparametric and Computational Statistics*
Remote Sensing*
Risk Management*
Web Analytics*

\*Optional Curricular Units: students must choose 30 ECTS in curricular units according to their interests.

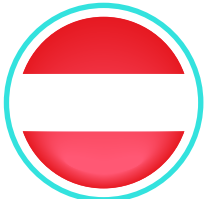


# Go further with the Mobility Programs



In Dresden I had a unique and challenging experience. A city rich in culture and with a balance between city life and nature. At HTW I gained a practical view of business and the basics of German. Undoubtedly a place to remember for the good times!

**Carolina Maximiano**  
Hochschule für Technik und  
Wirtschaft Dresden (Germany)



Austria



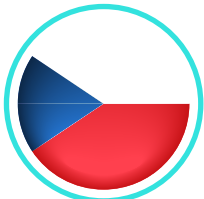
France



Lithuania



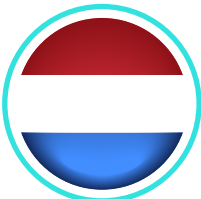
Sweden



Czech Republic



Germany



Netherlands



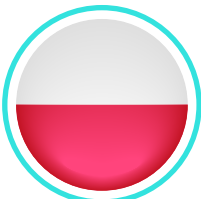
Switzerland



Denmark



Greece



Poland



Turkey



Finland



Hungary



Slovenia



United Kingdom



Italy



Spain



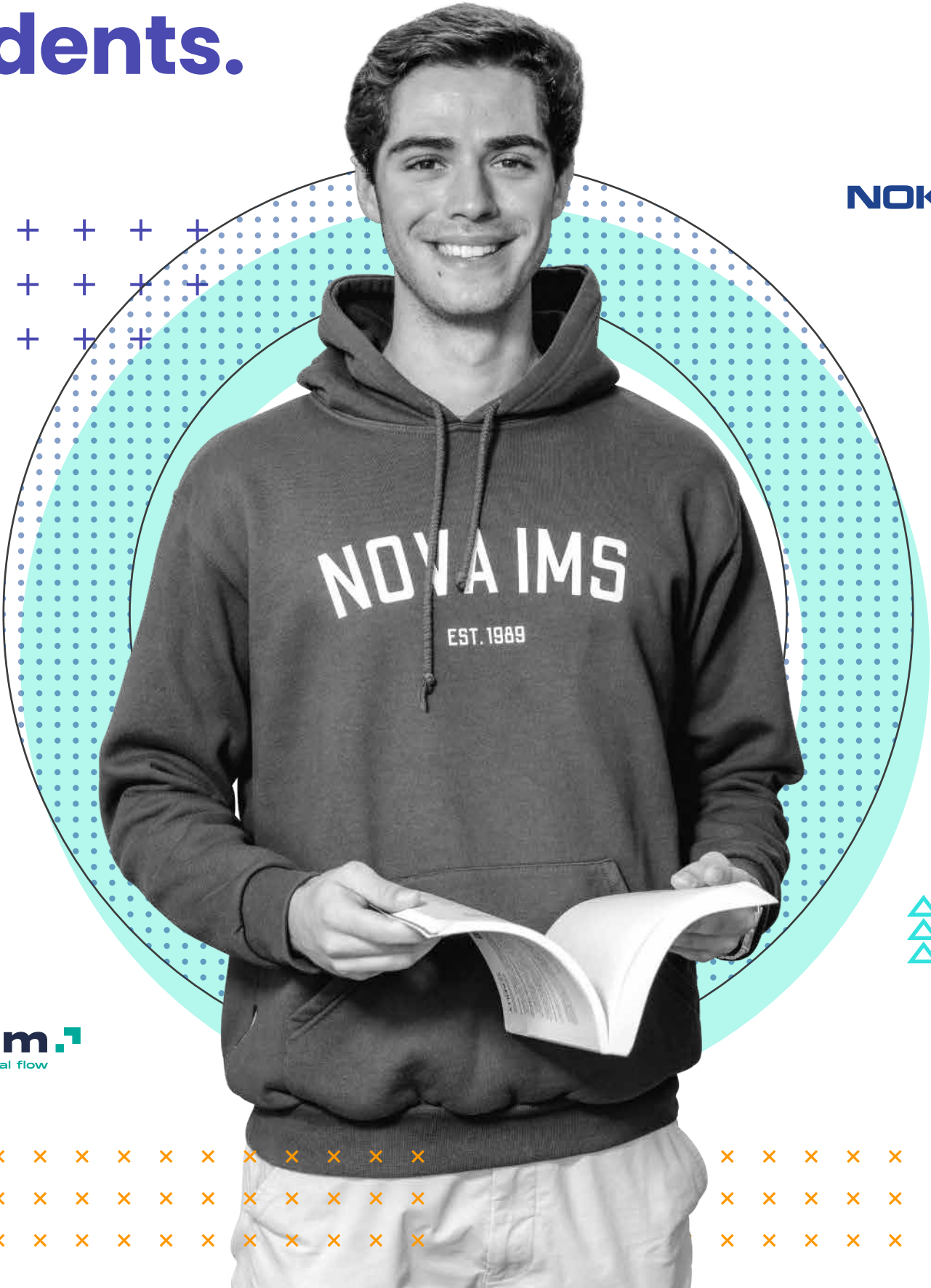
It was in Slovenia that I experienced the best of academic life. Living in a small town, surrounded by nature and where you can only ride a bike, were the main reasons why I chose Ljubljana.


**Gonçalo Calixto Pires**  
University of Ljubljana  
School of Economics and Business  
(Slovenia)



Through the Mobility Programs, NOVA IMS students have the possibility to attend a semester in a European educational institution with which a partnership has been established. NOVA IMS being aware of the importance of developing a culture of cooperation and mobility already has about 46 partner institutions from 18 different countries.

# Companies recognize the value of our students.



ORACLE® 

 Microsoft  REUTERS

NOKIA  NOVABASE

Jerónimo Martins  eurostat 

NOS

 altice

 pwc

Sonae

 inetum.  Positive digital flow

NOVA IMS is proud to have contributed to the training of excellent professionals in the national and international labor market.

Based on the perspective of promoting the employability of our graduates and an effective interconnection with the business world, NOVA IMS has been developing cooperation ties with companies and other public and private institutions, through the concession of internships and job offers, thus aiming to insert graduates into working life.

Here we present some of the companies that have recruited and made internships available to our students.

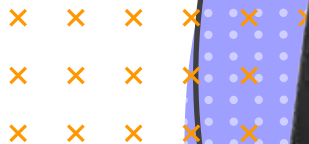


# At NOVA IMS, academic life is unforgettable.

You can count on NOVA Information Management School Students' Union (NOVA IMS SU) to give you the best years of your life, either with recreational events such as the welcome of new students, great academic festivals or the NOVA IMS Gala, either by promoting the practice of sports in several disciplines, including an indoor football team.

To enhance your experience, we have a wide range of benefits for our partners.

Meet us in person or through our official social networks.



# We promote your success in the job market.

AD NOVA IMS is the Association for the Development of the NOVA Information Management School. It is currently made up of 10 public and private institutions that are involved in the academic life of NOVA IMS, through different initiatives such as merit scholarships, internships, research projects, organization of conferences and events, advanced training courses and research seminars, responding to concrete business needs.

AD NOVA IMS links the academic world and society, publicizing job offers and monitoring graduate students' employability and professional paths.

## MEMBERS





# At NOVA IMS we reward excellence.

We reward students  
who excel upon entry  
to their degree programs  
and who work to  
exceed expectations  
during their  
academic careers.

## PRIZES AWARDED THROUGHOUT THE COURSE

	APPROVED ECTS	AVERAGE	AWARD
At the end of the 1 <sup>st</sup> year of registration	60 or more	16,5 or more	Amount of the tuition fee <sup>(1)</sup>
At the end of the 2 <sup>nd</sup> year of registration	120 or more	16,5 or more	Amount of the tuition fee <sup>(1)</sup>
At the end of the 3 <sup>rd</sup> year of registration	180 or more	16,5 or more	€3.000 discount <sup>(2)</sup>

### PRIZES AWARDED UPON ENTRY TO THE COURSE\*

#### Prize in the amount of the tuition fee \*\*

Application prize awarded to  
all students whose average  
entry is 18 or more<sup>(1)</sup>.

#### Jerónimo Martins

#### Best Application Grade of each Undergraduate Degree

€1.000



#### Best Student Finalist of Undergraduate Degree\*\*\*

€1.500



€1.500



#### Best Student of Course Unit (UC)\*\*\*

€1.500

Machine Learning UC



#### Best Student of Course Unit (UC)\*\*\*

Institutional Support  
for the implementation  
of a GIS project<sup>(3)</sup>  
Geospatial Intelligence UC



#### Best Student of Course Unit (UC)\*\*\*

€1.500

Business Process Management UC



€1.500

Process Intelligence UC



#### Best Students (group project) of Course Unit (UC)\*\*\*

€2.000

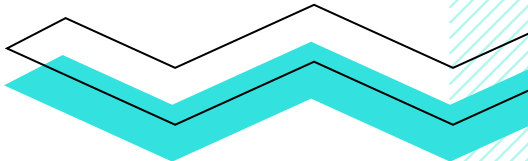
Information Systems Project UC



#### Best Student of Undergraduate and Master Degree Programs

Scholarship with value  
to be defined<sup>(4)</sup>

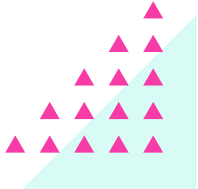
\*Prizes applied to students admitted in 2023/2024 and conditioned to registration and enrolment in the 1<sup>st</sup> school year of the degree course.  
\*\*Not cumulative with the award for the best application grade of each undergraduate degree, offered by Jerónimo Martins.  
\*\*\*Prizes in force in the school year 2022-23. Please access [www.novaims.unl.pt/premios-de-merito](http://www.novaims.unl.pt/premios-de-merito) to confirm the most recent updates.  
(1) Prize corresponding to the 1<sup>st</sup> year tuition fee.  
(2) The value of the tuition for a master's degree to be attended at the NOVA IMS. Not cumulative with Alumni discount. Cumulative with financial discount.  
(3) 10 days of institutional support through a Technological Mentor at the Esri facilities for the implementation of a GIS project.  
(4) The amount of the grant is 5 times the national minimum wage in force in the academic year in which prize is attributed.



Undergraduate Degree in  
● Data Science  
● Information Management  
● Information Systems



# We are here for you.



## STUDENTS' SUPPORT OFFICE

The Student Support Office evaluates suggestions, ideas, information requests, and complaints, ensuring monitoring and respective resolution to the competent authorities. Students may also be directed to this office for clarification of doubts and all kinds of useful information for their academic career.

## ACADEMIC SERVICES

Academic Services perform activities in the educational domain, academic monitoring of students and examination to obtain titles and degrees. NOVA IMS offers a Virtual Secretariat where students can consult all documents, program regulations, school operation procedures, and request the issuance of documents, avoiding a trip to school.



## IT SERVICES

NOVA IMS IT Services provide students with Helpdesk support, from 8 a.m. to 10:30 p.m. daily, and supply a set of software for educational and research purposes.

## LIBRARY AND DOCUMENTATION SERVICES

Specialized in Information Management, NOVA IMS Library and Documentation Services aim to provide students access to documentation and information required for the development of their academic and scientific activities. It offers versatile workspaces and multiple current bibliographic resources, from emerging scientific areas.

## SOCIAL ACTION SERVICES

SASNOVA is responsible for allocating scholarships to students in need, promoting access to accommodation for displaced students, promoting access to food for students through canteens and snack bars, as well as for proving medical, psychiatric, psychological and nutritional consultations.





# UNDERGRADUATE COURSES

## 2023/24

### ACCESS CONDITIONS

#### Application Grade Formula

Secondary School: 65%

Entry Exam Subject: 35%

#### Establishment Code

0906 - Universidade Nova de Lisboa - Instituto Superior de Estatística e Gestão de Informação

#### Minimum Grades

Application Grade: 100 points

Entry Grade: 95 points

### CONTACTS

#### Any questions? Talk to us!

licenciaturas@novaims.unl.pt

### WE'RE HERE!

Campus de Campolide,  
1070-312 Lisboa, Portugal

Tel: +351 213 828 610

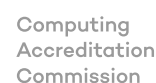
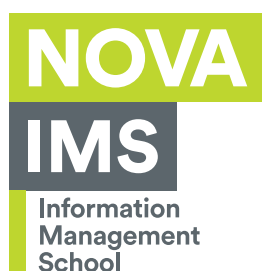
(Call to the national fixed network)

[www.novaims.unl.pt/licenciaturas](http://www.novaims.unl.pt/licenciaturas)

Join us for an  
**I**ncredible  
**M**emorable  
**S**ensational  
experience



#### NOVA IMS' ACCREDITATIONS AND CERTIFICATIONS



20th Edition

#### COFINANCED BY

