Programme syllabus for

Master's Programme in Clinical Optometry, 60 credits

Magisterprogrammet i klinisk optometri, 60 hp

Basic programme information

Programme code	3OP08
Name of the programme	Master's Programme in Clinical Optometry
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 2010. Approved revisions of the syllabus are described under the heading Transitional Provisions.
Decision date	2008-01-08
Decided by	Board of Higher Education
Last revision	2023-10-05
Revised by	Committee for Higher Education
Reference number	34064/2023)
Specific eligibility requirements	Degree of Bachelor of Science in Optometry of at least 180 credits. Or a licence to practise issued by Socialstyrelsen as a nurse and a Degree of Bachelor of Science in Nursing of at least 180 credits and additional courses in Ophthalmology of at least 60 credits. And proficiency in Swedish and English equivalent to Swedish B/Swedish 3 and English A/English 6.
Main field of study	Optometry
Qualification	Medicine magisterexamen med huvudområdet optometri *Degree of Master of Medical Science (60 credits) with a Major in Optometry* 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 level education shall essentially build on the knowledge that students acquire in first level education or corresponding knowledge.

Second level education shall involve a deepening of knowledge, skills and abilities relative to first level education and, in addition to what applies to first level education, shall

- further develop the students' ability to independently integrate and use knowledge,
- develop the students' ability to deal with complex phenomena, issues and situations, and
- develop the students' potential for professional activities that demand considerable independence 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 of Arts/Science (60 credits) degree 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 of Arts/Science (60 credits) degree 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 of Arts/Science (60 credits) degree 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.

Outcomes of the study programme at Karolinska Institutet

Knowledge and understanding
The student will demonstrate their understanding and specialised knowledge in the subjects:

- neuro-optometry

- ocular pharmacology
- diagnostic methods used in optometric investigations
- peadeatric optometry
- optometrydiseases of the eye
- and treatment of problems with double binocular disorders

Skills and abilities
The student will demonstrate their skills and abilities

- in the use of diagnostic methods in optometric investigations,
- in paediatric optometry,
- in the diagnosis of eye diseases,
- in optometric treatment of visual problems and
- in the assessment of when a patient should be referred and to where they should be referred.

Appraisal ability and attitude
The student will demonstrate the ability

- to adopt a scientific attitude to the subject and to practice evidence-based optometric care.

Description of the main field of study

The scientific basis for the main field of study of optometry consists of knowledge about the human eye, vision, visual systems and visual processes/perception, and the impacts from internal and external factors on vision. Internal factors mean general diseases, eye diseases and other physiological and anatomical changes that are often age-related, and could affect vision and visual function. External factors mean light, lighting, ergonomic and optical factors that could impact on vision, both positively and negatively.

Through optometry studies, students will develop knowledge of:

- Normal and abnormal vision and visual development
- Development and measurement of refractive errors in the eye and the adaptation of aids to suit different vision needs in relation to the faculty of vision
- Detection, treatment, habilitation and rehabilitation of eye diseases and other changes to the visual system
- Geometrical and physical optics
- Work/interventions based on changes to the visual environment and vision aids that can improve visual comfort

Knowledge in the subject area is applied to evidence-based optometry aimed at each individual/patient achieving optimal visual comfort and eye health. This knowledge is used to optimally assess, measure, diagnose, treat, and habilitate and rehabilitate the faculty of vision.

Content and structure

The Master's Programme in Clinical Optometry is worth 60 higher education credits, each of them within the main field of optometry. Half of the study programme involves internal work placements in Karolinska Institutet's clinic at the Optometry Unit of St. Erik Eye Hospital. The work placements are integrated with the theoretical education.

The programme is organised into courses worth 7.5 credits each, aside from the degree project, which is worth 15 credits. Several courses are taught in parallel in order to increase the level of integration, reduce unnecessary repetition and bridge the gap between preclinical and clinical elements - all of this

helps to facilitate learning.

The courses are planned in a way which allows knowledge from previous courses to form the basis of those that come later on in the study programme. The clinical training focuses on the optician's expanded role as a member of staff in the healthcare system.

The courses Ocular Pharmacology, Diagnostic Methods Used in Optometric Investigations and Neuro-optometry take place in Term 1. The courses Binocular Vision and Treatment, Eye Diseases and Diagnosis and Degree Projects in Optometry take place across Terms 1 and 2.

The courses that begin in Term 1 build on, and are an extension of, the knowledge the students bring from their earlier studies towards certification and contact lens authorisation and provide more specialised knowledge and skills at the second-cycle level.

The courses Paediatric Optometry and Diagnostic Clinic take place in Term 2. These courses build on the courses that began in Term 1 and aim to provide more specialised knowledge of paediatric optometry and expanded and more specialised clinical skills.

The degree project is intended to lead to a pronounced subject-related specialisation. The project is to be conducted using scientific methods appropriate to the question/subject and permeated by a scientific attitude.

Pedagogical methods
Various educational methods are used, depending on the objective of the course in question. The methods will encourage independent learning, specialist learning, scientific thought and lifelong learning. Examples of student activated methods are case methodology, seminars, supervised clinical practice, laboratory work and studies of academic literature. Teacher-led instruction is timetabled to coincide with laboratory work and exercises in order to facilitate learning. No specific teaching method will be used for all courses, but the methods may vary. The outcomes of the courses, as described in the relevant course syllabus, are adapted to suit SOLO taxonomy. Even courses taken early in the programme have outcomes at a higher taxonomic level to ensure student learning does not remain at a low level.

Examination
When assessing the results of a student's studies, consideration will be given to the student's knowledge and skills, as well as to their maturity and ability to apply knowledge, analyse critically and independently assess. When assessing the student's skills, particular consideration will be given to their ability to conduct practical investigations and their attitude to the patient.

Methods used to assess the student's performance include written and oral examinations, special examination methods such as examinations to assess clinical skills, the quality of the scientific work and also the oral presentation of the degree project. All examinations are adapted to and in line with the objectives that are described in each course's syllabus.

When assessing clinical expertise, there are assessment templates for each of the examinations.

Transitional provisions

The programme syllabus will be cancelled. The last admission of students to follow this programme syllabus was made the fall semester 2023.

For students admitted to the programme before the fall semester 2015, the specific eligibility requirements also included a licence to practice as an optician issued by Socialstyrelsen with the additional right to fit contact lenses.

Other guidelines

Grading scale

The grades used are Fail, Pass or Pass with Distinction. The grading scale is detailed in the course syllabus.

Language of instruction

The course language is Swedish but courses may be held in English. Literature in both English and Swedish is used.

Study plan with constituent courses

Semester	Name of the course	Higher education credits	Level	Depth of the course
1	Ocular Pharmacology and Diagnostics	7,5	Second	AV
1	Neuro-optometry	7,5	Second	AV
1 and 2	Ocular Diseases and Diagnostics	7,5	Second	AV
1 and 2	Binocular Vision and Orthoptic Treatment	7,5	Second	AV
2	Pediatric Optometry	7,5	Second	AV
2	Diagnostic Clinic	7,5	Second	AV
1 and 2	Degree Project in Optometry	15	Second	AV