University of Rennes
Programmes taught in English
2024-2025
## Summary

### Introduction

- Presentation of the University of Rennes
- Key figures

### Degrees in Science

- GreenSusCat
- Functional Behavioural and Evolutionary Ecology
- Biodiversity, Ecology & Evolution
- Nanosciences, Nanomaterials & Nanotechnologies
- Erasmus Mundus MAMASELF
- Photonics
- Lumomat
- Mathematics and Cryptography
- Fundamental Mathematics
- Cloud and Network infrastructures
- Cybersecurity
- Computer Science- Research-oriented
- Fintech
- Data Science

### Degrees in Business, Economics and Management

- Finance, Advanced Studies and Research in Finance
- Accounting and Auditing International
- Public Policies
- Business and Applied Economics
- Human Resources Project Management
- Business Administration in International Management
- Applied Economics for Business, Finance and Markets

### Apply

- How to apply
- Information about admission procedures and visas
- Contact
Rennes, capital of the Great West

Located in the centre of a human-scale city, it is just 1.5 hours away from Paris and only one hour from prestigious sites such as Mont Saint-Michel or Saint-Malo. Rennes is a safe, lively student city, ideal for international students. It currently holds the 2nd position in the national ranking of student.

The University of Rennes

The University of Rennes is an experimental public institution. Open to Europe and the world, at the heart of the Brittany Region and linked to Rennes Métropole and its ecosystem, it is built on a common history and the assets of its founding members. It has one ambition: to meet the major societal challenges of a world in transition, particularly in the fields of the environment, global health and digital technology.

The University of Rennes brings together training departments (UFR, faculties, schools, institutes), research centres and five grandes écoles who participate in the development and implementation of the strategy of the University of Rennes: École des hautes études en santé publique (EHESP), École nationale supérieure de chimie de Rennes (ENSCR), École normale supérieure de Rennes (ENS Rennes), Institut national des sciences appliquées de Rennes (INSA Rennes), Sciences Po Rennes. The University of Rennes also associates with the Université Rennes 2, the École nationale de statistique et analyse de l’information de Rennes (ENSAI) and the Institut Agro Rennes-Angers to pursue and develop joint projects.

The University of Rennes is a truly international university, and offers degrees taught entirely in English in the fields of Chemistry, Environmental science, Mathematics, Computer Science, Business and management, Economics. It currently welcomes over 3,000 international students (10% of the university’s student population) and every year, around 1,000 of our students undertake an outgoing study programme or work placement.

In 2019, the university was awarded the excellency Label « Bienvenue en France », for the quality of the services provided to international students.
The International Mobility Centre of Rennes

The CMI Rennes is the structure in charge of welcoming international students, PhD students and researchers.

- Welcome guide
- Accompaniment and specific individual follow-up
- Management of administrative procedures (residence permit, etc.)
- Settling in Rennes (housing, social security, opening a bank account, etc.)
- Adaptation to French culture
- Integration into society
- Cultural and tourist activities

A quality welcome

The University of Rennes is one of the top 25 French higher education institutions to receive the label. The criteria determined by the Campus France agency for obtaining the label includes:

- the quality and accessibility of information reception facilities
- training offer
- accommodation
- campus life
- the quality of post-graduation follow-up

Key figures & infos

37,000 students
9 campuses
+80 sport activities

3,700 international students

World’s top 500 universities

A quality welcome

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- campus life
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World’s top 500 universities

A quality welcome

The University of Rennes is one of the top 25 French higher education institutions to receive the label. The criteria determined by the Campus France agency for obtaining the label includes:

- the quality and accessibility of information reception facilities
- training offer
- accommodation
- campus life
- the quality of post-graduation follow-up

World’s top 500 universities
Degrees in Science

Chemistry
GreenSusCat

Environmental science
Functional Behavioural and Evolutionary Ecology
Biodiversity, Ecology & Evolution

Physics and properties of the matter
Nanosciences, Nanomaterials & Nanotechnologies
Erasmus Mundus MAMASELF
Photonics
Lumomat

Mathematics
Mathematics and Cryptography
Fundamental Mathematics

Computer science
Cloud and Network infrastructures
Cybersecurity
Computer Science- Research-oriented
Fintech
Data Science
**GreenSusCat**

The International Master in Molecular Catalysis and Green Chemistry is a postgraduate course in English for students in molecular chemistry. It provides the necessary skills for understanding recent and future developments of sustainable, modern, multidisciplinary chemistry at the industrial and academic level and will prepare the students for leadership roles in industry and academy.

**Objectives**

Every student will benefit from a personal tutorial assistance, with communication in English, during the laboratory training associated to a research project. The program covers the main aspects of modern molecular chemistry and catalysis and provides students who wish to pursue a PhD degree in France or EU for the requisite level. The master is open to students with a very good background in chemistry and a good level in English.

**Links with research**

CatGreenChem is linked to the Institute of Chemical Science of Rennes (ISCR), an internationally recognized research laboratory associated to CNRS and involved in numerous European and international networks (including 6 Joint Laboratories (Germany, China, India, Australia, Russia, Japan). It promotes diversity, multidisciplinary approach, research/industry interface and international cooperation. It brings together competence of 120 full & associated professors, 55 CNRS scientists, 200 PhD & post-doctoral and 70 master students.

**And after?**

After graduation, students get the opportunity to continue their studies with a PhD in France or in leading chemical institutes in Europe, and work as a researcher in R&D, in the following fields:

- Health and Pharmacy,
- Petroleum chemistry,
- Bulk chemistry,
- Energy conversion,
- Polymers, Material Science,
- Biochemistry,
- Patent engineer,
- Assistant professor, associate professor and full professor in universities
<table>
<thead>
<tr>
<th><strong>Level obtained</strong></th>
<th>Master 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Duration</strong></td>
<td>1 or 2 years</td>
</tr>
<tr>
<td><strong>Tuition fees</strong></td>
<td>National fees*</td>
</tr>
<tr>
<td><strong>Requirements</strong></td>
<td>A good bachelor (Honors) or equivalent degree (4 years) in Chemistry</td>
</tr>
<tr>
<td><strong>English proficiency</strong></td>
<td>IELTS (6.0) / TOEFL (550 paper test)</td>
</tr>
<tr>
<td><strong>Information &amp; contact</strong></td>
<td><a href="mailto:christophe.darcel@univ-rennes.fr">christophe.darcel@univ-rennes.fr</a></td>
</tr>
<tr>
<td><strong>Learn more</strong></td>
<td><a href="https://master-greensuscat.univ-rennes.fr/">https://master-greensuscat.univ-rennes.fr/</a></td>
</tr>
</tbody>
</table>

* €243 per year for european students and students from partner universities
  €950 per year for non-european students
Functional Behavioural and Evolutionary Ecology

The Master Functional Behavioural and Evolutionary Ecology provides students with an advanced understanding of biodiversity, ecology and evolution by applying a multidisciplinary approach.

Objectives

Apart from general competence in academic attitude and academic skills, graduates of the EFCE Master will acquire specific competences & knowledge in the following areas:

• The main theories, concepts and tools of scientific ecology, biodiversity and evolution
• Methods of statistical analysis (advanced statistics)
• Modelling and programming
• Molecular tools and bioinformatics
• Sampling protocols, experimental techniques in situ or in the lab, field and lab observations, and long-term monitoring.

Students will also develop during their training a variety of important soft skills including oral and written communication, team working, project management and others.

Links with research

This master’s courses are linked with the activities of more than 100 researchers, mainly within the Rennes Observatory OSUR, and also other groups and institutes located in Rennes.

And after?

This International Master degree is mostly designed to prepare graduates for the research activities carried out by researchers, engineers, and R & D managers, but also offers the possibility to pursue other careers such as ecological consulting, governmental institutions, local or regional authorities, etc. Graduates will be able to intervene in the fields of Research and Development, Patents, technological monitoring, advice and expertise in public and/or private research structures and within different national and/or international institutions.
<table>
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<tr>
<th>Level obtained</th>
<th>Master</th>
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<tbody>
<tr>
<td>Duration</td>
<td>1 year</td>
</tr>
<tr>
<td>Tuition fees</td>
<td>National fees*</td>
</tr>
<tr>
<td>Requirements</td>
<td>A good Bachelor degree (honors) or equivalent degree in a related field if applying for the 1st year (ecology or biology), additional specialization in Ecology is required if applying to the 2nd year of the programme.</td>
</tr>
<tr>
<td>English proficiency</td>
<td>IELTS (6.0) / TOEFL (550 paper test)</td>
</tr>
<tr>
<td>Information &amp; contact</td>
<td><a href="mailto:cecile.lelann@univ-rennes.fr">cecile.lelann@univ-rennes.fr</a> <a href="mailto:philippe.vandenkoornhuyse@univ-rennes.fr">philippe.vandenkoornhuyse@univ-rennes.fr</a></td>
</tr>
<tr>
<td>Learn more</td>
<td><a href="https://osur.univ-rennes.fr/EFCE">https://osur.univ-rennes.fr/EFCE</a></td>
</tr>
</tbody>
</table>

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Biodiversity, Ecology & Evolution (IMABEE)

IMABEE is a 2 year research-oriented master programme for talented and motivated students who are interested in understanding biodiversity, ecology and evolution in all their facets. This master funded in 2017 is a joint project between four European Universities (University of Rennes , coordinator, France; Vrije Universiteit Amsterdam, Netherlands; Georg-August Universität Göttingen, Germany; Aarhus Universitet, Denmark).

Objectives

Students start their first year at a home university. In the second year, students choose a second partner university (i.e. Host University) within the consortium. On completion of the programme, students are awarded a double degree from the two partner universities (i.e. two MSc degrees). For the students who wish to do their 1st year in Rennes, knowledges of both French and English languages are required (around 40% of the teaching given in English). The second year of IMABEE if fully given in English whatever the University of the consortium. The MSc tracks in the four universities are highly complementary and will provide IMABEE students with a wide choice of possibilities. More information about the various possible contents of the programme in our partner universities on IMABEE website.

And after?

These two master’s degrees (Functional Behavioural Ecology and Evolution, and International Master’s degree IMABEE) provide students with an advanced understanding of biodiversity, ecology and evolution by applying a multidisciplinary approach. Apart from general competence in academic attitude and academic skills, graduates will acquire specific competences & knowledge in the following areas:

- The main theories, concepts and tools of scientific ecology, biodiversity and evolution
- Methods of statistical analysis
- Modelling
- Molecular tools
- Sampling protocols, experimental techniques in situ or in the lab, field and
lab observations, and long-term monitoring.

**Graduates will be able to:**

- Initiate a search and use the appropriate scientific tools and methods
- Adapt to changing research needs and expertise in this field
- Assist in decisions on biodiversity conservation
- Conduct a literature study to permit relevant analysis of a new fundamental or applied research question
- Develop tools for monitoring and evaluation ecosystems, communities and populations
- Produce reports in scientific English
- Communicate orally: in seminars, conferences, for scientists or for a wider public audience

The **International Master’s degree IMABEE** is mostly designed to prepare graduates for the research activities carried out by researchers, engineers, and R & D managers, but also offers the possibility to pursue other careers such as ecological consulting, governmental institutions, local or regional authorities, etc. Graduates will be able to intervene in the fields of Research and Development, Patents, technological monitoring, advice and expertise in public and/or private research structures and within different national and / or international institutions such as:

- Universities and research institutions
- The European Union
- Ministries of ecology, agriculture, research
- Regional and Local authorities: national parks, natural reserves, etc.
- NGOs
- Engineering, design and consulting
- Industry: Agro-chemistry, Environment

Until now, a high proportion of graduated students (>80%) enter a PhD program in France and outside France, in academic laboratories with or without close links to private sector.
<table>
<thead>
<tr>
<th><strong>Level obtained</strong></th>
<th>Master</th>
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<tbody>
<tr>
<td><strong>Duration</strong></td>
<td>2 years</td>
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<tr>
<td><strong>Tuition fees</strong></td>
<td>National fees*</td>
</tr>
<tr>
<td><strong>Requirements</strong></td>
<td>A good Bachelor degree (honors) or equivalent degree in a related field (ecology or biology)</td>
</tr>
<tr>
<td><strong>English proficiency</strong></td>
<td>IELTS (6.0) / TOEFL (550 paper test) / TOEIC (750)</td>
</tr>
<tr>
<td><strong>Information &amp; contact</strong></td>
<td><a href="mailto:cecile.lelann@univ-rennes.fr">cecile.lelann@univ-rennes.fr</a> <a href="mailto:philippe.vandenkoornhuyse@univ-rennes.fr">philippe.vandenkoornhuyse@univ-rennes.fr</a></td>
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<tr>
<td><strong>Learn more</strong></td>
<td><a href="https://www.imabee.eu/">https://www.imabee.eu/</a></td>
</tr>
</tbody>
</table>

* €243 per year for european students and students from partner universities
* €950 per year for non-european students
The Nanosciences, Nanomaterials and Nanotechnologies Master 2 programme prepares qualified executives specialized in the elaboration, characterization, and modeling of innovative nanomaterials.

Objectives

Graduated students are trained to find correlations between properties of nano-structured materials at the atomic and macroscopic levels, to understand nanomaterial interactions with their specific environments and to implement specific experimental and modeling tools at the nanoscale. The Master 2 students are also trained to integrate nanomaterials in view of their use for specific technological applications. The Master 2 program in Nanosciences, Nanomaterials and Nanotechnologies is a partnership between 4 Universities: University of Rennes, Nantes University, South Brittany University and Occidental Brittany University. An international double diplomation with the Adam Mickiewicz University in Poznan (Poland) is also proposed.

And after?

After graduation, students get the opportunity to pursue their studies with a PhD in an academic or industrial laboratory and work as an academic researcher or research engineer in R&D, in the following fields:

- Information and communication technologies
- Materials for renewable energy sources
- Transports (automotive and aeronautics)
- Health and environment

Links with research

In Rennes, this programme is led by 3 laboratories: IPR (Institut de Physique de Rennes), IETR (Institute of Electronics and Telecommunications of Rennes) and ISCR (Institute of Chemical Sciences of Rennes). The Master’s degree is also a joint program with Universities of Nantes, Lorient and Brest, and benefits from the support of IMN (Institute of materials, Nantes), IRDL (Institut de recherche Dupuy de Lôme, Lorient) and OPTIMAG (Brest).
In the industrial sector, graduated students with the nanosciences and nanotechnologies specialization are aimed to work in companies focusing on technological innovation seeking for more effective materials or technological breakthrough by the integration of nanomaterials. Graduated students will also be able to interact with professionals in the related fields of medical or biological sectors (nanomedicine, nanobiomaterials).

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<tr>
<th>Level obtained</th>
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<tr>
<td><strong>Duration</strong></td>
<td>1 year</td>
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<tr>
<td><strong>Tuition fees</strong></td>
<td>National fees*</td>
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<tr>
<td><strong>Requirements</strong></td>
<td>A first year of Master's degree in Physics, Physical-chemistry or Material science is required</td>
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</tbody>
</table>
| **English proficiency** | TOEFL IBT 80 CBT 230 and PBT 550  
IELTS 6.5 or equivalent |
| **Information & contact** | pascal.turban@univ-rennes.fr |
| **Learn more**   | https://spm.univ-rennes.fr/nanosciences-nanomaterials-and-nanotechnologies-master-2-program |

* €243 per year for european students and students from partner universities  
€950 per year for non-european students
Erasmus Mundus Master MAMASELF+

Master in Materials Science for Energy and using Large Scale Facilities

Multiple Degree with two possible specializations: Fundamental and applied physics, or Chemistry, specialization in Material Science.

Objectives

The objectives of the MaMaSELF Erasmus Mundus program is to form students to fundamentals of materials with special emphasis on materials for energy applications and onto the understanding and use of large scale facilities, like neutrons sources, synchrotron sources or x-ray free electron laser sources, which are the more advanced techniques to materials from ultimate scales to extreme condition, and to cutting-edge science and technology. During the program, students coming from all over the world have several mobility paths, in the consortium institutions (France, Germany, Italy, Poland) or at associated partner institutions out of Europe. Through such mobility and program key-events (integration week, summer-school dedicated to the use of large scale facilities, status meeting), students develop transversal and soft skills, and benefit from social and cultural enrichment, yielding added values for employability.

Links with research

The master program is connected to research groups and institutes of the consortium institutions (Institut de Physique de Rennes, Institut des Sciences Chimiques de Rennes, department of Geoscience Ludwig Maximilians Universität, department of Physics Technische Universität Munchen, Institut Charles Gerhardt Montpellier, department of chemistry University of Torino, department of Physics Adam Mickiewicz University Poznan). International research cooperation also concerns associated partner universities (in Japan, India, Russia, Brazil and USA), and associated large-scale facilities: neutron reactors, synchrotron sources or x-ray free electron lasers (ILL, ESRF, FRM-II, Paul Sherrer Institut, SOLEIL, ALBA, DESY).

Consortium universities also develop research collaboration with private or industrial companies’ research or R&D centers.
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<th><strong>Level obtained</strong></th>
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<tr>
<td><strong>Duration</strong></td>
<td>2 years</td>
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<tr>
<td><strong>Tuition fees</strong></td>
<td>€6,000 per year for non-EU students, €3,000 per year for EU students</td>
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<tr>
<td><strong>Requirements</strong></td>
<td>A bachelor of Science or equivalent degree in Chemistry, Physics or Materials Science &amp; Engineering (or equivalent). Students must go through the joint selection process of the MaMASELF consortium and follow the two-years program is required if applying to the 2nd year of the programme.</td>
</tr>
<tr>
<td><strong>English proficiency</strong></td>
<td>TOEFL 230 cbt, 80 ibt, 550 pbt IELTS 6.5</td>
</tr>
<tr>
<td><strong>Information &amp; contact</strong></td>
<td><a href="mailto:christiane.cloarec@univ-rennes.fr">christiane.cloarec@univ-rennes.fr</a> <a href="mailto:philippe.rabiller@univ-rennes.fr">philippe.rabiller@univ-rennes.fr</a></td>
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<tr>
<td><strong>Learn more</strong></td>
<td><a href="https://www.mamaself.eu/">https://www.mamaself.eu/</a></td>
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</table>
Content of the programme

MaMaSELF+ program is a two-year master program with compulsory mobility periods. After selection, the students attend, in September of their first year of master, the integration week in Rennes.

Then they join one of the consortium universities (University of Rennes, University of Montpellier, Ludwig Maximilians Universität, Technische Universität München, Universita degli Studi di Torino) for the 1st academic year where they cumulate 30 ECTS (lectures, labs and eventually internship depending on the university).

At the beginning of the second year, all students gather in Montpellier and attend an intensive summer-school dedicated to large scale facilities. Students then join a different university, in a different country for their 3rd academic semester (30ECTS), including the 6th consortium partner, Adam Mickiewicz University. The 4th semester is fully dedicated to the master-thesis, with an at least 5 month placement and training in a research lab at one of the consortium partners, associated partners, or large scale facility partners, or industrial partners.

Students are awarded multiple degree at the end of their master, with a joint diploma supplement.
Photonics

The purpose of the specialization of this course is to provide students with advanced scientific and technical training (to the Master 2 level) in the field of photonics, allowing them to understand the main topics of research and R & D.

Objectives

The photonics specialty (M2) is organized into two foundations in the 3rd semester: a scientific foundation, with three study paths, and a practical and vocational foundation (scientific, technological and professional). The student must complete an internship in semester 4. The broad spectrum of training also guarantees that students from M1 will have direct opportunities to enter scientific and technological professions without necessarily continuing to do a research degree. An international “Master’s in Photonics” option is open to English-speaking students.

Links with research

The research laboratories associated with this specialty are: CNRS Institute Foton, CNRS Labsticc, and OPTIMAG. The outside contributors involved are therefore experienced lecturer-researchers from recognized laboratories, working in core-facility environments.

Training through research is based on the combined expertise of these contributors, communicated to the students through a practical scientific initiation TU (introduction to research, scientific conferences), the teaching of skills related to the research profession: use of English, programming, carrying out a project, etc. The training also includes practical aspects: it offers a remarkable opportunity to discover five research platforms (Nano-Rennes, CCLO, PERFOS, PERSYST and PIXEL).

For internships, students are placed in the top laboratories in France (CNRS, CEA, ONERA, Orange Labs, etc.) and abroad (EPFL, Technion, Stanford, MIT, ORC Southampton, etc.). For internships, students are placed in the top laboratories in France (CNRS (CELIA, Ecole Polytechnique, IOTA, LAAS, LPN, etc.), CEA, ONERA, Orange Labs, Alcatel-Lucent, Telecom Paris Tech, etc.) and abroad (EPFL, Technion, Stanford, MIT, ORC Southampton, etc.).
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<thead>
<tr>
<th>Level obtained</th>
<th>Master</th>
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<tbody>
<tr>
<td>Duration</td>
<td>1 year</td>
</tr>
<tr>
<td>Tuition fees</td>
<td>National fees*</td>
</tr>
<tr>
<td>Requirements</td>
<td>As with any Master 2, application is subject to a selection procedure. An admission board composed of representatives from the six partner establishments (ENIB, ENSSAT, IMT Atlantique, INSA-Rennes, University of Rennes, University of West Brittany) decides which candidates will be admitted.</td>
</tr>
<tr>
<td>English proficiency</td>
<td>Proficiency in English must be certified by an international test, B2 level (e.g. TOEFL, TOEIC, IELTS).</td>
</tr>
<tr>
<td>Information &amp; contact</td>
<td><a href="mailto:responsable.masterphotonique@enssat.fr">responsable.masterphotonique@enssat.fr</a></td>
</tr>
<tr>
<td>Learn more</td>
<td><a href="https://www.enssat.fr/en_US/ueb/master-photonique">https://www.enssat.fr/en_US/ueb/master-photonique</a></td>
</tr>
</tbody>
</table>

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And after?

The photonics industry requires high qualifications and a supply of PhD graduates. The photonics specialty meets that need by building on the research units Institute Foton, Institut de Physique de Rennes (IPR), the optical department of Telecom Bretagne, and the Labstic, OPTIMAG. The Master’s degree trains scientists to an advanced level in photonics technology, a key enabling technology. They can enter the workforce at public or private research organizations in the fields of technologies of communication and information, nanotechnology, and imaging for life and environmental science. Graduates can pursue their studies further by doing a PhD.

This training is also particularly suitable for industrial environments. (SME or large industrial groups), i.e., becoming an engineer or manager (Research & Development, instrumentation, etc.)

They can then work in the academic field as researchers or lecturer researchers.
The LUMOMAT Master’s degree offers a solid and innovative training in chemistry in close interaction with scientific research and technological innovation. It is integrated into the high potential field of organic electronics and photonics. In this context, it aims to train high-level engineers and researchers capable of meeting the major current and future challenges of energy, health, the environment and information storage.

Objectives

This training, which is based on a EUR (University Research School supported by the France 2030 Investment Programs), allows students to benefit from a label of excellence offering multiple advantages:

- Access to a large collaborative network of LUMOMAT researchers and teacher-researchers and partner universities in France and abroad;
- Panel of skills and equipment of four laboratories with complementary expertise in the Pays de la Loire and Brittany regions: MOLTECH-Anjou, Institut des Sciences Chimiques de Rennes (ISCR), Chimie Et Interdisciplinarité, Synthèse, Analyse, Modélisation (CEISAM), Institut des Matériaux de Nantes (IMN);
- Funding of attractiveness grants based on university criteria;
- Possibility of work-study (professionalization and apprenticeship contracts in M1 and M2);
- Mobility grants for internships abroad;
- Teaching in English;
- Strong interactions with the industrial world (courses, conferences, company visits, internships).

And after?

Students graduating from the LUMOMAT Chemistry Master’s program can hold an engineering position (synthesis, analysis, instrument management) and eventually hold management positions in companies related to R&D and the management of innovative projects.

The LUMOMAT graduate can also enter public research with an engineering level by competitive examination in large public research organizations (University, CNRS, INRA, INSERM, etc. or prepare a doctoral thesis in France or...
abroad by benefiting from thesis funding (e.g. CIFRE type grants linked to a company, and funding via the call for projects of EUR LUMOMAT and its network).

<table>
<thead>
<tr>
<th>Level obtained</th>
<th>Master</th>
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</thead>
<tbody>
<tr>
<td>Duration</td>
<td>2 years</td>
</tr>
<tr>
<td>Requirements</td>
<td>The M1 is intended for students with a Bachelor’s degree in Chemistry or Physics-Chemistry. Admission to M1 LUMOMAT is based on a portfolio, and possibly an interview for students coming from other courses. The M2 Master is open to students from the M1 LUMOMAT (automatic registration) and other Masters 1 with a major in chemistry or physics/chemistry.</td>
</tr>
<tr>
<td>English proficiency</td>
<td>Ideally CE-CRL B2 : Written and oral comprehension of the English language</td>
</tr>
</tbody>
</table>
| Information & contact | **M1 Nantes:** Mohammed BOUJTIT  
mohammed.boujtit@univ-nantes.fr  
**M2 Angers:** David CANEVET  
david.canevet@univ-angers.fr  
**M1 Rennes:** Muriel HISSLER  
muriel.hissler@univ-rennes.fr |
| Learn more | https://lumomat.fr/en/ |
IT Mathematics and Cryptography

Objectives

Students will gain in-depth understanding of cryptography by learning the necessary theory behind modern cryptography and information theory. Fundamental mathematics for modelisation and digital information processing include several branches of mathematics, such as algebra, geometry, combinatorics and probability. The aim of this specialisation is to teach students how to handle complex mathematics both from a theoretical and algorithmic point of view. The programme’s teaching staff come from academic and research (IRMAR and IRISA labs) and the industrial sectors (DGA-MI - Information Control Defence Agency, Orange Labs, and Amossys, amongst others). In addition to this mathematical knowledge, students also acquire skills in Computer Science through courses shared with students from other specialisations.

Acquired skills:

• Expertise in symmetric, asymmetric and post-quantum cryptography, cryptanalysis and side channel attack
• Proficiency in complex mathematics for use in a range of areas (mobile telephones, wireless networks, remote internet transactions, widespread use of smart cards in securing commercial transactions, biometric identification techniques, remote identification)
•Dual skills in mathematics and IT to enable students to work in information security, IT security and security software development
• Ability to adapt to new problems, attacks and environments.

Links with research

CyberSchool offers unique conditions for pursuing studies with a doctorate through:

• The research project included in the master’s degree
• The teacher-researchers present in the training
• Partnerships with research centres
• 2 internships that can be carried out in research centres

And after?

Increasing digital activity means that cryptography is a rapidly-developing sector. The Master’s programme delivers dual proficiency in mathematics and IT, which is rare in the current job market. Graduates are able to apply for the following
positions:

- R&D Engineer and IT Security Developer
- Research Engineer specialised in IT security
- Security Software Developer
- Research in cryptography or security

<table>
<thead>
<tr>
<th>Level obtained</th>
<th>Master</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration</td>
<td>2 years</td>
</tr>
<tr>
<td>Requirements</td>
<td>Hold/or be in your final year of studies of a Bachelor of Mathematics.</td>
</tr>
<tr>
<td>English proficiency</td>
<td>No proof of English or French language proficiency is required. We expect applicants to have a B2 level minimum French and English.</td>
</tr>
<tr>
<td>Information &amp; contact</td>
<td><a href="mailto:cyberschool@univ-rennes.fr">cyberschool@univ-rennes.fr</a></td>
</tr>
<tr>
<td>Learn more</td>
<td><a href="https://cyberschool.univ-rennes.fr/en/education/masters/study-programme/">https://cyberschool.univ-rennes.fr/en/education/masters/study-programme/</a></td>
</tr>
</tbody>
</table>
Master 2 in Fundamental Mathematics

The 2nd year of this Master pathway in Fundamental Mathematics prepares students to undertake research in mathematics, either pure or applied.

Objectives

The curriculum provides Master students with a large variety of lectures and scientific events, partly renewed every year. It mixes items contributing to the student grades (lectures, seminar, internship) with elements less formal but fostering students insertion into research activities (advanced lectures, master classes,...). The program takes place in Rennes but receives contributions from all institutions and universities of Rennes and Brest. It also benefits from the support of the Henri Lebesgue Center, promoting excellence of research in mathematics in our regional area.

Although lectures are organized by themes, students may mix lectures (partly renewed each year) from different themes (only four are required at first semester, and two only during second semester ; students may attend more lectures during both semesters ). Along the first semester, students read a research paper that they present to other students during a series of student talks, called «seminar». The year ends with an internship, at least two-months long, in a mathematical research department. During the internship, students prepare a Master thesis.

And after?

All professions in fundamental or applied research with mathematics as a core.
<table>
<thead>
<tr>
<th><strong>Level obtained</strong></th>
<th>Master</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Duration</strong></td>
<td>1 year</td>
</tr>
<tr>
<td><strong>Tuition fees</strong></td>
<td>National fees*</td>
</tr>
<tr>
<td><strong>Requirements</strong></td>
<td>Students must have obtained the Master 1 level in Mathematics, preferably with a good average.</td>
</tr>
<tr>
<td><strong>English proficiency</strong></td>
<td>B1 level recommended</td>
</tr>
<tr>
<td><strong>Information &amp; contact</strong></td>
<td><a href="mailto:tobias.schmidt@univ-rennes.fr">tobias.schmidt@univ-rennes.fr</a></td>
</tr>
<tr>
<td><strong>Learn more</strong></td>
<td><a href="https://math.univ-rennes.fr/master-2-fundamental-mathematics">https://math.univ-rennes.fr/master-2-fundamental-mathematics</a></td>
</tr>
</tbody>
</table>

* €243 per year for european students and students from partner universities
  €950 per year for non-european students
Cloud & Network Infrastructures

This Master program prepares future professionals and researchers with an advanced scientific and technological education together with a unique hands-on experience in technological innovation and entrepreneurship.

Objectives

The domain of Cloud & Network Infrastructures includes many hot topics such as big data analytics, scalable mobile applications and services, online social networks and web services. These technologies are now present in a broad range of devices and systems ranging from smartphones to data centers. New scientific and technological developments in this area create considerable industry demand for engineers who can design software systems utilizing these developments. This Master program provides students with state-of-the-art knowledge of the field, develops their practical skills and enhances their ability to adapt to the future developments of science and technology.

The program also prepares students to spot business opportunities for new high-tech products and successfully bring them to the market. A courses on the fundamentals of Innovation and Entrepreneurship, the Business Development Labs Course and a summer school program are vital parts of this module. As innovation centre, the EIT Digital Co-location Centre organizes frequent meetings with entrepreneurs and industry professionnals and also provide several modules in which our students have priority to apply: a summer school, a pre-incubator programme (INCUBE), and one-week seminars with specific topics all over the year.

And after?

After obtaining knowledge and expertise in cloud and network infrastructures, students will be able to join the ICT ecosystem in the Rennes Cluster and a great number of companies focusing on cloud and network services. The experience of the international programs (i.e. Data
and FinTech) has shown that students completing EIT Digital Masters are able to access higher level positions than those trained in a classical master. EIT Digital’ students are highly valued and recognized by companies, which are also involved in the continuous improvement of the program. PhD opportunities, particularly in CIFRE contracts in France but also abroad, are also provided. The scholarship for the EIT Digital Doctoral School is a great opportunity for Master students!

<table>
<thead>
<tr>
<th>Level obtained</th>
<th>Master</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration</td>
<td>2 years</td>
</tr>
<tr>
<td>Tuition fees</td>
<td>International track: see on website Local track: National fees*</td>
</tr>
<tr>
<td>Requirements</td>
<td>A Bachelor degree (180 ECTS equivalent) in computer science, computer engineering or information systems. Students should have basic competence in mathematics, theoretical foundations of computer science, algorithms and data structures, software engineering and database systems, computer architectures, computer networks and operating systems</td>
</tr>
<tr>
<td>English proficiency</td>
<td>IELTS: an overall band score of at least 6.5, with no section lower than 6. TOEFL iBT: a total score of at least 92 (with writing section 22 or more) TOEIC: score 785 or above</td>
</tr>
<tr>
<td>Information &amp; contact</td>
<td><a href="mailto:cedric.tedeschi@irisa.fr">cedric.tedeschi@irisa.fr</a> <a href="mailto:eit-istic@univ-rennes.fr">eit-istic@univ-rennes.fr</a></td>
</tr>
<tr>
<td>Learn more</td>
<td><a href="http://cni.istic.univ-rennes.fr/">http://cni.istic.univ-rennes.fr/</a></td>
</tr>
</tbody>
</table>

*€243 per year for european students and students from partner universities
€950 per year for non-european students
Cybersecurity

This Master program prepares future professionals and researchers with an advanced scientific and technological education together with a unique hands-on experience in technological innovation and entrepreneurship.

Objectives

Cybersecurity is the security in computer systems, and as such its domain encompasses not only almost all the devices in our personal environment: computers, smartphones, tablets, smart cards, key fobs, but also infrastructures such as power grids, water supply systems, etc. Therefore cybersecurity extends far beyond the Internet. The domain of Cybersecurity includes many hot topics such as Network architecture and administration, Cryptographic architectures and protocols, Methodology for the design of secure architectures, Cyberattacks and cyberdefense, Cybersecurity for the Internet of things, Software engineering techniques for cybersecurity. After completion of the program, students will be able to design, code, validate and manage new secure architectures or assess and correct existing architectures to protect them from cyberthreats. The program also prepares students to spot business opportunities for new high-tech products and successfully bring them to the market. Courses on the fundamentals of Innovation and Entrepreneurship, the Business Development Labs Course and a summer school program are vital parts of this module.

And after?

Graduates from the Cyber Security (CSE) master’s programme will qualify for jobs in international and local organisations in both technical and business roles.

Typical titles are:

- Cyber Security consultant
- Security Analyst
- Information Security Architect
- Cyber Security Specialist
- Computer forensics expert
- Privacy-by-design consultant
- Security Auditor
<table>
<thead>
<tr>
<th>Level obtained</th>
<th>Master</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration</td>
<td>2 years</td>
</tr>
<tr>
<td>Tuition fees</td>
<td>See on website</td>
</tr>
<tr>
<td>Requirements</td>
<td>A Bachelor degree (180 ECTS equivalent) in computer science, information systems, mathematics, statistics, electrical engineering / electronics. Students should have knowledge of the fundamentals of computing and information science and technologies</td>
</tr>
<tr>
<td>English proficiency</td>
<td>IELTS: an overall band score of at least 6.5, with no section lower than 6. TOEFL iBT: a total score of at least 92 (with writing section 22 or more). TOEIC: score 785 or above.</td>
</tr>
<tr>
<td>Information &amp; contact</td>
<td><a href="mailto:mohamed.sabt@univ-rennes.fr">mohamed.sabt@univ-rennes.fr</a> <a href="mailto:eit-istic@univ-rennes.fr">eit-istic@univ-rennes.fr</a></td>
</tr>
</tbody>
</table>
Research in Computer Science

The Research in Computer Science (SIF) master offers a wide choice of courses from various active research domains in Computer Science.

Objectives

The SIF master is administered by a consortium of the main computer science universities and graduate schools in Brittany: University of Rennes, University of Southern Brittany (UBS), ENS Rennes, National Institute of Applied Science, Rennes (INSA) and CentraleSupélec. This consortium of institutions, with the support of renowned laboratories, offers students training at the cutting edge of computer science research. The program is supported by an agreement with Inria. The methodological part of the program comprises a bibliographic study, training in oral expression techniques which will be applied through participation in the colloquium of the master, a series of lectures and seminars, and work experience in a research team (internship).

Hosting laboratories

Each year, several internships are proposed by the teams of the host laboratories: IRISA (Institut de recherche en informatique et systèmes aléatoires) located in Rennes, INRIA Rennes Bretagne Atlantique regional research center, Lab-STICC (Laboratoire en sciences et techniques de l’information de la communication et de la connaissance).
<table>
<thead>
<tr>
<th>Level obtained</th>
<th>Master</th>
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<tbody>
<tr>
<td>Duration</td>
<td>2 years</td>
</tr>
<tr>
<td>Tuition fees</td>
<td>National fees*</td>
</tr>
<tr>
<td>Requirements</td>
<td>Applicants to the Research in Computer Science Master must have completed the first year of a Master's in Computer Science, or an equivalent Computer Science qualification</td>
</tr>
<tr>
<td>English proficiency</td>
<td>IELTS: an overall band score of at least 6.5, with no section lower than 6. TOEFL iBT: a total score of at least 92 (with writing section 22 or more). TOEIC: score 785 or above.</td>
</tr>
<tr>
<td>Information &amp; contact</td>
<td><a href="mailto:maud.marchal@univ-rennes.fr">maud.marchal@univ-rennes.fr</a> <a href="mailto:david.gross-amblard@univ-rennes.fr">david.gross-amblard@univ-rennes.fr</a></td>
</tr>
<tr>
<td>Learn more</td>
<td><a href="http://master.irisa.fr/">http://master.irisa.fr/</a></td>
</tr>
</tbody>
</table>

*€243 per year for European students and students from partner universities
€950 per year for non-European students
This Master program prepares future professionals and researchers to develop in-depth theoretical and technical skills in courses such as Data Management, Machine Learning, and Symbolic Data Mining.

Objectives

It provides a Minor in Innovation and Entrepreneurship oriented to FinTech services and technologies (i.e. I&E Basics, I&E Electives, Business Development Labs; and Application Project in Digital Finance) and offers specialized training in Cloud and Bigdata Management and Datawarehouses. The program also prepares students to spot business opportunities for new high-tech products and successfully bring them to the market. As innovation centre, the EIT Innovation Centre organizes frequent meetings with entrepreneurs and industry professionals.

Links with research

The Fintech specialisation is backed by the Faculty of Economics of the University of Rennes and IRISA, one of the biggest computer science research labs in France with 800 people. Most teachers in our master are researchers in one of those groups, ensuring quickly evolving course contents.

Structure

The Fintech master program is proposed in two different tracks: EIT Digital and University of Rennes. In the EIT Digital Track, students will spend their two study years in two different European universities. They will receive a double master’s degree as well as an EIT Digital certificate, documenting the specific EIT Digital learning outcomes. The universities participating in this program are University of Rennes, ELTE, KTH, Nice UCA, POLIMI, Trento and UPM. In the University of Rennes track, students will follow exactly the same set of courses as students from the EIT Digital master school, except that they will spend their two study years in Rennes. They will receive a master’s degree in Fintech from the University of Rennes.

And after?

Students will be able to contribute to the digital transformation of the
extraordinary ecosystem of entrepreneurs, companies, students and alumni across the world. EIT Digital’ students are highly valued and recognized by companies, which are also involved in the continuous improvement of the program. PhD opportunities, particularly in CIFRE contracts in France but also abroad, are also provided. The scholarship for the EIT Digital Doctoral School is a great opportunity for Master students!

<table>
<thead>
<tr>
<th>Level obtained</th>
<th>Master</th>
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<tr>
<td>Duration</td>
<td>2 years</td>
</tr>
<tr>
<td>Tuition fees</td>
<td>See on website</td>
</tr>
<tr>
<td>Requirements</td>
<td>Applicants must hold a bachelor’s degree 3 in Computer Science or equivalent. Students from economic can apply, provided that they have enough computer science knowledge. A personal project regarding an innovative technological idea that the candidate would like to develop in the future has to be submitted.</td>
</tr>
<tr>
<td>English proficiency</td>
<td>ELTS: an overall band score of at least 6.5, with no section lower than 6. TOEFL iBT: a total score of at least 92 (with writing section 22 or more) TOEIC: score 785 or above</td>
</tr>
<tr>
<td>Information &amp; contact</td>
<td><a href="mailto:alvaro.pina-stranger@univ-rennes.fr">alvaro.pina-stranger@univ-rennes.fr</a> <a href="mailto:eit-istic@univ-rennes.fr">eit-istic@univ-rennes.fr</a></td>
</tr>
</tbody>
</table>
Data science

The students will learn to analyse business intelligence problems, and to make the appropriate choices among the numerous existing methods and tools. They will also learn to conduct the data science workflows, and to analyse the results in cooperation with domain experts.

Objectives

At University of Rennes, we have already built for decades a strong enterprise culture where students acquire competencies for communicating with non-IT domain experts, especially in business. Those competencies are highly valued and recognized by companies, which are also involved in the continuous improvement committee of the existing cursus on which this master is founded.

Links with research

The Data Science specialisation is backed by IRISA, one of the biggest computer science research labs in France with 800 people. Most teachers in the master are researchers in one of those groups, ensuring quickly evolving course contents.

Structure

The Data Science master program is proposed in two different tracks: EIT Digital and University of Rennes. In the EIT Digital Track, students will spend their two study years in two different European universities. They will receive a double master’s degree as well as an EIT Digital certificate, documenting the specific EIT Digital learning outcomes. The universities participating in this program can be found here. In the University of Rennes track, students will follow exactly the same set of courses as students from the EIT Digital master school, except that they will spend their two study years in Rennes. They will receive a master’s degree in Data Science from the University of Rennes.

And after?

After obtaining knowledge and expertise in data science, students will be able to join the ICT ecosystem in the Rennes Cluster and a great number of companies focusing on Data Analytics.
services. The experience of the international programmes (i.e. CNI and FinTech) has shown that students completing EIT Digital Masters are able to access higher level positions than those trained in a classical master. EIT Digital’ students are highly valued and recognized by companies, which are also involved in the continuous improvement of the program. PhD opportunities, particularly in CIFRE contracts in France but also abroad, are also provided. The scholarship for the EIT Digital Doctoral School is a great opportunity for Master students!

<table>
<thead>
<tr>
<th><strong>Level obtained</strong></th>
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<tr>
<td><strong>Duration</strong></td>
<td>2 years</td>
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<tr>
<td><strong>Tuition fees</strong></td>
<td>See on website</td>
</tr>
<tr>
<td><strong>Requirements</strong></td>
<td>Applicants must hold a bachelor’s degree in Computer Science or equivalent. A personal project regarding an innovative technological idea that the candidate would like to develop in the future has to be submitted.</td>
</tr>
<tr>
<td><strong>English proficiency</strong></td>
<td>IELTS: an overall band score of at least 6.5, with no section lower than 6. TOEFL iBT: a total score of at least 92 (with writing section 22 or more) TOEIC: score 785 or above</td>
</tr>
<tr>
<td><strong>Information &amp; contact</strong></td>
<td><a href="mailto:sebastien.ferre@univ-rennes.fr">sebastien.ferre@univ-rennes.fr</a> <a href="mailto:eit-istic@univ-rennes.fr">eit-istic@univ-rennes.fr</a></td>
</tr>
</tbody>
</table>
Degrees in Business, Economics and Management

Finance & Economics
Finance, Advanced Studies and Research in Finance 43
Accounting and Auditing 45
Public Policies 47
Business and Applied Economics (Bachelor) 49

Human Resources and Management
International Human Resources Project Management 51
International Management 53

International Graduate Programme
Applied Economics for Business, Finance and Markets 55
Finance, Advanced studies and Research in Finance

The Advanced Studies and Research in Finance program is a one-year Master 2 programme whose main objectives are to prepare students for doctorate level studies as well as for the CFA (Chartered Financial Analyst credential) exam, and to provide them with a solid background and training to pursue careers in the financial, banking, insurance and corporate sectors as research analysts, financial consultants or executives.

Objectives

Students acquire up-to-date knowledge and become experts in their field of specialization. The program allows students to choose elective topics, depending on their academic project (i.e. research or CFA preparation). The Master’s thesis is an essential part of the research project. Great emphasis is placed on the development of critical analysis and innovative skills. All students will have the possibility to attend preparation classes for the CFA exam. The cost of this certification is covered by the IGR-IAE.

Links with research

The program and the supervision of students whose focus is on research are supported by the Research Center for Economics and Management (CREM in French), which is the only research center dedicated to Economics and Management Science accredited by the National Center for Scientific Research (CNRS) in western France.

And after?

Graduates from the master’s degree in Finance can become Researchers and consultants in finance (market or corporate finance), risk managers, portfolio and asset managers, financial managers in banks or companies, employees in IT services or consulting firms, researchers or academic researchers (this outlet involves further study in the doctoral program), managers and financial, executives in finance departments, investment banks and insurance companies.
<table>
<thead>
<tr>
<th><strong>Level obtained</strong></th>
<th>Master</th>
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</thead>
<tbody>
<tr>
<td><strong>Duration</strong></td>
<td>1 year</td>
</tr>
<tr>
<td><strong>Tuition fees</strong></td>
<td>See on website</td>
</tr>
<tr>
<td><strong>Requirements</strong></td>
<td>In order to apply, students should hold 4-year Bachelor’s, or a Master 1 or Master 2 or a 4 or 5-year business school diploma in the field of finance. Holders of a 3-year Bachelor’s degree are not eligible to apply</td>
</tr>
<tr>
<td><strong>English proficiency</strong></td>
<td>The language test in English is not mandatory if the candidate is a Native English speaker or studied in English at University level. Non-English native speakers must submit official international scores of one of the following tests: IELTS: overall band score of 6 or TOEFL: 550 paper test (100 IBT score) TOEIC: 750 or over</td>
</tr>
<tr>
<td><strong>Information &amp; contact</strong></td>
<td><a href="mailto:nadia.saghi@univ-rennes.fr">nadia.saghi@univ-rennes.fr</a> <a href="mailto:igr.international-degree@univ-rennes.fr">igr.international-degree@univ-rennes.fr</a></td>
</tr>
</tbody>
</table>
Accounting & Auditing

The Master’s degree in Accounting and Auditing (AAA) of the University of Rennes’s Graduate School of Management (IGR-IAE Rennes) is aimed at English-speaking students with a Bachelor’s degree in economics or management.

Objectives

The development of international audit practices and international financial reporting standards contribute to the importance of an international focus in accounting and audit education. The specificity of this program is to combine a comprehensive academic program, in international accounting and audit, with intensive French language courses (250 hours). This allows even total beginners in French to evolve professionally and to learn more about French culture and management.

And after?

The master of Accounting and Auditing (AAA) is designed to train foreign students interested in an international career in accounting, auditing, management control and corporate finance in an English and multicultural context – in France or/and abroad. Here are a few examples of jobs aimed by the master degree and sought for by companies:

- Financial auditor
- Certified accountant
- Manager consolidation
- Chief Financial Officer
- Data controller
- Head of Internal audit
- Controlling & Performance Manager
- Accounting Manager
<table>
<thead>
<tr>
<th>Level obtained</th>
<th>Master</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration</td>
<td>18 months</td>
</tr>
<tr>
<td>Tuition fees</td>
<td>€9,500</td>
</tr>
<tr>
<td>Requirements</td>
<td>In order to apply, students should hold at least a Bachelor’s Degree business school diploma</td>
</tr>
<tr>
<td>English proficiency</td>
<td>The language test in English is not mandatory if the candidate is a Native English speaker or studied in English at University level. Non-English native speakers must submit official international scores of one of the following tests: IELTS: overall band score of 6 or TOEFL: 550 paper test (100 IBT score) TOEIC: 750 or over</td>
</tr>
<tr>
<td>Information &amp; contact</td>
<td><a href="mailto:lionel.touchais@univ-rennes.fr">lionel.touchais@univ-rennes.fr</a> <a href="mailto:igr.international-degree@univ-rennes.fr">igr.international-degree@univ-rennes.fr</a></td>
</tr>
</tbody>
</table>
Public Policies

Offered by the Faculty of Economics of the University of Rennes, this second year master level programme teaches students the various activities of governments – expenditure policies, tax instruments, macroeconomic and regulatory policies – in an evolutionary, comparative, international perspective.

Objectives

The IMPF offers double-degrees with 6 partner universities (Friburg, Switzerland, Tampere, Finland, Piemonte Orientale and Turin, Italy, Masaryk, Czech Republic and Mino, Portugal). The programme also welcomes students from several Asian partner universities and institutions as well as individual applications from all over the world.

During their training, IMPP students must complete either an Internship or a Master thesis:

- Internship: The internship should last 4 months, from 1 April - 30 September
- Master thesis: students choose the topic with the help of professors before the end of December

And after?

Graduates from the IMPP will be active and dynamic players in processes of management and reform of public sector activities and agencies, in a plurality of institutional contexts and countries. They can be typically employed in:

- International organisations (EU, IMF, OECD, etc.)
- National administrations at the central and local levels
- Banks and financial institutions, especially in the assessment of country specific risks and policy evaluation
- Nonprofit organizations and think-tanks.
<table>
<thead>
<tr>
<th><strong>Level obtained</strong></th>
<th>Master</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Duration</strong></td>
<td>1 year</td>
</tr>
</tbody>
</table>
| **Tuition fees**   | European students and students from partner universities: €250  
Non-European students: €3,770 per year |
| **Requirements**   | A 4-year degree in Finance |
| **English proficiency** | Non-English native speakers must submit official international scores of one of the major tests, certifying a B2 level in English.  
IELTS: 6  
TOEIC: greater than 750  
TOEFL: greater than 80 |
| **Information & contact** | fabio.padovano@univ-rennes.fr  
david.masclet@univ-rennes.fr |
| **Learn more**     | https://eco.univ-rennes.fr/en/international-master-public-policies |
Bachelor Business and Applied Economics

The Bachelor Program in Business and Applied Economics is a two-semester program. It is entirely taught in English in small group classes. The lectures cover a broad range of topics in Economics: microeconomics, macroeconomics, applied, public, international and business economics... Students will also get the opportunity to learn and use the Bloomberg database and take the Bloomberg certificate (BMC).

Objectives

Courses are taught by senior lecturers from the Faculty of Economics. To enhance your immersion in France, students will also be offered the opportunity to study French as a foreign language. Depending on your proficiency, you may consider taking different courses: beginner, elementary, intermediate or advanced courses.

Students need to earn 60 ECTS (European Credit Transfer System credits. Study plans are very flexible. The only condition to validate a Bachelor in Business and Applied Economics is that you need to earn at least 75% of total credits (40 credits) with economic courses. Remaining credits can mix French courses, English courses, sport or other economic courses.

And after?

To help students making the most of their studies abroad, the European Commission has developed a European Credit Transfer System, (ECTS), which provides a way of measuring and transferring learning achievements from one university to another. One year of study in the European Union corresponds to 60 ECTS.

With this program, you earn a Bachelor degree in one academic year. This will allow you to carry on a Master’s degree in France or in any European country.
<table>
<thead>
<tr>
<th><strong>Level obtained</strong></th>
<th>Bachelor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Duration</strong></td>
<td>1 year</td>
</tr>
<tr>
<td><strong>Tuition fees</strong></td>
<td>€4,500</td>
</tr>
<tr>
<td><strong>Requirements</strong></td>
<td>At least 2 years of undergraduate studies in Economics or General Management. Admission is based on the academic records of the student’s last three years of study</td>
</tr>
<tr>
<td><strong>English proficiency</strong></td>
<td>Non-English native speakers must submit official international scores of one of the major tests, certifying a B2 level in English. IELTS: 6  TOEIC: greater than 750  TOEFL: greater than 80</td>
</tr>
<tr>
<td><strong>Information &amp; contact</strong></td>
<td><a href="mailto:eco-bachelor@univ-rennes.fr">eco-bachelor@univ-rennes.fr</a></td>
</tr>
</tbody>
</table>
International Human Resources Project Management

Based on active learning, the training combines a comprehensive academic program in international human resources management (HRM) with intensive French language courses.

Objectives

It develops a wide range of relevant skills in social innovation and in HRM. Students take part in HRM project management in an international context (e.g. talent or mobility management) and on current issues (e.g. digital management, workplace quality of life and multicultural team management). These projects are supervised by professors, international speakers and professionals.

Key Managerial Skills Developed:

• Understanding the international and multicultural management context;
• Acquiring specific knowledge essential to HRM in an international context;
• Leading project in change management, team-work, psychological well-being, HRM project management;
• Extending one’s international network, and working with people from different nationalities and cultures;
• Learning how to develop one’s knowledge and skill set as a future professional;
• Professionalization: program in collaboration with IHRM professionals, internships of four to six months;
• Classes taught by French and international researchers and practitioners, all experts in social innovations, project and human resources management;
• Courses designed to develop students’ learning and project abilities: students learn how to acquire further knowledge as future professionals;
• Small group dynamics: case studies, role-play, supervised projects and management problem solving.

And after?

The programme is designed for students who wish to pursue an international HRM career in a global
context and with a digital edge. The Master aims to train managers to develop human resource projects in a multicultural context - in France and/or abroad - for small and medium-sized import/ export companies or major international groups.

<table>
<thead>
<tr>
<th>Level obtained</th>
<th>Master</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration</td>
<td>18 months</td>
</tr>
<tr>
<td>Tuition fees</td>
<td>€9,500</td>
</tr>
<tr>
<td>Requirements</td>
<td>In order to apply, students should hold at least a Bachelor’s Degree business school diploma</td>
</tr>
<tr>
<td>English proficiency</td>
<td>The language test in English is not mandatory if the candidate is a Native English speaker or studied in English at University level. Non-English native speakers must submit official international scores of one of the following tests: IELTS: overall band score of 6 or TOEFL: 550 paper test (100 IBT score) TOEIC: 750 or over</td>
</tr>
<tr>
<td>Information &amp; contact</td>
<td><a href="mailto:caroline.ruiller@univ-rennes.fr">caroline.ruiller@univ-rennes.fr</a> <a href="mailto:igr.international-degree@univ-rennes.fr">igr.international-degree@univ-rennes.fr</a></td>
</tr>
</tbody>
</table>
Business Administration in International Management

The Master of Business Administration in International Management is specifically aimed at English-speaking students with a Bachelor’s degree in economics or management, as well as graduates with a background other than management (engineering, chemistry, health, humanities and social science).

Objectives

Focused on international management issues, the program will help students understand the main steps in the globalization of companies, with a particular emphasis on the interdependence of strategic, cultural, commercial, legal, financial and managerial issues.

Programme highlights

The specificity of the program is to combine intensive French language courses with a comprehensive academic program in International Management. As the class size is limited, the courses are very interactive and all faculty members are accessible to students. This customized program equips students with the essential skills they need to pursue a career as an International Business Executive. Whether you want to improve your career opportunities in your area of expertise or make a career transition, we offer specific support throughout the program that will help you achieve your goals. As an International Management student at IGR-IAE Rennes, you will expand your cultural understanding, develop your professional skills, strengthen your French language skills, collaborate with students from around the world, and gain real-world experience.

And after?

The Master of Business Administration in International Management targets students without prior background in management. Therefore the positions held by our graduates are extremely diversified (business developer, international project manager, international marketing, international logistics, etc).
<table>
<thead>
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</tr>
<tr>
<td><strong>Information &amp; contact</strong></td>
<td><a href="mailto:laura.sabbado-da-rosa@univ-rennes.fr">laura.sabbado-da-rosa@univ-rennes.fr</a> <a href="mailto:igr.international-degree@univ-rennes.fr">igr.international-degree@univ-rennes.fr</a></td>
</tr>
<tr>
<td><strong>Learn more</strong></td>
<td><a href="https://www.igr.univ-rennes.fr/fr/formation/mba-international-management/">https://www.igr.univ-rennes.fr/fr/formation/mba-international-management/</a></td>
</tr>
</tbody>
</table>
Applied Economics for Business, Finance and Markets

Because world and local markets are changing rapidly, with higher levels of risk and uncertainty, a sound understanding of the fundamental underlying economic mechanisms is a necessary prerequisite to better respond to those changes and to deal more efficiently with turbulent markets. New demands and expectations are urging us to rethink in depth the individual and collective strategies of firms, consumers and governments. Economists and managers thus really need a modern and clear vision of the new market conditions in order to face these new challenges.

Objectives

The main objective of this program is to help you acquire an in-depth and sound knowledge of the main economic processes at work, the challenges at stake as well as the ongoing strategies related to those. You will acquire a thorough understanding of the different layers of the field, including at the company, market, national and international relationships levels.

Moreover, combining applied lectures with strong scientific understanding will give you an accurate and up-to-date view of economic realities as well as critical thinking, so as to help you grow into a skilled but also modern professional.

You will also get the opportunity to learn and use the Bloomberg database and take the Bloomberg certificate (BMC).
<table>
<thead>
<tr>
<th><strong>Level obtained</strong></th>
<th>Master</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Duration</strong></td>
<td>1 year</td>
</tr>
<tr>
<td><strong>Tuition fees</strong></td>
<td>€4,500 the full year</td>
</tr>
<tr>
<td><strong>Requirements</strong></td>
<td>Proficiency in Economics, General Management and Quantitative skills</td>
</tr>
<tr>
<td><strong>English proficiency</strong></td>
<td>Non-English native speakers must submit official international scores of one of the major tests, certifying a B2 level in English. IELTS: 6 TOEIC: greater than 750 TOEFL: greater than 80</td>
</tr>
<tr>
<td><strong>Information &amp; contact</strong></td>
<td><a href="mailto:eco-international.degree@univ-rennes.fr">eco-international.degree@univ-rennes.fr</a></td>
</tr>
<tr>
<td><strong>Learn more</strong></td>
<td><a href="https://eco.univ-rennes.fr/en/igp">https://eco.univ-rennes.fr/en/igp</a></td>
</tr>
</tbody>
</table>
How to apply?

If you’re from the EU
The admission procedure in order to apply to a Bachelor (except 1st year) or Master program is the same as for French students. You must contact the person in charge of the study programme or the International Relations Office of the programme department that will give you the informations on how to proceed. You can also write to dari-entrant@univ-rennes.fr

If you’re not from the EU and:
1. You reside in one of the countries concerned by the Etudes en France:
The application is made online, on the Etudes en France website.

Algeria, Argentina, Benin, Brazil, Burkina Faso, Burundi, Cameroon, Chad, Chile, China, Colombia, Comoros, Congo, Côte d’Ivoire, Democratic Republic of the Congo, Djibouti, Egypt, Gabon, Guinea, Haiti, India, Indonesia, Iran, Japan, Kuwait, Lebanon, Madagascar, Mali, Mauritania, Mauritius, Mexico, Morocco, Niger, Nigeria, Peru, Russia, Saudi Arabia, Senegal, Singapore, South Korea, Taiwan, Togo, Tunisia, Turkey, United States, Vietnam

2. You are an international student and do not reside in one of the countries in the list above:
Application has to be made directly on on our Application portals. There are two different portals to apply:
If you want to apply to the following masters:

- Master in International Human Resources Project Management
- Master of Business Administration and International Management
- Master in Finance, Advanced Studies and Research in Finance
- Master IT Mathematics and Cryptography
- Master of Cybersecurity
- Bachelor in Business & Applied Economics
- International Master in Public Finance

Go to this portal: **APPLYING**

For all the other ones:

Go to this portal: **CANDIDATURES**

If your application is accepted, you will receive a document confirming your admission. From that point on, you will be able to undertake the procedures with the French Consulate in your country of residence to obtain a visa. Request a student visa if your admission involves a Bachelor’s or Master’s level programme; request a talent passport visa if it involves enrolment in a Doctorate programme.

### Information about admission procedures and visas

You can find out more information about applying to a study program in France on [Campus France website](#), or on the [CMI (Centre for International Mobility) website](#), our helpdesk dedicated to international students in Rennes.
Looking forward to seeing you!

Follow us on social media

www.univ-rennes.fr/en
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RennesUniv

RennesUniv_EN
@RennesUniv
dari@listes.univ-rennes.fr