Programme syllabus for

Master's Programme in Nutrition Science, 120 credits

Masterprogrammet i nutritionsvetenskap, 120 hp

Basic programme information

Programme code	4NT22
Name of the programme	Master's Programme in Nutrition Science
Number of credits	120.0 credits (120.0 ECTS credits)
Starting date	The syllabus applies to students who commence their studies in or after autumn 2022. Approved revisions of the syllabus are described under the heading Transitional Provisions.
Decision date	2021-05-18
Decided by	Committee for Higher Education
Last revision	2024-04-30
Revised by	Committee for Higher Education
Reference number	3-1844/2024
Specific eligibility requirements	A Bachelor's degree or a professional degree equivalent to a Swedish Bachelor's degree of at least 180 credits in biomedicine, cellular and molecular biology, pharmaceutics, medicine, nutrition, or the equivalent. And proficiency in English equivalent to English B/English 6.
Main field of study	Nutrition Science
Qualification	Degree of Master of Medical Science (120 credits) with a Major in Nutrition Science *(Medicine masterexamen med huvudområdet nutritionsvetenskap)* Upon request, a student who meets the requirements for a qualification is to receive a diploma.

Outcomes

Outcomes of second cycle education according to the Higher Education Act

Second-cycle courses and study programmes shall be based fundamentally on the knowledge acquired by students during first-cycle courses and study programmes, or its equivalent.

Second-cycle courses and study programmes shall involve the acquisition of specialist knowledge, competence and skills in relation to first-cycle courses and study programmes, and in addition to the requirements for first-cycle courses and study programmes shall:

- further develop the ability of students to integrate and make autonomous use of their knowledge,
- develop the students' ability to deal with complex phenomena, issues and situations, and
- develop the students' potential for professional activities that demand considerable autonomy, or for research and development work.

Outcomes of the Degree of Master (120 credits) according to the Higher Education Ordinance
Knowledge and understanding
For a Degree of Master of Science (120 credits) the student shall

- demonstrate knowledge and understanding in the main field of study, including both broad knowledge of the field and a considerable degree of specialised knowledge in certain areas of the field as well as insight into current research and development work, and
- demonstrate specialised methodological knowledge in the main field of study.

Competence and skills
For a Degree of Master of Science (120 credits) the student shall

- demonstrate the ability to critically and systematically integrate knowledge and analyse, assess and deal with complex phenomena, issues and situations even with limited information
- demonstrate the ability to identify and formulate issues critically, autonomously and creatively as well as to plan and, using appropriate methods, undertake advanced tasks within predetermined time frames and so contribute to the formation of knowledge as well as the ability to evaluate this work
- demonstrate the ability in speech and writing both nationally and internationally to report clearly and discuss his or her conclusions and the knowledge and arguments on which they are based in dialogue with different audiences, and
- demonstrate the skills required for participation in research and development work or autonomous employment in some other qualified capacity.

Judgment and approach
For a Degree of Master of Science (120 credits) the student shall

- demonstrate the ability to make assessments in the main field of study informed by relevant disciplinary, social and ethical issues and also to demonstrate awareness of ethical aspects of research and development work
- demonstrate insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used, and
- demonstrate the ability to identify the personal need for further knowledge and take responsibility for his or her ongoing learning.

Content and structure

The purpose of the programme is to provide the students with a deeper understanding of the scientific foundations of the field of nutrition and its research methods, and to better enable students to be active within nutrition and related fields, both nationally and internationally.

The first semester examines how to study the relationship between diet and health, how different types of studies contribute to this knowledge, and what is the basis for different recommendations in diet and physical activity, where sustainability aspects are also included as an essential part. Students also have in-depth studies in molecular and genetic mechanisms to understand the connection between diet and health and the methods for how to study these. Measurement methodologies for dietary intake, physical activity, fitness, muscle strength and body composition are explored, with a focus on understanding the methods' validity, applicability and evaluation of results.

The second semester provides a deeper examination of the importance of diet and physical activity in both prevention and treatment of the most common public health diseases. Students gain an in-depth understanding of intervention studies with special emphasis on the use of the internet (eHealth) or mobile phone technology (mHealth). They also explore in more detail nutrition-related diseases and their mechanisms and treatment at the individual level, with an emphasis on understanding the scientific evidence for different types of diets. Students are also supported in their professional development in terms of popular science communication, use of different media and entrepreneurship.

During the second year of the programme, students can choose to do a 30-, 45- or 60-credit degree project. As part of this project, students can choose, based on interest and previous experience, to explore both subject and method knowledge in a field of nutrition science. Examples include molecular, physiological, clinical, epidemiological or public health emphasis. Depending on the length of the degree project, students can include up to 30 credits of elective courses.

Scientific knowledge, competence and approach

The programme develops understanding of the scientific basis of the nutrition field with a focus on current methods and how new knowledge can be interpreted and understood in relation to existing knowledge in the field. Students develop skills in searching, reviewing, compiling, presenting and communicating, in writing and orally, scientific information to different groups. The scientific method is integrated into all programme courses, and students develop skills in applying their knowledge independently. Global, ethical, societal and sustainability aspects are integrated as overarching themes in the field of nutrition, as are equality perspectives.

Practice Integrated Learning

Practice integrated learning is a generic term for the pedagogical models based on interaction and integration between higher education and working life. Practice integrated learning may take the form of placements, study visits, observing teaching activities, staff exchange training schemes or field studies within out-patient and in-patient healthcare, municipal care and social care or other relevant activities.

During the degree project, students may independently conduct a scientific project within a research or work area of their choice, such as at a university, public authority or company, in an area that relates to the field of nutrition. Traineeship or project courses are offered as electives, which provide students the opportunity to learn about nutrition-related activities both within and outside the university.

Internationalisation

The programme is international in its entirety and all courses have an international perspective. Global aspects of the field of nutrition are systematically addressed during the programme. In the second year, students can also take part in international exchanges.

Elective courses

Depending on the scope of the degree project, students can include up to 30 credits of elective courses. The purpose of the elective courses is to give students the opportunity to create their own specialisations in their education. Nutrition science is a subject that spans many disciplines, from molecular research to epidemiology and public health efforts at the population level, which means that relevant courses can be found in many different fields. Students can, based on their own interests, explore a research or method area with relevance to the main field of study and/or expand into areas that improve their employability and continued career paths in nutrition-related fields. These courses may not overlap with other courses within the programme.

Other guidelines

Grading scale

The grades used are Fail, Pass or Pass with Distinction. Alternative grading scales may apply to modules within courses and to elective courses. The grading scale is described in the syllabus for each course.

Language of instruction

The language of instruction is English.

Specific eligibility requirements within the programme

There are specific eligibility requirements for the courses within the programme. The eligibility requirements can be found in the syllabi. In cases where the requirements are connected to the admission to a later term, they are described on the programme's website. There may also be specific eligibility requirements within a specific term if a course requires certain prior knowledge. Requirements for elective courses may also differ from requirements for other courses during the programme semester.

Study plan with constituent courses

For students starting the programme in the fall of 2025 or later:

Semester	Course name	Credits	Main field of study	Cycle
1	Diet and health - scientific evidence, recommendations and sustainability	10	Nutrition science	Second
1	Molecular and genetic mechanisms in nutrition science	10	Nutrition science	Second
1	Diet, physical activity and fitness - assessment and evaluation	10	Nutrition science	Second
2	Monitoring of non-communicable diseases, large scale data collection, analysis, and data visualizations	7	Nutrition science	Second
2	Diet and physical activity - interventions and digital health	8	Nutrition science	Second
2	Nutrition and disease - treatment and clinical aspects	10	Nutrition science	Second
2	Professional development and communication in nutrition science	5	Nutrition science	Second
3-4	Degree project in nutrition science	30, 45 or 60	Nutrition science	Second
3-4	Elective courses	0-30	--	First/ Second

For students starting the programme in the fall of 2024 or earlier:

Semester	Course name	Credits	Main field of study	Cycle
1	Diet and health - scientific evidence, recommendations and sustainability	10	Nutrition science	Second
1	Molecular and genetic mechanisms in nutrition science	10	Nutrition science	Second
1	Diet, physical activity and fitness - assessment and evaluation	10	Nutrition science	Second
2	Diet and physical activity and disease prevention - Interventions, mHealth and eHealth	15	Nutrition science	Second
2	Nutrition and disease - treatment and clinical aspects	10	Nutrition science	Second
2	Professional development and communication in nutrition science	5	Nutrition science	Second
2	Degree project in nutrition science	30, 45 or 60	Nutrition science	Second

2	Elective courses	0-30	--	First/Second