# Physics (MSc)

## Specialisations

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Discover the world at Leiden University
The Physics master’s programme offers you a research intensive tailor-made study path on current topics in experimental and theoretical physics at an institute of international renown.

What does this master’s programme entail?

The Physics master’s programme is intimately related to the scientific research carried out at the Leiden Institute of Physics. You will spend approximately 50% of your programme on research, as a member of one of our top-level international research groups. We offer five research specialisations, with emphasis on either experimental or theoretical physics, which train you as an independent researcher. We also offer three specialisations that put Physics in broader societal contexts and train you for careers where a Physics background is an asset. Each of these specialisations aims at providing a combination of research independence and content proficiency that fully prepares you for a successful professional development for your professional development.

Learn more about the Physics master’s programme.

Why study Physics at Leiden University?

- The programme offers a wide choice of individual study paths that take into account individual needs and interests. You can either build a purely academic profile, or you may combine physics research with education, business studies or science communication.
- You will carry out at least one research project with one of the research groups of the Leiden Institute of Physics. Research at the department is at the forefront of fundamental modern Physics at an internationally competitive level.
- At the Leiden Institute of Physics you experience an open, inclusive, and collegial atmosphere. Your weekly routine includes attending colloquia of international speakers, partaking in symposia and participating in lively scientific discussions.
Find more reasons to choose Physics at Leiden University.

**Physics: the right master’s programme for you?**

Are you looking into furthering your education in fundamental questions in physics? Then our Physics master’s programme is the right choice. Whether you are interested in experimental or theoretical research, or cosmology, we offer it all. You will be trained for a career in research within or outside academia. You can also choose for a more practical-oriented specialisation where you combine one year of Physics research with one year of training in business, communication or education.

Read more about the entry requirements for Physics.

**Why Leiden University?**

World-class research is integral part of the master’s education. You obtain a Physics degree from an institute with an international reputation. Research in this programme is fundamental and curiosity-driven.

**Education at a world class research institute**

The Leiden Institute of Physics (LION) is one of the oldest physics institutes in the Netherlands. Renowned physicist like Lorentz, Kamerlingh-Onnes, Zeeman and van der Waals obtained their breakthrough results while working in Leiden. For over a century, many eminent scientists have been and are associated to LION as staff members, alumni and guests. Building on this tradition, we perform physics research and provide physics education at the highest level. Therefore you can expect excellent education and cutting edge research in Physics during your master’s programme.

**Broad spectrum of research topics**

Research at LION covers a broad spectrum of subjects, ranging from cosmology to the mechanics of DNA, from the physics of jamming in granular materials to quantum nanoscience, from protein folding to super lubricity. All topics are covered by joined efforts in theory and experiment. Further, the development of novel world-class instrumentation is
signature for LION’s experimental research effort. During your research project you will participate in one of our research groups. Many master’s students obtain their degree with a publication in an international refereed journal.

**Experimental and Theoretical Physics**

Experimental physics research covers two domains: Biological and Soft Matter, and Quantum Matter and Optics. The Instituut-Lorentz is the home of theoretic physics that tackles topics as diverse as condensed matter, biophysics, string theory, and cosmology. It is our aim to have parallel theoretical and experimental activities in those research areas that we cover. There is close collaboration of theorists with experimentalists on many of the topics.

**Faculty of Science**

The Faculty of Science is a first-class research faculty with an excellent position in the basic disciplines of science. The current research and education programmes span the entire spectrum of science ranging from Mathematics and Statistical Science, Computer Science and Data Science, Astrophysics, Physics, Chemistry and Bio-Pharmaceutical Sciences to Biology and Environmental Sciences. Our science community is driven by their curiosity and desire to increase basic knowledge, for science and to contribute to the great societal challenges of today and tomorrow. Core values are scientific impact, technological innovation and relevance to society.

**Study at a world-class university**

Leiden University is the oldest university in the Netherlands and enjoys an excellent worldwide reputation built up over more than four centuries. Since 1575 we’ve provided sound personal education for hundreds of thousands of students. We’ll do our utmost to give you the best possible support. And if you can and want to do more, we’ll challenge you every step of the way. For many years, we’ve been among the leaders in Dutch university rankings and we are currently to be found in a variety of top international rankings too.

More reasons to choose Leiden University

**About the programme**
The MSc programme Physics offers 5 research-oriented specialisations where you can focus on Theoretical Physics, Quantum Matter and Optics, Biological and Soft Matter, Cosmology or Casimir pre-PhD. You can also combine Physics with education, management or science communication.

**Programme overview**

The MSc Physics programme offers eight specialisations:

- **Theoretical Physics:** you follow a two-year programme consisting of 3/5ths of coursework and one 9-month long project that prepares you for scientific research towards a PhD in a broad range of topics in theoretical Physics.
- **Quantum Matter and Optics:** you follow a programme in experimental physics consisting of 50% course work and 2 research projects in Condensed Matter problems.
- **Biological and Soft Matter Physics:** you follow a programme in experimental physics consisting of 50% coursework and 2 research projects in Biophysics or Soft Matter.
- **Cosmology:** You follow a joined programme with the department of Astronomy where you cover all aspects of modern astrophysics and carry out research projects tackling observation, interpretation, simulation and theory.
- **Casimir pre-PhD:** After entry to one of the Experimental or Theoretical Physics specialisations, you can be selected to the program that gives you the opportunity to raise the funds for a PhD on a topic of choice within the Casimir Research School (a collaboration between the University of Leiden and the Technical University of Delft).
- **Physics and Business Studies:** You combine a training in Physics (1 year of courses and research project) with courses in business and entrepreneurship and an internship with a company.
- **Physics and Education (in Dutch):** You combine a training in Physics (1 year of courses and research project) with courses in education and a teaching internship at a Dutch highschool. It leads to a teaching qualification valid for secondary education.
- **Physics and Science Communication and Society (SCS):** You combine a training in Physics (1 year of coursework and research project) with courses in communication and relating science to the public.

The research-oriented master’s specialisations consist of two components: courses and research. Depending on your specialisation, the programme consists of:

- Mandatory courses (15-30 EC)
- Electives (27-45 EC)
• One or two research projects (48-60 EC)

Find out more about the research-oriented specialisations:

• Theoretical Physics Research
• Cosmology
• Quantum Matter and Optics
• Biological and Soft Matter
• Casimir Pre-PhD

These three specialisations combine at least one year of the Physics research curriculum (minimally 60 EC) with training to prepare you for specific science-related careers (minimally 45 EC).

Find out more about the mixed specialisations:

• Physics and Education
• Physics and Business Studies
• Physics and Science Communication and Society

**Educational methods**

• Lectures
• Working groups
• Presentations
• Individual papers
• Colloquium
• Lab work
• Literature study

**Study guidance**

The Physics MSc programme has a small intake and a relatively large staff to student ratio. It can thus afford to provide students with individualized attention. The study programme is discussed and decided with the Study Advisor who remains a reference point throughout the programme. The staff to student ratio is particularly low. Interaction during classes is
informal and strongly encouraged. Besides direct interaction with the lecturer, classes are supported by PhD students and often post-docs. Interaction during the research project(s) is direct and informal and takes place within a small group of which an MSc student is integral part. There are regular group meetings. Interaction often extends outside office hours and incorporates social events.

**Extra-curricular**

Are you interested in taking up an extra challenge during your master’s programme? You can develop your personal leadership style or study abroad. Would you like to experience education at Leiden University up close before starting your master’s? Apply for one of our Summer School programmes.

**Leiden Leadership Programme**

Do you like a personal challenge in leadership? Then join the Leiden Leadership Programme. In this one-year programme, you work on developing your personal leadership skills through an assessment, training, seminars and a practice assignment in an organisation. You discover and develop your qualities in the context of an organisation. The goal is to learn how to work intensively with other professionals and learn how to use their qualities. With the Leiden Leadership Programme, a Dutch-based honours programme, you will be able to follow 20 EC next to your Leiden, The Hague or Delft master's programme. Read more about Leiden Leadership Programme

**International Leiden Leadership Programme**

Curious about your personal leadership style? The International Leiden Leadership Programme is a 5 EC honours programme for master’s students looking to understand leadership, train and develop their leadership skills and acquire an insight into their personal strengths and weaknesses. Thanks to its small-scale approach and supportive tutor-mentor system, you’ll be working on your development on a very personal level. During this interdisciplinary programme you will attend seminars and skills-training sessions, which will give you more insight into the effect that your behaviour has on others. The programme involves the creation of a Personal Leadership Roadmap, a five-year plan for reaching and developing your own leadership style.

For more information: International Leiden Leadership Programme
The Leiden/ESA Astrophysics Programme for Summer Students

The Leiden/ESA Astrophysics Programme for Summer Students (LEAPS) is the opportunity for students with an interest in astronomy and astrophysics to perform a 10 - 12 week summer research project in collaboration with a research scientist from Leiden Observatory or ESA. If you are interested in the Physics Cosmology MSc programme, taking this summer course is a good opportunity to get acquainted with the educational and research opportunities within the institute. Read more

Summer School: Modern Physics at all scales

Present day physics stretches from better understanding of the evolution of the universe to the physics of condensed matter, biological processes, soft matter and metamaterials. The summer programme will highlight aspects of these fields. If you are interested in the Physics Masters programme and the experimental and theoretical research opportunities offered within the Leiden Institute of Physics (LION) this is an excellent opportunity to get to know the programme. Read more

Study abroad

Because of the tailor made construction of the programme students get the opportunity to study abroad. There is the option to follow elective courses abroad. You can also conduct a research project abroad, at another university or in industry.

Career prospects

With your Physics degree you are well prepared for broad array of career prospects in research or industry. The master degree is an excellent stepping stone for pursuing a PhD degree.

Acquired skills and competence

The goal of each programme is to train you as an independent researcher, and to develop the necessary skills and proficiency to advance your career. After graduating you will have excellent knowledge of fundamental Physics and highly developed curiosity-driven research
skills. You will be a creative and independent scientist who is ready to continue in research. The research specialisations are an excellent stepping-stone for graduates with the ambition and aspiration to pursue a PhD degree.

**Career**

After completing the Physics master's programme you will have a broad array of career prospects. All students with a Master of Science in Physics are admissible to a PhD programme. If you have the desire to apply your knowledge of Physics outside the university, there are ample job possibilities in high-tech industry, software and consultancy companies worldwide, or a career as a teacher, science communicator or science policy maker.

**Career preparation**

Leiden University offers you several services related to career orientation and job application skills.

**Science Career Service**

Are you looking for career advice? Get in touch with our science career advisor. The Science Career Service supports students of the Science Faculty in their career orientation and making effective career decisions during their study. We offer services such as consultation hours, individual appointments with the career counselor and advice on your CV or motivation letter.

**Science Career Event**

Whether you are actively looking to meet interesting companies, or even if you have no idea what you career will look like yet, the Science Career Event gives you a chance to speak with a large number of companies. Every year the Science Career Event is organized by students of the Faculty of Science. During this event you can get your resume checked, participate in a workshop or speed date with a company to discuss possibilities in the near future. The Science Career Event is the ideal day to orient yourself on career possibilities.

**The Mentor Network**
If you have questions about the job market, you can get in touch with Leiden alumni who are happy to offer their advice. On the Mentor Network platform you can view the profiles of around 650 alumni. Once you have found someone you would like to contact for advice, you can send him or her a request for assistance.

Admission and application

Do you want to apply for the master’s programme Physics at Leiden University? Find out how to apply for your programme by following the step-by-step guide in the application and admission section.

The guide will give you the necessary help and guidance in submitting your application.

• Step 1: Check the admission requirements.
• Step 2: Check the application deadlines.
• Step 3: Collect the required documents.
• Step 4: Start your application.
• Step 5: Pay your tuition fees
• Step 6: Prepare for your studies at Leiden University

Admission requirements

To enter the master’s programme in Physics at Leiden University, applicants have to satisfy the following criteria.

Diploma requirements

Automatic admission for any applicant with a:

• Bachelor degree in Physics from Leiden University
• Bachelor degree in Astronomy from Leiden University
• Bachelor degree in Physics from any Dutch University provided that:
  • The BSc degree has been obtained within the past two year
• The BSc degree has been completed within five year
• The average grade for all BSc courses is 7.0
• The grade for BSc research project is 7.0

• Applicants with a Bachelor degree in Physics from any recognized university anywhere in the world will be considered based on the study programme*, their grades and their motivation.
• Applicants with a Bachelor degree from a HBO Technische Natuurkunde of the Netherlands will be admitted to the programme upon completion of a pre-master's programme agreed with the Study Advisor of the Physics Programme of the University of Leiden and on the basis of their performance.
• Otherwise exceptional candidates without an adequate degree in Physics who have in other ways covered the aforementioned material in a demonstrable way (i.e., having taken exams) will be evaluated on an individual basis.
• Only exceptionally performing candidates are admitted to the MSc in Theoretical Physics and Physics and Cosmology programmes. The specialisation ‘Cosmology’ also requires knowledge of ‘Physics of Elementary Particles’ at undergraduate level.

* An appropriate study program should cover most of the following:

Math:

• Multivariate calculus, ordinary and partial differential equations, complex analysis, Fourier transforms, special functions
• Real and Complex vector spaces, linear transformations, orthonormal bases, basis transformations, quadratic and Hermitian forms, spectral methods

Classical Mechanics:

• Lagrangian and Hamiltonian formalisms.

Special Theory of Relativity
Electromagnetism:
Electrical and magnetic fields, Maxwell’s equations; wave theory of light, propagation of EM waves in media.

Statistical Physics:
Thermal equilibrium and equipartition theorem; entropy and microcanonical ensemble, free energy, canonical ensemble, partition functions, Maxwell relations; ideal gases, elasticity, Hooke’s law; magnetization and magnetic susceptibility; Ising model; mean-field solution; macrocanonical ensemble, Grand free energy.

Quantum Mechanics:
Schrödinger equation, 1D stationary states, Hilbert space, 3D spherically symmetric systems, H atom, angular momentum, spin; including probability functions, operators, Dirac notation, eigenvalue problem; many particle systems; H-like atoms, Fermi-Dirac and Bose-Einstein statistics; blackbody radiation; fine structure, Zeeman and Stark effects; time dependent perturbation theory; quantum theory of radiation (Einstein coefficients).

Language requirements
Copy of English proficiency certificate evidenced by appropriate language test.

- IELTS: minimum 6.5
- TOEFL: internet based 90
- Cambridge Certificate of Advanced English (CAE), minimum grade C

Please note: This requirement does not apply if you have completed your education in Canada, USA, UK, Ireland, New Zealand or Australia, or have an International Baccalaureate or a Dutch bachelor’s diploma.

Application deadlines
The master’s programme Physics starts in September. Other starting dates are only possible in exceptional cases and are not recommended.

Starting in September
• If you need a visa, residence permit or accommodation via Leiden University Housing Office, the **deadline is 1 April.**
• If you do not need a visa, residence permit or accommodation via Leiden University Housing Office, the **deadline is 15 June.**

**Apply early!**

Just in case you might have to take an additional entrance exam or submit additional documentation, you should always apply as early as possible. If you apply at the last minute, you risk missing deadlines, such as those for accommodation or visa applications. Late applications will only be considered in exceptional cases, and at the discretion of the faculty Board of Admissions.

**Scholarships, grants and loans**

Do you want to apply for a scholarship, grant or loan? Please note, these have different application deadlines. Read more

**Required documents**

Along with your application, you will need to submit a variety of documents.

**Required application documents**

Please upload a copy of the passport page(s) with your personal details and photograph. If you come from the EU/EER, you may also send a copy of your identity card.

If you are already staying in the Netherlands with a Dutch residence permit for study or for another purpose, please upload a copy of both sides of your Dutch residence permit.

Your CV must be written in English. Other than this, no standardised format or template is required. Your CV should clearly outline your educational and professional history up until the present date, as well as basic personal facts.
A personal statement must be submitted explaining why you want to follow the programme, why you have chosen to do so at Leiden University, and what makes you think you are a good candidate. The statement should be between 700 and 1,500 words.

- Digital copies are required initially. Once you have been admitted, we will tell you how to submit certified copies to the Admissions Office.
- Documents must be in the original language and accompanied by official translations if they are not in English, Dutch, German or French. If you have not yet completed your study programme, state your expected graduation date and submit copies of all transcripts obtained to date.
- If you are applying for an LLM Advanced Studies programme: all documents must be available in English (or translated into English).

You can apply to a programme before you obtain the results of your language exam (if you already have your results you can upload them directly in our online portal). If you are admitted, it will be on the condition that these results will meet the required levels specified.

Always check first if your programme requires you to send in letters of recommendation. If you need to submit more than one letter, at least one letter must be from an academic staff member.

- The letter must be printed on letterhead paper, signed and bearing the full contact details of the referee (for verification purposes).
- Your referee should describe your skills, qualities and competencies.

**Recommendation letters - submission information**

Letters of recommendation can be scanned and uploaded as part of your online application. Alternatively, your referee can send them directly to us, making sure your name and application number are clearly indicated.

- By post:

  *Leiden University Admissions Office*
  *“Gravensteen” Pieterskerkhof 6*
Application procedure

The application procedure consists of three steps.

Part 1. Apply for a programme in Studielink

All students applying for a programme at Leiden University will need to start in Studielink. Apply in Studielink for the master’s programme of your choice. Studielink will be open for applications from 1 October.

Please follow the instructions given in Studielink. After taking the first step, you will receive an email with the following information (but bear in mind that it can take a few days):

- confirmation that you have started the application process in Studielink
- login details for Leiden University’s online application portal

In the online application portal, Leiden University will let you know whether you qualify for automatic admission and will guide you through all necessary steps to complete your registration, as well as informing you about what you have to do after applying.
Important note: If you are applying for a programme that starts in the Academic year 2017-2018, you won’t receive login details from Studielink for the online application system. In this case, go the online application system of Leiden University and apply for admission.

Part 2. Online application at Leiden University

If you cannot be admitted automatically, you will have to apply.

In our online application portal you can finalise your application by uploading the necessary documents and answering a few questions. The portal provides an overview of what you need to do to complete your application at Leiden University. Please follow the instructions carefully. We strongly recommend that you complete your application as early as possible, because the sooner you apply, the sooner you’ll receive a decision.

Important note: If you are applying for a programme that starts in February 2018, you won’t receive login details from Studielink for the online application system. In this case, go the online application system and apply for admission. In the online application you can finalise your application by uploading the necessary documents and answering a few questions. Please follow the instructions carefully. We strongly recommend that you complete your application as early as possible because the sooner you do so, the sooner you will receive a decision.

All students with an international degree have to pay a non-refundable €100 application fee. This fee cannot be refunded and entitles you to apply for up to three programmes/specialisations within the same academic year. After we have received your application fee, we will start processing your application. Please do not delay paying the fee as this will delay the application process. The online application system describes how you can pay the fee.

Can I be exempted from paying the application fee?

You do not have to pay the application fee if:

- You submit a copy of a bachelor’s degree or current bachelor’s transcript from a Dutch institute of higher education (hbo or wo).
- You were previously registered as a foreign exchange, bachelor’s, master’s or pre-master’s student at Leiden University.
1. You have refugee status in the Netherlands (residence permit for asylum).
2. You are an Indonesian student applying for an MSc programme and have been issued with a 'review letter' by the Leiden Science Indonesia Office.
3. You have applied for a CEU Praesidium Libertatis scholarship (this only applies to students who have been nominated by the Central European University).
4. You have previously been admitted to a degree programme at Leiden University, but you decided to postpone your studies. This does not apply if you wish to apply for a different study programme or specialisation.

Exemptions cannot be granted on any other grounds.

After submitting your application, the online portal will, if applicable, ask you if you want to apply for student housing, a visa or a scholarship. Make a careful note of the deadlines for applying for a scholarship, student visa/residence permit and student accommodation.

*Important note: If you are applying for a programme that starts in February 2018, and if applicable, the Admissions Office will send you an email with information about student housing, immigration, student registration and other formalities.*

- Upon receipt of your application fee (if applicable), the Admissions Office will check whether all the necessary documents have been uploaded and will inform you by email whether your application is complete or if there are any omissions.
- Your application will then be forwarded to the Board of Admissions at the faculty and they will decide whether you meet the entry requirements of the degree programme of your choice.
- The Board of Admissions will make a decision within four to six weeks after the University has received your application.

The Board of Admissions will send you its decision by email within four to six weeks after Leiden University has received your application.

There are three possible options:

1. **You are admitted**
   All conditions have been fulfilled.
2. You are conditionally admitted; in other words you will be admitted, provided you meet certain conditions.
   The conditions will be given in the decision letter.
3. You are not admitted, because you do not meet the programme’s entry requirements.
   The reasons will be clearly stated in the decision letter.

If you are told that your application has been successful, congratulations! A number of additional steps now need to be taken.

The Admissions Office will ask you to inform them whether you will accept the offer of admission or conditional admission. Please go to the online application portal to accept the offer. You have the following choices:

1. Accept
2. Accept, but start later
3. Decline

**Part 3. Complete your registration in Studielink**

In addition to applying to Leiden University, you will also need to register in Studielink. We will send you a reminder to register in Studielink once you have been accepted onto a master’s programme at Leiden University. We strongly advise that you register in Studielink as soon as possible.

The deadlines for registering via Studielink are:

- 31 August, for programmes starting in September
- 31 January, for programmes starting in February

After 1 September you will not be able to register in Studielink or change your choice of master’s programme.

Remember to submit all the necessary documents.
Complete your registration for your master’s programme via Studielink. Enter your payment details in Studielink and submit all the necessary documents before the official start date of your programme. Failure to do so means you won’t be allowed to study. If you have any questions about Studielink, go to the 'I have a question' page.

Pay your tuition fee before the official start date of your programme. Failure to do so means you won’t be allowed to study.

**Pre-master's**

Candidates without a Physics or Astronomy degree will be considered upon completion of a tailored pre master’s programme. This consists of maximally 60 EC and is agreed with the Study adviser. It will cover and strengthen any missing topics from the required BSc Physics courses and may include a selection of Physics elective courses.

**Tuition fees**

The amount of tuition fee you have to pay depends on a number of factors. Your nationality, study programme and previous Dutch higher education qualifications determine the amount of tuition fee you have to pay.

The tuition fees for the academic year 2017-2018 are:

- Dutch, EU/EEA, Swiss and Surinamese students: €2,006 per year
- Non-EU/EEA students €17,800 per year
- Second Dutch master’s programme: €16,000 per year

The tuition fees for the academic year 2018-2019 are:

- Dutch, EU/EEA, Swiss and Surinamese students: €2,060 per year
- Non-EU/EEA students €17,800 per year
- Second Dutch master’s programme: €16,000 per year
More information about tuition fees

The tuition fee for this programme is €2,006.- for the academic year 2017-2018 and €2,060.- for the academic year 2018-2019 (statutory fee).

This tuition fee applies if this is not your second master’s programme and you are a national of the Netherlands, or one of the following countries:

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The fee applies for both full-time and part-time study.

If you are not a national of an EEA country, Suriname or Switzerland you must generally pay an institutional tuition fee. However if, on the basis of your Dutch residence permit, you are eligible for student finance from the Dutch education agency (DUO) you are entitled to pay statutory tuition fee. Information on qualifying residence permits can be found in the DUO nationality chart.

If you do not qualify for Dutch student finance and you are not a national of an EEA country, Suriname or Switzerland you can find the amount of tuition fee you are required to pay for your study programme here below. These tariffs apply for both full and part-time study.

Please note! If you will study at Leiden University via a cooperation agreement the tariffs stated in the agreement apply

Tuition fee: €17.800,- (academic year 2017-2018 and 2018-2019)

If you will undertake a second Dutch master’s programme you will generally have to pay an institutional tuition fee that is higher than the statutory tuition fee.

If you obtained a Dutch Bachelor’s, doctoraal, ingenieurs or HBO (Bachelor’s in professional education) diploma after 1991, and you are a national of an EEA country
(Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the United Kingdom), Suriname or Switzerland, the following institutional tuition fees apply.

**Institutional tuition fee: €16,000.- (academic year 2017-2018 and 2018-2019)**

Did you commence a Bachelor’s programme at Leiden University before 2010, and will you continue directly onto a second Master’s programme in the year you complete your Bachelor’s programme, or in the following year? If so you are entitled to pay statutory tuition fee in accordance with a transitional ruling (also see ‘Exceptions’).

*Please note! Other tariffs apply for students who are not nationals of an EEA country, Suriname or Switzerland. Please refer to the information in the section ‘Students who are not nationals of an EEA country, Suriname or Switzerland’.*

Are you unsure whether you have to pay statutory tuition fee or an institutional fee? Consult our tuition fee flowchart for second Master’s programmes.

**Exceptions**

In some cases nationals of EEA countries, Suriname or Switzerland may be permitted to pay tuition fees set at the same amount as statutory tuition fee for their second degree programme.

- If your second degree programme is in the field of healthcare or teacher training you are entitled to pay institutional tuition fees set at the same amount as statutory tuition fee.
- If you begin your second Bachelor’s or Master’s programme whilst you are still following your first Bachelor's or Master’s programme you may pay institutional tuition fees set at the same amount as statutory tuition fee for your second degree programme – on condition that you remain continuously registered as a student.
If you begin a second Bachelor’s or Master's programme at Leiden University in the academic year directly following the year in which you obtained your first Bachelor’s or Master's degree at Leiden University you may pay institutional tuition fee set at the same amount as statutory tuition fee.

**Physics Scholarships**

Several scholarships are available specifically for Physics students. More information can be found [on this website](#). General information on scholarships at Leiden University can be found below.

**Scholarships, grants and loans**

Leiden University offers a wide range of scholarships for students from specific regions of the world, or for specific programmes. If you have EU/EEA or Swiss nationality and are under 30, you may be eligible for a loan from the Dutch government to cover your tuition fees. Leiden University also offers the Leiden University Excellence Scholarship (LExS). This scholarship programme is designed for non-EU/EEA students enrolling in a master’s programme and for students of all nationalities enrolling in an Advanced LLM programme.

Find out more about scholarships, grants, loans and deadlines

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## Student life

Your time at Leiden is about more than just studying. Some of your best experiences will stem from being a part of our lively and diverse student community, as well as from life in the beautiful city of Leiden.

### Life in Leiden

Quaint, picturesque and the perfect size, Leiden is an idyllic place to spend your university days. You will soon become familiar with the dozens of cafes, shops and bars that line the leafy canals, as well as its year-round line-up of cultural events. For visits further afield, the major cities of The Hague and Amsterdam are a short train ride away, along with Schiphol Airport, which is just half an hour away by train.
Within the university’s student community, our study and student associations organise a huge variety of social, cultural, and study events to keep you busy all year round. You can also join the University Sports Centre, which offers scheduled group sports and fitness classes amongst other activities.

**Welcome and orientation programme**

In August and February each year, Leiden University hosts the English-language Orientation Week Leiden (OWL), which welcomes both international and Dutch students. The OWL is an excellent way to get to know Leiden University, the city and to meet other students.

New to the city and the university? Take part in the best introduction to the city, the university and your faculty: The OWL! Enjoy this week of fun, music, culture, sports, games and making new friends. It will be an unforgettable start of your studies!
Our Hortus botanicus is a place where science is conducted, but it is equally popular for studying or relaxing. Come visit it!
Leiden is a lively, compact and safe city which is appreciated by national and international students alike. Everything is in reach within a 15 minutes bicycle ride.
The city is located centrally between Netherland’s biggest cities like Amsterdam, The Hague, Utrecht and Rotterdam, all easily reached by public transport.
Enjoy strolling through the narrow cobbled streets and become familiar with the dozens of cafes, shops and bars that line the leafy canals.

**De Leidsche Flesch**

De Leidsche Flesch is the study association of the studies Computer Science, Physics, Astronomy and Mathematics. The main goals of the De Leidsche Flesch are to contribute to the interaction between its members and the scientific community and to contribute to the interaction between its members themselves. They organize a wide range of activities, like (lunch) lectures, excursions and study trips. They also try to acquaint you with job opportunities for after completing your study.

**Good start of your programme at Leiden University**

At the start of the academic year, the research in the department is showcased in a symposium. The department also facilitates the organization of an afternoon of food and drinks organized by first year students to promote get to know and team building. If you are a first year international student, you will get a buddy to help your way around at our programme.

**Science Buddy Programme**
The Science master’s Buddy Programme has been set up by the Faculty of Science to help all international students who are new to the university to integrate quickly and easily into university life. Through the programme you will learn everything you need to know about the university, the student community, and the practical side of life in Leiden. Your buddy is your first connection in the Netherlands and he or she can help you to find your way around. A few weeks before the start of your studies, you will get an invitation for the programme. After signing up, you will be matched to a student preferably from your own study programme.

**Information activities**

Are you thinking about studying at Leiden University? Come and visit our Master’s Open Day.

**About our Master’s Open Day**

Are you exploring your options for a master’s programme? You can learn a lot by coming to our Master’s Open Days. This event is your opportunity to learn everything you need to know about our master’s programmes and how they can help you reach your goals. Attend presentations by the different programmes, visit the information fairs, and ask lecturers, students, alumni and study advisers all your questions. And you’ll get to know the best student city right in the heart of Europe in the Netherlands.

Read more about the Master's Open Days

**Impressions Master's Open Day**

**Contact**

Do you have any questions about the Physics master's programme? Please contact us.

**Contact the programme**
Contact the study advisor for more information about the Physics programmes, entry requirements, admissions procedures, tuition fees and scholarships.

Study advisor
Dr. H. Papathanassiou (Hara)
Email: Papathanassiou@physics.leidenuniv.nl
Phone: +31 (0)71 527 5764

Contact the university about general questions

Do you have questions about studying at Leiden University?
Do you want to know more about one or more programmes or about our information activities? The StudyLine is a source of information for students and is staffed by students. You can contact them by mail or by phone on +31 (0)71 527 11 11 on working days between 9.00 am and 17.00 pm.

Do you have questions about your admission and application?
For questions about your admission and application, you can contact the Student Information Centre. You can contact them by telephone on +31 (0)71 527 80 11 (daily between 11:00 am and 16:00 pm) or ask your question in the online contact form.