

# Education and Examination Regulations

**2025-2026**

Master Computing Science

**Radboud Universiteit**



## TABLE OF CONTENTS

<b>PART I GENERAL PROVISIONS MASTER</b> .....	<b>4</b>
<i>Section 1. General provisions</i> .....	4
Article 1.1 Applicability of the regulations .....	4
Article 1.2 Executive Board Guidelines .....	4
Article 1.3 Definitions .....	5
<b>PART II GENERAL PART</b> .....	<b>7</b>
<i>Section 2. Admission to the study programme and education</i> .....	7
Article 2.1 Admission and admission requirements .....	7
Article 2.2 Language requirements .....	7
<i>Section 3. Structure and design</i> .....	7
Article 3.1 Final examination, degree and distinctions .....	7
Article 3.2 General learning outcomes .....	8
Article 3.3 Curriculum .....	8
Article 3.4 Sequence of education and interim examinations .....	9
Article 3.5 Types of interim examinations .....	9
Article 3.6 Exemptions .....	10
Article 3.7 Term of validity for successfully completed interim examinations .....	11
Article 3.8 Elective programmes .....	11
<i>Section 4. Assessment</i> .....	11
Article 4.1 Frequency of interim examinations .....	11
Article 4.2 Registration for interim examinations .....	11
Article 4.3 Determination of interim examination results .....	11
Article 4.4. Publication of interim examination results .....	12
Article 4.5 Right of inspection and review .....	12
Article 4.6 Determination of final examination results .....	13
<i>Section 5. Study progress, academic counselling, study advice and evaluation of education</i> .....	13
Article 5.1 Study progress and academic counselling .....	13
Article 5.2 Method of evaluating education .....	13
<b>PART III PROGRAMME-SPECIFIC PART</b> .....	<b>14</b>
<i>Section 6. Admission to the study programme and education</i> .....	14
Article 6.1 Admission requirements .....	14
Article 6.2 Pre-Master's programme of study .....	14
<i>Section 7. Structure and design</i> .....	15

Article 7.1 Programme-specific learning outcomes .....	15
Article 7.2 Composition of the study programme .....	16
Article 7.3 Deviating programme .....	26
Article 7.4 Definition of final project .....	26
<i>Section 8. Transitional provisions</i> .....	27
<b>PART IV FINAL PROVISIONS</b> .....	<b>31</b>
<i>Section 9. Final provisions</i> .....	31
Article 9.1 Safety net scheme and hardship clause .....	31
Article 9.2 Establishment and amendments .....	31
Article 9.3 Entry into force .....	31
Article 9.4 Publication .....	31
<b>Appendix 1: Guideline for Awarding Distinctions</b> .....	<b>32</b>
<b>Appendix 2: Fraud Regulations</b> .....	<b>33</b>

# 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 Computing Science at Radboud University.
2. Students who have successfully completed the final examination of a Bachelor's programme in Computing Science or Technical Computing Science at another Dutch university.
3. Students who are in possession of a degree certificate that is at least equivalent to the qualification referred to in Article 6.1 paragraph 1.
4. Students who have in the opinion of the International and Admissions Office demonstrated their suitability for participation in the study programme.
5. For the Data Science specialisation: students who have successfully completed the final examination of the Bachelor's programme in Artificial Intelligence at Radboud University or at another Dutch university, or who have successfully completed the final examination of the Bachelor's programme in Data Science and Artificial Intelligence at Maastricht University.
6. For the Mathematical Foundations of Computer Science specialisation: students who have successfully completed the final examination of the Bachelor's programme in Mathematics at Radboud University or at another Dutch university.
7. Students must provide proof of sufficient proficiency in English, as described in Article 2.2.

### ARTICLE 6.2 PRE-MASTER'S PROGRAMME OF STUDY

Students who have earned a qualification in the field of Computing Science from a university of applied sciences (HBO) or a related field, and who have completed the pre-Master's programme of maximum 30 EC established for them will also be admitted to the study programme.

### ARTICLE 7.1 PROGRAMME-SPECIFIC LEARNING OUTCOMES

1. 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:
  - a. Graduates have thorough academic knowledge and insight in the field of their specialisation (discussed in more detail below per specialisation in points 2 to 6), are experts in a sub-fields within their specialisation and can contribute to the further academic development within this sub-area, and are able to acquire knowledge, insight and skills in other sub-fields of Computing Science.
  - b. Graduates are able to apply their knowledge and skills to research and system development issues, both independently and in small teams. Depending on the chosen specialisation and expertise, the emphasis may lie on research or system development.
  - c. Graduates are aware of the societal aspects of IT.
  - d. Graduates are able to communicate at a professional level and provide a clear oral and written presentation of their own or someone else's completed work.
2. Graduates in the Software Science specialisation possess broad knowledge of state-of-the-art techniques for the development and analysis of software (including software technology, domain-specific languages, computer-aided analysis, and the use of mathematic models and modelling techniques) and are able to apply these techniques.
3. Graduates in the Data Science specialisation have a broad overview of the data science discipline (incl. algorithmic, organisational, software, hardware and ethical aspects), are able to use appropriate data science techniques to extract insights from data, are experienced with specifying, designing and creating applications in which data science plays an important role, and can contribute to discussions about the role of data science in society.
4. Graduates in the Cyber Security specialisation possess broad knowledge of information and computer security (including organisational, software, hardware, network, cryptographic, legal and privacy aspects), can evaluate the security aspects of existing systems and systems yet to be developed and to this end are able to formulate and prioritise safety requirements, are experienced in specifying, designing or developing applications in which safety plays an important role, and can contribute to discussions on the role of cyber security and privacy in society.
5. Graduates in the Cyber Security and AI specialisation have a broad knowledge of information and computer security and artificial intelligence. They can also apply state-of-the-art artificial intelligence within the context of security and have experience in specifying, designing and developing secure machine learning systems. They have a broad overview of the role of artificial intelligence in the design of secure systems and understand the importance of secure machine learning systems.
6. Graduates in the Mathematical Foundations of Computer Science (MFoCS) specialisation have a broad knowledge of theoretical computing science and the mathematics that serve as its foundation and can apply mathematical techniques (such as logic and algebra) in modelling and analysing computing science concepts.

7. Students who opt for the Science, Management and Innovation specialisation as described in Article 7.2f will 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.
  - b. 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.
  - c. Graduates have developed a proficiency in utilising research methods and frameworks from the social sciences.
  - d. Graduates have developed a proficiency in speaking the language of both the natural and social sciences 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.
  - e. 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).
  - f. 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.
8. Students who opt for the Science in Society specialisation as described in Article 7.2g also
  - a. Develop the ability to analyse the role of scientific expertise in societally relevant issues.
  - b. Develop the ability to design and conduct independent, methodologically sound research about the interface of science and society, and contribute to academic research.
  - c. Develop the ability to understand and implement public and stakeholder engagement in research and innovation.
  - d. 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).
  - e. Develop the ability to substantiate and communicate the relevance of their scientific discipline in society.

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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. Software Science
  - b. Data Science
  - c. Cyber Security
  - d. Cyber Security and AI
  - e. Mathematical Foundations of Computer Science (MFoCS)
  - f. Science, Management and Innovation
  - g. Science in Society

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## ARTICLE 7.2A MASTER'S SPECIALISATION IN SOFTWARE SCIENCE

The Master's specialisation in Software Science consists of the following educational units:

### 1. MANDATORY EDUCATIONAL UNITS (21 EC)

Course code	Course name	EC
NWI-I00032	Advanced Programming	6
NWI-I00110	Testing Techniques	6
NWI-IMI003	Philosophy and Ethics for Computing and Information Science	3
NWI-IMC045	Research Seminar Software Science	6

### 2. CHOICE OF SPECIALISATION (30 EC)

The student chooses 30 EC from among the courses listed below:

Course code	Course name	EC
NWI-IMC004	Compiler Construction	6
NWI-IMC059	Software Product Lines	6
NWI-IMI004	Software Development Entrepreneurship	6
NWI-ISOFSE	Software Security	6
NWI-I00139	Proof Assistants (not offered in 2025-2026)	6
NWI-IMC046	Model Checking	6
NWI-IMC009	Automated Reasoning	6
NWI-IMC010	Type Theory and Rocq	6
NWI-IMC011	Semantics and Domain Theory (not offered in 2026-2027)	6
NWI-IMC036	Category Theory and Coalgebra	6
NWI-IMC060	Program Verification with Types and Logic	6
NWI-IMC071	Human-Centered Design	3
NWI-IMC073	Data Engineering	3
NWI-IMC076	Green Software	6

### 3. LIMITED CHOICE ELECTIVES (18 EC)

In addition, students must select 18 EC from the specialisations of the Master's programme in Computing Science (7.2a-7.2e, paragraphs 1-2) that do not overlap in content with each other or with other educational units within the programme. Students may also include courses from other Master's programmes, but these may not overlap with each other or with other course in terms of content, and this option also requires prior approval from the Examination Board.

### 4. FREE ELECTIVES (6 EC)

See the general part of the EER, Article 3.3 paragraphs 5 and 6.

## 5. RESEARCH INTERNSHIP (15 EC)

Course code	Course name	EC
NWI-IMC047	Research Internship	15

To be decided in consultation with an internship coordinator of the education institute. All ICIS divisions are automatically approved as internship departments.

## 6. GRADUATION THESIS (30 EC)

Course code	Course name	EC
NWI-IMC029	Master Thesis Computing Science	30

The final project of the study programme consists of a graduation thesis of 30 EC, to be agreed upon with an internship coordinator from the education institute.

## ARTICLE 7.2B MASTER'S SPECIALISATION IN DATA SCIENCE

The Master's specialisation in Data Science consists of the following educational units:

### 1. MANDATORY EDUCATIONAL UNITS (30 EC)

Course code	Course name	EC
NWI-I00041	Information Retrieval	6
NWI-IMC030	Machine Learning in Practice	6
NWI-IMC012	Statistical and Causal Inference	6
NWI-IMI003	Philosophy and Ethics for Computing and Information Science	3
NWI-IMC044	Research Seminar Data Science	6
NWI-IMC070A	Deep Learning 1	3

### 2. CHOICE OF SPECIALISATION (24 EC)

The student chooses 24 EC from among the educational units listed below:

Course code	Course name	EC
NWI-IMC056	Statistical Machine Learning	6
NWI-IMC042	Natural Computing	6
NWI-IMC070B	Deep Learning 2: Deeper Learning	3
NWI-IMC037	Artificial Intelligence in Medical Imaging	6
SOW-MKI49	Complex Adaptive Systems	6
NWI-SM299	Pattern Recognition for Natural Science	6
LET-REMA-LCEX06	Text and Multimedia Mining	6
NWI-IMC006	Law and Technology	6
NWI-I00035	Foundations of Information Systems	6
SOW-MKI52	New Media Lab	6

Course code	Course name	EC
LET-REMA-LCEX10	(Automatic) Speech Recognition	6
NWI-NM116B	Machine Learning in Particle Physics and Astronomy	6
NWI-IMC069	Security and Privacy of Machine Learning	6
NWI-IMC073	Data Engineering	3
NWI-IMC075	Generative AI	3
NWI-IMC076	Green Software	6
NWI-IMC077	Introduction to Neuromorphic Human-Computer Interaction	3

### 3. LIMITED CHOICE ELECTIVES (15 EC)

In addition, students must select 15 EC from the specialisations of the Master's programme in Computing Science (7.2a-7.2e, paragraphs 1-2) or the Master's programme in Artificial Intelligence at the Faculty of Social Sciences that do not overlap in content with each other or with other educational units within the programme. Students may also include courses from other Master's programmes, but these may not overlap with each other or with other course in terms of content, and this option also requires prior approval from the Examination Board.

### 4. FREE ELECTIVES (6 EC)

See the general part of the EER, Article 3.3 paragraphs 5 and 6.

### 5. RESEARCH INTERNSHIP (15 EC)

Course code	Course name	EC
NWI-IMC047	Research Internship	15

To be decided in consultation with an internship coordinator of the education institute. All ICIS divisions are automatically approved as internship departments.

### 6. GRADUATION THESIS (30 EC)

Course code	Course name	EC
NWI-IMC029	Master Thesis Computing Science	30

The final project of the study programme consists of a graduation thesis of 30 EC, to be agreed upon with an internship coordinator from the education institute.

## ARTICLE 7.2C MASTER'S SPECIALISATION IN CYBER SECURITY

The Master's specialisation in Cyber Security consists of the following educational units:

### 1. MANDATORY EDUCATIONAL UNITS (33 EC)

Course code	Course name	EC
NWI-ISOFSE	Software Security	6
NWI-I00153	Security in Organisations	6
NWI-IMC062	Advanced Network Security	6

Course code	Course name	EC
NWI-IMC061	Applied Cryptography	6
NWI-IMI003	Philosophy and Ethics for Computing and Information Science	3
NWI-I00I36	Privacy Seminar	6

## 2. CHOICE OF SPECIALISATION (24 EC)

The student chooses 24 EC from among the educational units listed below:

Course code	Course name	EC
NWI-IMC066	Security Protocol Project	3
NWI-IMC068	Physical Attacks on Secure Systems	6
NWI-IMC006	Law and Technology	6
NWI-IMC064	Engineering Cryptographic Software	3
NWI-IMC065	Hardware Security	3
NWI-IMC030	Machine Learning in Practice	6
NWI-IMC056	Statistical Machine Learning	6
NWI-IMC070A	Deep Learning 1	3
NWI-IMC070B	Deep Learning 2: Deeper Learning	3
NWI-IMC060	Program Verification with Types and Logic	6
NWI-IMC063	Cryptology	6
NWI-IMC074	Online Tracking and Privacy	6
NWI-IMC069	Security and Privacy of Machine Learning	6

## 3. LIMITED CHOICE ELECTIVES (12 EC)

In addition, students must select 12 EC from the specialisations of the Master's programme in Computing Science (7.2a-7.2e, paragraphs 1-2) that do not overlap in content with each other or with other educational units within the programme. Students may also include courses from other Master's programmes, but these may not overlap with each other or with other course in terms of content, and this option also requires prior approval from the Examination Board. The Examination Board may also grant the student permission to take either the Bachelor's course NWI-IBC051 (Mathematics for Cryptography) or the Bachelor's course NWI-IBC023 (Introduction to Cryptography), provided that the student has a substantive motivation for doing so and there is a thematic connection with the other elective courses. The NWI-IMC072 course (AI and Security Seminar) may not be included in the elective space.

## 4. FREE ELECTIVES (6 EC)

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

## 5. RESEARCH INTERNSHIP (15 EC)

Course code	Course name	EC
NWI-IMC047	Research Internship	15

To be decided in consultation with an internship coordinator of the education institute. All ICIS divisions are automatically approved as internship departments.

## 6. GRADUATION THESIS (30 EC)

Course code	Course name	EC
NWI-IMC029	Master Thesis Computing Science	30

The final project of the study programme consists of a graduation thesis of 30 EC, to be agreed upon with an internship coordinator from the education institute.

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## ARTICLE 7.2D MASTER'S SPECIALISATION IN CYBER SECURITY AND AI

The Master's specialisation in Cyber Security and AI consists of the following educational units:

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

Course code	Course name	EC
NWI-IMC061	Applied Cryptography	6
NWI-IMC069	Security and Privacy of Machine Learning	6
NWI-IMI003	Philosophy and Ethics for Computing and Information Science	3
NWI-IMC072	AI and Security Seminar	6
NWI-IMC070A	Deep Learning 1	3
NWI-IMC070B	Deep Learning 2: Deeper Learning	3

### 2. CHOICE OF SPECIALISATION (24 EC)

The student chooses 24 EC from among the educational units listed below:

Course code	Course name	EC
NWI-IMC006	Law and Technology	6
NWI-IMC068	Physical Attacks on Secure Systems	6
NWI-IMC074	Online Tracking and Privacy	6
NWI-IMC071	Human-Centered Design	3
NWI-IMC062	Advanced Network Security	6
NWI-IMC042	Natural Computing	6
NWI-IMC030	Machine Learning in Practice	6
NWI-IMC012	Statistical and Causal Inference	6
SOW-MKI75	Applied Machine Learning	6

### 3. LIMITED CHOICE ELECTIVES (18 EC)

In addition, students must select 18 EC worth of courses from the specialisations of the Master's programme in Computing Science (7.2a-7.2e, paragraphs 1-2) that do not overlap in content with each other or with other educational units within the programme. Students may also include courses from other Master's programmes, but these may not overlap with each other or with other course in terms of content, and this option also requires prior approval from the Examination Board. The NWI-I00136 course (Privacy Seminar) may not be included in the elective space.

### 4. FREE ELECTIVES (6 EC)

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

### 5. RESEARCH INTERNSHIP (15 EC)

Course code	Course name	EC
NWI-IMC047	Research Internship	15

To be decided in consultation with an internship coordinator of the education institute. All ICIS divisions are automatically approved as internship departments.

### 6. GRADUATION THESIS (30 EC)

Course code	Course name	EC
NWI-IMC029	Master Thesis Computing Science	30

The final project of the study programme consists of a graduation thesis of 30 EC, to be agreed upon with an internship coordinator from the education institute.

## ARTICLE 7.2E MASTER'S SPECIALISATION IN MATHEMATICAL FOUNDATIONS OF COMPUTING SCIENCE

The Master's specialisation in Mathematical Foundations of Computing Science (MFoCS) consists of the following educational units:

### 1. MANDATORY COURSES (21 EC)

Course code	Course name	EC
NWI-IMC010	Type Theory and Rocq	6
NWI-IMC036	Category Theory and Coalgebra	6
NWI-IMI003	Philosophy and Ethics for Computing and Information Science	3
NWI-IMC057	MFoCS Seminar	6

### 2. CHOICE OF SPECIALISATION (24 EC)

The student chooses 24 EC from among the educational units listed below:

Course code	Course name	EC
NWI-IMC009	Automated Reasoning	6
NWI-I00139	Proof Assistants (not offered in 2025-2026)	6
NWI-IMC011	Semantics and Domain Theory (not offered in 2024-2025)	6
NWI-IMC046	Model Checking	6
NWI-IMC060	Program Verification with Types and Logic	6

NWI-WM069D	Computer Algebra	8
NWI-WM072D	Complexity Theory	8
NWI-WM120D or NWI-WM223 (MasterMath version)	Computability Theory	8

### 3. LIMITED CHOICE ELECTIVES (24 EC)

Students must select 24 EC worth of courses from the specialisations of the Master's programme in Computing Science (7.2a-7.2e, paragraphs 1-2) Mathematics, or the national MasterMath programme that do not overlap in content with each other or with other educational units within the programme. Students may also include courses from other Master's programmes, but these may not overlap with each other or with other course in terms of content, and this option also requires prior approval from the Examination Board. In particular, no more than one of the Category Theory and Homological Algebra (RU Mathematics) and Category Theory (UVA MasterMath) courses may be included.

### 4. FREE ELECTIVES (6 EC)

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

### 5. RESEARCH INTERNSHIP (15 EC)

Course code	Course name	EC
NWI-IMC047	Research Internship	15

To be decided in consultation with an internship coordinator of the education institute. All ICIS divisions and the Mathematics division of IMAPP are automatically approved as internship departments.

### 6. GRADUATION THESIS (30 EC)

Course code	Course name	EC
NWI-IMC029	Master Thesis Computing Science	30

The final project of the study programme consists of a graduation thesis of 30 EC, to be agreed upon with an internship coordinator from the education institute.

## ARTICLE 7.2F MASTER'S SPECIALISATION IN SCIENCE, MANAGEMENT AND INNOVATION (SMI)

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

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

Course code	Course name	EC
NWI-FMT003F	Sustainable Innovation Management	3
NWI-FMT030	Reaching the 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 Modelling	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	Environmental and Ecological Concepts	3
NWI-BM075	Biodiversity Assessment	3
NWI-BM033F	Nature in a Crowded Country	3
NWI-FMT032	Environmental Life Cycle Assessment	6

## 3. DISCIPLINARY EDUCATIONAL UNITS (51 EC)

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The student selects a course package from Software Science (consisting of all courses in Article 7.2a, paragraph 1 and 30 EC from Article 7.2a, paragraph 2) or a course package from Data Science (consisting of all courses in Article 7.2b, paragraph 1 and 21 EC from Article 7.2b, paragraph 2).

## 4. LIMITED CHOICE ELECTIVES (6 EC)

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The student selects 6 EC worth of courses from the Master's programme in Computing Science (Articles 7.2a-e, paragraphs 1-2). Students may also include courses from other Master's programmes, but these may not overlap with each other or with other course in terms of content, and this option also requires prior approval from the Examination Board.

## 5. FREE ELECTIVES (6 EC)

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

Students can use the free elective space to expand the Science, Management and Innovation final research project by 3 EC.

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

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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.

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## ARTICLE 7.2G MASTER'S SPECIALISATION IN SCIENCE IN SOCIETY

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

### 1. MANDATORY COURSES (27 EC)

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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 <i>OR</i> NWI-FC0043B	Philosophy of Evidence and Expertise <i>OR</i> 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-FFIL221	Compete or collaborate? An Introduction to Interdisciplinarity	3

### 2. DISCIPLINARY COURSES (54 EC)

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The student selects a course package from Software Science (consisting of all courses in Article 7.2a, paragraph 1, 30 EC from Article 7.2a, paragraph 2, and 3 EC from Articles 7.2a-e paragraph 1-2) or a course package from Data Science (consisting of all courses in Article 7.2b, paragraph 1 and 24 EC from Article 7.2b, paragraph 2).

### 3. FREE ELECTIVES (9 EC)

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

### 4. SCIENCE IN SOCIETY RESEARCH PROJECT (30 EC)

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In consultation with a SiS lecturer, the SiS graduation project (NWI-SISSTAGE) 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.

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#### ARTICLE 7.3 DEVIATING PROGRAMME

If a student does not choose a specialisation, they must request permission from the Examination Board, by means of a motivated request and within three months of commencing the Master's programme, to modify the Master's programme. The submitted course selection must include in any case a programme-specific component of at least 60 EC of the total 120 EC. A deviating programme must in any case include the following mandatory educational units: the NWI-IMI003 Philosophy and Ethics for Computing and Information Science course (3 EC) and a graduation thesis (30 EC).

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#### ARTICLE 7.4 DEFINITION OF FINAL PROJECT

In accordance with Article 1.3k, the final project of the Master's programme in Computing Science consists of the graduation thesis (Article 7.2a-e, Article 7.3), the SIM research project (Article 7.2f, paragraph 6), or the SiS graduation project (Article 7.2g, paragraph 5).

## SECTION 8. TRANSITIONAL PROVISIONS

For students who started in the 2023-2024 academic year, the Examination Board may grant permission to use a maximum of 6 EC of Bachelor's educational units within the elective space (paragraph 3 of Articles 7.2a, 7.2b, 7.2c, 7.2d and 7.2e), if the student is able to motivate this choice and the Bachelor's educational units have a thematic coherency with the other courses in the elective space.

Software Science students who started in or before the 2023-2024 academic year may also include NWI-I00155 Design of Embedded Systems (6 EC) as a specialisation option.

Software Science students who started in or before the 2024-2025 academic year may also include NWI-WM072D Complexity Theory (8 EC) and/or NWI-WM120D Computability Theory (8 EC) as a specialisation option.

Students who started in or before the 2024-2025 academic year may also include NWI-IMC070 Deep Learning (6 EC) instead of NWI-IMC070A, or the combination of NWI-IMC070A Deep Learning 1 (3 EC) and NWI-IMC070B Deep Learning 2 (3 EC). For Data Science students who started in or before the 2024-2025 academic year, NWI-IMC070A Deep Learning 1 (3 EC) is not compulsory.

Data Science students who started in or before the 2024/2025 academic year may also include NWI-NM048B Advanced Machine Learning as a specialisation option. Data Science and Cyber Security and AI students who started in or before the 2024/2025 academic year may also include as a specialisation choice NWI-NM048D CDS: Machine Learning.

Cyber Security and AI students who started in or before the 2024-2025 academic year may also include NWI-IMC056 Statistical Machine Learning (6 EC) as a specialisation option.

For Cyber Security students who started in or before the 2024-2025 academic year, the Examination Board may grant permission to use the NWI-IMC023 Introduction to Cryptography (6 EC) course within the elective space (paragraph 3 of Article 7.2c), if the student is able to motivate this choice and there is a thematic connection with the other elective courses. Cyber Security students who started in or before the 2022–2023 academic year may replace NWI-IMC074 Online Tracking and Privacy (6 EC) with NWI-IMC067 Capita Selecta in Cyber Security (6 EC).

For SWS/MFoCS students who started in or before the 2022-2023 academic year, the following applies:

- NWI-WB069D Computer Algebra (8 EC) may be replaced by NWI-WB069B Computer Algebra (6 EC).
- NWI-WM072D Complexity Theory (8 EC) may be replaced by NWI-WM072B Complexity Theory (6 EC).
- NWI-WM120D Computability Theory (8 EC) may be replaced by NWI-WM120C Computability Theory (6 EC) or NWI-WM223 Computability Theory (8 EC).

provided that the minimum number of credits required for the Master's programme is met.

### Transitional provisions for the Science, Management and Innovation specialisation

- Only students who were already enrolled in the Green Industries and IT theme prior to the 2025-2026 academic year may complete this theme.
- Students who started the Science, Management and Innovation specialisation in the 2025-2026 academic year but have not completed both NWI-FMT003E and NWI-FMT019 must enrol for NWI-FMT003F and NWI-FMT019A.
- Students who have completed NWI-FMT003E are not permitted to participate in NWI-FMT003F, and students who have completed NWI-FMT019 are not permitted to participate in NWI-FMT019A.
- Students who have already completed NWI-FMT003E but not NWI-FMT019 must register for NWI-FMT019A. As a result, the free elective space for these students is reduced by 3 EC.
- Students who have already completed NWI-FMT019 but not NWI-FMT003E must register for NWI-FMT003F and may do a research project (NWI-FMT033) worth 30 EC instead of 27 EC.
- Students who have successfully completed NWI-FMT020 Bio-Economy may use it instead of one of the 3 EC courses in the Climate and Energy theme.
- Students who have successfully 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 it 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 include it in their free elective space or they can take NWI-FC0043B Science and Public Policy, allowing them to 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.
- For the specialisation in Science in Society, the following transitional provisions apply:

### Transitional provisions for the Science in Society specialisation

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.
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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.

# 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.