

Education and Examination Regulations

Research Master's programme

Molecular Mechanisms of Disease

Curriculum 2022

Academic year 2022-2023



Contents

Section 1.	General provisions	3
Section 2.	Admission to the programme.....	5
Section 3.	Access to courses and examinations	6
Section 4.	Structure and form of the programme	8
Section 5.	Structure and form of educational units	12
Section 6.	Assessment and examination	14
Section 7.	Study progress, counselling, and recommendations	18
Section 8.	Evaluation of teaching.....	18
Section 9.	Judicium abeundi	18
Section 10.	Transitional provisions.....	19
Section 11.	Final provisions.....	19
Appendix I	Admission requirements and procedures	21
	Paragraph 1 Admission requirements.....	21
	Paragraph 2 Language requirements	21
	Paragraph 3 Admission and application procedure	22
Appendix II	Examination programme Molecular Mechanisms of Disease	23
Appendix III	Course-specific information.....	24
	Paragraph 1 Theoretical courses.....	24
	Paragraph 2 Research training periods	32
	Paragraph 3 Electives: Literature thesis and Knowledge transfer	35
Appendix IV	RU Regulations on Fraud	38
	Paragraph 1 Introductory provisions	38
	Paragraph 2 Definition fraud, procedure and sanctions	38
	Paragraph 3 Transitional provisions	40
	Paragraph 4 Final provisions.....	40
Appendix V.	RU Regulations on House Rules Examination Rooms	42
	Paragraph 1 Introductory provisions	42
	Paragraph 2 House Rules.....	43
	Paragraph 3 Transitional provisions	44
	Paragraph 4 Final provisions.....	45
Appendix VI	Guidelines for Distinctions Molecular Mechanisms of Disease.....	46

Section 1. General provisions

Article 1. Purpose of the regulations

1. These education and examination regulations (hereinafter: regulations) list the current procedures and rights and obligations established for the teaching activities and final examination of the degree programme **Molecular Mechanisms of Disease** CROHO code 60322 (hereinafter: the programme). This programme was established by the Executive Board of Radboud University (hereinafter RU) and is taught by the Faculty of Medical Sciences of Radboud University, which is subsumed under Radboud university medical center.
2. The programme is taught in collaboration with the Radboud Institute for Molecular Life Sciences research graduate school, a joint graduate school of Radboudumc and the Faculty of Science, Mathematics, and Computing Sciences, both part of RU.

Article 2. Scope of the regulations

These regulations apply to students who are enrolled in the programme described in Article 1 for the academic year 2022-2023, with reference to the transitional provisions set out in Section 10 of these regulations. The provisions in Section 2 of these regulations apply to students who enrol for that academic year.

Article 2a Executive Board Guidelines

1. With a view to the organization and coordination of the provisions in these regulations, the Executive Board has established the following guidelines
(See: <https://www.radboudnet.nl/onderwijs/werkwijze-regelingen/>).
 - a. Guideline for Distinction Regulations
 - b. Not applicable
- 1a. In addition to the above guidelines, the Executive Board has established a number of temporary guidelines in response to the COVID-19 pandemic. These guidelines can be found at <https://www.ru.nl/nieuws-agenda/nieuws/coronavirus-radboud-universiteit/>.
2. The provisions in these Education and Examination Regulations apply without prejudice to the provisions of the guidelines referred to in Section 1.

Article 3. Definitions

1. Terms in these regulations that also appear in the Higher Education and Research Act (Wet op het hoger onderwijs en wetenschappelijk onderzoek, hereinafter: HERA) have the meaning ascribed to them in HERA.
2. Without prejudice to the first paragraph, in these regulations the following definitions apply:

- a. Contact hour: One hour of teaching during which a lecturer is present (physically or online);
- b. Partial examination: An examination of the knowledge, understanding, and skills of the student, as well as the assessment of the results of this examination, which partially determines the result of the examination as referred to in Article 7.10, first paragraph, of HERA. Where these regulations refer to examination, this term may also be taken to mean partial examination, unless stipulated otherwise;
- c. Regulations on Fraud: the Regulations on Fraud established by the Dean through a separate decision. These regulations have been included here as Appendix IV;
- d. Examination date: The date on which the examination is administered by or on behalf of the examiner;
- e. Working day: Monday to Friday, with the exception of public holidays as specified in the CAO of Dutch Universities and the collective free days designated by the Executive Board;
- f. Academic adviser: Staff member who may be consulted by students to be advised about academic and/or personal issues;
- g. Academic year: period from September 1 up to and including August 31 of the following year;
- h. Assessment Regulations: Description of the form and components of an examination (partial examinations), the requirements for taking part in these components, and the manner in which the result is determined;
- i. Assessor: A scientist of sufficient seniority and expertise, holding a PhD degree, who assesses an oral presentation or written report, master's thesis or literature thesis;
- j. Board of examiners: A committee appointed by the Dean of Radboud university medical center, in accordance with Article 7.12a of HERA;
- k. Brightspace: A digital learning environment. Course manuals, full details of the courses, assessment regulations, timetables and rooms, as well as PowerPoint presentations and other study materials, will be made available through Brightspace;
- l. Course (educational unit of study): Every organized teaching activity that is linked to a number of study credits and concluded with a test/examination;
- m. EC: European Credits (study credits), being units that express study load in accordance with the European Credit Transfer System, whereby 1 EC represents 28 hours of study. The study load of an academic year is 60 study credits, which is equivalent to 1680 hours of study;
- n. Electives: Either theoretical or practical optional courses in molecular medicine and/or life sciences which the student uses for specialisation or broadening of knowledge;

- o. Examination: A component of a final examination, as referred to in Article 7.10, first paragraph, of HERA, that is concluded with an assessment linked to a number of study credits (EC);
 - p. Examiner: The person designated by the board of examiners to administer the tests and examinations, in accordance with Article 7.12 of HERA;
 - q. External assessor: A PI from another department than the department of the supervisor, who assesses a research training period (oral presentation and/or report), master's thesis or literature thesis;
 - r. Final paper: An assessment of the student's academic achievements in the programme's specific discipline (master's thesis);
 - s. Knowledge Transfer: Seminars, forums, conferences and workshops in life sciences;
 - t. Master's examination: A review of the student's academic achievements in which the board of examiners assesses whether or not all course examinations and assessments of all courses and research training periods that are part of the Master's programme (as defined in the regulations), have been successfully completed. The board of examiners may decide to complete this review with an overall assessment (in terms of HERA);
 - u. Mentor: senior scientist, also appointed as student adviser especially with respect to elective subjects and research training periods. Mentors discuss progress and future career perspectives with their students approximately four times a year;
 - v. Principal Investigator (PI): Scientist appointed by Radboudumc as assistant professor, associate professor or professor; or scientist appointed by RU – and affiliated with RIMLS – as assistant professor, associate professor or professor. A PI may act as supervisor or external assessor of a research training period or literature thesis;
 - w. Research training period (internship): A practical project as referred to in HERA, in the following form: practical training and experience, writing a report or Master's thesis;
 - x. Research training period supervisor: PI who gives guidance during a research training period;
3. Resit: An opportunity to resit an examination as referred to in Article 7.10, first paragraph, of HERA. Where these regulations refer to student, in most cases, this term also includes prospective student, unless stipulated otherwise.

Section 2. Admission to the programme

Article 4. Enrolling in the programme

1. The Executive Board enrolls a student who meets the admission requirements and procedures for enrolment at Radboud University, as referred to in Chapter IV of the Radboud University

Enrolment Regulations (see: <https://www.ru.nl/studenten/tijdens-studie/regelingen/regeling-aanmelding-inschrijving/>).

2. In order to provide the prospective student with adequate and clear information, the admission requirements and procedures referred to in the first paragraph have been included in these regulations as Appendix I.

Article 4a

Not applicable

Article 5. **Decision concerning admission**

1. The Dean decides on behalf of the Executive Board whether a student can be granted admission to the programme.
2. Without prejudice to the first paragraph, decisions concerning admission to the programme are made by the selection committee of the board of examiners on behalf of the Dean.

Section 3. Access to courses and examinations

Article 6. **Registering for teaching activities and examinations**

1. Any student who has registered for the teaching activities and examinations of the educational units included in the programme in accordance with applicable procedures and in timely fashion, and who, where applicable, meets the admission requirements set out in these regulations, will be registered for the relevant teaching activities, including the accompanying examinations and partial examinations (first opportunity).
2. Registration for teaching activities and examinations is not dependent on any monetary contribution other than the tuition fees, unless it was decided, through a separate decision, that there are costs related to the special nature of the programme.

Article 7. **Registering and unregistering for educational units**

1. The student must register for the teaching activities and accompanying examinations of the educational units of the programme they are enrolled in in the manner described in Appendix III.
 - 1a. Notwithstanding the provisions of the first paragraph, first-year students in their first semester are automatically registered for all teaching activities and examinations in the first semester.
2. Registration for an educational unit includes registration for all tests and assignments that are included in the examination (first opportunity).

3. Registration for an educational unit is not possible after the deadline defined in Appendix III, unless the board of examiners decides otherwise, on behalf of the Dean and in special circumstances.
4. It is not possible to unregister from an educational unit once it has started, unless the board of examiners decides otherwise, on behalf of the Dean and in special circumstances.

Article 8. Registering and unregistering for examinations and resits

1. If a student does not wish to sit an examination (first opportunity) for which they are registered, they must unregister via Osiris, no later than five working days before the examination date, unless Appendix III specifies a different procedure and/or time frame for unregistering.
2. If a student does wish to sit an examination (first opportunity) for which they are not registered, they must register for the examination via Osiris, no later than five working days before the examination date, unless Appendix III specifies a different procedure and/or time frame for registering.
3. The student is personally responsible for registering for the resit for an educational unit (second opportunity). To take part in a resit for an educational unit, the student must register via Osiris, no later than five working days before the resit date, unless Appendix III specifies a different procedure and/or time frame, or if the board of examiners decides otherwise.
4. If the student fails to unregister in due time for an examination or resit, non-attendance is considered as a used opportunity to sit the examination, unless the board of examiners, or other authority designated in Appendix III, decides otherwise in special circumstances.

Article 9. Entry requirements for teaching activities and examinations

1. The enrolled student is allowed to take part in all the educational units of the programme and sit all corresponding examinations.
2. Notwithstanding the provisions of the first paragraph, Appendix III lists any entry requirements and/or other provisions that apply to specific educational units and/or the corresponding examinations. If entry requirements apply, the student cannot be granted admission to the educational unit and/or the corresponding examination until these entry requirements have been met.
3. An examination that was passed may be resat, unless determined otherwise in Appendix III. A partial examination that was passed may not be resat before the result of the examination has been irrevocably established, unless determined otherwise in Appendix III.
4. In exceptional cases, the board of examiners may grant an exemption from these entry requirements, with or without stipulating alternative entry requirements.

5. Access to teaching activities and examinations is not dependent on any monetary contribution other than the tuition fees, unless there are costs related to teaching. If such costs are involved, they are specified in Appendix III.

Section 4. Structure and form of the programme

Article 10. **Learning outcomes of the programme**

This highly selective programme provides a sound balance of theory and practice to operate successfully as a researcher in academia, and/or as a team member in a research position in industry or in another advanced academic position. The learning outcomes of the programme are the following:

- a. Fundamental knowledge on the molecular mechanisms underlying human disease processes in a broad range of the molecular life sciences;
- b. Knowledge about key developments in translational medicine and ability to translate fundamental molecular knowledge into medical experimental research towards prevention, therapies and diagnostics;
- c. Ability to autonomously formulate a research problem, design and perform scientific research on a high level, keeping up with international standards;
- d. Competence to participate in scientific discussions and present scientific results in the English language to an international scientific audience;
- e. Capacity to write at the level of published articles in international peer-reviewed journals;
- f. Ability to integrate the societal and ethical impact of scientific research at relevant moments and in relevant situations in the scientific career;
- g. Ability to critically reflect on one's strengths and weaknesses with respect to career decisions and a sustainable work-life balance;
- h. Proficiency to operate successfully in varying roles in a team.

Article 11. **Study load of the programme**

The degree programme has a study load of 120 EC. The programme's study load was established under or pursuant to HERA and/or by separate decision of the Executive Board.

Article 12. **Form of the programme**

The programme is taught full-time. The programme's form was established by the Executive Board in a separate decision.

Article 13. Language of instruction

The programme is taught in the English language, which is the programme's language of instruction. The programme's language of instruction was established by the Executive Board in a separate decision.

Article 14. Examination programme

The programme includes an examination programme aimed at realizing the learning outcomes referred to in Article 10. The examination programme consists of a coherent set of educational units, as further described in Appendix II.

Article 15. Incorporation of educational units (free elective space)

1. With due consideration for the examination programme described in Appendix II, the programme allows for the incorporation of 11 EC or 17 EC of optional educational units from other programmes.
2. The board of examiners incorporates optional educational units from other programmes at the student's request.
3. When selecting educational units for the free elective space, the following conditions apply:
 - a. Electives are in the field of molecular medicine and/or life sciences and may be chosen from other Master's or PhD studies, or may be composed as an individual course (code: VKO/IND);
 - b. Electives have a minimum study load of 1.5 EC. Shorter courses may be included in Knowledge Transfer (MED-MMKT);
 - c. Electives are to be graded numerically. Exceptions are MED-MMKT and when approved by the board of examiners a maximum of 6 EC of individual electives may be qualified with P (Pass) or F (Fail);
 - d. Notwithstanding the provision under a, a maximum of 6 EC may be spent on Bachelor's or Master's courses outside the field of molecular medicine and/or life sciences, for example for career development;
 - e. The total amount of courses on Bachelor's level in the examination programme (electives and extracurricular) may not exceed 12 EC;
 - f. Electives have no significant overlap with the other components of the student's individual study plan;
 - g. Electives have to be approved by the board of examiners as part of the individual study plan;

- h. Assessment regulations, as referred to in article 30.7, for individually composed electives are to be provided by the examiner prior to the start of the elective and have to be approved by the board of examiners.
4. Not applicable.
5. Incorporation of an educational unit is only permitted before the relevant educational unit starts.
6. In the event the educational units load and study results of the educational units to be incorporated differ from the provisions laid down in these regulations, conversion will take place. The board of examiners will decide on the conversion, with due observance of the memo on conversion: 'Conversion of study load and study results' (Conversie van studiebelasting en studieresultaten) (https://www.radboudnet.nl/publish/pages/838626/12_conversie_van_studiebelasting_en_studieresultaten_aan_de_radboud_universiteit_nijmegen.pdf).
7. When selecting educational units from other degree programmes for the mandatory free elective space, the relevant rules with respect to procedures and rights and obligations as referred to in Article 7.13, paragraph 2 of HERA should be adhered to, in so far as these procedures relate to that educational unit.
8. If the inclusion of optional educational units leads to the 120 EC required by the examination programme being exceeded, these optional educational units will be seen as extra-curricular educational units. Students may indicate in their individual study plan which educational units this applies to.

Article 16. Adding educational units (extracurricular)

1. The programme allows for the addition of extracurricular educational units.
2. The total number of educational units added to the examination programme may not exceed 18 EC.
3. The board of examiners adds the educational units from other programmes at the student's request.
4. The addition of optional educational units is subject to the following conditions:
 - a. Extracurricular educational units have to be approved by the board of examiners as part of the individual study plan. Approved units will be presented on the diploma supplement;
 - b. Extracurricular educational units may be chosen from other Master's or PhD studies, or may be composed as an individual course (code: VKO/IND);
 - c. Extracurricular educational units are to be graded numerically, and at least 50% of the grade needs to be obtained by individual assessment;
 - d. Extracurricular educational units are taken along in the determination for a distinction.

- e. Notwithstanding the provision under b, a maximum of 6 EC may be spent on Bachelor's courses;
 - f. The total amount of courses on Bachelor level in the examination programme (electives and extracurricular) may not exceed 12 EC.
5. Not applicable.
 6. For adding educational units, the provisions in Article 15, paragraphs 5 through 7 apply mutatis mutandis.

Article 17. **Exemptions from educational units**

1. Exemptions from educational units are permitted.
2. The total number of exemptions may not exceed 18 EC.
3. At the student's request, the board of examiners may grant an exemption for an educational unit and the corresponding examination if the student:
 - a. has completed a relevant educational unit as part of a university programme that is comparable in terms of both content and level
 - b. can prove previous (academic) achievements that justify exemption.
4. In the assessment referred to in paragraph 3, the board of examiners checks the current relevance of the knowledge, understanding or skills that the student was tested on.
5. Exception: An exemption as referred to in the first paragraph cannot be granted for the final paper (Master's thesis).
6. The board of examiners does not grant any exemptions for partial examinations.
7. The board of examiners does not grant exemptions on the basis of results obtained during a period when the student was barred from sitting examinations because of examination fraud that was established by the board of examiners, as referred to in the Regulations on Fraud.
8. The following generic exemptions are granted for the programme:
 - a. none.
9. In establishing the results of final examinations, exemptions will be listed in Osiris as VR ("vrijstelling", exemption).

Article 18. **Replacing educational units**

1. Replacing compulsory educational units in the examination programme is permitted.
2. At the student's request, and in special cases, the board of examiners can replace an educational unit in the examination programme with an educational unit from another programme.
3. The replacement of educational units is subject to the following conditions:
 - a. Requests need to relate to pressing personal circumstances that justify replacement;

- b. Replacements of educational units need to be similar both as regards content and as regards level, and part of a university Master's or PhD programme;
 - c. The board of examiners will consult the examiner of the replaced educational unit to determine suitable replacements.
4. The replacement option referred to in the first paragraph does not apply to the final paper (Master's thesis) and first research training period report.
5. For replacing educational units, the provisions in Article 15, paragraphs 5 through 7 apply *mutatis mutandis*.
6. At the student's request and in special cases, the board of examiners may grant a student, after hearing the examiner, dispensation from a specific partial examination or educational unit. This means that the student is not required to take part in the relevant unit of study or examination but is required to meet pre-defined alternative conditions.
7. Dispensation as referred to in paragraph 6 of this Article is subject to the following conditions:
 - a. Requests must relate to pressing personal circumstances that justify dispensation.
 - b. Alternatives must be comparable to the unit of study for which dispensation is being requested in terms of both content and level.
 - c. Requests must be submitted to the board of examiners no later than 8 weeks before the start of the relevant unit of study/ partial examination.

Article 19. Free curriculum

It is not possible to follow a free curriculum.

Section 5. Structure and form of educational units

Article 20. Educational units organized per academic year

Each educational unit is offered once per academic year unless otherwise specified in Appendix III.

Article 21. Number of opportunities to sit an examination per educational unit; resits

1. Per educational unit, the student can sit one examination and one resit per academic year, unless otherwise specified in Appendix III.
2. If the examination referred to in the first paragraph consists of partial examinations, the resit also consists of partial examinations, unless otherwise specified in Appendix III.

Article 22. Teaching and examination timetable

Appendix III specifies at the very least in which period students are given the opportunity to follow courses and sit examinations.

Article 23. Language of instruction and examinations

The teaching activities and examinations of the educational units are provided in the language of instruction of the programme, as defined in Article 13, unless otherwise specified in Appendix III.

Article 24. Learning objectives

All educational units are aimed at realizing the learning objectives described in these regulations. The learning objectives per educational unit (or a reference to these objectives) are further elaborated in Appendix III.

Article 25. Instruction methods

The overview in Appendix III of these regulations lists the instruction methods per educational unit, or a reference to these methods.

Article 26. Number of contact hours

The number of contact hours per educational unit (or a reference to this number) is indicated in Appendix III.

Article 27. Study load

The number of EC per educational unit is indicated in Appendix III.

Article 28. Examination format

1. Appendix III lists the examination format per educational unit, or a reference to this form. The programme uses the following examination formats:
 - a. Written partial examinations / examinations (written or digital);
 - b. Written research proposals;
 - c. Oral presentations and discussions;
 - d. Written reports, essays and assignments;
 - e. Portfolio;
 - f. Participation. 'Participation' cannot be used to assess students unless supported by a rubric or assessment form to evaluate the students.
2. In special cases, the board of examiners may decide to deviate from the examination format set out in Appendix III.
3. Written examinations are administered in the rooms designated by the programme for this purpose.

4. Not applicable.
5. For examinations other than written examinations, further rules are set out in the Assessment Regulations referred to in Article 30, paragraph 7.
6. The board of examiners may allow students with an impairment, by way of special examination facilities, to sit examinations in a format adapted to their individual impairment. Prior to reaching a decision on this matter, the board of examiners may seek expert advice. In so far as facilities in the context of a 'digital test' are concerned, the board of examiners, in designing the facility, may seek advice from the faculty's digital testing coordinator.
7. Within the framework of these Education and Examination Regulations, the board of examiners establishes guidelines and instructions (Article 7.12b, paragraph 1 (b) of HERA) for assessing and establishing the results of examinations and final examinations.
8. In case of oral presentations at least two examiners or assessors are present. For oral presentations of research training periods the daily supervisor, even if this person does not yet hold a PhD degree, may act as assessor.
9. The board of examiners may decide that a student's work can be assessed in another form if a student requests this in writing.

Section 6. Assessment and examination

Article 29. **Rules for the administration of examinations**

In order to ensure proper procedure is observed when administering examinations in the examination rooms of Radboud University, the Dean has established house rules for examination venues in a separate decision (Regeling Huisregels Tentamenruimten). In order to provide adequate and clear information, these rules have been included in these regulations as Appendix V.

Article 30. **Establishing examination results**

1. The examiner determines the result of an examination in writing or digitally and is responsible for recording this result in Osiris.
2. The result of an examination is expressed in half points or full points on a scale of 1-10. If the result of an examination is expressed differently, this is described in more detail in the overview in Appendix III.
3. Notwithstanding the provisions of the second paragraph, the result of an examination is never set at 5.5 points. An arithmetical score equal to or higher than 4.5(0) and lower than 5.5(0) is rounded down to 5, and a score equal to or higher than 5.5(0) is rounded up to 6.

4. If the result of an examination is equal to or higher than 6.0 points, or is graded as a 'pass', the examination is considered to have been passed. If the result of the examination is equal to or lower than 5.0 points, or is graded as a 'fail', the examination is considered not to have been passed.
5. If an examination that has already been sat is resat, the most recent grade always determines the result.
6. The results of partial examinations are expressed in decimals, on a scale of 1.0 - 10.0, unless otherwise specified in Appendix III.
- 6a. If the result of a partial examination is equal to or higher than 5.5(0), or is assessed as a 'pass', the partial examination is considered to have been passed. If the result of a partial examination is lower than 5.5(0) or is assessed as a 'fail', the partial examination is considered not to have been passed.
7. For every examination, the examiner establishes Assessment Regulations listing the rules for determining the examination results. The Assessment Regulations require the approval of the board of examiners and are published before the start of the educational unit. The Assessment Regulations do not deviate from that the provisions of Appendix III.

Article 30a Non-numerical results

Without prejudice to the provisions of Article 30, the following non-numerical results are established and registered in Osiris in the following cases:

- a. 'NS' / 'ND' – 'no show' (*'niet deelgenomen'*) if the student was registered for an educational unit or examination, but did not take part in it;
- b. 'EX' / 'VR' – exemption (*'vrijstelling'*) if, in accordance with these regulations, the board of examiners has granted the student an exemption from an educational unit in the examination programme;
- c. 'FR' ('fraud'), if the board of examiners has ascertained that (~~serious~~) fraud was committed during an examination, and has declared the result of the relevant examination to be invalid, in accordance with the provisions of the Regulation on Fraud attached to these regulations;
- d. 'EFR' ('serious fraud' – *'ernstige fraude'*), if the board of examiners has ascertained that serious fraud was committed during the administration of an examination, and has declared the result of the relevant examination to be invalid, in accordance with the provisions of the Regulation on Fraud attached to these regulations
- e. 'NR' / 'GU' – no result (*'geen uitslag'*), if no mark can be assigned due to incomplete or lack of data;
- f. 'F' / 'OV' – failed, not sufficient (*'onvoldoende'*), if a student fails one or more examinations

- or has not submitted his work before the due date that counts towards the final grade;
- g. 'SU' / 'V' – sufficient ('voldoende'), if a student passes one or more examinations;
 - h. 'P' / 'VD' – passed ('voldaan'), if a student passes one or more examinations;

Article 31. **Publication of examination results**

1. Immediately after the result of an examination has been established, the examiner provides the student administration office with the data required for the publication of this result.
2. The examiner publishes the result of a written examination within 15 working days after the date on which the examination was administered and no later than 10 working days before the date of the resit examination. If an examination is taken in multiple sessions, the result is published within 15 working days of the last session. Immediately following an oral examination, and in any case no later than 5 working days after it was administered, the examiner informs the student of the result and provides them with a written or digital statement to this effect. For examinations that are administered in some other way than in writing or orally, Appendix III sets out the time period within which the student must be informed of the result. This period may not exceed 15 working days.
3. In special circumstances and upon request, the board of examiners may extend or reduce the time period referred to in the second paragraph.
4. Once the results of an examination are published, students are informed of their right to inspect their marked work as referred to in these regulations.
5. The provisions in paragraphs 1 through 4 do not apply to partial examinations.
6. Once the results of an examination are published, students are informed of the possibility to appeal with the Examinations Appeals Board¹ within the applicable appeal period.

Article 32. **Perusal and inspection rights**

1. For a period of at least twenty working days following the publication of an examination result, the student is entitled, at their request, to peruse and inspect the assessed work.
2. For the period referred to in the first paragraph, any student who sat the examination is entitled to inspect the questions and/or assignments set for this examination and the standards used in the assessment.
3. Notwithstanding the provisions of paragraphs 1 and 2, the examiner may decide that perusal shall take place for all students at the same time, on a pre-defined date, time and location. If a student is unable to attend this collective perusal session due to demonstrable circumstances beyond

¹ Procedure is stated on the Radboud University website: <https://www.ru.nl/currentstudents/during-your-studies/legal-affairs/objections-executive-board/>

their control, a separate perusal opportunity can be arranged upon request, preferably within the time period referred to in paragraph 1.

4. If the examination involves an examination format to which the perusal and inspection procedure described in paragraphs 1 and 2 cannot be applied, Appendix III describes how perusal is to be organized.
5. In any event, the opportunity for perusal is offered no later than 5 working days prior to the first following opportunity to sit the examination.
6. The provisions in paragraphs 1 through 5 do not apply to partial examinations.

Article 33. Validity term of examinations

1. Passed examinations are valid indefinitely.
2. Not applicable.
3. Not applicable.
4. Not applicable.
5. Not applicable.
6. The validity term of partial examinations expires immediately after the end of the academic year following the academic year in which the partial examination was taken, unless stated otherwise in Appendix III.

Article 34. Final examination

1. The programme is concluded with a final Master's examination.
2. The board of examiners establishes the result of the final examination in writing as soon as the student has passed all the examinations corresponding to the educational units in the examination programme pertaining to the programme in question, and the student has requested a final examination. The board of examiners decides which examination the student sat last.
3. At the same time as determining the result of the final examination, the board of examiners also sets the final examination date. The final examination date is the day on which the board of examiners establishes the result, as specified in paragraph 2.
4. Prior to determining the result of the final examination, the board of examiners may conduct an inquiry into the student's knowledge with respect to one or more educational units or aspects of the programme. In that case, the final examination date is the date on which the board of examiners has established the results of the inquiry.

Article 35. Degree and distinction

1. A student who has passed the final examination of the programme will be awarded a Master of Science (MSc) degree.

2. The board of examiners can award a distinction to a student who has successfully completed the programme. The rules for awarding distinctions have been laid down in appendix VI.

Section 7. Study progress, counselling, and recommendations

Article 36. **Study progress and student counselling**

1. The Dean is responsible for recording student results in such a way that the board of examiners can provide every student, at their request and within a reasonable period of time², with an up-to-date overview of their results.
2. The Dean is responsible for providing adequate student counselling. This means that the student can in any case make use of the RHA study advisors. In addition, students receive support and guidance from their personal mentor throughout the programme, as described in the prospectus.

Article 37. **Not applicable**

Section 8. Evaluation of teaching

Article 38. **Teaching evaluation method**

With due observance of Radboud University's quality assurance system, as laid down in the Radboud University Quality Assurance System Handbook, the Dean is responsible for the systematic evaluation of the teaching offered in the context of the programme.

Section 9. Judicium abeundi

Article 39. **Student conduct in relation to future professional practice**

In order to provide the student with proper and clear information, the student is informed about the legal provisions (Article 7.42a of HERA) that grant the Executive Board the authority, in special cases and provided the due diligence requirements described in Article 7.42a are met, to terminate or refuse a student's enrolment in a programme, if the student's conduct or views indicate an incapacity to exercise one or more professions for which their degree programme trains them, or for the practical preparation for professional practice.

² An up-to-date overview can be produced at all times, students can do this themselves as well.

Section 10. Transitional provisions

Starting 2022-2023 MED-MMP2A (39 EC) and MED-MMP2B (45 EC) are replaced by MED-MMP2A1 (37.5 EC) plus MED-MMCOA (1.5 EC) and MED-MMP2B1 (43.5 EC) plus MED-MMCOA (1.5 EC), respectively. Students who have already completed components of the master programme in accordance with the exam regulations of 2021-2022 or earlier, can graduate under the examination programme (Appendix II) of the EER which was operative in the year they started the master programme.

Section 11. Final provisions

Article 40. **Safety net scheme**

1. In all cases not covered fully or clearly by these regulations, the decision lies with the Dean.
2. In case of conflict between these regulations and the relevant legal provisions, the provisions in HERA take precedence.

Article 41. **Adoption, employee participation and amendments**

1. These regulations are drawn up or amended by the Dean after the programme committee has delivered its opinion on them and the Faculty Joint Assembly has approved them.
2. Amendments to these regulations do not take effect in the current academic year unless this disproportionately compromises the student's interests.
3. In cases when these regulations cannot be implemented as a result of an urgent crisis and the accompanying restrictions and measures, the Dean decides on any adjustments needed to ensure optimal study progress in the given circumstances.
4. In the cases referred to in paragraph 3, the Dean informs the programme committee and the UMC-Raad of the proposed adjustments and, if the circumstances allow it, waits before reaching a final decision until the programme committee and UMC-Raad have delivered their opinion on the matter.
5. In the cases referred to in paragraph 3, an addendum will be added to these regulations. The participational bodies will be involved in drawing up this addendum in accordance with the standard, statutory provisions regarding the adoption, in whole or in part, of the EER.

Article 42. **Entry into force**

1. These regulations enter into force on 1 September 2022.
2. Any previously established Education and Examination Regulations expire as of this date.

Article 43. **Publication**

1. The Dean is responsible for publishing these regulations and any amendments thereto.
2. Any interested party is entitled to peruse these regulations via the website of the relevant Radboud university medical center programme.

Article 44. **Evaluation**

The Dean is responsible for regularly assessing these regulations.

As established by the Dean on 12 May 2022.

Appendix I Admission requirements and procedures

Paragraph 1 Admission requirements

1. To be admitted to the programme Molecular Mechanisms of Disease, candidates must have:
 - a. a Bachelor of Science (BSc) degree in life sciences such as Cell Biology, Molecular Medicine, Biomedical Sciences, Biochemistry, Biotechnology or Molecular Biology or have completed training which the board of examiners deems to be of a comparable content and level;
 - b. a BSc degree with results well above average as assessed by the selection committee for this programme; the board of examiners may make exceptions in special cases;
 - c. chosen the research-oriented specialisation in their BSc programme, where possible;
 - d. a strong motivation to pursue a career in research that is related to the molecular mechanisms of disease;
 - e. at least two months of hands-on practical experience in the field of molecular life sciences;
 - f. an excellent command of English (see language requirements, paragraph 2).
2. In addition to the prior education or the qualities of the candidate, at least two members of the entrance selection committee of the board of examiners will hold an individual interview (in English) with the candidate. This interview assesses communicative behaviour, capacity for teamwork, the capacity to reflect on one selves, creativity, innovative thinking and scientific reasoning. Furthermore, using a standard set of questions it is assessed whether the background knowledge of the students conforms to the required content and level.

Admission to the programme is dependent on this interview and final overall judgement of the board of examiners of the master's programme Molecular Mechanisms of Disease.

Paragraph 2 Language requirements

An advanced command of English is required to participate in classes and examinations, as stated in the Code of Conduct Foreign Languages of Radboud University Nijmegen. This requirement is satisfied if the student can submit before start of the programme a testimonial of one of the following tests:

- a TOEFL test certifying a minimum score of 90 (Internet test), with all sub-scores equal or above 22;
- IELTS (International English Language Testing System), applicants must achieve an overall minimum test score of 6.5, a minimum testscore of 6.0 on all subitems and a minimal testscore on “writing” of 6.5;

- Cambridge EFL examinations, applicants must have obtained a C1 or C2 diploma, both with a minimum pass grade C.

For native speakers and students who have completed their prior education in English, a General Certificate of Education (grade C) or equivalent is sufficient. It is assumed that students who have studied to University Bachelor's or equivalent level in the Netherlands will have a sufficient level of the English language and therefore they do not need to submit a TOEFL test or equivalent.

Paragraph 3 Admission and application procedure

1. The admission procedure, which is approved by the board of examiners before start of the selection, is stated on our website. See <https://www.ru.nl/english/education/masters/molecular-mechanisms-of-disease-research/application/>
2. The programme has a maximum student number of 30, as determined by the executive board, in a separate decision. For educational reasons, to allow sufficient guidance and small scale groups, the programme has sets it's student limit to 24 in 2022-2023. At the discretion of the dean, following advice of the programme director, the set student number may be exceeded.

Appendix II Examination programme Molecular Mechanisms of Disease

Year	Educational unit / course	Code	Study load (EC)
1	Introduction to Molecular Mechanisms of Disease	MED-MMIC	2.5
	Excellence in communication	MED-MMEC	1.5
	Understanding basic statistics using R	MED-MMBS	1.5
	Immunity, infection and inflammation	MED-MM1CFA	4.0
	Immunity related disorders and immunotherapy	MED-MM1TR	2.0
	Metabolism, transport and motion	MED-MM2CFA	4.0
	Metabolic disorders	MED-MM2TR	2.0
	Cell growth and differentiation	MED-MM3CFB	2.5
	Developmental disorders and malignancies	MED-MM3TR	2.0
	Computational Biology & Bioinformatics	MED-MMCBB	3.0
	Scientific skills	MED-MMSKB	1.5
	Masterclass 2	MED-MM2MC	1.5
	Research training period 1	MED-MMP1C	30.0
	2	Omics data analysis and interpretation	MED-MMSTA
Science and society		MED-MMSS	1.5
Masterclass 1		MED-MM1MC	1.5
Research training period 2 – 26 weeks		MED-MMP2A1*	37.5
Research training period 2 – 30 weeks		MED-MMP2B1*	43.5
1 and 2	Electives	EL#	17.0 or 11.0
	Literature thesis	MED-MMLT**	6.0
	Knowledge transfer	MED-MMKT**	3.0
	Mentoring	MED-MMCOA1***	1.5
		Total	120

*Students either do MED-MMP2A1 or MED-MMP2B1.

#Electives need to be 17.0 EC in combination with MED-MMP2A1 or 11.0 EC in combination with MED-MMP2B1. A maximum of 6.0 EC of electives can be used to fill deficiencies at bachelor's level. All other elective courses must be of master's or PhD level.

**Literature thesis (MED-MMLT) and Knowledge transfer (MED-MMKT) are optional elective components.

Appendix III Course-specific information

Paragraph 1 Theoretical courses

For all theoretical courses, described in the underlying tables IIIb the following is determined.

Table IIIa. General information MMD theoretical courses (MED-MMIC, MED-MMEC, MED-MMBS, MED-MM1CFA, MED-MM1TR, MED-MM2CFA, MED-MM2TR, MED-MM3CFB, MED-MM3TR, MED-MMCBB, MED-MMSKB, MED-MM2MC, MED-MMSTA, MED-MMSS, MED-MM1MC)

Information education		
	Learning objectives	See prospectus (https://www.ru.nl/courseguides/fmw/master/molecular-mechanisms-disease-2022-2023/)
	Entry requirements	Not applicable
	Registration for tuition	All students need to register via Osiris at least 10 working days before start of the educational unit. Specific registration periods will be announced. Exempted are incoming first year MMD students; they are automatically enrolled via Osiris for tuition of all obligatory courses in Semester 1.
	Tuition form	Lectures and demonstrations, discussions, enquiry-based projects, communication skills training; for details see prospectus (https://www.ru.nl/courseguides/fmw/master/molecular-mechanisms-disease-2022-2023/)
	Number of contact hours	See https://onderwijsroosters.radboudumc.nl/schedule
	Language of instruction	English
	Study costs	Not applicable
Information examination		
	Entry requirements examination	Not applicable
	Number of examination opportunities per study year	2
	Maximum number of examination opportunities	Not applicable
	Registration examination	Students who are registered for tuition via Osiris are also automatically enrolled for the first examination opportunity of the corresponding unit of study; resit registration needs to be done via Osiris in accordance with article 8.
	Deregistration examination	See article 8, via Osiris, at the latest 10 working days before the examination date. In case notice of absence has been given to the examiner at least two days prior to the examination date, the final result of the examination will be 'NS' (no show) and no EC will be awarded.
	Examination language	English
	Period of validity	Indefinitely, with due observance of the stipulations on this matter laid down in HERA.

	Resit of passed examination	Allowed, after having informed the board of examiners at the latest 28 days before the examination date.
	Resit of module tests	Allowed for module tests that were not passed. <u>Not allowed</u> for passed module tests, except written individual exams (short answer open-ended question exams), after having informed the board of examiners at the latest 28 days before the module test date.
Set-up first examination opportunity		
	Term for publication of examination results	15 working days
	Validity term of module tests	As stated in article 33
Set-up resit examination		
	Term for publication of examination results	15 working days
	Number of module tests	Equal to first examination opportunity
	Examination form	Equal to first examination opportunity
Committee to be approached with special requests		
	Board of Examiners MMD	

Table IIIb. Specific details theoretical courses (MED-MMIC, MED-MMEC, MED-MMBS, MED-MM1CFA, MED-MM1TR, MED-MM2CFA, MED-MM2TR, MED-MM3CFB, MED-MM3TR, MED-MMCBB, MED-MMSKB, MED-MM2MC, MED-MMSTA, MED-MMSS, MED-MM1MC)

Introduction to Molecular Mechanisms of Disease		
	Code	MED-MMIC
	Study load	2.5 EC
Information examination		
	Determination examination grade	Pass (P) or Fail (F); written report is numerically graded.
Set-up first examination opportunity		
	Period	September
	Number of module tests	3
	Examination form	Written assignments (2) and written report; for details see assessment regulations.
Set-up resit examination		
	Period	To be determined in consultation between examiner and student.

Excellence in communication		
	Code	MED-MMEC
	Study load	1.5 EC
Information examination		
	Determination examination grade	Pass (P) or Fail (F)
Set-up first examination opportunity		
	Period	September
	Number of module tests	2
	Examination form	Oral presentation (performance, content and creativity) and poster presentation (content and creativity); for details see assessment regulations.
Set-up resit examination		

Period	To be determined in consultation between examiner and student.
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Understanding basic statistics using R	
Code	MED-MMBS
Study load	1.5 EC
Information examination	
Determination examination grade	Pass (P) or Fail (F)
Set-up first examination opportunity	
Period	October
Number of module tests	2
Examination form	Computer assignment and written scientific abstract; for details see assessment regulations.
Set-up resit examination	
Period	To be determined in consultation between examiner and student.

Immunity, infection and inflammation	
Code	MED-MM1CFA
Study load	4.0 EC
Information examination	
Determination examination grade	According to article 30; numerically graded
Set-up first examination opportunity	
Period	December
Number of module tests	4
Examination form	Written examination (short answer open-ended questions), written research proposal, journal club presentation, round table discussion; for details see assessment regulations.
Set-up resit examination	
Period	April

Immunity related disorders and immunotherapy	
Code	MED-MM1TR
Study load	2.0 EC
Information examination	
Determination examination grade	According to article 30; numerically graded
Set-up first examination opportunity	
Period	December
Number of module tests	1
Examination form	Written examination (short answer open-ended questions); for details see assessment regulations.
Set-up resit examination	
Period	April

Metabolism, transport and motion	
Code	MED-MM2CFA
Study load	4.0 EC

Information examination		
	Determination examination grade	According to article 30; numerically graded
Set-up first examination opportunity		
	Period	November
	Number of module tests	3
	Examination form	Written examination (short answer open-ended questions), written research proposal, oral presentation; for details see assessment regulations.
Set-up resit examination		
	Period	March

Metabolic disorders		
	Code	MED-MM2TR
	Study load	2.0 EC
Information examination		
	Determination examination grade	According to article 30; numerically graded
Set-up first examination opportunity		
	Period	November
	Number of module tests	1
	Examination form	Written examination (short answer open-ended questions); for details see assessment regulations.
Set-up resit examination		
	Period	March

Cell growth and differentiation		
	Code	MED-MM3CFB
	Study load	2.5 EC
Information examination		
	Determination examination grade	According to article 30; numerically graded
Set-up first examination opportunity		
	Period	October
	Number of module tests	1
	Examination form	Written examination (short answer open-ended questions); for details see assessment regulations.
Set-up resit examination		
	Period	February

Developmental disorders and malignancies		
	Code	MED-MM3TR
	Study load	2.0 EC
Information examination		
	Determination examination grade	According to article 30; numerically graded
Set-up first examination opportunity		
	Period	October
	Number of module tests	1
	Examination form	Written examination (short answer open-ended questions); for details see assessment regulations.
Set-up resit examination		

Period	February
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Computational Biology & Bioinformatics	
Code	MED-MMCBB
Study load	3.0 EC
Information examination	
Determination examination grade	According to article 30; numerically graded
Set-up first examination opportunity	
Period	January
Number of module tests	2
Examination form	Practical coding exercise/essay questions and bioinformatics project (presentation); for details see assessment regulations.
Set-up resit examination	
Period	May

Scientific skills	
Code	MED-MMSKB
Study load	1.5 EC
Information examination	
Determination examination grade	Pass (P) or Fail (F)
Set-up first examination opportunity	
Period	January-June
Number of module tests	1
Examination form	Portfolio consisting out of assignments for the individual elements of the course; for details see assessment regulations.
Set-up resit examination	
Period	To be determined in consultation between examiner and student.

Omics data analysis and interpretation	
Code	MED-MMSTA
Study load	3.0 EC
Information examination	
Determination examination grade	According to article 30; numerically graded
Set-up first examination opportunity	
Period	September
Number of module tests	2
Examination form	Written examination (short answer open-ended questions) and oral presentation; for details see assessment regulations.
Set-up resit examination	
Period	November

Science and society	
Code	MED-MMSS
Study load	1.5 EC
Information examination	
Determination examination grade	According to article 30; numerically graded
Set-up first examination opportunity	
Period	September

	Number of module tests	2
	Examination form	Oral presentation and written assignment (essay/position paper); for details see assessment regulations.
Set-up resit examination		
	Period	To be determined in consultation between examiner and student.

Masterclass 1		
	Code	MED-MM1MC
	Study load	1.5 EC
Information examination		
	Determination examination grade	According to article 30; numerically graded
Set-up first examination opportunity		
	Period	September
	Number of module tests	2-3 (to be determined); see assessment regulations.
	Examination form	Written assignment, journal club presentation and other (to be determined); for details see assessment regulations.
Set-up resit examination		
	Period & form	If a student fails the masterclass, the examiner will determine the exact form and period for resit. The form will be as much as possible equal to the first examination opportunity.

Masterclass 2		
	Code	MED-MM2MC
	Study load	1.5 EC
Information examination		
	Determination examination grade	According to article 30; numerically graded
Set-up first examination opportunity		
	Period	January
	Number of module tests	2-3 (to be determined); see assessment regulations
	Examination form	Written assignment, journal club presentation and other (to be determined); see assessment regulations.
Set-up resit examination		
	Period & form	If a student fails the masterclass, the examiner will determine the exact form and period for resit. The form will be as much as possible equal to the first examination opportunity.

Table IIIc. Information MMD Mentoring – Learning trajectory personal and professional development

Mentoring		
	Code	MED-MMCOA
	Study load	1.5 EC

	Learning objectives	See prospectus (https://www.ru.nl/courseguides/fmw/master/molecular-mechanisms-disease-2022-2023/)
Information education		
	Entry requirements	Not applicable
	Registration for tuition	Not applicable
	Tuition form	Students discuss with their personal mentor study choices, personal development and career perspectives. Students prepare these meetings by writing a reflection report. Obligatory group intervision meetings (under guidance of a professional coach) are scheduled at three moments in the programme. Q&A group sessions with the programme coordinator are planned several times a year.
	Number of contact hours	Flexible; 4 mentor meetings in first year and 3 meetings in second year are highly recommended. Three meetings during the first year and the final meeting at the end of the Master's programme are obligatory. The group intervision sessions are obligatory.
	Language of instruction	English
	Study costs	Not applicable
Information examination		
	Entry requirements examination	Not applicable
	Number of examination opportunities per study year	2
	Maximum number of examination opportunities	Not applicable
	Registration examination	Students are registered for the examination by the programme administration.
	Deregistration examination	Not applicable
	Examination language	English
	Period of validity	Unlimited
	Determination examination grade	Pass (P) or Fail (F)
	Resit of passed examination	Not applicable
	Resit of module tests	Not applicable
Set-up first examination opportunity		
	Period	Flexible
	Number of module tests	1
	Examination form	Written short reflection per mentor meeting. Three reflections in the first year (signed by mentor) and the final reflection of the Master's programme (all uploaded to Brightspace Mentor course) are obligatory as documentation of the mentor meetings. The final reflection has to be prepared and uploaded at least 15 working days before the intended graduation date. The mentor signature on this final reflection is not obligatory.
	Term for publication of examination results	15 working days
	Validity term of module tests	As stated in article 33
Set-up resit examination		

	Period	Flexible
	Number of module tests	1
	Examination form	Submit written short reflection per mentor meeting.
	Term for publication of examination results	15 working days
Committee to be approached with special requests		
	Board of Examiners MMD	

Paragraph 2 Research training periods

Table IIIId. Information MMD research training periods

Research training period 1		
	Code	MED-MMP1C
	Study load	21 weeks – 30 EC
	Learning objectives	See Guidelines internship MMD on Brightspace
Information education		
	Entry requirements	The work plan for the research training period must be approved by the board of examiners as part of the individual study plan before the start of the research training period.
	Registration for tuition	The student submits the research training period work plan 1 to the board of examiners via Osiris-Zaak, end of November, before start of the research training period.
	Tuition form	The student conducts research under supervision of a scientist and writes a report.
	Number of contact hours	The student conducts research 40 hours a week; estimated supervision time is at least 5 hours a week.
	Language of instruction	English
	Study costs	Not applicable
Information examination		
	Entry requirements examination	Not applicable
	Number of examination opportunities per study year	1
	Maximum number of examination opportunities	2
	Registration examination	Automatic registration after approval of research training period work plan.
	Deregistration examination	Not applicable
	Examination language	English
	Period of validity	Unlimited
	Determination examination grade	According to article 30; numerically graded. Specific rules apply to examiners and assessment forms, see Rules and regulations of the board of examiners and Guidelines internship MMD on Brightspace. Detailed assessment regulations for research training periods are printed on the assessment form (available from Brightspace).
	Resit of passed examination	Not allowed
	Resit of module tests	If a student fails the research training period, the examiner in consultation with the board of examiners will determine the options for resit.
Set-up first examination opportunity		
	Period	21 weeks in January-July; this time period includes writing a report.
	Number of module tests	4
	Examination form	Professional attitude and activities, oral presentation and written internship report.

		See internship assessment forms (approved by the board of examiners) and Guidelines internship MMD on Brightspace for details.
	Term for publication of examination results	15 working days
	Validity term of module tests	As stated in article 33
Set-up resit examination		
	Period	If a student fails the research training period, the examiner in consultation with the board of examiners will determine the options and period for resit.
	Number of module tests	Equal to first examination opportunity
	Examination form	Equal to first examination opportunity
	Term for publication of examination results	15 working days
Committee to be approached with special requests		
	Board of Examiners MMD	

Research training period 2		
	Code	MED-MMP2A1 or MED-MMP2B1
	Study load	MED-MMP2A1 (26 weeks) - 37.5 EC MED-MMP2B (30 weeks) - 43.5 EC
	Learning objectives	See Guidelines internship MMD on Brightspace
Information education		
	Entry requirements	The work plan for the research training period must be approved by the board of examiners as part of the individual study plan before the start of the research training period.
	Registration for tuition	The student submits a research training period work plan (and traineeship agreement) to the board of examiners via Osiris-Zaak at least 6 weeks before start of the research training period.
	Tuition form	The student conducts research under supervision of a scientist and writes a report.
	Number of contact hours	The student conducts research 40 hours a week; estimated supervision time is at least 5 hours a week.
	Language of instruction	English
	Study costs	Not applicable
Information examination		
	Entry requirements examination	Not applicable
	Number of examination opportunities per study year	1
	Maximum number of examination opportunities	2
	Registration examination	Automatic registration after approval of research training period work plan.
	Deregistration examination	Not applicable
	Examination language	English
	Period of validity	Unlimited
	Determination examination grade	According to article 30; numerically graded. Specific rules apply to examiners and assessment forms, see Rules and regulations

		of the board of examiners and Guidelines internship MMD on Brightspace. Detailed assessment regulations for research training periods are printed on the assessment form (available from Brightspace).
	Resit of passed examination	Not allowed
	Resit of module tests	If a student fails the research training period, the examiner in consultation with the board of examiners will determine the options for resit.
Set-up first examination opportunity		
	Period	26 or 30 weeks in October-July; this time period includes writing a Master's thesis.
	Number of module tests	4
	Examination form	Professional attitude and activities, oral presentation and Master's thesis which has to be written in the format of a scientific paper with supplements. See internship assessment forms (approved by the board of examiners) and Guidelines internship MMD on Brightspace for details.
	Term for publication of examination results	15 working days
	Validity term of module tests	As stated in article 33
Set-up resit examination		
	Period	If a student fails the research training period, the examiner in consultation with the board of examiners will determine the options and period for resit.
	Number of module tests	Equal to first examination opportunity
	Examination form	Equal to first examination opportunity
	Term for publication of examination results	15 working days
Committee to be approached with special requests		
	Board of Examiners MMD	

Paragraph 3 Electives: Literature thesis and Knowledge transfer

Table IIIe. Information MMD Literature thesis

Literature thesis		
	Code	MED-MMLT
	Study load	6 EC
	Learning objectives	See Guidelines Literature thesis on Brightspace
Information education		
	Entry requirements	The application for the Literature thesis must be approved by the board of examiners as part of the individual study plan before the start of the Literature thesis.
	Registration for tuition	The student submits the application form Literature thesis to the board of examiners, at least 4 weeks, before start of the literature thesis.
	Tuition form	The student answers a research question, performs a literature study and writes a review under structured supervision of a scientist. Specific guidelines for the Literature thesis (including a time limit of 4 weeks, restrictions on topic and supervisors) are published on Brightspace.
	Number of contact hours	The student conducts the literature study in 4 weeks (or an equivalent thereof); estimated supervision time is at least 1.5 hours a week.
	Language of instruction	English
	Study costs	Not applicable
Information examination		
	Entry requirements examination	Not applicable
	Number of examination opportunities per study year	2
	Maximum number of examination opportunities	Not applicable
	Registration examination	Via approval of the Literature thesis application form.
	Deregistration examination	Not applicable
	Examination language	English
	Period of validity	Unlimited
	Determination examination grade	According to article 30; numerically graded. Specific rules apply to examiners and assessment forms, see Rules and regulations of the board of examiners and guidelines Literature thesis on Brightspace. Detailed assessment regulations for Literature thesis are printed on the assessment form (available from Brightspace).
	Resit of passed examination	Not allowed
	Resit of module tests	Not allowed
Set-up first examination opportunity		
	Period	Flexible, 4-week time period
	Number of module tests	1

Examination form	Written Literature thesis. See Literature thesis assessment form (approved by the board of examiners) and guidelines Literature thesis on Brightspace for details.
Term for publication of examination results	15 working days
Validity term of module tests	As stated in article 33
Set-up resit examination	
Period	Flexible, 4-week time period
Number of module tests	1
Examination form	If a student fails the Literature thesis, the student has to write a complete new Literature thesis on a new topic.
Term for publication of examination results	15 working days
Committee to be approached with special requests	
Board of Examiners MMD	

Table IIIe. Information MMD Knowledge transfer

Knowledge transfer	
Code	MED-MMKT
Study load	3 EC
Learning objectives	See prospectus (https://www.ru.nl/courseguides/fmw/master/molecular-mechanisms-disease-2022-2023/)
Information education	
Entry requirements	Not applicable
Registration for tuition	Not applicable
Tuition form	Students attend (international) scientific seminars and symposia, discuss and present science and reflect.
Number of contact hours	Flexible
Language of instruction	English
Study costs	Reimbursement for symposia costs (fee and travel) is given up to 400 euro per student
Information examination	
Entry requirements examination	Not applicable
Number of examination opportunities per study year	2
Maximum number of examination opportunities	Not applicable
Registration examination	Via Osiris in accordance with article 8.
Deregistration examination	Via Osiris in accordance with article 8.
Examination language	English
Period of validity	Unlimited
Determination examination grade	Pass (P) or Fail (F)
Resit of passed examination	Not applicable
Resit of module tests	Not applicable
Set-up first examination opportunity	
Period	Flexible
Number of module tests	1
Examination form	Written short reflection per seminar and/or symposium. The Knowledge transfer reflection sheet (available via Brightspace) has to be handed in to the course coordinator.

	Term for publication of examination results	15 working days
	Validity term of module tests	As stated in article 33
Set-up resit examination		
	Period	Flexible
	Number of module tests	1
	Examination form	Resubmit improved written short reflection per seminar and/or symposium.
	Term for publication of examination results	15 working days
Committee to be approached with special requests		
	Board of Examiners MMD	

Appendix IV RU Regulations on Fraud

Paragraph 1 Introductory provisions

Article 1. Purpose and scope of these regulations

To prevent fraud during examinations and bachelor/master examinations, as referred to in article 7.12b *WHW*, relating to the education and examination in the **Molecular Mechanisms of Disease** programme of Radboud University (hereinafter: RU), the dean of the faculty of Medical Sciences adopts the following regulations.

Article 2. Definitions

The terms that are used in these regulations – in so far as these terms are also used in the Higher Education and Research Act (*Wet op het Hoger onderwijs en Wetenschappelijk onderzoek* (hereinafter: HERA)) or the Education and Examination Regulations of the degree programme (hereinafter: the EER) – have the same meaning that is given to these terms in HERA and the EER.

Paragraph 2 Definition fraud, procedure and sanctions

Article 3. Definition of fraud

1. At RU, fraud is understood to mean any act or omission by a student which, in its nature, is intended to have as an effect that proper assessment of the knowledge, understanding and skills of that student, or another student, is made fully or partially impossible.
2. Fraud is in any case understood to mean:
 - a) fraud when sitting written examinations, including
 - i. having materials available which are not permitted under the House Rules Examinations Rooms RU Regulations (*Regeling Huisregels Tentamenruimten RU*);
 - ii. copying or exchanging information;
 - iii. passing oneself off as someone else, or being represented by someone else during examinations or bachelor/master examinations;
 - b) fraud when producing theses and other papers, including
 - i. plagiarism in the sense of using or copying someone else's texts, data or ideas without complete and correct source references, 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. fabricating (making up) and/or falsifying (distorting) research data;
 - iii. submitting a thesis or any other paper that was written by someone else.
- c) other fraud in the context of examinations or bachelor/master examinations, including
- i. taking possession of assignments, answer keys and the like, prior to the time the examination or bachelor/master examination is to take place;
 - ii. changing answers to assignments in an examination or a bachelor/master examination after it has been handed in for assessment;
 - iii. providing incorrect information when applying for an exemption, extension of validity period, and the like, of an examination or a bachelor/master examination.
3. For the purpose of these regulations, an attempt to commit fraud will also be seen as fraud.

Article 4. Procedure establishing fraud

1. When fraud is suspected, the board of examiners or the examiner immediately informs the student of this suspicion. If the suspicion of fraud is established when the examination is administered, the board of examiners or the examiner will allow the student to complete the examination.
2. The board of examiners or the examiner may order the student to make any material related to the suspicion of fraud available to them.
3. For the purposes of the provisions in paragraphs 1 and 2 of the present article, examiner is also understood to mean the invigilator or any other RU member of staff.
4. The board of examiners or the examiner drafts a report of the suspicion of fraud. The report drafted by the examiner will be sent to the board of examiners without delay.
5. The board of examiners makes the report referred to in paragraph 4 available to the student without delay and then starts an investigation into the matter. The board of examiners provides the student with the opportunity to respond to the report in writing. The board of examiners hears both the examiner and the student.
6. Within four weeks following the date the report was made available to the student, the board of examiners decides whether fraud was actually committed. The board of examiners informs both the student and the examiner of their decision in writing. The four-week period may be extended by two weeks.

Article 5. Remedial action

If the board of examiners has established fraud:

- a) the board of examiners declares the relevant examination invalid, and

- b) the board of examiners includes a statement in the student's student file that it has established fraud and, if applicable, which sanctions have been imposed.

Article 6. Sanctions

1. If the board of examiners has established that fraud has been committed, the board of examiners may:
 - a) determine that the student may not sit one or more examinations during a period to be set by the board of examiners, which period amounts to a maximum of one year;
 - b) determine that no distinction will be awarded on the degree certificate;
 - c) make a recommendation to the Dean 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 should be ended.

If the board of examiners has established that *serious* fraud has been committed, the board of examiners may also

- d) make a recommendation to the executive board that the student's registration for a degree programme should be terminated with definitive effect.
2. After the board of examiners has established that serious fraud has been committed, the executive board – upon the board of examiners' recommendation – may terminate the student's registration for a programme with definitive effect.
3. The sanctions referred to in this article are imposed as from the day following the date the student is notified of the decision that sanctions are imposed.

Paragraph 3 Transitional provisions

Not applicable.

Paragraph 4 Final provisions

Article 7. Decisions and legal protection

1. Decisions pursuant to these regulations may be sent to the student digitally and/or by email.
2. The student can appeal against any decision made under these regulations, within six weeks following the date on the relevant decision, by lodging a notice of appeal at the Examinations Appeals Board (*College voor Beroep van de Examens (CBE)*).

Article 8. Adoption and amendment

1. These regulations are adopted by the dean.
2. In so far as the content of these regulations relates to the duties and powers of the degree programme's board of examiners, the content must also be confirmed by that board of examiners.

Article 9. Effect

These regulations take effect on September 1, 2019. These regulations will then replace any previous regulations.

Article 10. Publication

1. The dean ensures the appropriate publication and possible amendments of these regulations.
2. For the purpose of proper and clear provision of information to students and prospect students, the dean includes these regulations as an appendix to the Education and Examination Regulations (*Onderwijs- en Examenreglement (OER)*). Accordingly, the board of examiners includes these regulations accordingly as an appendix to the rules and guidelines of the degree programme to be laid down by that board.

Thus adopted by the dean on 12 May 2022.

Appendix V. RU Regulations on House Rules Examination Rooms

Paragraph 1 Introductory provisions

Article 1. Purpose of the regulations

For the proper course of events during examinations and bachelor/master examinations relating to the education and the examination of the **Molecular Mechanisms of Disease** programme that are administered in examination rooms at Radboud University (hereinafter: RU), the dean of the faculty of Medical Sciences of RU adopts the following regulations.

Article 2. Definitions

The terms that are used in these regulations – in so far as these terms are also used in the Higher Education and Research Act (*Wet op het Hoger onderwijs en Wetenschappelijk onderzoek* (hereinafter: HERA)) or the Education and Examination Regulations of the degree programme (hereinafter: the EER) – have the same meaning that is given to these terms in HERA and the EER.

Article 3. Examiners and invigilators

1. For the administration of examinations the board of examiners Molecular Mechanisms of Disease has appointed one or more examiners.
2. The examiners appointed as referred to in paragraph 1 are responsible for the supervision and execution of the provisions in these regulations. On behalf of the examiner(s) appointed, one or more invigilators may be present in the examination rooms, assigned by or on behalf of the executive board.
3. When invigilators have been assigned, at least one appointed examiner is also present in the examination room or, as appropriate, available on call.

Article 4. Instructions by the executive board

1. In view of the executive board's mandating decision dated May 15, 2019, these regulations include instructions in the sense of article 7.12b of HERA. The student is obliged to comply with the instructions laid down in these regulations.
2. A student who fails to comply with any instructions under these regulations may be denied access to the examination room by or on behalf of the examiner. Non-compliance with the instructions may also lead to a suspicion of fraud in the sense of the Regulations on Fraud (*Regeling Fraude*).

Article 5. Guidelines for examiners

These regulations include instructions in the sense of article 7.12b of HERA. The examiner is obliged to comply with the instructions laid down in these regulations.

Article 6. Instructions by examiners for students

1. The examiner may give instructions, in the context of the instructions described in these regulations, to a student in the RU examination room if a concrete situation should be cause for this. The student is obliged to comply with these instructions.
2. The student who fails to comply with the instructions referred to in paragraph 1 may be denied access to the examination room by or on behalf of the examiner. Not-compliance with the instructions may also lead to a suspicion of fraud in the sense of the Regulations on Fraud (*Regeling Fraude*).

Paragraph 2 House Rules

Article 7. Admission to the examination room and leaving it

1. With respect to entering and leaving the examination rooms, the following applies:
 - a. the examination room is accessible for the student at least 15 minutes before the examination starts;
 - b. except in the circumstances described in paragraphs c and d, the student is no longer admitted into the examination room after the examination has started;
 - c. the student who arrives too late at the examination room is given the opportunity, 15 minutes following the start of the examination, to be as yet admitted into the examination room;
 - d. the student is permitted to use the toilet during the examination;
 - e. the student is not allowed to leave the examination room within the first 30 minutes following the start of the examination;
2. In special circumstances the examiner may act contrary to the provisions in paragraph 1. If the provisions in paragraph 1 are departed from, the student will be informed of this in due time.

Article 8. Student ID

1. In the examination room the student must be able to furnish proof of identity, at any time, by producing a valid identity document (passport, driver's license, ID-card or residence permit).

2. The student who cannot furnish proof of identity as laid down in the first paragraph of the present article will not be admitted into the examination room or can as yet be denied access to that room.

Article 9. Start and duration of the examination

The examiner starts the examination at the time scheduled. If the examination starts at a later moment in time because of relevant circumstances, the examiner ensures that the scheduled duration of the examination can be fully used by the student.

Article 10. Materials permitted in examinations

1. When taking the examination, the student is not allowed to have materials available that serve or could serve as auxiliary materials for the examination paper, unless the use of that material has been explicitly permitted by the examiner before the start of the examination.
2. Materials for the purpose of these regulations include, amongst other things: textbooks and dictionaries, notes and lecture notes, and watches, laptops, tablets, telephones and other smart devices and/or wearables.

Article 11. Handing in examination papers

1. When the examination ends, the student is obliged to hand in the examination paper.
2. The student may also be requested to hand in other examination materials, such as examination question papers and/or note paper used during the examination.

Article 12. Peace and order and furniture and fixtures in the examination room

1. Both during and after completion of the examination, the examiner ensures that measures are taken that are required for adequate surveillance and for maintaining the necessary peace and order in the examination room. Eating and drinking is allowed during the examination, with due observance of the provisions in these regulations.
2. When examinations take place, each examination room has at least one clock which is clearly visible for every student.

Paragraph 3 Transitional provisions

Not applicable.

Paragraph 4 Final provisions

Article 13. Departure from rules and house rules

In special circumstances the examiner may depart from the provisions in these regulations.

Article 14. Adoption and amendment

1. These regulations are adopted by the dean.
2. In so far as the content of these regulations relates to the duties and powers of the programme's board of examiners, the content must also be confirmed by that board of examiners.

Article 15. Effect

These regulations take effect on September 1, 2019. These regulations then replace any previous regulations.

Article 16. Publication

1. The dean ensures the appropriate publication of these regulations and any amendments of these regulations.
2. For the purpose of proper and clear provision of information to students and prospect students, the dean includes these regulations as an appendix to the Education and Examination Regulations (*Onderwijs- en Examenreglement (OER)*). The board of examiners includes these regulations accordingly as appendix to the rules and guidelines of the programme that are to be laid down by that board.

Thus adopted by the dean on 12 May 2022.

Appendix VI Guidelines for Distinctions Molecular Mechanisms of Disease

1. The board of examiners will judge whether the Master's certificate should be awarded the distinctions of cum laude or summa cum laude. Based on the weighted mean of the courses stipulated in Appendix II*, the following judicia can be awarded:
No judicium: the weighted mean of the grades assigned is below 8.0.
Cum laude: the weighted mean of the grades assigned is ≥ 8.0 and < 9.0 .
Summa cum laude: the weighted mean of the grades assigned is ≥ 9.0 .
** This relates to courses assessed with a mark.*
2. In order for the Board to consider any distinction as mentioned in paragraph 1 here above, the results of both research training periods are ≥ 8.0 and the weighted mean of the grades for all courses (obligatory, elective and extracurricular) excluding the research training periods is ≥ 8.0 .
3. In order for the Board to consider any distinction as mentioned in paragraph 1 here above, all results have to be obtained the first time the student takes a course examination; only one resit may have been involved in obtaining any of the results of the master's programme.
4. In order for the Board to consider any distinction as mentioned in paragraph 1 here above, the research question answered in the reports of the research training periods has to be in agreement with the research question as defined in the work plan approved by the board of examiners; in addition the reports of the research training periods have to be handed in for grading on time – 6 weeks after a research training period has been completed – as specified in the Rules and Guidelines set by the board of examiners.
5. The board of examiners can deviate from the criteria in paragraphs 1, 2, 3 and 4 in special circumstances.