

# Education and Examination Regulations

**2025-2026**

Master Physics and Astronomy

**Radboud Universiteit**



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# PART I GENERAL PROVISIONS MASTER

## SECTION 1. GENERAL PROVISIONS

### ARTICLE 1.1 APPLICABILITY OF THE REGULATIONS

1. These Education and Examination Regulations (hereinafter: EER) apply to the Master's programmes (the study programme in which the student is enrolled, is hereinafter referred to as: the study programme), including all associated educational units, of the Faculty of Science. These regulations outline the applicable procedures, rights and obligations for teaching, interim examinations and final examinations.
2. The present regulations apply to all students enrolled in the study programme in the 2025-2026 academic year. Students who enrolled in the study programme before 1 September 2016 and have been continuously enrolled in this study programme may appeal to the regulations that were active at the time of their initial enrolment in the study programme.
3. Educational units that are included in the programme-specific part of these regulations as part of the study programme are subject to the rules outlined in these regulations. Educational units offered by the Faculty of Science are always subject to the regulations included in at least one of the EERs of the Faculty of Science.
4. The Faculty offers the following 120 EC Master's programmes:
  - a. Biology
  - b. Computing Science
  - c. Science Education
  - d. Mathematics
  - e. Medical Biology
  - f. Molecular Sciences
  - g. Physics and Astronomy
  - h. Science for Sustainability
5. The Faculty offers the following 60 EC Master's programmes:
  - a. Information Sciences
6. The study programmes are offered exclusively as full-time programmes.

### ARTICLE 1.2 EXECUTIVE BOARD GUIDELINES

1. In view of the organisation and coordination of the provisions in these regulations, the Executive Board has established the following guideline and regulations. The guideline and regulations can be found in the appendix:
  - a. Appendix 1: Guideline for Awarding Distinctions
  - b. Appendix 2: Fraud Regulations

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## ARTICLE 1.3 DEFINITIONS

1. The terms used in these regulations that also appear in the Higher Education and Research Act (Wet op het Hoger onderwijs en Wetenschappelijk onderzoek, hereinafter: 'the Act') have the same meaning as that assigned to them by the Act.
2. Apart from the terms referred to in paragraph 1, the terms below are understood to have the following meanings:
  - a. **Study programme:** the Master's programme, as referred to in Article 7.3a, paragraph 1 of the Act.
  - b. **Educational unit:** a study programme is a coherent set of educational units; see Article 7.3, paragraphs 2 and 3 of the Act. In practice, an educational unit is also referred to as a 'course'.
  - c. **Student:** a person enrolled at Radboud University to take educational units and/or to take interim examinations and the final examination of a study programme.
  - d. **Academic year:** the period from 1 September in a given year until 31 August of the following year.
  - e. **Practical:** a practical exercise as referred to in Article 7.13, paragraph 2 under (d) of the Act.
  - f. **Course objective:** a general description of the knowledge, understanding and/or skills the student must possess after completing an educational unit.
  - g. **Interim examination:** an examination testing the knowledge, understanding or skills of the student in relation to a certain educational unit, as well as the assessment of the results of this examination, which is administered by at least one examiner designated by the Examination Board as referred to in Article 7.10, paragraph 1 of the Act.
  - h. **Partial examination:** an examination testing the knowledge, understanding or skills of the student in relation to a certain educational unit, which in conjunction with one or more other partial examinations constitute the interim examination. In these regulations, when the term 'interim examination' is used, this can also be read as 'partial examination', unless explicitly indicated otherwise.
  - i. **Resit:** an opportunity to retake an interim examination as referred to in Article 7.10, paragraph 1 of the Act. In these regulations, when the term 'interim examination' is used, this can also be read as 'resit', unless explicitly indicated otherwise.
  - j. **Final examination:** an assessment, on the basis of which the Examination Board determines whether the Master's examination, as defined in the programme-specific part of these regulations, has been completed successfully.
  - k. **Final project:** the final project is an academic proof of competence in the specific field of study of the study programme.
  - l. **Fraud:** any behaviour or negligence on the part of the student that, by its nature, is directed toward making it partly or entirely impossible to properly assess the knowledge, understanding and skills of the student or of another student.
  - m. **Examination Board:** the examination board of a study programme, established in accordance with Article 7.12 of the Act. See also the Radboud University Structure Regulations.
  - n. **Examiner:** the person designated by the Examination Board to administer the interim examinations, in accordance with Article 7.12c of the Act.
  - o. **Distinction:** a distinction awarded by the Examination Board that indicates that a student has completed the study programme with exceptional success. There are two distinctions: cum laude and summa cum laude.

- p. **EC:** European Credits, i.e. the study load unit in accordance with the European Credit Transfer System.
- q. **Specialisation:** a coherent programme within the Master's programme that has been approved as such by the Faculty Board.
- r. **Working day:** Mondays to Fridays, with the exception of official holidays and any other days designated by Radboud University as collective holidays.
- s. **Course catalogue:** catalogue listing the educational units and minors associated with the study programmes. The catalogue provides programme-specific information about all Radboud University study programmes.
- t. **University:** Radboud University.
- u. **Faculty:** the Faculty of Science of Radboud University.
- v. **Education Institute:** the organisational unit responsible for the study programme.
- w. **Programme Director:** person responsible for managing the study programme. In these regulations, where the term 'programme director' is used, this can also be read as 'programme coordinator'.
- x. **Free elective:** a freely-selected, academic, assessable educational unit chosen from the options offered within the study programme.
- y. **Rules and Regulations:** regulations in which the Examination Board sets out how it works in accordance with these regulations.

# PART II GENERAL PART

## SECTION 2. ADMISSION TO THE STUDY PROGRAMME AND EDUCATION

### ARTICLE 2.1 ADMISSION AND ADMISSION REQUIREMENTS

1. The Admissions Office decides on admission on behalf of the Dean.
2. The general admission requirements are included in the [Registration Regulations for the 2025-2026 academic year](#). The programme-specific part of these regulations lists the programme-specific admission requirements.

### ARTICLE 2.2 LANGUAGE REQUIREMENTS

1. The Faculty offers study programmes in Dutch or in English. A Dutch-taught study programme may include English-taught educational units. An English-taught study programme may include Dutch-taught educational units. The language of instruction of the study programme is specified in the programme-specific part of these regulations.
2. To participate in a Dutch-taught study programme, the student must be able to provide proof of sufficient Dutch language proficiency. Qualifications and certificates that meet the Dutch language requirements can be found on the [website of Radboud University](#).
3. To participate in an English-taught study programme, the student must be able to provide proof of sufficient English language proficiency. Qualifications and certificates that meet the English language requirements can be found on the [website of Radboud University](#).
  - a. For the following certificates, the test results listed below are required:
    - TOEFL IBT, score  $\geq 90$  + sub-score  $\geq 22$  + writing sub-score  $\geq 25$
    - IELTS Academic, score  $\geq 6.5$  + sub-score  $\geq 6.0$  + writing sub-score  $\geq 6.5$
    - Cambridge Certificate C1 Advanced: general minimum score 176, minimum component score 169, minimum writing component score 176
    - Cambridge Certificate C2 Proficiency, general minimum score 180, minimum component score 169, minimum writing component score 176
4. A student who does not meet the requirements described above but can otherwise demonstrate sufficient language proficiency may submit a request for exemption from the language requirement to the Admissions Office, which will decide on the matter on behalf of the Dean.

## SECTION 3. STRUCTURE AND DESIGN

### ARTICLE 3.1 FINAL EXAMINATION, DEGREE AND DISTINCTIONS

1. A Master's programme is concluded with a Master's examination.
2. Students who pass the study programme's Master's examination will be awarded a Master of Science degree. The Master's examination is considered to have been successfully completed if a valid and satisfactory interim examination result has been obtained for all compulsory educational units, supplemented by elective educational units, as specified in the programme-specific part of these regulations. The Examination Board may conduct an additional investigation into the knowledge, understanding and skills of the candidate (see Article 7.10, paragraphs 1 and 2 of the Act).

3. The degree referred to in paragraph 2 is awarded exclusively if the student has earned at least half of the EC required for their study programme at this University.
4. The Examination Board can award distinctions to students who have successfully passed the final examination of the study programme. The rules for awarding distinctions can be found in the Guideline for Awarding Distinctions in the appendix.

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### ARTICLE 3.2 GENERAL LEARNING OUTCOMES

The study programme has the following learning outcomes for students:

1. Acquire knowledge, understanding and skills in the relevant field of study
2. Develop academic competences
3. Prepare for a future career
4. Deepen qualifications in the area of independent academic research

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### ARTICLE 3.3 CURRICULUM

1. The programme-specific part of these regulations lists and describes all of the educational units that jointly comprise the study programme.
2. For each educational unit, the Programme Director is responsible for ensuring that the following information is included in the course catalogue for the academic year corresponding to these regulations prior to the adoption of these regulations:
  - a. a description of the educational unit
  - b. the course objectives
  - c. any admission requirements
  - d. the manner in which interim examinations are administered
  - e. how the results of an interim examination are determined, taking into account the weighting of any partial examinations
  - f. scheduling of partial or interim examinations
  - g. if relevant, the limited validity of partial examinations
  - h. any capacity restrictions
3. Contrary to the provisions of Article 3.3, paragraph 2, the information from Article 3.3, paragraph 2 under (a), (c), (e), and (f) of the educational units that are completed in the third and fourth periods may still be amended by the Programme Director up until the start of the second period.
4. Students can register for an educational unit up until 11:59 p.m. on the day prior to a period of four weeks before the start of the period in which the educational unit starts. For educational units in the first period, students can register until the end of the first week of teaching.
5. For educational units with a capacity restriction as referred to in Article 3.3, paragraph 2 under (h), if the number of enrolments exceeds capacity, the following procedure will be followed: participants will be admitted in order of enrolment. Students who cannot be admitted due to capacity restrictions will also be placed on a waiting list in order of enrolment. Notwithstanding the above provisions, the Programme Director can decide otherwise; the procedure that applies in that case must be included in the course catalogue for the academic year corresponding to these regulations prior to the adoption of these regulations. A capacity restriction may not apply to students for whom the educational unit is compulsory.
6. If students are granted admission to an educational unit, they are admitted to all components of the unit in question, including the interim examination.

7. Some modes of instruction have attendance/participation requirements. Attendance or participation can only be made compulsory if attendance is required to meet one or more of the course objectives. The attendance/participation requirement must be listed in the course catalogue under the relevant educational unit.
8. All Faculty of Science Master's programmes, with the exception of Information Sciences and Science for Sustainability, offer research specialisations and societal specialisations. The specialisations are described in the programme-specific part of these regulations.
9. The educational units of the nominal space of the study programme may not have any substantial substantive overlap.
10. The study programme includes a free elective space with a study load of 6 EC.
11. The study programme includes an educational unit of a philosophical nature with a minimum study load of 3 EC.
12. The study programme includes a component for the purpose of reflecting on study progress and planning, and professional orientation with a study load of 1, 2, or 3 EC. This component can be a stand-alone educational unit or integrated into subject-specific educational units. In the latter case, assessment must take the form of one or more partial examinations.
13. The study programme includes an individual final project. The programme-specific part of these regulations lists the partial or interim examinations that together represent the final project, and their scope in EC.
14. The student must present their compiled Master's programme to the Examination Board for approval no later than three months before the expected examination date. The Examination Board will reach a decision within 20 working days of receiving the submitted programme.
15. Extracurricular educational units are allowed if, in the opinion of the Examination Board, the course is testable at an academic level.
16. If a student chooses educational units within the programme that result in a total study load exceeding 120 EC or 60 EC respectively, the excess educational units will be classified as extracurricular. This does not apply if the study load of such an educational unit would have to be split up. Extracurricular educational units do not count towards the determination of the distinction.
17. If a student can choose different educational units within the curriculum, and the student has passed more than one of these educational units, the student can decide which educational units will count toward their distinction if one or more of the educational units are extracurricular.

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#### ARTICLE 3.4 SEQUENCE OF EDUCATION AND INTERIM EXAMINATIONS

1. The programme-specific part of these regulations may contain further requirements for the order in which educational units and the accompanying interim examinations may be taken.

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#### ARTICLE 3.5 TYPES OF INTERIM EXAMINATIONS

1. Educational units are concluded by an interim examination. Interim examinations may comprise several partial examinations. Only partial examinations and interim examinations can be used to determine a final grade.
2. Partial examinations and interim examinations may consist of the following assessment forms:
  - a. Written test and/or
  - b. Oral test and/or
  - c. Presentation and/or
  - d. Skills test and/or

- e. The creation of a discipline-specific product and/or text.
3. Contrary to the provisions of Article 3.3, paragraph 2 under (d) and at the request of the student or the examiner, the Examination Board may allow an interim examination to be taken in an alternative form, if this is not to the detriment of the student.
4. The course materials offered provide the student with insight into the manner in which, as well as the form in which the learning objectives will be assessed.
5. For partial and interim examinations as referred to in paragraph 2 under (a), information concerning the format of the partial or interim examination will be provided no later than 10 working days before the day on which the partial or interim examination concerned is administered. In this context, the following must be specified:
  - a. The type of questions: open and/or closed questions
  - b. Permitted aids and resources
  - c. Application of methods whereby points are deducted, such as 'guess correction'
6. For partial and interim examinations as referred to in paragraph 2, under (c), (d), and (e), the assessment criteria must be made available with the assignment, or otherwise communicated to the student.
7. Students with functional impairments have the opportunity to take interim examinations in a manner appropriately suited to their impairment. The Examination Board shall, if necessary, seek expert advice prior to reaching a decision on the matter. If a student requires certain facilities for their interim examinations, they must request these from the Education and Examination Administration of the Faculty no later than two weeks before the interim examination.
8. During oral examinations, no more than one person is tested at a time, unless the Examination Board decides otherwise.
9. Oral examinations are not public, unless the Examination Board has deemed otherwise in exceptional cases. Oral examinations are recorded, or a second examiner or designated observer is present.

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#### ARTICLE 3.6 EXEMPTIONS

1. At the request of the student and having heard the examiner involved, the Examination Board may exempt the student, either partially or fully, from sitting for an interim examination if the student:
  - a. Has completed an educational unit at a research university or university of applied sciences (HBO) that is equivalent in content and level, or
  - b. Demonstrates that they have adequate knowledge and skills regarding the educational unit in question as a result of relevant work or professional experience.
2. Any generic exemptions in the study programme are included in the programme-specific part of these regulations.
3. A course can only be registered with a grade on the diploma for one study programme. If a course is also part of another examination programme, this course will be listed as an exemption on one of the two diplomas.
4. For students who first enrolled on or after 1 September 2017, the number of exemptions as referred to in paragraph 1 may not exceed one quarter of the total study load of the study programme expressed in EC.
5. All results achieved before the date of initial enrolment for a study programme are listed as exemptions on the diploma for that study programme. These exemptions do not count towards the EC as stated in paragraph 4 if the courses are only included in one examination programme.
6. Nor is it possible to obtain an exemption for the free elective space based on a Bachelor's educational unit that was not completed during the Master's programme.

7. Exemptions as referred to in paragraphs 1 and 2 cannot be granted for final projects.
8. If, after completing two Master's programmes, a student wishes to distribute the exemptions in accordance with paragraphs 2 and 3 across the two diplomas, they must submit an examination application for both study programmes at the same time.

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#### ARTICLE 3.7 TERM OF VALIDITY FOR SUCCESSFULLY COMPLETED INTERIM EXAMINATIONS

1. Successfully completed interim examinations are valid indefinitely.
2. Successfully completed partial examinations are valid indefinitely, unless specified otherwise in the course catalogue (see Article 3.3, paragraph 2, under (g)), but at least until the end of the academic year in which they were completed.
3. A successfully passed interim examination may be taken again. If a student resits an interim examination, in derogation from paragraph 1, the last result obtained always applies.

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#### ARTICLE 3.8 ELECTIVE PROGRAMMES

The Examination Board of the study programme decides about requests for authorisation to follow an elective programme as referred to in Article 7.3j of the Act. The Examination Board verifies whether the elective programme fits within the domain of the study programme, whether it is sufficiently cohesive, and whether the level is adequate in the context of the study programme's learning outcomes. Further requirements to this end may be set out in the programme-specific part of these regulations.

### SECTION 4. ASSESSMENT

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#### ARTICLE 4.1 FREQUENCY OF INTERIM EXAMINATIONS

1. For each educational unit, there are at least two interim examination opportunities per academic year.
2. Notwithstanding paragraph 1, there may in some cases only be one opportunity to take an interim examination or partial examination. The Programme Director is responsible for ensuring that this is included in the course catalogue for the academic year corresponding to these regulations prior to the adoption of these regulations.
3. Notwithstanding paragraph 1, if an educational unit is offered for the last time in a particular academic year, there will be at least one other opportunity to take an interim examination for this educational unit in the following academic year.
4. If an educational unit is not offered in a particular academic year, the opportunity to take the corresponding interim examination will be offered once in that academic year, as long as the interim examination is administered in written or oral form.

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#### ARTICLE 4.2 REGISTRATION FOR INTERIM EXAMINATIONS

1. Students can register for an interim examination up until 11:59 p.m. on the day prior to a period of five working days before the date of the interim examination. Registration is not possible after this, unless the head of the Education Centre decides otherwise in exceptional cases and on behalf of the Dean.

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#### ARTICLE 4.3 DETERMINATION OF INTERIM EXAMINATION RESULTS

1. The examiner determines the result of an interim examination on one of the following result scales:
  - a. A grade on a scale from 1 (lowest possible grade) to 10 (the highest possible grade), whereby only the following final grades can be awarded: 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 6, 6.5, 7, 7.5, 8, 8.5, 9, 9.5, 10. A final grade of 6 or higher means that the educational unit has been successfully completed (pass). Grades that are not one of the permitted final grades must be rounded to the nearest permitted final grade. A grade that falls exactly between two permitted final grades must be rounded up.
  - b. A non-numerical result from the following list: 'pass' (voldaan, VD), 'fail' (niet voldaan, NVD), 'satisfactory' (voldoende, VLD), 'unsatisfactory' (onvoldoende, ONV), 'good' (goed, G), 'participated' (deelgenomen, D) and 'did not participate' (niet deelgenomen, ND), whereby a result of 'VD', 'VLD', 'G' or 'D' means that the educational unit has been successfully completed.
2. Notwithstanding the provisions of paragraph 1 under (a), partial examinations may also be graded to one decimal point on a scale of 1 to 10.

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#### ARTICLE 4.4. PUBLICATION OF INTERIM EXAMINATION RESULTS

1. The examiner determines the result of an interim examination within 15 working days of the date the interim examination was administered. Here, the precondition applies that there must be at least 10 working days between the date of the publication of the result in OSIRIS and the date of the resit.
2. Notwithstanding paragraph 1, for interim examinations in the fourth period, the examiner shall determine the results of the examination no later than nine days before the date of the resit. The period between the interim examination and the resit is always at least 14 working days. This gives the examiner five working days to establish the result.
3. Contrary to the provisions of paragraph 1, the examiner shall determine the result of an oral examination within a maximum of five working days of the date it was administered, such that the student is given the opportunity to graduate in the current academic year.
4. In exceptional cases, the Examination Board may extend the term in which the result must be determined as referred to in paragraphs 1 and 2 by a maximum of 10 working days. This is not possible for the interim examinations in the fourth period. The lecturer will inform students of this extension.
5. The examiner determines the result of the final project within 15 working days after all products and assessments have been completed and submitted according to the method specified in the course catalogue.
6. In the statement concerning the result of an interim examination, the student is also informed of their right to inspection, as referred to in Article 4.5, as well as the right to appeal to the Examination Appeals Board.
7. Students may appeal an interim examination result to the Examination Appeals Board within six weeks after the date of publication of the examination result in question.

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#### ARTICLE 4.5 RIGHT OF INSPECTION AND REVIEW

1. Students are given the opportunity to view their graded work within 30 working days of the publication of the results of a written interim examination. The student can submit a request to this end to the examiner. The student may upon request also be provided with a copy of their graded work where 'open' questions are concerned. The inspection must take place at least five working days before the resit. For interim examinations in the fourth period, this is possible until one working day before the resit.

2. During the period referred to in paragraph 1, any student who has taken an interim examination may review the questions and assignments of the interim examination in question, as well as the standards on which the assessment was based.
3. If the student demonstrates that they are or were unable to attend an inspection due to circumstances outside their control, they may ask the Examination Board to allow them another opportunity to inspect the examination, if possible within the period referred to in paragraph 1.
4. The retention period for partial and interim examinations is:
  - Written partial and interim examinations on paper: two years (retained by the examiner)
  - Digital written partial and interim examinations: two years (retained in the assessment software)
  - Final project: seven years (retained in OSIRIS)

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#### ARTICLE 4.6 DETERMINATION OF FINAL EXAMINATION RESULTS

1. Students are given the opportunity to take the final examination once they have successfully completed all educational units, as described in Article 3.3, paragraph 14.
2. There is at least one final examination date every month.
3. The Examination Board will determine the result of the final examination, as well as the rules for the manner in which the result of the examination is determined. The result is determined within five weeks following the application. If the final examination takes place in July, the results will be determined no later than 31 August. Where needed due to entry requirements for a subsequent study programme or the acceptance of a job, a statement can be released within five working days indicating that the student has met the requirements of the final examination. This is only possible if the student has met the requirement specified in paragraph 1.
4. Before the Examination Board determines the result of the final examination, they may evaluate and assess the student's knowledge on one or more educational units or aspects of the study programme, if and to the degree to which this is justified by the results of the relevant interim examinations.

### SECTION 5. STUDY PROGRESS, ACADEMIC COUNSELLING, STUDY ADVICE AND EVALUATION OF EDUCATION

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#### ARTICLE 5.1 STUDY PROGRESS AND ACADEMIC COUNSELLING

1. The Dean is responsible for recording study results in such a way that the Education and Examination Administration can, upon request, and within a reasonable time period, provide every student with an overview of their study results up to that moment.
2. The Dean is responsible for providing adequate academic counselling.

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#### ARTICLE 5.2 METHOD OF EVALUATING EDUCATION

In compliance with the quality assurance system of the University as described in the Radboud University Quality Assurance Manual, the Dean shall ensure that the education of the study programmes is evaluated systematically.

# PART III PROGRAMME-SPECIFIC PART

## SECTION 6. ADMISSION TO THE STUDY PROGRAMME AND EDUCATION

### ARTICLE 6.1 ADMISSION REQUIREMENTS

The following students are admissible to the study programme:

1. Students who have successfully completed the final examination of the Bachelor's programme in Physics and Astronomy at Radboud University.
2. Students who have successfully completed the final examination of the Bachelor's programme in (Technical) Physics and/or Astronomy at another Dutch university.
3. Students who are in possession of a certificate that is at least equivalent to the qualification referred to in Article 6.1 under a and b.
4. Students who have in the opinion of the Examination Board otherwise demonstrated their suitability for participation in the study programme, including the successful completion of a pre-Master's programme set for them.
5. Students must provide proof of sufficient proficiency in English, as described in Article 2.2.

## SECTION 7. STRUCTURE AND DESIGN

### ARTICLE 7.1 PROGRAMME-SPECIFIC LEARNING OUTCOMES

In addition to the general learning outcomes described in the general part of these regulations, the study programme aims to achieve the following learning outcomes:

1. General cognitive skills:
  - a. Graduates have acquired a way of thinking that will enable them to penetrate and solve problems, while maintaining a critical stance towards established scientific insights.
  - b. Graduates are able to formulate and analyse scientific problems at an abstract level by dividing them into testable sub-problems, differentiating between major and minor aspects.
  - c. Graduates are able to synthesise solutions to sub-problems within a scientific framework and thus contribute to the formulation of general theories.
  - d. Graduates possess mathematical knowledge to the extent that it is relevant in physics and astronomy at Master's level.
  - e. Graduates possess sufficient skills in the fields of computing and computer science, which will enable them to design and implement computer programs and use current application programs.
2. Skills based on knowledge and insights pertaining to the fields of physics and astronomy
  - a. Graduates have gained adequate knowledge and insights pertaining to the basic sub-areas of physics and astronomy. The scope of this basic knowledge is sufficient to allow them to receive practical training in one of the research groups.
  - b. Graduates possess sufficient skills in at least one sub-specialisation of physics and astronomy to conduct scientific research under supervision.

- c. Graduates are able to understand scientific articles on their chosen specialisation. Furthermore, they are able to follow developments in their chosen specialisation (as published in the professional, peer-reviewed literature of the field, such as the Physical Review).
  - d. Graduates are able to assimilate newly acquired knowledge of physics and astronomy and to integrate this knowledge with the knowledge they already possess. They are also able to orient themselves at specialist level in a sub-specialisation of physics and astronomy that lies outside their chosen specialisation.
3. Research methods in physics and astronomy
    - a. Graduates are able to find relevant scientific sources relating to physical or astronomical problems that need to be solved.
    - b. Graduates are able to formulate new questions and hypotheses in the fields of physics and astronomy, and to select the appropriate pathways and research methods for solving these questions, taking into account the services and means available.
    - c. Graduates are able to set up and perform experimental or theoretical scientific research, to systematically process and critically interpret the research results, and to formulate conclusions.
  4. General communication skills
    - a. Graduates are able to communicate with colleagues in the same discipline about scientific knowledge, both at basic and specialist levels. They are able to report orally and in writing, and to discuss a scientific topic.
    - b. Graduates are able to give an oral presentation and to write a lucid article on research and modern concepts in physics and astronomy for a general, non-specialist public.
  5. Reflection on society, societal problems, and professional career
    - a. Graduates have gained sufficient knowledge of and insights into the role of physics and astronomy in society in order to function adequately in their future professions and reflect on societal problems.
    - b. Graduates have gained knowledge and acquired skills to compete for professional opportunities after graduation.
  6. Specific skills to be acquired in the specialisations
    - a. Students who opt for the specialisation in Particle and Astrophysics, Quantum Matter, and Neurophysics
      - i. Develop a broad and in-depth overview of the topic of the Master's specialisation and profound knowledge of capita selecta in connection to the topic of their Master's thesis.
    - b. Students who opt for the specialisation in Science, Management and Innovation, as described in Article 7.2d, also achieve the following learning outcomes:
      - a. Graduates are able to bridge the gap between their own scientific discipline and other disciplines, based on a profound understanding of their chosen core theme and its relation to political, business/economic, societal, technological, environmental and legal issues or objectives in today's world.
      - ii. Graduates are able to take an analytical approach to a system that can draw on methods or models from both inside and outside their core scientific discipline.
      - iii. Graduates have developed a proficiency in utilising research methods and frameworks from the social sciences.
      - iv. Graduates have developed a proficiency in speaking the language of both the natural and social sciences in order to effectively communicate in written and spoken form the problems and approaches for solutions that are found at the intersection of scientific research and applications in society.
      - v. Graduates have developed the ability to balance perspectives and interests in specific contexts within a company, government and non-government organisation or an industry in the general sense in order to formulate appropriate strategies and

recommendations that can be utilised towards the realisation of the Sustainable Development Goals (SDGs).

- vi. Graduates have developed the ability to work in multidisciplinary and multicultural high-performance teams based on a sound division of tasks, knowledge, competencies, and responsibilities, whilst respecting diverging views and opinions.
- c. Students who opt for the specialisation in Science in Society
- i. Develop the ability to analyse the role of scientific expertise in societally relevant issues.
  - ii. Develop the ability to design and conduct independent and methodologically sound social research at the interface of science and society, and contribute to academic research.
  - iii. Develop the ability to understand and implement public and stakeholder engagement in research and innovation.
  - iv. Develop the ability to analyse, improve and evaluate interdisciplinary collaborations with multiple stakeholders, integrating different perceptions, interests, and types of knowledge (experiential, professional and scientific).
  - v. Develop the ability to substantiate and communicate the relevance of their scientific discipline in society.

The final learning outcomes for the specialisation in Science and Education are listed in the table below:

	Knowledge and insight	Skills		Attitude	
	1. Knowledge and insight	2. Applying knowledge and insight	3. Communication	4. Making judgements	5. Learning skills
<b>A. Development of Scientific Competences</b> 2.4, 2.7-2.9, 2.11, 2.13*	Graduates have knowledge and understanding of national and international developments in science and its relation to their school subject. This refers to: - [scientific discipline]** - [(discipline) didactics] Graduates are familiar with relevant educational and learning theories.	Graduates are able to carry out scientific research that, in a relevant way, combines elements from the field of - [scientific discipline] - [(discipline) didactics]	Graduates are able to report on research in an academically responsible manner. This concerns in any case research that, in a relevant way, combines elements from the field of - [scientific discipline] - [(discipline) didactics]	Graduates are able to make judgements about the quality of research in these areas from the perspective of [scientific discipline] and [(discipline) didactic knowledge] and insights.	Graduates are able to reflect on their own learning from academic education and learning theories and can independently keep pace with national and international developments in academia.
<b>B. (Development of) Didactics Competences</b> 2.4*	Graduates have basic academic knowledge of discipline-specific and general didactic insights about teaching and [the school subject].	Graduates are able to create, implement and systematically evaluate an educational design (which includes designing tests). In the process, they are able to establish a relationship between (discipline) didactic and disciplinary content concepts, pupils' disciplinary thinking at different levels and problems from teaching practice in the school subject.	Graduates are able to communicate clearly with individual pupils and groups of pupils, colleagues and relevant third parties (e.g. parents), with a focus on cooperation, responsibility, and differentiated action and improving the social climate.	Graduates are able to make judgements about specific problems in [the school subject] and infer appropriate action. Graduates are able to prioritise developmental and behavioural problems independently, and act appropriately after consulting relevant third parties.	Graduates are able to devote attention to the discipline-specific learning of individual students, with a focus on developing inspiring education.
<b>B. (Development of) Pedagogic Competences</b> 2.14, 2.16, 2.18*	Graduates have basic academic knowledge of the development of, and communication with, students in the classroom, the conditions for a powerful learning environment, and how to use them to create an effective working environment.				

	Knowledge and insight	Skills		Attitude	
	1. Knowledge and insight	2. Applying knowledge and insight	3. Communication	4. Making judgements	5. Learning skills
<b>C. (Development of) Academic Professional Competencies</b>	Graduates have basic knowledge of standards and requirements related to relevant professional sectors, including at least [discipline-related professional sectors] and the professional educational sector.	Graduates are able to responsibly translate and apply academic knowledge and insights for the benefit of professional practice, including [discipline-related professional sectors] and educational professional practice. More specifically, they are able to apply academic knowledge and insights for the benefit of school and policy development, scientific discipline development and teacher development (both personal development and that of colleagues). Graduates are able to think and act creatively to solve problems, using digital competences.	Graduates are able to contribute in a constructive and clear manner to relevant collaborations, including: - the academic, public and societal debate - professional groups in [discipline-related professional sectors] and the educational sector - teams at school.	Graduates are able to take an academically argued position in relevant collaborations, including: - the academic, public and societal debate - professional groups in [discipline-related professional sectors] and the educational sector - teams at school. Graduates are able to critically consider and adjust their own actions, using basic knowledge of standards and requirements related to relevant professional sectors.	Graduates have developed a distinct identity in the context of the academic profession. Graduates are able to interpret their own knowledge and actions and the actions and feedback of colleagues, and use them to guide their own professional development.

\* Italicised numbers refer to the relevant paragraph in the *Besluit Bekwaamheidseisen Onderwijspersoneel* (Decree on Proficiency Requirements for Teaching Staff) (16 March 2017).

\*\* Text in square brackets refers to components that are completed in a subject-specific manner, depending on the chosen specialisation.

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## ARTICLE 7.2 COMPOSITION OF THE STUDY PROGRAMME

1. The student chooses one of the following specialisations of the study programme:
  - a. Particle and Astrophysics
  - b. Quantum Matter (until 2023-2024 Physics of Molecules of Materials)
  - c. Neurophysics
  - d. Science, Management and Innovation (SMI)
  - e. Science in Society (SiS)
  - f. Science and Education (enrolment closed from 2024-2025 academic year)

The programme for the research specialisations (a, b and c) is described under Article 7.2.1. The programme for the societal specialisations (d, e and f) is described under Articles 7.2.2, 7.2.3 and 7.2.4.

Educational units of the type 'elective' refer to 'free elective' as described in Article 1.3.

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### 7.2.1 MASTER'S PROGRAMME OF THE RESEARCH SPECIALISATION IN PARTICLE AND ASTROPHYSICS

#### MANDATORY TRACK COURSES (15 EC)

Course code	Course name	EC
NWI-NM108	Gravity and the Cosmos	6
NWI-NM109	Particles and the Cosmos	6
NWI-NM072E	Student Seminar Particle & Astrophysics	3

#### MANDATORY PHA COURSES (8 EC)

Course code	Course name	EC
NWI-NM001B	Electrodynamics	3
NWI-FFIL211B	Physics and Philosophy	3
NWI-NM019C	Professional Preparation	2

#### PROGRAMME ELECTIVES (24 EC)\*

This elective space can also be filled with one of the synergy tracks: Computational and Data Science (all research specialisations) or Gravity+ (Particle and Astrophysics).

Course code	Course name	EC
NWI-MOL406	Computational Physical Chemistry 1	3
NWI-NB077	Experimental Techniques	3
NWI-NM009B	Solid State Physics	6
NWI-NM015C	CDS: Advanced Programming	3
NWI-NM016B	Nuclear Physics	6
NWI-NM018B	Black Holes and Accretion	6
NWI-NM024C	Foundations & Frontiers of GW Astrophysics	6
NWI-NM040B	Quantum Field Theory	6
NWI-NM042B	Monte Carlo Techniques	6
NWI-NM044C	Fundamentals of Magnetism	6
NWI-NM047D	Computational Neuroscience	3
NWI-NM048B	Advanced Machine Learning	3
NWI-NM048D	CDS: Machine Learning	3

NWI-NM050B	Theory of Brain Machine Interfaces	6
NWI-NM066D	CDS: Numerical Methods	3
NWI-NM067B	Data Analysis	3
NWI-NM070C	Scanning Probe Microscopy	3
NWI-NM076B	Astroparticle Physics	6
NWI-NM079B	Mechanical Engineering	2
NWI-NM080B	Quantitative Brain Networks	6
NWI-NM083B	Quantum Transport	6
NWI-NM085C	Advanced Computational Neuroscience	6
NWI-NM089B	Molecular Physics	6
NWI-NM092B	Advanced Stellar and Binary Evolution	6
NWI-NM099B	Hands-on Neuroscience	6
NWI-NM101B	Lie Algebras in Particle Physics	3
NWI-NM102	The Auditory System	3
NWI-NM103B	Methods in Neuroscience	3
NWI-NM107B	General Relativity	9
NWI-NM112	Formation and Evolution of Galaxies	6
NWI-NM114	Quantum Gravity	6
NWI-NM116B	Machine Learning in Physics	6
NWI-NM119	Neurobiophysics	3
NWI-NM120	Neuro-Analysis	3
NWI-NM121	Astronom Instrumentation & Data Analysis	9
NWI-NM122	Quantum Field Theory 2: Standard Model	3
NWI-NM124	Gravity+ Club	3
NWI-NM125	Foundations of GW & BH Pert. Theory	3
NWI-NM126B	Exp Particle Physics: Detection Techn	3
NWI-NM127	Modelling of Complex Systems	6
NWI-NM128	Interstellar Matter	6
NWI-NM129	Th. Foundations of Quantum Field Theory	6
NWI-NM130	GW Astrophysics: Statistics and Data Analysis	3
NWI-NM131	Photonics	3
NWI-NM132	Condensed Matter Quantum Field Theory	6
NWI-NM133	Computational Quantum Physics	6
NWI-NM134	Ultracold Atoms and Molecules	3
NWI-NM135	Exp Part Phys: Standard Model & New Phys	6
NWI-NM136	Building a particle physics detector	3
NWI-SM292A	Molecular Materials	3
NWI-SM295	Quantum Dynamics	3
NWI-SM297	Molecular Modelling	3
NWI-NM117B	Superconductivity	3
NWI-NM110	Quantum Geometry	6
NWI-NM022C	Open Questions in Th Particle Physics	3

\*Students need to complete at least 24 EC worth of courses from the Physics and Astronomy Master's programme. The list of courses needs to be approved by the Examination Board. Courses from the list below have been pre-approved. A synergy track can be part of these 24 EC. The elective space should be supplemented up to 37 EC.

## THESIS PROJECT (60 EC)

Course code	Course name	EC
NWI-NM086F	Master Thesis Project Physics & Astronomy	60

## 7.2.2 MASTER'S PROGRAMME OF THE RESEARCH SPECIALISATION IN QUANTUM MATTER

### MANDATORY TRACK COURSES (15 EC)

Course code	Course name	EC
NWI-NM009B	Solid State Physics	6
NWI-NM089B	Molecular Physics	6
NWI-NM113	Student Seminar QM	3

### MANDATORY PHA COURSES (8 EC)

Course code	Course name	EC
NWI-NM001B	Electrodynamics	3
NWI-FFIL211B	Physics and Philosophy	3
NWI-NM019C	Professional Preparation	2

### PROGRAMME ELECTIVES (24 EC)\*

This elective space can also be filled with one of the synergy tracks: Computational and Data Science (all research specialisations).

Course code	Course name	EC
NWI-MOL406	Computational Physical Chemistry 1	3
NWI-MOL409	Fundamentals of Spectroscopy	6
NWI-NB077	Experimental Techniques	3
NWI-NM015C	CDS: Advanced Programming	3
NWI-NM016B	Nuclear Physics	6
NWI-NM018B	Black Holes and Accretion	6
NWI-NM024C	Foundations & Frontiers of GW Astrophysics	6
NWI-NM040B	Quantum Field Theory	6
NWI-NM042B	Monte Carlo Techniques	6
NWI-NM044C	Fundamentals of Magnetism	6
NWI-NM047D	Computational Neuroscience	3
NWI-NM048B	Advanced Machine Learning	3
NWI-NM048D	CDS: Machine Learning	3
NWI-NM050B	Theory of Brain Machine Interfaces	6
NWI-NM066D	CDS: Numerical Methods	3
NWI-NM067B	Data Analysis	3
NWI-NM070C	Scanning Probe Microscopy	3
NWI-NM076B	Astroparticle Physics	6
NWI-NM079B	Mechanical Engineering	2
NWI-NM080B	Quantitative Brain Networks	6
NWI-NM083B	Quantum Transport	6

NWI-NM085C	Advanced Computational Neuroscience	6
NWI-NM092B	Advanced Stellar and Binary Evolution	6
NWI-NM099B	Hands-on Neuroscience	6
NWI-NM101B	Lie Algebras in Particle Physics	3
NWI-NM102	The Auditory System	3
NWI-NM103B	Methods in Neuroscience	3
NWI-NM107B	General Relativity	9
NWI-NM108	Gravity and the Cosmos	6
NWI-NM112	Formation and Evolution of Galaxies	6
NWI-NM114	Quantum Gravity	6
NWI-NM116B	Machine Learning in Physics	6
NWI-NM119	Neurobiophysics	3
NWI-NM120	Neuro-Analysis	3
NWI-NM121	Astronom Instrumentation & Data Analysis	9
NWI-NM122	Quantum Field Theory 2: Standard Model	3
NWI-NM124	Gravity+ Club	3
NWI-NM125	Foundations of GW & BH Pert. Theory	3
NWI-NM126B	Exp Particle Physics: Detection Techn	3
NWI-NM127	Modelling of Complex Systems	6
NWI-NM128	Interstellar Matter	6
NWI-NM129	Th. Foundations of Quantum Field Theory	6
NWI-NM130	GW Astrophysics: Statistics and Data Analysis	3
NWI-NM131	Photonics	3
NWI-NM132	Condensed Matter Quantum Field Theory	6
NWI-NM133	Computational Quantum Physics	6
NWI-NM134	Ultracold Atoms and Molecules	3
NWI-NM135	Exp Part Phys: Standard Model & New Phys	6
NWI-NM136	Building a particle physics detector	3
NWI-SM295	Quantum Dynamics	3
NWI-SM297	Molecular Modelling	3
NWI-NM117B	Superconductivity	3
NWI-NM074C	Laser Matter Interaction	3

\*Students need to complete at least 24 EC worth of courses from the Physics and Astronomy Master's programme. The list of courses needs to be approved by the Examination Board. Courses from the list below have been pre-approved. A synergy track can be part of these 24 EC. The elective space should be supplemented up to 37 EC.

### 7.2.3 MASTER'S PROGRAMME OF THE RESEARCH SPECIALISATION IN NEUROPHYSICS

#### MANDATORY TRACK COURSES (15 EC)

Course code	Course name	EC
NWI-NM119	Neurobiophysics	3
NWI-NM048D	CDS: Machine Learning	3
NWI-NM047D	Computational Neuroscience	3
NWI-NM085C	Advanced Computational Neuroscience	6

**MANDATORY PHA COURSES (8 EC)**

Course code	Course name	EC
NWI-NM001B	Electrodynamics	3
NWI-FFIL211B	Physics and Philosophy	3
NWI-NM019C	Professional Preparation	2

**PROGRAMME ELECTIVES (24 EC)\***

This elective space can also be filled with one of the synergy tracks: Computational and Data Science (all research specialisations).

Course code	Course name	EC
NWI-MOL406	Computational Physical Chemistry 1	3
NWI-MOL409	Fundamentals of Spectroscopy	6
NWI-NB077	Experimental Techniques	3
NWI-NM009B	Solid State Physics	6
NWI-NM015C	CDS: Advanced Programming	3
NWI-NM016B	Nuclear Physics	6
NWI-NM018B	Black Holes and Accretion	6
NWI-NM024C	Foundations & Frontiers of GW Astrophysics	6
NWI-NM040B	Quantum Field Theory	6
NWI-NM042B	Monte Carlo Techniques	6
NWI-NM044C	Fundamentals of Magnetism	6
NWI-NM048B	Advanced Machine Learning	3
NWI-NM050B	Theory of Brain Machine Interfaces	6
NWI-NM048D	CDS: Machine Learning	3
NWI-NM050B	Theory of Brain Machine Interfaces	6
NWI-NM066D	CDS: Numerical Methods	3
NWI-NM067B	Data Analysis	3
NWI-NM070C	Scanning Probe Microscopy	3
NWI-NM076B	Astroparticle Physics	6
NWI-NM079B	Mechanical Engineering	2
NWI-NM080B	Quantitative Brain Networks	6
NWI-NM083B	Quantum Transport	6
NWI-NM089B	Molecular Physics	6
NWI-NM092B	Advanced Stellar and Binary Evolution	6
NWI-NM099B	Hands-on Neuroscience	6
NWI-NM101B	Lie Algebras in Particle Physics	3
NWI-NM102	The Auditory System	3
NWI-NM103B	Methods in Neuroscience	3
NWI-NM107B	General Relativity	9
NWI-NM108	Gravity and the Cosmos	6
NWI-NM112	Formation and Evolution of Galaxies	6
NWI-NM114	Quantum Gravity	6
NWI-NM116B	Machine Learning in Physics	6
NWI-NM120	Neuro-Analysis	3
NWI-NM121	Astronom Instrumentation & Data Analysis	9

NWI-NM122	Quantum Field Theory 2: Standard Model	3
NWI-NM124	Gravity+ Club	3
NWI-NM125	Foundations of GW & BH Pert. Theory	3
NWI-NM126B	Exp Particle Physics: Detection Techn	3
NWI-NM127	Modelling of Complex Systems	6
NWI-NM128	Interstellar Matter	6
NWI-NM129	Th. Foundations of Quantum Field Theory	6
NWI-NM130	GW Astrophysics: Statistics and Data Analysis	3
NWI-NM131	Photonics	3
NWI-NM132	Condensed Matter Quantum Field Theory	6
NWI-NM133	Computational Quantum Physics	6
NWI-NM134	Ultracold Atoms and Molecules	3
NWI-NM135	Exp Part Phys: Standard Model & New Phys	6
NWI-NM136	Building a particle physics detector	3
NWI-SM292A	Molecular Materials	3
NWI-SM295	Quantum Dynamics	3
NWI-SM297	Molecular Modelling	3
NWI-NM117B	Superconductivity	3
NWI-NM079B	Mechanical Engineering	2

\*Students need to complete at least 24 EC worth of courses from the Physics and Astronomy Master's programme. The list of courses needs to be approved by the Examination Board. Courses from the list below have been pre-approved. A synergy track can be part of these 24 EC. The elective space should be supplemented up to 37 EC.

## 7.2.4 SYNERGY TRACKS

### 7.2.4.1 SYNERGY TRACK COMPUTATIONAL AND DATA SCIENCE (15 EC)

#### MANDATORY COURSES (9 EC)

Course code	Course name	EC
NWI-NM048D	CDS: Machine Learning	3
NWI-NM066D	CDS: Numerical Methods	3
NWI-NM015C	CDS: Advanced Programming	3

#### FREE ELECTIVES (6 EC)

Course code	Course name	EC
NWI-SM297	Molecular Modelling	3
NWI-MOL406	Computational Physical Chemistry 1	3
NWI-MOL437	Computational Physical Chemistry 2	3
NWI-SM299	Pattern Recognition for Natural Science	3
NWI-NM133	Computational Quantum Physics	6

NWI-NM042B	Monte Carlo Techniques	6
NWI-NM067B	Data Analysis	3
NWI-NM121	Astronom Instrumentation & Data Analysis	9
NWI-NM116B	Machine Learning in Physics	6
NWI-NM048B	Advanced Machine Learning	6
NWI-IMC030	Machine Learning in Practice	6
NWI-NM127	Modelling of Complex Systems	6
NWI-NM085C	Advanced Computational Neuroscience	6

#### 7.2.4.2 SYNERGY TRACK GRAVITY+ (18 EC)

##### MANDATORY COURSES (12 EC)

Course code	Course name	EC
NWI-NM107B	General Relativity	9
NWI-NM124	Gravity+ Club	3

##### FREE ELECTIVES (6 EC)

Course code	Course name	EC
NWI-NM018B	Black Holes and Accretion	6
NWI-WM159	Singularities and Black Holes	6
NWI-NM114	Quantum Gravity	6
NWI-NM110	Quantum Geometry	6
NWI-NM024C	Foundations & Frontiers of GW Astrophysics	6
NWI-NM125	Foundations of GW & BH Pert. Theory	3
NWI-NM130	GW Astrophysics: Statistics and Data Analysis	3

#### 7.2.5 FREE ELECTIVES (13 EC)

See the general part of the EER, Article 3.3, paragraph 10.

#### 7.2.6 MASTER THESIS PROJECT PHYSICS AND ASTRONOMY (60 EC) (NWI-NM086F)

The Final Research Project (also called Master's internship) can be completed at one of the research departments in physics, astronomy or mathematical physics at the Faculty of Science. For an internship conducted at an external institute, university or company, approval from the internship coordinator must be obtained before the start of the internship.

### 7.3 MASTER'S SPECIALISATIONS IN SCIENCE IN SOCIETY AND SCIENCE, MANAGEMENT AND INNOVATION OF PHYSICS AND ASTRONOMY

The first year of the Physics and Astronomy Master's for the societal specialisations consists of the following educational units:

### 7.3.1 MANDATORY EDUCATIONAL UNITS IN PHYSICS AND ASTRONOMY (5 EC)

Course code	Course name	EC
NWI-FFIL211B*	Physics and Philosophy	3
NWI-NM019C	Professional Preparation	2

\*Instead of this course, students may also take NWI-EDU-NA001 History and Principles of Physics (6 EC). This will be deducted from the elective space, paragraph 2 or 3.

### 7.3.2 LIMITED CHOICE ELECTIVES IN PHYSICS AND ASTRONOMY (19 EC)

Students are required to take 19 EC of Physics and Astronomy courses at Master's level. Their choice must be submitted to the Examination Board for approval. Courses mentioned in Article 7.2.1 under specialisation (elective) courses are automatically approved.

### 7.3.3 FREE ELECTIVES (6 EC)

See the general part of the EER, Article 3.3, paragraph 10.

### 7.3.4 MASTER THESIS PHYSICS AND ASTRONOMY (NWI-NM078D) (30 EC)

The study programme publishes an annual list of approved internship departments in the course catalogue. In order to complete an internship at a department that is not on this list, permission must be obtained from the internship coordinator prior to the start of the internship.

#### ARTICLE 7.3.5.1 SCIENCE IN SOCIETY

The second year of the Master's specialisation in Science in Society consists of the following educational units:

#### 1. MANDATORY EDUCATIONAL UNITS (27 EC)

Course code	Course name	EC
NWI-FC0046	Introduction to Philosophy and Social Studies of Science	3
NWI-FFIL218	Science and Values	3
NWI-FC0045	Science and Public Participation	6
NWI-FC0010D	Framing Knowledge	6
NWI-FFIL220 <u>OR</u> NWI-FC0043B	Philosophy of Evidence and Expertise <u>OR</u> Science and Public Policy	3 3
NWI-FC0049	Social Scientific and Philosophical Methods for Science in Society	3
SiS elective course*	Elective course (see below)	3

\*The student chooses one of the following educational units:

Course code	Course name	EC
NWI-FC0013C	Science and Media	3
MED-BMS07	Science, Communication and Society	3

NWI-FFIL209B	Environmental Ethics	3
NWI-FFIL217	Science and Arts	3
NWI-FFIL302	Philosophy and Ethics in Microbiology	3
NWI-IMI003	Philosophy and Ethics for Computing and Information Science	3
NWI-FFIL221	Beyond Boundaries: An Introduction to Interdisciplinarity	3

## 2. EDUCATIONAL UNIT OF A PHILOSOPHICAL NATURE (3 EC)

Students choose one of the following courses of a philosophical nature (3 EC):

Course code	Course name	EC
NWI-FFIL203B	Bioethics for Life Scientists	3
NWI-FFIL202A	Evolution and the Mind	3
NWI-FFIL209B	Environmental Ethics	3
NWI-FFIL217	Science and Arts	3
NWI-FFIL215	Upgrading the Human?	3
NWI-FFIL302	Philosophy and Ethics in Microbiology	3
NWI-FFIL211B	Philosophy and Physics	3
NWI-FFIL216	Imagining the Anthropocene	3
NWI-FFIL218	Science and Values	3
NWI-FFIL220	Philosophy of Evidence and Expertise	3
NWI-FFIL221	Beyond Boundaries: An Introduction to Interdisciplinarity	3
NWI-FFIL222	Philosophy of Ecological Restoration	3
NWI-FFIL223	Philosophy of Mathematics	3

A course chosen as a philosophy course and/or a free elective course cannot be chosen as a course of a philosophical nature.

## 3. SCIENCE IN SOCIETY RESEARCH PROJECT (30 EC) (NWI-SISSTAGE)

In consultation with a SiS lecturer, the SiS graduation project can be completed both internally (at the ISIS department) and externally (government, consulting firms, NGOs, etc.). In the first month, the student will write a research plan which must be approved by both the first and the second examiner. The assessment of the thesis is based on the criteria described in the Graduation Project Guidelines SiS. Students may only take part in the Science, Management and Innovation Final Research Project once they have successfully completed 12 EC from the SiS curriculum, including at the very least the Social Scientific and Philosophical Methods for Science in Society course.

### ARTICLE 7.3.5.2 SCIENCE, MANAGEMENT AND INNOVATION

The second year of the Master's specialisation in Science, Management and Innovation consists of the following educational units:

### 1. MANDATORY EDUCATIONAL UNITS (15 EC)

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Course code	Course name	EC
NWI-FMT003F	Sustainable Innovation Management	3
NWI-FMT030	Reaching Sustainable Development Goals	6
NWI-FMT019A	Methods in Societal Research: Science, Management & Innovation	6

### 2. THEMATIC EDUCATIONAL UNITS (15 EC)

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Students can choose from one of the following themes:

#### *Climate and Energy*

Course code	Course name	EC
NWI-FMT022	Energy and Climate	6
NWI-FMT026	Energy Systems Analysis	3
NWI-FMT032	Environmental Life Cycle Assessment	6

#### *Health*

Course code	Course name	EC
NWI-FMT023	The Future of Health	6
NWI-FMT029	How Health Systems Work	6
	Free electives	3

#### *Biodiversity*

Course code	Course name	EC
NWI-BM038A	Ecological and Environmental Concepts	3
NWI-BM075	Biodiversity Assessment	3
NWI-BM033F	Nature in a Crowded Country	3
NWI-FMT032	Environmental Life Cycle Assessment	6

### 3. EDUCATIONAL UNIT OF A PHILOSOPHICAL NATURE (3 EC)

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Students choose one of the following courses of a philosophical nature (3 EC):

Course code	Course name	EC
NWI-FFIL203B	Bioethics for Life Scientists	3
NWI-FFIL202A	Evolution and the Mind	3
NWI-FFIL209B	Environmental Ethics	3
NWI-FFIL217	Science and Arts	3
NWI-FFIL215	Upgrading the Human?	3
NWI-FFIL302	Philosophy and Ethics in Microbiology	3
NWI-FFIL211B	Philosophy and Physics	3

NWI-FFIL216	Imagining the Anthropocene	3
NWI-FFIL220	Philosophy of Evidence and Expertise	3
NWI-FFIL221	Compete or Collaborate? An Introduction to Disciplines and Interdisciplinarity	3
NWI-FFIL222	Philosophy of Ecological Restoration	3
NWI-FFIL223	Philosophy of Mathematics	3

A philosophy course that is taken as a compulsory course and/or as an elective course may not be chosen as a course of a philosophical nature.

#### 4. SCIENCE, MANAGEMENT AND INNOVATION FINAL RESEARCH PROJECT, NWI-FMT033 (27 EC)

The SMI research project may, in consultation with the SMI coordinator or a lecturer from the SMI specialisation, be completed both internally (within RU/Radboudumc) or externally (government, businesses, consulting firms, NGOs, etc.), at home or abroad. In the first month, the student writes a research plan that must be approved by the first examiner, the day-to-day supervisor from the organisation, and the second examiner. Students may only take part in the Science, Management and Innovation Final Research Project once they have successfully completed the theme-based educational units NWI-FMT019A Methods in Societal Research: Science, Management & Innovation and NWI-FMT003F Sustainable Innovation Management. The assessment of the thesis is based on the criteria described in the ***Doing your Research Project in the Science, Management and Innovation Master Specialisation: Student Guide*** manual. It is possible to extend the SMI Research Project up to a maximum of 30 EC.

#### ARTICLE 7.3.5.3 SCIENCE AND EDUCATION

Note: Enrolment for this specialisation is closed from the 2024-2025 academic year.

##### Programme

In derogation from Article 3.3 paragraph 10 of the general part of the Master's EER, this variant has no free elective space.

#### 1. MANDATORY EDUCATIONAL UNITS (84 EC)

Course code	Course name	EC
NWI-EDU-NA001	Geschiedenis en filosofie van de natuurkunde	6
NWI-EDU-NA002	Vakspecifiek denken in de natuurkunde	6
NWI-EDU05	Bètawetenschappen en samenleving	6
RDA-VDA-NA	Vakdidactiek A natuurkunde	5
RDA-VDB-NA	Vakdidactiek B natuurkunde	5
RDA-PED	Pedagogisch handelen	4
RDA-MA2-WP	Wetenschap in de educatieve praktijk	4
RDA-MA2-BS	Begeleide Stage en Integraal Oordeel	15
RDA-MA2-ZS	Zelfstandige Stage en Integraal Oordeel	15
NWI-EDU02	Methoden van Vakdidactisch Onderzoek	6
LET-EDU-MA17	Academische en Professionele Ontwikkeling 1	3
LET-EDU-MA18	Academische en Professionele Ontwikkeling 2	3
LET-EDU-MA19	Academische en Professionele Ontwikkeling 3	3
LET-EDU-MA20	Academische en Professionele Ontwikkeling 4	3

#### 2. LIMITED CHOICE ELECTIVES (16 EC)

##### 2a. Physics electives (12 EC)

Choice from:

Course code	Course name	EC
NWI-NM109	Particles and the Cosmos <i>and</i>	6
NWI-NM108	Gravity and the Cosmos	6
	<i>or</i>	
NWI-NM009B	Solid State Physics <i>and</i>	6
NWI-NM089B	Molecular Physics	6

### 2b. Pedagogical-didactic electives (4 EC)

To choose from RDA specialisation courses, 2 EC each, course codes RDA-SP-01 up to and including RDA-SP-08.

Course code	Course name	EC
RDA-SP-01	Formatief handelen	2
RDA-SP-02	Game Design	2
RDA-SP-03	NL Onderwijssysteem	2
RDA-SP-04	Leerlingen met leerproblemen	2
RDA-SP-05	Autonomie-ondersteuning	2
RDA-SP-06	Positief leerklimaat (klassenmanagement)	2
RDA-SP-07	Didactisch coachen	2
RDA-SP-08	Metacognitie	2

### 3. MASTER'S THESIS (20 EC)

A graduation thesis (NWI-EDU03, 20 EC), to be decided in consultation with one of ISE staff members.

#### ARTICLE 7.4 DEVIATING PROGRAMME

If a student does not choose a specialisation, they must submit a motivated request for permission to the Examination Board for an alternative course selection for the Master's programme prior to the start of this Master's programme. The programme must in any case meet the following conditions:

#### 1. Mandatory courses (5 EC)

Course with a philosophical nature worth 3 EC. All philosophy courses offered by the Faculty (course code starting with NWI-FFIL2 or NWI-FFIL3) are automatically approved.

NWI-NM019C Professional Preparation (2 EC) or a comparable course.

#### 2. Physics and Astronomy Master's courses (42 EC)

The courses listed in Article 7.2.1 are automatically approved. Inclusion of courses from the societal specialisations (Article 7.2.2) must be submitted for assessment to the Examination Board.

#### 3. Free electives (13 EC)

To be filled with assessable courses at academic level.

#### 4. Thesis and/or internship components (60 EC)

This component should in any case include one of the Physics and Astronomy final projects: NWI-NM086F (60 EC) or NWI-NM078D (30 EC).

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## ARTICLE 7.5 DEFINITION OF FINAL PROJECT

The following educational units count as a final project:

- NWI-NM086F Master Thesis Project Physics and Astronomy (60 EC)
- NWI-NM078D Master Thesis Physics and Astronomy (30 EC)
- NWI-FMT033 Science, Management and Innovation Research Project (27 EC)
- NWI-SISSTAGE Science in Society Research Project (30 EC)
- NWI-EDU03 Integrated Master's Research (20 EC)

## SECTION 8. TRANSITIONAL PROVISIONS

From academic year	New course(s)	Old course(s)
2025-2026	NWI-NM107B General Relativity (9 EC)	NWI-NM107 General Relativity (6 EC)
2025-2026	For students who successfully completed NWI-NM107 General Relativity (6 EC), the synergy track Gravity+ has a minimum scope of 15 EC.	
2025-2026	For students who enrolled in 2024-2025 or earlier, NWI-NM040B Quantum Field Theory (6 EC) can also be part of the synergy track Gravity+.	
2025-2026	Students who started the Neurophysics specialisation in 2024-2025 or earlier can also take NWI-BM059 Systematic Reviews in Neuroscience (6 EC) as a track course instead of NWI-NM085C Advanced Computational Neuroscience (6 EC).	
2024-2025	NWI-MOL437 Computational Physical Chemistry 2 (3 EC)	NWI-SM297 Molecular Modelling (3 EC)
2024-2025	NWI-NM074C Laser Matter Interaction (3 EC)	NWI-NM074B Laser Matter Interaction (6 EC)
2024-2025	NWI-EDU-NA001 Geschiedenis en grondslagen natuurkunde (6 EC)	NWI-NM123 Geschiedenis en grondslagen natuurkunde (6 EC)
2023-2024	NWI-NM019C Professional Preparation (2 EC)	NWI-NM019B Professional Preparation (1 EC) and course to expand the elective space by 1 EC

### CONCERNING THE SPECIALISATION IN SCIENCE, MANAGEMENT AND INNOVATION:

- Only students who already enrolled in the Green Industries and IT theme prior to the 2025-2026 academic year may complete that theme specialisation.
- Students who started the Science, Management and Innovation specialisation before the 2025-2026 academic year, but who did not complete both FMT003E and FMT019, must now enrol in FMT003F and FMT019A.
- Students who completed FMT003E may not enrol in FMT003F, and students who completed FMT019 may not enrol in FMT019A.
- Students who already completed FMT003E but not FMT019 must enrol in FMT019A and can include it in their free elective space, if elective space is available in their chosen theme.
- Students who already completed FMT019 but not FMT003E must enrol in FMT003F and can complete a 30EC research project (FMT033) instead of a 27EC research project.
- Students who already completed NWI-FMT020 Bio-economy may use this course instead of one of the three 3 EC courses in the Climate and Energy theme.
- Students who already completed NWI-FMT025B From Lab to Clinic may use it instead of NWI-FMT029 How Health Systems Work.
- Students who have successfully completed NWI-FMT024 Policy and Economics *and* NWI-FMT006A Entrepreneurship: Making a Business Plan may use them instead of NWI-FMT030 Reaching Sustainable Development Goals.
- Students who have successfully completed NWI-FMT006A Entrepreneurship: Making a Business Plan, but not NWI-FMT024 Policy and Economics, may use it as a free elective, or they can take NWI-FC0043B Science and Public Policy and then use NWI-FMT006A Entrepreneurship: Making a Business Plan and NWI-

FC0043B Science and Public Policy together instead of NWI-FMT030 Reaching Sustainable Development Goals.

- Students who have successfully completed NWI-FMT024 Policy and Economics but *not* NWI-FMT006A Entrepreneurship: Making a Business Plan may use it as part of their free elective space.
- Students who have successfully completed NWI-MM020A Environmental Life Cycle Assessment and a 3 EC free elective may use it instead of NWI-FMT032 Environmental Life Cycle Assessment.

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**IN THE SPECIALISATION IN SCIENCE IN SOCIETY**

Old course				Replacement course			
Course code	Name	EC	Final year	Course code	Name	EC	Remarks
NWI-FC0048	Philosophical Methods for Science in Society	3	2024	NWi-FC0049	Social Scientific and Philosophical Methods for Science in Society	3	NWI-FC0047 and NWI-FC0048 have been merged into NWI-FC0049. Successfully completing NWI-FC0047 or NWI-FC0048 is equivalent to completing NWI-FC0049.
NWI-FC0044C	Methods of Societal Research	6	2023	NWI-FC0046 NWI-FC0049	Introduction to Philosophy and Social Studies of Science + Social Scientific and Philosophical Methods for Science in Society	3 3	
NWI-FC003B	Research, Responsibility and Uncertainty	3	2022	NWI-FC0045	Science & Public Participation	6	NWI-FC0045 is a combination of NWI-FC003B and NWI-FC002B. NWI-FC0045 can therefore not be included in a single programme with NWI-FC003B or NWI-FC002B.
NWI-FC002B	Science and Societal Interaction	3	2022	NWI-FC0045	Science & Public Participation	6	NWI-FC0045 is a combination of NWI-FC003B and

						NWI-FC002B. NWI-FC0045 can therefore not be included in a single programme with NWI-FC003B or NWI-FC002B.
NWI-FFIL300C	Philosophy of Mathematical Practice	3	2021	none		Students may use the course as a philosophy elective course
NWI-FFIL219	Philosophy of Neuroscience	3	2023	none		Students may use the course as a philosophy elective course
NWI-FC0047	Social Scientific Methods for Science in Society	3	2024	NWi-FC0049	Social Scientific and Philosophical Methods for Science in Society	3 NWI-FC0047 and NWI-FC0048 have been merged into NWI-FC0049. Successfully completing NWI-FC0047 or NWI-FC0048 is equivalent to completing NWI-FC0049.

Until 2024, students were required to choose one of the following profiles: *Science and Societal Interaction* or *Philosophies and Worldviews*. This requirement was abolished in 2025. With the course package and the elective courses that meet the requirements of the profiles, the current structure also meets the requirements of the Science in Society specialisation.

**For students in the specialisation in Science and Education who started before the 2023-2024 academic year, the following applies:**

Educational unit	To be replaced by
RDA-MA2-02 Leren en Instructie 1 (2 EC)	RDA-VDA-NA-A Vakdidactiek A natuurkunde (variant, 2 EC)
RDA-MA2-04 Leren en Instructie 2 (2 EC)	RDA-SP-01 Specialisatiecursus Formatief handelen (2 EC)
RDA-MA2-21 Leren en Instructie 3 (3 EC)	RDA-VDA-NA-B Vakdidactiek A natuurkunde (variant, 3 EC)
RDA-MA2-06 Oriëntatie op Pedagogische Professionaliteit (3 EC)	RDA-PED-A Pedagogisch handelen (variant, 3 EC)
RDA-MA2-08 Handelen vanuit pedagogische professionaliteit (2 EC)	RDA-PED-B Pedagogisch handelen (variant, 2 EC)
RDA-MA2-20 and RDA-MA2-15 Intensification themes (2 x 1 EC)	RDA-SP-01 up to and including RDA-SP-08 Specialisation Course (2 EC)
LET-EDU-MA11 Academische en Professionele Ontwikkeling 1 (2 EC)	LET-EDU-MA17-A Academische en Professionele Ontwikkeling 1 (variant, 2 EC)

LET-EDU-MA12 Academische en Professionele Ontwikkeling 2 (2 EC)	LET-EDU-MA18-A Academische en Professionele Ontwikkeling 2 (variant, 2 EC)
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# PART IV FINAL PROVISIONS

## SECTION 9. FINAL PROVISIONS

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### ARTICLE 9.1 SAFETY NET SCHEME AND HARDSHIP CLAUSE

1. In all cases not covered fully or clearly by these regulations, the final decision lies with the Dean. If this concerns an educational unit in which the Dean is involved, the Vice Dean responsible for education will decide.
2. In all cases in which these regulations may result in an unreasonable or unfair situation for individual students, the Examination Board or the Dean is authorised to make an exception to the provisions in these regulations. Unless this concerns an educational unit in which the Dean is involved, in which case the Vice Dean responsible for education is authorised to do so instead of the Dean.

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### ARTICLE 9.2 ESTABLISHMENT AND AMENDMENTS

1. Without prejudice to the provisions in Article 7 of the Structure Regulations, these regulations are established or amended by the Dean following advice from the programme committees and approval by the Joint Assembly of the Faculty.
2. An amendment to these regulations applies in the current academic year, unless this would disproportionately damage the interests of the student.
3. Notwithstanding the provisions of paragraph 1, the Dean is authorised to drop elective educational units from the curriculum should the circumstances be deemed impossible for offering these educational units.

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### ARTICLE 9.3 ENTRY INTO FORCE

These regulations enter into force on 1 September 2025.

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### ARTICLE 9.4 PUBLICATION

The Dean is responsible for ensuring that these regulations and any amendments thereto are published in an appropriate manner via the [Radboud University website](#).

As established by the Dean on 15 July 2025.

## APPENDIX 1: GUIDELINE FOR AWARDING DISTINCTIONS<sup>1</sup>

- a. With due observance of the provisions set out in this Article, the Examination Board is responsible for deciding whether a distinction should be awarded and if so, which distinction.
- b. The distinction is calculated on the basis of all units of the examination programme for which a grade has been awarded on a scale from 1 to 10, with the exception of extracurricular units.
- c. The number of EC of the unit referred to in paragraph b shall serve as the weighting factor for the calculation of the weighted average result, unless stipulated otherwise in the programme-specific part of the EER.
- d. The distinction 'cum laude' shall be awarded if the weighted average result of the final assessment of the units referred to in paragraph b is equal to or higher than 8.0.

Both the EC-weighted average of the assessments of all the educational units of the examination with a study load of **less than 20 EC** and the EC-weighted averages of the assessments of the educational units of the examination with a study load **equal to or more than 20 EC** must be at least equal to 8.0 before any rounding off.

- e. The distinction 'summa cum laude' shall be awarded if the weighted average result of the final assessment of the units referred to in paragraph b is equal to or more than 9.0.

Both the EC-weighted average of the assessments of all the educational units of the examination with a study load of **less than 20 EC** and the EC-weighted averages of the assessments of the educational units of the examination with a study load **equal to or more than 20 EC** must be at least equal to 9.0 before any rounding off.

- f. The distinction shall not be awarded if more than 10% of the total study load of the examination programme (consisting of one or more educational units) has been resat, unless the Examination Board decides otherwise, stating their reasons for this decision.
- g. The distinction shall not be awarded if interim examinations have been resat more than once, unless the Examination Board decides otherwise, stating their reasons for this decision.
- h. The distinction shall not be awarded if the scope of the granted exemptions constitutes more than 50% of the programme, taking into account any further restrictions to the permitted number of exemptions as established in the EER.
- i. The distinction shall not be awarded if fraud was discovered in one of the educational units of the examination programme.

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<sup>1</sup> In this guideline, 'unit' refers to an educational unit as referred to in Article 7.3, paragraphs 2 and 3 of the Act.

## APPENDIX 2: FRAUD REGULATIONS

### SECTION 1. INTRODUCTORY PROVISIONS

#### ARTICLE 1. OBJECTIVE AND SCOPE OF THE REGULATIONS

The Dean of the Radboud University Faculty of Science has drawn up the following regulations with a view to preventing fraud during interim and final examinations as referred to in Article 7.12b of the Higher Education and Research Act (Wet op het Hoger onderwijs en Wetenschappelijk onderzoek, hereinafter: 'the Act') and that are part of the teaching and examinations of the study programmes offered by the Radboud University Faculty of Science.

#### ARTICLE 2. DEFINITIONS

The terms used in these regulations – in so far as these terms also appear in the Act or the Education and Examination Regulations of the study programme (hereinafter: the EER) – have the same meaning as that given to them in the Act and the EER.

### SECTION 2. DEFINITION OF FRAUD, PROCEDURE AND SANCTIONS

#### ARTICLE 3. DEFINITION OF FRAUD

1. At Radboud University, fraud is understood to mean any act or omission by a student which, by its nature, is intended to render the proper assessment of the knowledge, understanding and skills of that student or another student fully or partially impossible.
2. Fraud is understood to mean in any case:
  - a. Fraud when taking written interim and final examinations, including:
    - i. Having access to unauthorised aids as referred to in the House Rules for Radboud University Examination Rooms
    - ii. Looking at the work of others or exchanging information
    - iii. Impersonating someone else or allowing someone else to impersonate oneself during an interim or final examination
  - b. Committing fraud when writing theses or other papers, or completing assignments, including:
    - i. Plagiarism in the sense of using or copying someone else's texts, data or ideas without complete and correct references to sources, plagiarism in the sense of copying the work of another student and presenting this as one's own work, and other specifically academic forms of plagiarism
    - ii. The fabrication and/or falsification of research data
    - iii. The submission of a thesis or other paper that has been written by someone else
  - c. Other fraud during assessment and examination, including:
    - i. Taking possession of assignments, answer keys and the like, prior to the time the interim or final examination takes place
    - ii. Changing answers to questions on an interim or final examination after it has been submitted for assessment
    - iii. Providing incorrect information when requesting an exemption, an extension of the validity period, and other similar requests regarding an interim or final examination
3. Any attempt at fraud will also be considered fraud in the sense of these regulations.

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#### ARTICLE 4. PROCEDURE FOR DETERMINING FRAUD

1. In the event that fraud is suspected, the Examination Board or the examiner will immediately inform the student. If fraud is suspected while an interim or final examination is being administered, the Examination Board or the examiner will provide the student with the opportunity to complete the interim or final examination.
2. The Examination Board or the examiner may order the student to hand over the materials involved in the suspicion of fraud.
3. For the application of the provisions in paragraphs 1 and 2, 'examiner' is also understood to mean the invigilator or another Radboud University staff member.
4. The Examination Board or the examiner will draw up a report of the suspected fraud. If the examiner draws up the report, the examiner will send it to the Examination Board immediately.
5. The Examination Board will immediately make the report referred to in paragraph 4 available to the student and will launch an investigation into the matter. The Examination Board will provide the student with the opportunity to respond to the report in writing. The Examination Board will hear both the examiner and the student.
6. Within four weeks of making the report available to the student, the Examination Board will determine whether there is evidence of fraud. The Examination Board will inform both the student and the examiner of its decision in writing. The period of four weeks may be extended by two weeks.

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#### ARTICLE 5. REMEDIAL MEASURES

If the Examination Board determines that fraud has been committed:

- a. The Examination Board will declare that the relevant interim or final examination taken by the student (or students) in question is considered invalid, and
- b. It will document the identification of fraud and, if applicable, the sanctions imposed in the student's file.

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#### ARTICLE 6. SANCTIONS

1. If the Examination Board determines that fraud has been committed, it may:
  - a. Decide that the student is no longer allowed to sit one or more interim or final examinations during a period to be defined by the Examination Board, being no longer than one year.
  - b. Make a recommendation to the Manager and Faculty Programme Director of the Honours Academy that the student should not be admitted to the honours programme of the University or the Faculty, or recommend that the student's participation in the honours programme of the University or the Faculty be terminated.
2. If the Examination Board establishes that serious fraud has been committed:
  - a. The Examination Board may recommend to the Executive Board that the student's enrolment in a study programme be definitively terminated
  - b. The Executive Board may definitively terminate the student's enrolment in a study programme at the recommendation of the Examination Board.
3. As described in the Guideline for Awarding Distinctions, a distinction will not be awarded if fraud has been detected in one or more of the educational units of the examination programme as a whole.
4. The sanctions as specified in this provision will be imposed as from the day following the date on which the student has been informed of the decision to impose the sanctions.

## SECTION 3. FINAL PROVISIONS

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### ARTICLE 7. DECISIONS AND LEGAL PROTECTION

1. Decisions on the basis of these regulations may be sent to the student via OSIRIS and/or by email.
  2. For decisions based on these regulations, the student is permitted to appeal the relevant decision with the Examination Appeals Board (EAB) within six weeks of the decision date.
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### ARTICLE 8. ADOPTION AND AMENDMENTS

1. These regulations are adopted and amended by the Dean.
  2. Where the content of these regulations relates to duties and powers of the Examination Board of the study programme, that content must also be ratified by that Examination Board.
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### ARTICLE 9. ENTRY INTO FORCE

These regulations enter into force on 1 September 2025. On that date, these regulations will replace any previous regulations.

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### ARTICLE 10. PUBLICATION

1. The Dean is responsible for publishing these regulations and for appropriately disclosing any amendments thereto.
2. For the purpose of proper and clear provision of information to students and prospective students, the Dean will include these regulations as an appendix to the EER.

As established by the Dean on 15 July 2025 and ratified by the Examination Board on 15 July 2025.