



**Karolinska
Institutet**

Programme syllabus for

Master's Programme in Nutrition Science, 60 credits

Magisterprogrammet i nutritionsvetenskap, 60 hp

Basic programme information

Programme code	3NT18
Name of the programme	Master's Programme in Nutrition Science
Number of credits	60.0 credits (60.0 ECTS credits)
Starting date	The syllabus applies to students who commence their studies in or after autumn 2018.
	Approved revisions of the syllabus are described under the heading Transitional Provisions.
Decision date	2017-05-17
Decided by	Board of Higher Education
Last revision	2021-03-31
Revised by	Committee for Higher Education
Reference number	3-1451//2021
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, pharmaceuticals, medicine, nutrition, or the equivalent. And proficiency in English equivalent to English B/English 6.
Main field of study	Nutrition Science
Qualification	Medicine magisterexamen med huvudområdet nutritionsvetenskap. (<i>Degree of Master of Medical Science (60 credits) with a Major in Nutrition Science</i>)

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.

Objectives of the Degree of Master (60 credits) according to the Higher Education Ordinance

Knowledge and understanding

For a Degree of Master (60 credits) the student shall:

- demonstrate knowledge and understanding in the main field of study, including both an overview of the field and 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 (60 credits) the student shall

- demonstrate the ability to 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 autonomously as well as to plan and, using appropriate methods, undertake advanced tasks within predetermined time frames
- demonstrate the ability in speech and writing 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 employment in some other qualified capacity.

Judgement and approach

For a Degree of Master (60 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 aim of the program is to give the student an in-depth understanding of the scientific basis of the subject nutrition and related research methodology. Areas covered in the first part of the programme

include how relationships between diet and health are studied and how different types of studies contribute to this knowledge, what the basis is for various recommendations in diet and physical activity, including sustainability aspects, as well as exploration of molecular mechanisms underlying the link between diet and health. Thereafter, assessment methodology for dietary intake, physical activity, fitness and muscle strength as well as nutritional status will be addressed, with a focus on understanding the validity, applicability and evaluation of results. The final course of the first semester builds on this and deals with intervention research based on eHealth and mHealth (internet and mobile phone technology). Global perspectives and comparisons are included in all of the courses.

In the second semester, the student carries out a degree project of 30 credits. Here, the student has the opportunity to, according to interest and previous background, choose to work in different areas of nutritional research, for example, it may be molecular, physiological, clinical, epidemiological or public health-oriented.

In all courses, the student also receives training in communicating science, orally and in writing with different target groups. Ethical and social aspects of research and science are also dealt with.

Scientific knowledge, competence and approach

In the programme, the student will develop knowledge of the scientific basis of the nutrition area, with a focus on modern methodology and how new knowledge can be interpreted and understood in relation to existing knowledge. The student is trained in searching for, evaluating as well as presenting and discussing scientific information in the field. Scientific methodology is integrated in all courses in the programme and the students are trained to autonomously apply their knowledge. Likewise, awareness of global, ethical, societal and sustainability aspects of the nutrition area is developed.

Practice Integrated Learning

Practice integrated learning is a generic term for the pedagogical models that are 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, social care or other relevant activities.

During the programme, the student will be in contact with teachers active in research, thus enabling them to be part of the academic environment. During the degree project, the student will work autonomously within an optional research or working area, for example at a university, governmental agency or company, in a field that relates to nutrition science.

Internationalisation

The programme accepts both national and international students, thus enabling discussions and meetings between different nations and cultures, in relation to various nutritional issues. Global aspects of nutrition are systematically dealt with in the programme.

Transitional provisions

The Master's Programme in Nutrition Science (60 credits) has its last regular programme study start in the autumn semester of 2021. Students who are admitted and registered have the right to complete the educational programme according to this programme syllabus and date. In the case of re-admission after a granted study break, an individual study plan is set up. The right to be examined is regulated in the respective course syllabi.

Other guidelines

Grading scale

The grades used are Fail, Pass or Pass with Distinction.

Language of instruction

The teaching language 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.

Study plan with constituent courses

For students starting the programme in 2020 or later:

Term	Name of the course	Credits	Main field of study	Cycle and depth
1	Diet and health - scientific basis, recommendations and sustainability <i>Kost och hälsa - vetenskaplig grund, rekommendationer och hållbarhet</i>	7,5	Nutrition science	Second
1	Diet and health - molecular and genetic mechanisms <i>Kost och hälsa - molekylära och genetiska mekanismer</i>	7,5	Nutrition science	Second
1	Diet, physical activity and fitness - assessment and evaluation <i>Kost, fysisk aktivitet och fitness - mätmetodik och utvärdering</i>	7,5	Nutrition science	Second
1	Diet and Physical Activity - interventions, e-health and m-health <i>Kost och fysisk aktivitet - interventioner, e-Hälsa och m-Hälsa</i>	7,5	Nutrition science	Second
2	Degree project in nutrition science <i>Examensarbete i nutritionsvetenskap</i>	30	Nutrition science	Second

For students starting the programme in 2019 or earlier:

Term	Name of the course	Credits	Main field of study	Cycle and depth
1	Diet and health - scientific basis, recommendations and sustainability <i>Kost och hälsa - vetenskaplig grund, rekommendationer och hållbarhet</i>	7.5	Nutrition science	Second
1	Diet and health - molecular and genetic mechanisms <i>Kost och hälsa - molekylära och genetiska mekanismer</i>	7.5	Nutrition science	Second
1	Diet, physical activity and fitness - assessment and evaluation <i>Kost, fysisk aktivitet och fitness - mätmetodik och utvärdering</i>	7.5	Nutrition science	Second
1	Preventive nutrition - interventions, e-health and m-health <i>Preventiv nutrition - interventioner, eHälsa och mHälsa</i>	7.5	Nutrition science	Second
2	Degree project in nutrition science <i>Examensarbete i nutritionsvetenskap</i>	30	Nutrition science	Second