

## 1. Assessment policy for eligibility to courses within the different physics programmes

This policy applies to the following programmes: Bachelor programme in Astronomy and Astrophysics (NASAK), Bachelor programme in Meteorology, Oceanography, and Climate Physics (NMTTK), Bachelor programme in Physics (NFYSK), Medical Radiation Physics programme (NSFKY), Course Package (FK5900), and Master's programme in Medical Radiation Physics (NMSFO). This document serves as a guideline for evaluating students' progression within and across these programmes.

Official eligibility criteria for each course are written in the respective course syllabi. If a student fails to meet the official eligibility criteria, exemptions from the official entry requirements may sometimes be granted by the Academic advisor at the Department of Physics. However, students must have been registered and actively engaged in all prerequisite courses within the programme to qualify for such exemptions. Examples of principles governing exemptions are provided in the accompanying attachment.

This document differentiates between specific *conditions* and *recommendations*. Failure to meet the *conditions* indicates insufficient knowledge for progression within the programme, and exemptions from official entry requirements for subsequent courses cannot be granted by the Academic Advisor. Fulfilment of the *conditions*, however, does not automatically guarantee admission to upcoming courses within the programme. *Recommendations* serve as guidance for students to meet conditions in a timely manner. Should *recommendations* not be met within the designated timeframe, students are advised to consult the Academic Advisor to devise a study plan.

### 1.1. Assessment policy:

To be considered for exemptions from official entry requirements and to continue within the programme, students must have at least satisfied the *conditions* outlined below. Additionally, students must have been registered and actively participated in all previous courses within the programme. The policy for the Course Package and the Master's programme in Medical Radiation Physics are found in a separate section below (1.1.1.).

#### Recommendation 1: Before commencing spring semester of year 1

- Completion of 7.5 credits in MM2001 Mathematics I
- Completion of one out of two course modules in FK3014 Classical physics

#### Condition 1: Before commencing year 2

- Completion of 15 credits in MM2001 Mathematics I, including at least two written exams
- Completion of three out of five course modules in FK3014 Classical physics

#### Recommendation 2: Before commencing spring semester of year 2

- Completion of 22.5 credits from the courses MM2001 Mathematics I, MM5010 Mathematics II - Analysis (Part A), and MM5011 Mathematics II - Analysis (Part B)
- Completion of three out of five course modules in FK3014 Classical physics
- Completion of 7.5 credits in FK4026 Programming, numerical methods and statistics for physicists

#### Condition 2: Before commencing year 3 for NASAK, NMTTK, and NFYSK (not Medical Radiation Physics)

- Completion of all courses from year 1 (e.g., MM2001 Mathematics I and FK3014 Classical physics)
- Completion of 7.5 credits from the mathematics courses offered during year 2
- Completion of 15 credits from the courses FK4026 Programming, numerical methods and statistics for physicists, FK5019 Electromagnetism and waves, FK5020 Quantum mechanics, or FK5021 Experimental physics
- Passing the course FK5020 Quantum mechanics is mandatory for students in the NASAK and NFYSK



**Condition 3: Before commencing the 15 credit Degree project, for NASAK, NMTTK, and NFYSK (not Medical Radiation Physics)**

- Completion of all courses from years 1 and 2 of the programmes (a total of 120 credits)
- For the Bachelor programme in Astronomy and Astrophysics and the Bachelor programme in Meteorology, Oceanography, and Climate Physics, completion of at least 15 credits from courses within the main field of study

**1.1.1. For the Medical Radiation Physics Program, Course Package in Medical Radiation Physics, and Master's programme in Medical Radiation Physics:**

**Condition 3: Before commencing year 3 for the Medical Radiation Physics program**

- Completion of all courses from year 1 (e.g., MM2001 Mathematics I and FK3014 Classical Physics)
- Completion of 45 credits from year 2, including FK5020 Quantum mechanics

**Condition 4: Before commencing spring semester for the Course Package**

- Passed exams on two of the three following courses: Radiation sources and medical applications, Interaction of ionizing radiation with matter, Radiation detectors and measurement methods.

**Condition 5: Before commencing year 4, or moving from the Course Package to the Master's programme in Medical Radiation Physics**

- Completion of 45 credits from courses in year 3 or in the Course Package

**Condition 6: Before commencing year 5, or the second year of the Master's programme in Medical Radiation Physics**

- Completion of 45 credits from courses in year 4 or first year of the Master's programme

## 1.2. Principles for exemptions

In all programmes, there is a significant progression between courses, emphasizing the importance of following them in a prescribed order. Attempting a course late in the programme without prior knowledge from the prerequisite courses can be challenging. The official entry requirements for each course are outlined in the syllabus, often encompassing many or all previous courses within the programme. It is typically stated in the syllabus that students should possess knowledge equivalent to certain prerequisites. This equivalency can be achieved if a student has successfully completed a comparable course at another university with similar content and learning outcomes.

If a student has met all minimum required conditions for each year and is deemed to have sufficient knowledge to proceed in the programmes, they may be granted an exemption from the official prerequisites. In some cases, a prerequisite course is offered concurrently with another course. For example, in Classical physics, where Mathematics I is a prerequisite, exemptions may be granted to take both courses simultaneously, ensuring synchronization of content.

Students may also be exempted from a course listed as an official entry requirement if they have actively participated in the prerequisite course. This often occurs when courses are closely aligned in timing, and the exam for the prerequisite course is not graded before the subsequent course begins.

It's important to note that meeting the conditions for a particular year does not guarantee admission to subsequent courses within the programs. During the assessment process, previous courses completed by the student are carefully considered. For instance, when evaluating exemptions for Electromagnetism and waves, successful completion of the Electromagnetism course in Classical physics is particularly important, as it is seen as a related follow-up course.