



Master of Science (MSc) in Physics

Two-year MSc programme in Physics at the University of Iceland (UoI)
in partnership with
the Nordic Institute of Theoretical Physics (Nordita).

The programme is offered in English.

Programme Aim: The programme aims to provide students with up-to-date knowledge of contemporary physics in the main areas of astrophysics, condensed matter physics and high-energy physics, as well as solid training in applying mathematical and numerical tools widely used in these fields. The programme also offers a course to develop professional skills such as writing and presenting scientific content.

[Nordita](#) is the *Nordic Institute for Theoretical Physics*. Its purpose is to carry out research and strengthen Nordic collaboration within theoretical physics. Nordita has traditionally provided training for graduate students as well as junior scientists.

The [Faculty of Physical Sciences](#) and the [Science Institute](#) within the [UoI](#) are the leading research institutions in Iceland in the Physical Sciences. Research in experimental and theoretical physics is carried within the [Mathematics](#) and [Physics](#) Divisions of the Science Institute at the UoI. [Staff members](#) at both divisions will be involved in teaching as well as supervising projects within the MSc programme.

Programme Structure: 60 ECTS in graduate coursework and 60 ECTS research based thesis project. Both of these components are provided in collaboration between UoI and Nordita Faculty. Students are assigned a supervisor who will guide them through their coursework and to develop a thesis topic.

Study Track: The coursework consists of a set of 4 core graduate courses in theoretical physics (40 ECTS in total), complemented with 2 courses in developing skills in statistical methods and research communication (10 ECTS in total). Finally, students in coordination with their supervisors, select a specialised course (10 ECTS) in line with their research thesis project.

Course Curriculum			Timeline (preliminary)
Core Courses	Advanced Topics in Classical Physics (10 ECTS)		Fall 2022
	Advanced Topics in Electrodynamics (10 ECTS)		Fall 2022
	General Relativity (10 ECTS)		Spring 2023
	Quantum Field Theory (10 ECTS)		Spring 2023
Transferable	Seminar on Research Communication (4 ECTS)		Fall 2022
	Statistical methods in Data Analysis (6 ECTS)		Spring 2023
Specialisation (10 ECTS course plus 60 ECTS thesis)			
Astrophysics	Condensed Matter	Theoretical/Mathematical Physics	Fall 2022
MSc Thesis research project			Fall 2023 Spring 2024



Research lines for thesis projects: Research projects can be developed/pursued in one of the three main areas of expertise present at UoI and Nordita: Astrophysics, Condensed Matter Physics, and Theoretical High Energy Physics. Each student will have a supervisor at UoI, but projects can be co-supervised by Nordita faculty.

Admission: For admission requirements, application procedure, and additional information, please follow the guidelines at this [webpage](#). **In addition, applicants are required to give notice of their application to the local coordinators of the programme by sending a brief e-mail to the addresses below.** Notice that the UoI charges a one-time application fee of 8,000 ISK (circa 52 EUR/62 USD). In addition, there is a yearly fee of 75,000 ISK (480 EUR/584 USD) for the duration of the programme. Pending on securing funding (TBA), there might be a few scholarships available to partially support the living expenses (and/or UoI fees) of a selection of the students accepted into the programme.

For current and additional information on the programme please visit <https://english.hi.is/physics>. Information on research lines, as well as a list of affiliated staff members, can also be found <https://phys.hi.is>. For detailed information about the programme, please feel free to contact the local coordinators of the programme at UoI:

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