



HAN UNIVERSITY
OF APPLIED SCIENCES

Degree Statute

(including Education and Examination Regulations)

For Master degree programme Applied Data
Science

Academie IT & Mediadesign

2026-2027

Established on 20 May 2026

Agreement academy council on 08 May 2026

Approval of the program committee on 12 May 2026

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PART 1 General part

Adoption

This degree statute was adopted by the dean on 20 May 2026, after consent was received from the degree committee on 12 May 2026 and consent from school council on 08 May 2026.

1 About the degree statute

This degree statute has been formulated according to the model degree statute for master programmes of HAN University of applied Sciences.

The Higher Education and Research Act stipulates in article 7.59 that an institution such as HAN University of Applied Sciences (hereafter HAN) is obliged to adopt and publish a student charter. The Student Charter consists of two parts: the institution-specific part (which we call the 'Student Charter') and the degree-specific part (which we call the 'Degree Statute').

The degree statute consists of three parts:

- Part 1: General part.
- Part 2: The Education and Examination Regulations, which outline the education, final assessments, exams and modular exams for your degree programme.
- Part 3: Other regulations.

Part 1 is purely informative. No rights can be derived from it. Rights and obligations may be derived from the remaining parts; these are legally applicable regulations.

The degree statute is part of the Student Charter. The other part of the Student Charter is the institution-specific part, which we simply call 'The Student Charter' at HAN. It contains all the regulations that protect your rights. The Student Charter also describes the responsibilities associated with enrolment in a programme. You can find the Student Charter on the HAN website, but it is also sent to you digitally every year.

1.1 Which degree programme(s) does this degree statute apply to?

This is the Degree Statute for the following HAN degree programme(s):

Degree programme	Degree format	CROHO number	Degree after graduation
Applied Data Science	part-time	49164	Master of Science

This degree statute contains information on the structure, organisation and execution of the degree programme, education, student facilities, counselling and study coaching, the education and examination regulations and the other degree-specific regulations that describe student rights and responsibilities. When this document subsequently refers to 'the degree programme', we mean the above degree programme(s).

1.2 How do you read this degree statute?

We use regular UK spelling rules.

When we use 'you', we mainly mean you as an internal or external student enrolled in this degree programme at HAN. But we also mean others, such as prospective students.

When we use 'the student' we refer to all students: male, female and non-binary.

1.3 How long is the degree statute valid for?

A new degree statute is written for each HAN degree programme every academic year. The degree statute for a certain academic year applies to everyone enrolled in the degree programme for that academic year. It does not

matter which phase of your degree programme you are in, whether you are an internal or external student, or when you started.

This degree statute applies to the 2026-2027 academic year: from 1 September 2026 to 31 August 2027. For students starting their degree programme on 1 February 2027, two different degree statutes apply consecutively during their first 'year': the current one and that of the next academic year.

Did you enrol in the degree programme in a previous academic year, and is the degree programme working with a renewed or modified curriculum in the education and examination regulations? Then certain provisions in the education and examination regulations may apply from a degree statute from a previous academic year.

1.4 How does the degree statute come about?

The degree statute for the degree programme is adopted by the dean each year. It is based on the model degree statute: a framework that applies for the entire HAN.

The school council exercises the participation rights on the degree statute, but only in so far as the HAN participation council has not already exercised these rights through the model degree statute and in so far as these rights have not been conferred to the degree committee. How this works exactly is set out in the Participation Council Regulations and the Regulations of the Degree Committee.

Advice is requested in advance from the degree programmes board of examiners.

The relevant HAN organisational bodies strive to publish the new degree statute each year before 1 July.

1.5 Consistency of degree statute, student charter and enrolment regulations

The Degree Statute is part of the Student Charter. The Student Charter applies to the entire HAN. The Student Charter lists all the rights and obligations of students and HAN.

The Student Charter can be found here: [Student Charter | HAN University of Applied Sciences](#).

You can find the rules for application, admission, educational requirements, selection and enrolment in the Enrolment regulations. The degree statute only contains a number of specific additions to this. These additions may not contradict the rules from the enrolment regulations.

The enrolment regulations can be found

at: <https://www.han.nl/opleidingen/master/applied-data-science/deeltijd/praktische-info/Inschrijvingsreglement-2025-2026-MADS-def.pdf> .

2 Education at HAN

Your degree programme is part of the HAN educational offerings. HAN has an overarching mission and vision on higher education. Your degree programme embodies this vision in its own way. HAN's mission and vision are described in the HAN Institutional Plan. You can find this plan on [han.nl](https://www.han.nl).

The HAN goals for the period from 2022-2028 are described in the HAN Institutional Plan: 'For a smart, green and social world of tomorrow'. You can find this plan on [han.nl](https://www.han.nl).

3 Information about your degree programme

3.1 Mission and vision of your degree programme

Our mission is to support professionals in their quest to grow in competence and social responsibility. We achieve this by aligning our educational programme with the current and future demands of the (international) profession and society.

Our vision is to add value by working with young professionals, organisations and society in the field of data science.

We aim to create a learning environment where students, lecturers and external experts work together on practical problems in the field of data science. In this learning environment, the focus is on the students' learning process. The students develop into data science experts in a largely self-directed manner. The lecturers act as coaches and expert partners who support and accompany the development of the students.

3.2 Content and organisation of your degree programme

This section gives a broad description of your degree programme. You can find the rules and details in Part 2, the education and examination regulations, and in the regulations in Part 3.

3.3 How we educate and supervise

Theory and practice come together in the various projects organised in each semester of this degree programme. You work in groups on real(istic) data science problems. You learn how to conduct research and communicate your results to a wider audience. You will gain experience in the effective use of Data Science, in interpreting and evaluating results, and in advising others on the effective use of data-driven solutions.

We support and guide your development and learning process through feedback. Professors, lecturers and peer students give you feedback during your project work and on your result.

3.4 Internships and/or workplace

In our programme, you are encouraged to have a suitable workplace or internship for your graduation project. This is because our education is designed to develop the learning outcomes of your graduation in a work environment. If you lose your job or change jobs during your studies, it does not mean that you will not be able to complete the programme. In this case, we will work together to find a solution, which may be an internship. Part 2 contains more information on these requirements.

3.5 How the work- and professional field are involved

The professional field is involved in various ways:

- Representatives of the (inter)national and regional professional field advise and give feedback on the Master's programme.

- Representatives of the professional field participate in the programme through guest lectures and provide feedback and guidance to the students, e.g. on their research projects.
- Representatives of the local professional provide data and supervision in collaborative research projects with the students, e.g. through hackathons and group projects.

3.6 Research groups and research centres

The following research groups and research centres are involved in the programme:

School of IT and Media Design:

- Lectoraat 'Data & Knowledge Engineering'
- Lectoraat 'Applied Data Science & AI'

School of Engineering and Automotive:

- Lectoraat 'Lean & World Class Performance'

School of Applied Biosciences and Chemistry:

- Lectoraat 'Biodiscovery' & competence centre HAN BioCentre'

Together with education and the field, research groups and research centres explore applied design and innovation development with key technologies and methodologies. These stem from the national top sector policy and the schools' Knowledge and Innovation Agendas.

The research groups unlock key technologies and develop key methodologies for specific domains, such as (manufacturing) industry, sustainable energy or health. In doing so, they implement the HAN Centres of Excellence Smart, Clean and Social. Within HAN, the research groups drive the application of these key technologies. Outside HAN, they mainly work on regional issues, but from an international perspective. Where possible, the research groups contribute to projects and agendas at national, European and global level.

Connection with education

The research groups strengthen HAN's social role as a knowledge institution. In research projects, various professors, researchers, field partners, lecturers and students therefore work closely together. The interaction between research groups and study programmes provides teachers and students with knowledge of research skills and a contribution to curriculum innovation. The research groups participate in the Master's degree programme in Applied Data Science. This interweaving with education strengthens the training of future-proof young professionals and safeguards the schools' innovative capacity.

3.7 Other

Not applicable

4 Exit qualifications of your degree programme and professional requirements

4.1 The professional field

Digitization in industry, organisations and society lead to an increasing demand for developing solutions that handle large, diverse amounts of data and support decision-making or provide new insights.

Data Scientists are specialists who generate new knowledge and insights from data. They do this by applying Data Science and Machine Learning techniques. Data Science knows various applications. For example, to better predict the effects of a medical treatment, estimate the expected need for waste collection in a municipality or plan routes for trucks more efficiently. Data Scientists know how to translate such questions into data-driven solutions.

4.2 Professional requirements

Not applicable.

4.3 Exit qualifications

This section describes your exit qualifications at the end of the degree programme. These exit qualifications are formally defined in the education and examination regulations.

When you graduate, you conform to the exit qualifications of the degree programme. In other words, you have certain (required) knowledge, understanding, skills and (if relevant) attitude, for the profession you have been educated for. The exit qualifications for your degree programme are outlined below.

Nr.	Exit qualification	Description
A	Problem understanding	The Master's graduates translate a (business or research) problem into a data science project by determining objectives and success criteria in collaboration with the problem owner. They take into account (business) requirements and assess potential risks. They derive relevant data requirements from problem insight.
B	Data understanding	The Master's graduates identify and collect relevant data using domain knowledge or in collaboration with relevant stakeholders. They apply methods of data exploration and visualization to identify data properties and relationships between data and to assess data quality.
C	Data analytics	The Master's graduates apply appropriate data science and machine learning algorithms and techniques for complex data analysis. They prepare data, including selecting, cleaning, and combining data from various sources. They determine algorithms suitable for data analysis and establish the test design. They build models and evaluate them by interpreting model results, predefined success criteria, and the test design. They decide on follow-up actions based on the evaluation results of the model.

Nr.	Exit qualification	Description
D	Deployment	The Master's graduates advise on the deployment of data analytics solutions, also taking into account ethical and privacy concerns, as well as on their monitoring and maintenance. They critically discuss (business and data) consequences for an organization or society by evaluating and assessing the possibilities and use of data analytics solutions.
E	Professional skills	The Master's graduates reflect on their own professional identity and develops their knowledge, skills, and attitude in a self-directed manner. They build and maintain a network of professionals inside and outside their organisations. They are in regular dialogue with relevant stakeholders and communicate their work appropriately. They determine objectives, approach, and project plan for a data science project.
F	Research skills	The Master's graduates purposefully apply a range of research and analytics techniques in a systematic and rational way. They critically follow new developments in the field of data science, assess their value for their own profession and master them when relevant. They read and understand scientific and professional literature and communicate according to professional standards.

The level of the exit qualifications is geared to the Dublin Descriptoren long cycle and/or the NLQF-level 7. (For an explanation of the NLQF-levels see [NLQF niveaus - waaier - NLQF](#)). The diagram below shows what has been chosen.

As a result, our degree programmes are guaranteed to be at the correct national and international level. The degree certificates meet all legal requirements and are therefore comparable with and equal to similar degree certificates from other universities of applied sciences in the Netherlands and abroad.

Dublin Descriptor	
	1. Knowledge and understanding provides a basis or opportunity for originality in developing or applying ideas often in a research context
	2. Applying knowledge and understanding through problem solving abilities applied in new or unfamiliar environments within broader (or multidisciplinary) contexts
	3. Making judgements demonstrates the ability to integrate knowledge and handle complexity, and formulate judgements with incomplete data
	4. Communication of their conclusions and the underpinning knowledge and rationale (restricted scope) to specialist and non-specialist audiences (monologue)
	5. Learning skills study in a manner that may be largely self-directed or autonomous.
Final qualifications and how they are related to Dublin descriptor(s)	
	The Master's graduates:
A.	<ul style="list-style-type: none"> • translate a (business or research) problem into a data science project by determining objectives and success criteria in collaboration with the problem owner (1, 2, 3). • take into account (business) requirements and assess potential risks (1, 2, 3). • derive relevant data requirements from problem insight (1, 2, 3).

B.	<ul style="list-style-type: none"> • identify and collect relevant data using domain knowledge or in collaboration with relevant stakeholders (1, 2, 3). • apply methods of data exploration and visualization to identify data properties and relationships between data and to assess data quality (2, 3).
C.	<ul style="list-style-type: none"> • apply appropriate data science and machine learning algorithms and techniques for complex data analysis (1, 2, 3). • prepare data, including selecting, cleaning, and combining data from various sources (2, 3). • determine algorithms suitable for data analysis and establish the test design (1, 2, 3). • build models and evaluate them by interpreting model results, predefined success criteria, and the test design (2, 3). • decide on follow-up actions based on the evaluation results of the model (1, 2, 3).
D.	<ul style="list-style-type: none"> • advise on the deployment of data analytics solutions, also taking into account ethical and privacy concerns, as well as on their monitoring and maintenance (1, 2, 3). • critically discuss (business and data) consequences for an organization or society by evaluating and assessing the possibilities and use of data analytics solutions (1, 2, 3).
E.	<ul style="list-style-type: none"> • reflect on their own professional identity and develops their knowledge, skills, and attitude in a self-directed manner (5). • build and maintain a network of professionals inside and outside their organisation (4). • are in regular dialogue with relevant stakeholders and communicate their work appropriately (4). • determine objectives, approach, and project plan for a data science project (4).
F.	<ul style="list-style-type: none"> • purposefully apply a range of research and analytics techniques in a systematic and rational way (1, 3). • critically follow new developments in the field of data science, assess their value for their own profession and master them when relevant (1, 3, 5). • read and understand scientific and professional literature and communicate according to professional standards (1, 4, 5).

For an explanation of the NLQF levels see: <https://nlqf.nl/english>.

5 Academic calendar

This chapter outlines the lecture days, lecture times and the holidays and lecture-free weeks.

5.1 Lecture days and lecture times

The HAN timetable is published on HAN Insite.

Regular lecture days of the program are generally on Mondays, and always on a weekday. Occasionally, examinations and other activities can be planned on different weekdays or in evenings.

The dates of the programme-specific holidays, contact days and deadlines for assignments are provided as a preliminary schedule at the beginning of the programme.

The definitive dates, including lecture times and deadlines for assignments are provided at the beginning of each semester.

5.2 Holidays and lecture-free weeks

The calendar for this academic year can be found on HAN Insite.

This academic calendar gives the lecture weeks and holidays. In addition, there are a number of lecture-free weeks. The lecture-free weeks may also contain study activities, such as a theme week, exams and modular exams. Keep this in mind.

6 HAN organisation

This chapter gives information about the organisation of HAN. Here you also find information on participation, quality assurance and the facilities you as a student can use.

6.1 Schools

At HAN, the degree programmes are divided over 12 schools.

Your degree programme belongs to School of IT and Media Design.

Below is an overview of all the schools.

Afkorting	Academie (NL)	School (ENG)
ABE	Academie Built Environment	School of Built Environment
ABOC	Academie Business, Ondernemerschap en Communicatie	School of Business, Entrepreneurship and Communication
AE	Academie Educatie	School of Education
AEA	Academie Engineering en Automotive	School of Engineering and Automotive
AFMR	Academie Financieel Management en Recht	School of Financial Management and Law
AGV	Academie Gezondheid en Vitaliteit	School of Health Studies
AIM	Academie IT en Mediadesign	School of IT and Media Design
AMM	Academie Mens en Maatschappij	School of Social Studies
AOO	Academie Organisatie en Ontwikkeling	School of Organisation and Development
APS	Academie Paramedische Studies	School of Allied Health
ASB	Academie Sport en Beweging	School of Sport and Exercise
ATBC	Academie Toegepaste Biowetenschappen en Chemie	School of Applied Biosciences and Chemistry

6.2 Management and organisation of the school

On HAN Insite you can find information about the set-up, organisation and staff of your degree programme, and about the school they belong to.

6.2.1 Board of examiners and examiners

The members of the board of examiners can be found

on: <https://www1.han.nl/insite/medewerkers/academies/academie-it-en-mediadesign/examencommissie/>

You can contact the board of examiners for your degree programme via the board of examiners secretarial office examencommissie.aim@han.nl

The members of the board of examiners are appointed by the HAN Executive Board.

The tasks and responsibilities of our board of examiners can be found in the Regulations of the Board of Examiners. These include additional rules regarding final assessment and examination in so far as these are within the powers of the board of examiners. See also the Regulations of the Board of Examiners in Part 3 of this degree statute.

The board of examiners decides, amongst other things, whether you meet the conditions set out in the education and examination regulations.

The board of examiners appoints examiners for each exam and modular exams. One or more appointed examiners administer that exam or modular exam and determine the result.

Other duties and powers of the board of examiners include:

- Assuring exam quality.
- Granting exemptions.
- Handling requests for an extra opportunity for an exam or a modular exam.
- Handling requests for modified exam or modular exam formats.
- Handling complaints.

You can find all the further rules on exams, modular exams and final assessments that apply to you in the education and examination regulations (see Part 2). You can also find rules on the organisation of written and digital exams, modular exams and final assessments in the Exam Regulations (see Part 3).

6.2.2 Participation and consultation

Below is a short overview of the HAN committees and councils. They discuss and also influence the policies and decisions made at HAN.

Degree committee

There is a degree committee for each degree programme or group of programmes. A degree committee consists of an equal number of staff members and students. The degree committee advises the course department about promoting and guaranteeing the quality of the degree programme. Each year it also evaluates the degree programme's compliance with the education and examination regulations. The degree committee also has a right of consent and advisory rights. Through this committee, you can contribute ideas and make decisions about the education and organisation of your degree programme.

Would you like to become a member of the degree committee? You can request more information from opleidingscommissie.aim@han.nl. The degree committee has its own regulations (see Part 3).

School council

Each school has its own school council. A school council consists of an equal number of staff members and students. This council has the right to discuss all matters concerning the school and to ask the dean about these matters. The council also has the right to be consulted on school policies. The school council gives you the opportunity to contribute ideas and decide on school policies.

Would you like to know more about the school council? Contact the school council secretarial office: academieraad.aim@han.nl.

Participation council

The participation council allows staff and students to participate at HAN level. This council has a right of consent on certain aspects of policy, on the main features of the institution budget, the general applicable part of the education and examination regulations and more. The participation council has an equal number of students and staff. The

participation council deals with general HAN policy.

Would you like to join the participation council? You can ask for more information from the secretarial office for the participation council: secretariaat.mr@han.nl. Would you like to learn more about the participation council? Go to [Participation Council](#).

6.3 Successful study

At hanuniversity.com, on the Student Services page

<https://www.hanuniversity.com/en/study-and-living/studying-at-han/student-services/> you will find information about your rights and responsibilities as a student at HAN, such as study coaching and support. Students' rights to these facilities are outlined in section 3.1 of the Student Charter. Chapter 5 of the charter tells you where else you as a student can get support. You can access the Student Charter at: Rights and responsibilities (hanuniversity.com).

6.3.1 Student wellbeing

At HAN, students take centre stage. We see, hear and know our students. Together, we work on student wellbeing, guided by the themes in the Wheel of Student Wellbeing: connection, self-direction and resilience, inclusivity and safety, meaningful learning experiences, healthy lifestyles, flexible education and tailored support.

So, what do we mean by student wellbeing? Being happy with yourself and enjoying your studies. Feeling good physically, socially and mentally - not only at HAN, but also in the world beyond. Supporting student wellbeing is not just the responsibility of study coaches; it requires commitment from everyone at HAN. You can read more about student wellbeing at HAN Insite.

I: www1.han.nl/insite/en/students

6.3.2 Student coaching and support

Studying at HAN is about more than learning a profession. At HAN, it is especially about growth. About discovering who you are, your talents, passion and how you want to develop further. The guiding principle is that, as you progress through your studies, you gradually take more control and responsibility for your own learning process. Various people within your program will support you with your professional and personal development. In consultation with your study coach, you will build a guidance network by involving the right people to match your learning and development needs. This will help you choose the learning route that best suits you.

In addition to study coaching, HAN offers additional facilities for students who encounter obstacles in their studies, for instance related to accessibility, including physical accessibility, or the way in which the study program is designed.

After referral by your student coach, you can discuss your situation with a senior study coach to determine which facilities would be most helpful.

You can read more about these extra facilities on HAN Insite. If you need specialized support beyond your degree program, it is available through the Student Support Centre.

6.3.3 Student Support Center

As a student, you can rely on good coaching throughout your academic journey. Within your degree program, you and your study coach will discuss the type of coaching you need, monitor your study progress, and explore your career development. Together, you will reflect on your talents, ambitions, and any support needs. In addition to the coaching provided within your program, you can also make use of the services offered by the Student Support Centre. This is a team of experts dedicated to one shared goal: supporting your growth as a student.

On HAN Insite/Students you can find more information about the following facilities:

Training & coaching (including students for students);
Student counsellors;
Student psychologists;
Study and career guidance;
Internship and work coaching for special circumstances;
Center for Entrepreneurship;
HAN Elite Sport Academy;
Meaning and identity;
HAN Language Centre (De Taalkamer).

6.4 Student information facilities

6.4.1 HAN Language Centre

The HAN Language Centre provides a range of language support services. Through the Student Support Centre, you can join De Taalkamer for free workshops on various language aspects such as spelling and sentence structure; courses on Dutch as a foreign language; and English grammar and language coaching. If you are struggling with your writing, you can also sign up for individual writing coaching. As a HAN student you can also take evening courses in English and German, for a fee, to further strengthen your language skills.

6.4.2 Library

The Library offers a diverse collection at various HAN locations. These locations also have study places and quiet zones. On the HAN library website you can find the digital collection, which you can also consult at home. Here you can also find study materials for the Information Skills lessons. More information about the services, opening hours and contact details can be found on the website.

6.4.3 Confidential counsellors

At HAN we treat each other respectfully. Unfortunately, incidents can occur in which you as a student or staff member has to deal with unacceptable behaviour. If this happens, contact one of the confidential counsellors to discuss what you can do about it. You can choose which confidential counsellor you speak to. More information and the contact details of the confidential counsellors can be found on HAN Insite.

6.4.4 Complaints and Disputes Office

Do you have a complaint, dispute, objection or appeal? The first step is to try to work it out together, possibly with the support of the study coach. If this does not work, you can contact the Complaints and Disputes Office. Please note the deadlines that apply. The Complaints and Disputes Office ensures that complaints, appeals and objections are forwarded to the right organisational bodies within HAN. The Complaints and Disputes Office also provides secretarial support to the Examination Appeals Board and the Disputes Advisory Committee.

I: www1.han.nl/insite/en/students/panelnav.xml/contact/complaints-disputes-unacceptable-behavior/

T: 024 – 353 05 30

A: Verlengde Groenestraat 75 Nijmegen / Postbus 6960, 6503 CD Nijmegen

6.4.5 International Office

HAN is active internationally in many ways. These include the internationalisation of its curriculum, the expansion of its partner university network, and the creation of opportunities for students to study abroad and lecturers to go on

exchanges. These activities are supported by the International Office. For example, the International Office manages and provides support for two major scholarship programs: the European Erasmus+ program and the national NL Scholarship program. The International Office also guides international students and functions as their first point of contact. You are welcome to drop by with your questions, or visit the International Office page on HAN Insite for more information.

6.4.6 Sport facilities

As a HAN student you can purchase a sports card. This allows you to use the sports facilities at HAN Seneca (the HAN centre for improving health, wellbeing and lifestyle) the sports facilities of the Arnhem council and the sports facilities of Radboud University Nijmegen.

6.4.7 HAN Employment

HAN Employment supports students in their search for a suitable workplace, which is required for a work-study or part-time program. HAN Employment offers an online job board where organizations and companies can post vacancies for part-time students. They also organise several networking events and training sessions each year. Students registered with HAN Employment are automatically notified of these events.

6.4.8 HAN Centre for Entrepreneurship

The HAN Centre for Entrepreneurship supports ambitious students in realizing their entrepreneurial goals and building a career as an entrepreneur. They offer Business Coaching, BusinessClasses, the start-up program BusinessBooster, financing options (start-upvoucher/loans), the Top Entrepreneurs Scheme (TOR), inspiring BusinessEvents and a large regional Network. The programme is extracurricular and free of charge for students. For information about the entrepreneurship minor, you can contact the Ondernemerschap & Retail Management programme.

6.4.9 Health and safety for students

Would you like to know more about the rules related to your wellbeing and to safe and healthy work practices at HAN? Or do you want to know which resources we have in this area? Visit the special health and safety pages for students on HAN Insite.

Although students are not covered by labour legislation, HAN has policies in place to support student health, safety and wellbeing.

6.4.10 HAN Information Centre via ASK@han.nl

The ASK HAN team has extensive knowledge about HAN. They can assist with both general and specific questions about study progress, application and enrolment, information about programmes, certificates of enrolment, buildings and facilities, educational applications and ICT matters.

You can reach them at:

I: Han.nl/ASKHAN and/or ask@han.nl

T: (024) 353 05 00

You are also welcome to visit one of the ASK HAN desks at Kapittelweg 33 in Nijmegen or Ruitenberglaan 31 in Arnhem.

PART 2 Education and Examination Regulations

1 About the education and examination regulations

The education and examination regulations govern the education, exams, modular exams and final assessments for your degree programme and your rights and responsibilities.

These education and examination regulations are included in the degree statute that applies to your degree programme. The education and examination regulations are adopted each academic year.

1.1 Terms and definitions

The terms and definitions used in these education and examination regulations are given below. (The Dutch term is given between brackets.)

Academic year (<i>Studiejaar</i>)	The period starting on 1 September and ending on 31 August of the following calendar year.
Assessment criteria (<i>Beoordelingscriteria</i>)	Clearly defined and unambiguous standards that can be used to give a motivated assessment of whether and to what extent a student meets the required level of knowledge, understanding and skills and (if relevant) attitude assessed in an exam or modular exam.
Course (<i>Cursus</i>)	The term "Course" refers to a unit of study or a unit of learning outcomes and is used for all types of education and corresponding educational concepts.
Credit (<i>Studiepunt</i>)	Each programme (and each course) is measured in credits. For a programme composed of units of study, one credit corresponds to the normative study load of 28 hours of study. Sixty credits is equal to 1680 hours of study.
CROHO	CROHO is the central register of higher education programmes As of 2024, it will have the Dutch name <i>Registratie Instellingen en Opleidingen</i> (RIO).
Degree committee (<i>Opleidingscommissie</i>)	The statutory public participation body as referred to in article 10.3c of the Higher Education and Research Act, which is responsible for eg. guaranteeing the quality of the degree programmes listed in Part 2, chapter 1.
Degree format (<i>Inrichtingsvorm</i>)	The manner in which a degree programme is organised: full-time, part-time or work-study.
Degree Programme (<i>Opleiding</i>)	A coherent set of units of study (unit of study or unit of learning outcomes) designed to achieve clearly defined objectives in terms of the knowledge, understanding and skills that a person should have acquired on completion of the degree programme.
Deregistering (<i>Uittekenen</i>)	Deregistering for participation in courses or exams and modular exams after registering in Osiris.

Educational arsenal (<i>Onderwijsarsenaal</i>)	The educational and coaching activities offered to students with a unit of learning outcomes programme with the aim of supporting the student in gaining the course exams and exam modules.
Elective course (<i>Keuze-cursus</i>)	A course that can be chosen from two or more courses. Once selected, a course becomes part of the student's study programme and final assessment. The exams and modular exams for the non-mandatory courses that the student did not select do not need to be taken for the degree certificate.
Exam (<i>Tentamen</i>)	An investigation of a student's knowledge, understanding and skills, and the assessment of the results of that investigation. An exam can consist of several modular exams.
Exam opportunity (<i>Tentamengelegenheid</i>)	An opportunity offered in the degree programme to sit for an exam or modular exam.
Exam sitting (<i>Tentamenmoment</i>)	The sitting/time at which an exam or modular exam is administered/held.
Examination Appeals Board (<i>College van Beroep voor de examens</i>)	This is the board referred to in article 7.60 of the Higher Education and Research Act. The board deals with appeals submitted by students against decisions made by HAN.
Examiner (<i>Examinator</i>)	Appointed by the board of examiners to administer and grade exams and modular exams.
Exams taken independently of the standard programme (<i>Leerwegaafhankelijk tentamen</i>)	An exam or modular exam that the student can take without having participated in the educational activities linked to that exam or modular exam. These exams are designed to ensure that students can demonstrate their acquired knowledge, understanding and skills regardless of how and in what environment they acquired them.
Exemption (<i>Vrijstelling</i>)	A decision made by the board of examiners that a student does not have to take the exam(s) or modular exam(s) relating to one or more specific courses. This decision is based on the board's opinion that the student already sufficiently masters the required knowledge, understanding, competences and/or skills and (if relevant) attitude.
Exit qualifications (<i>Eindkwalificaties/Eindtermen</i>)	Well-defined outcomes regarding the knowledge, understanding and skills and (if relevant) the attitude a student should acquire by the time they complete their degree programme.
External student (<i>Extraneus</i>)	A person enrolled at a university of applied sciences or university who can participate in exams, modular exams and final assessments but not in the education or supervision.
Graduation specialisation (<i>Afstudeerrichting</i>)	A specialisation within a degree programme as defined in the education and examination regulations.
HAN (<i>HAN</i>)	HAN University of Applied Sciences. This abbreviation is used in internal documents to improve the readability of documents.

Head examiner (<i>Hoofdexaminator</i>)	Final examiner in case more than one examiner is appointed for an exam or modular exam.
Higher Education and Research Act (<i>WHW</i>)	Higher Education and Research Act (in Dutch: <i>Wet op het Hoger Onderwijs en Wetenschappelijk Onderzoek</i>).
Learning outcome (<i>Leeruitkomst</i>)	Describes the measurable learning outcomes (a coherent set of knowledge, understanding and skills) that a student must demonstrate. It is a representation, separate from the standard programme, of what a student has acquired in terms of knowledge, understanding and skills and, where relevant, attitude.
Learning path plan (<i>Leerwegplan</i>)	The plan in which the student can establish their own learning pathway and make agreements about the content of that learning pathway including exams and coaching. By law, this plan is called the 'Study Plan'. See <i>Study Plan</i> later in this glossary for more.
Major (<i>Major</i>)	The core 210 credits of a bachelor degree programme. During the major a student acquires the qualifications needed to graduate for a university of applied sciences bachelor degree and meet the professional requirements.
Minor (<i>Minor</i>)	The part of the post-propaedeutic phase of the bachelor programme that consists of one or more related courses. The minor is aimed at differentiating or specialising within the degree programme with a study load of 30 credits.
Model degree statute (<i>OER</i>)	Education and examination regulations.
Module (<i>Module</i>)	An internally coherent and to some extent independent part of the part-time and work-study degree programme. A module consists of one or more courses and is aimed at a realistic cluster of qualifications derived from professional practice.
Module certificate (<i>Modulecertificaat</i>)	Written statement by the board of examiners that a student has successfully completed a module in the part-time or work-study degree format.
Osiris	The HAN student information system.
Premaster (<i>Premaster</i>)	Opportunity to resolve deficiencies when failing to meet the admission requirements of master degree programmes.
Professional requirements (<i>Beroepsvereisten</i>)	Well-defined qualifications regarding the knowledge, understanding and skills and (if relevant) the attitude a student needs to carry out the profession they are studying for.
Progression standard (<i>Doorstroomnorm</i>)	The progression standard is the minimum number of credits you must have earned and/or certain courses you must have passed before you can begin second-year courses and exams.

Recognition of Prior Learning (<i>Erkenning Verworven Competenties, EVC</i>)	Recognition of prior learning gained outside the degree programme that leads to a Certificate of Prior Learning from the Nationaal Kenniscentrum EVC, the national research centre for the recognition of prior learning. Recognition of prior learning can lead to exemption from exams and modular exams for courses that focus on the competences already gained through the prior learning.
Register (<i>Intekenen</i>)	Registering for participation in educational components, exams and modular exams in Osiris.
School (<i>Academie</i>)	An organisational unit with interconnected degree programmes, research and knowledge services.
Student (<i>Student</i>)	A person enrolled as a student in a degree programme at HAN with the aim of participating in education, exams and modular exams.
Study coach (<i>Studentbegeleider</i>)	A staff member responsible for the study coaching of one or more students. In Osiris, this staff member is called study coach.
Study load (<i>Studielast</i>)	The time and effort required for a course.
Student pathway	A student pathway is a student's learning paths and exams. The student pathway includes both the planned pathway and the pathway that has already been followed.
Study plan (<i>Studieplan</i>)	A study plan is a plan in which the student plans and defines their student pathway.
Study progress requirement (<i>Studievoortgangsnorm</i>)	The standard that the course department sets and that the student must meet in order to receive positive study advice.
Track with special feature (<i>Traject met bijzondere eigenschap</i>)	A degree track that distinguishes itself from the standard track because of a different duration, intensity, language or format. In all cases, the study load and the qualities in the area of knowledge, understanding and skills that a student has to acquire by the end of the track are the same as those of the degree programme.
Unit of Learning Outcomes (<i>Eenheid van leeruitkomsten</i>)	A unit of study that contains a coherent body of knowledge, understanding and skills that a student can acquire without having participated in the standard programme and whose mastery the student can demonstrate independently of the standard programme.
Unit of study (<i>Onderwijseenheid</i>)	A unit in a degree programme designed to achieve clearly defined objectives in terms of knowledge, understanding and skills, culminating in an exam. The current Unit of Study and Unit of Learning Outcomes are both specific forms of a unit of study.
Workplace learning agreement (<i>Praktijkleerovereenkomst</i>)	Agreement between HAN, the student and a company or organisation regarding work-study placement in the part-time or work-study courses as described in article 7.7.

Other terms and definitions have the meanings given to them in the national laws and regulations.

1.2 Which degree programme(s) do these education and examination regulations apply to?

These are the education and examination regulations, as defined in article 7.13 of the Higher Education and Research Act, for the following HAN degree programme(s):

Degree programme	Degree format	CROHO number	Location of the degree programme
Applied Data Science	Part-time	49164	Arnhem

1.3 Which education and examination regulations apply to you?

At HAN, the education and examination regulations are renewed every year. This does not mean everything changes each year. Generally only a small number of changes are made to the educational programme and the organisation.

These education and examination regulations apply to the 2026-2027 academic year, so from September 2026 to 31 August 2027.

This means that during this same period these regulations also apply to students who started their degree programme on 1 February 2026, or who will start their degree programme on 1 February 2027. It also means that students who start their degree programme on 1 February have two different education and examination regulations in their first year.

Amendments made to the education and examination regulations do not apply to events or matters in the past, but only to the new academic year. Special rules may apply when switching from 'earlier' education and examination regulations to new education and examination regulations. These rules can be found in the transition regulations: Part 2, Chapter 8.

In exceptional cases the education and examination regulations must be amended during an academic year. Amendments can only be made during an academic year if this is reasonably necessary and does not disadvantage the students. Transition regulations may also apply in these cases: see Part 2, Chapter 8. The overview of adopted amendments is included in Part 2, section 8.7.

In cases not provided for in these education and examination regulations, the dean will decide. If a case is subject to the authority of the board of examiners, a decision will be made by the chair of that board of examiners. Those with an interest in the decision will be informed of that decision within four workweeks.

2 Regulations concerning admission

The rules concerning application, admission, education requirements, selection and enrolment for the degree programme(s) to which this degree statute applies, can be found in the Enrolment Regulations as specified in Part 1, Chapter 1.5.

This chapter contains the applicable rules for admission into the degree programme, which by law must be included in the education and examination regulations.

2.1 Maximum number of admissions

A maximum of 33 persons will be enrolled for this degree programme in the 2026-2027 academic year.

If the number of applicants is higher than this maximum, the following will apply for

admission: <https://www.han.nl/opleidingen/master/applied-data-science/deeltijd/praktische-info/Inschrijvingsreglement-2025-2026-MADS-def.pdf>.

2.2 Admission requirements

A requirement for admission to a master degree programme is holding a bachelor degree from a university of applied sciences or university or possessing knowledge, understanding and skills at the level of a bachelor degree from a university of applied sciences or university.

The following specific requirements also apply to this degree programme:

- A sufficient level of programming (e.g. Python, R or comparable) and a sound background in mathematics and statistics. For the specific entry level of the applicant's knowledge of programming, statistics and mathematics for the Master's degree programme see table below.
- A suitable workplace (for at least 8 hours per week) to carry out assignments and the graduation project. The workplace should enable the student to work effectively on the graduation project. Additional requirements may depend on the content of the project.
- English at level B2 (or above) (European Framework of References).
- A positive assessment by a representative of the degree programme after an admission interview. This interview is organised by the programme. During the admission interview, we assess whether the potential student can, in principle, complete our programme successfully.
- [Programming skills (in Python)
The student applicant is able to
 - set up his/her own development environment to program, test, and run simple Python scripts
 - work with integrated development environments such as Python IDE, Jupyter Notebook, PyCharm, VisualStudio Code
 - install Python packages
 - use Python data types correctly, e.g. numbers, strings, arrays, lists
 - apply standard operations on variables
 - explain the different types of variables and data structures in Python
 - use and write conditional operators e.g. if-else statements, control and loop statements, and own functions
 - use modules and packages
 - explain the scope of variables

- use basic functionality of NumPy arrays, Pandas data frames, matplotlib plots
- write Python scripts to load and save data, retrieve data from tab-, or comma-delimited files, store data in data objects, visualize data using scatter plots, box plots, histograms.

Statistics

The student applicant

- Is able to use data visualization
- knows mean, median, mode, modal, range, quartile, mean deviation, standard deviation
- knows univariant, bivariant data, scatter plots, outliers, correlation, variance, (co)variance
- knows concepts of probability, relative frequencies, independent and dependent events
- knows concepts of distribution (discrete and continuous)
- knows concepts of sampling, hypothesis testing, statistical tests, and p-value

Mathematics

The student applicant

- knows and correctly applies methods of differential calculus: limits, slope of a function, derivatives, finding minima/maxima, concept of integration
- knows and correctly applies equations and formulas, exponents, logarithm, polynomials, summation and product symbols, function of one or more variables
- knows and correctly applies vector operations and notation
- knows and correctly applies matrix operations and notation]

2.3 Employment requirements for part-time degree programme(s)

Not applicable.

2.4 Learning in the workplace

If you want to learn in the workplace, your intended workplace must meet a number of conditions. These conditions are set by the degree programme you are enrolled in. This is because the workplace must provide opportunities for you to carry out the tasks described in the relevant course descriptions in Part 2, Chapter 6.

Workplace learning involves shaping part of your education by gaining the necessary knowledge, understanding and experience in a professional setting. This may take place at your current workplace, during an internship or at another place.

Workplace learning is only possible through a tripartite agreement between you, HAN, and the workplace. This agreement sets out clear arrangements regarding what you will learn, how you will learn, and the supervision you will receive from both HAN and the workplace.

The agreement must meet the requirements of the HAN model agreement applicable to your situation. These requirements also apply if you are self-employed.

2.5 Study plan and learning path plan

2.5.1 Study plan

To shape your education, you can create a study plan. This plan provides an overview of the courses you intend to take and the exams and modular exams you plan to complete during a specific period of time. Your Study coach can support you in drawing up this plan.

2.5.2 Learning path plan

Not applicable.

2.6 Extra contribution

Not applicable.

3 Description of the degree programme

In this chapter you can read about the format and structure from the degree programme. You can also read what the study load is for the degree programme and what options there are to do a special track within the degree programme. This chapter contains a general description. Part 2, Chapter 6, describes the exact content of the degree programme.

3.1 Structure and format of the degree programme

3.1.1 Structure of the degree programme

The degree programme consists of a coherent set of units of study or units of learning outcomes. At HAN, both units of study and units of learning outcomes are categorised under the heading 'course'. As the distinction between these two types is relevant, the table below indicates whether the courses are composed of units of study or units of learning outcomes.

In schematic form your programme looks like this. For the numbering of the exit qualifications, see Part 1, Chapter 4. The exit qualifications for your programme and professional requirements.

Semester 1	Semester 2	Semester 3	Semester 4
Predictive Modelling (15 EC) Exit qualifications: A, B, C, E, F	Data Exploration (15 EC) Exit qualifications: A, B, C, E, F	Graduation Project (20 EC) Exit qualifications: A, B, C, D, E, F	
		Deep Learning & Deployment (10 EC) Exit qualifications: A, B, C, D, E, F	

For the numbering of the exit qualifications, see Part 1, Chapter 4. For the exit qualifications for your programme and professional requirements, see Chapter 4.3.

The study load of a degree programme is represented in credits. One credit is equal to 28 hours of study. The study load of this master degree programme is 60 credits.

Each year of study is structured so that the study load for a full-time degree format is 60 credits.

The standard scheduled duration of this degree programme is 2 years of study.

The description of the educational programme for this degree programme is provided in Part 2, Chapter 6.

3.1.2 Structure of the work-study degree format

Not applicable.

3.1.3 Elective courses

Not applicable.

3.1.4 Graduation specialisation

Not applicable.

3.2 Tracks with special features

Not applicable.

3.2.1 Combined track

Not applicable.

3.2.2 Other tracks

Not applicable.

3.3 Languages

Not applicable.

3.4 Extra educational components

As a student you can take one or more extra modules or courses at HAN. If you choose to do this, you will be expanding your study load. The study load for the *degree programme* will never exceed what is specified in Section 3.1.1. However, you may earn more credits than this by completing additional educational components.

Capacity limits may apply for participation in an extra course or module, and may mean priority is given to the students from the corresponding degree programme.

If you would like to take extra educational components, please contact your study coach.

You do not need permission from the board of examiners to participate in an additional course or module. Please note that this only applies to additional education offered by HAN.

Extra educational components are not part of the degree programme. The results of extra educational components will be listed separately on the degree certificate. Your degree certificate will list only the educational components that you completed while enrolled in the degree programme and for which you passed the final assessment.

3.5 If the content or structure of your degree programme changes

We regularly change or update components of the degree programme so we can guarantee the quality of the degree programme and the value of your degree (certificate). This means the education and examination regulations for a following academic year may contain amendments to the course programme you will follow.

Changes to the degree programme can have certain consequences. If you have a study delay, for example, you may need to pass a different exam or modular exam than you initially thought. A change may also mean an exam or modular exam is still offered, but you can no longer follow the educational activities for that particular component.

A change cannot mean that courses or exams and modular exams you have already passed no longer count towards the final assessment. The law only allows this in highly exceptional cases.

The transition regulations in Part 2, Chapter 8, stipulate, for every change to the degree programme, where needed, what the consequences are for students who are registered for the study programme at the time of said change.

3.6 Registering for educational activities

To participate in educational activities you must register for these educational activities. You can do this in Osiris. If you do not register for an educational activity, you may not participate. The only exception to this rule are the educational activities at the start of your degree programme. Your programme will register you for those educational activities.

Registration for courses is open from 20 to 10 working days before they start. Once the registration period ends, you can no longer register for courses.

You may still submit a request for late registration. A request for late registration will be granted if the course format allows late registration and either no maximum number of students applies or this maximum has not yet been reached. If your request for late registration is approved, you will be registered for the course.

A request for late registration must be submitted no later than 9:00 on the working day prior to the start of the course. For courses offered at the start of the academic year, late registration is possible until the last working day of the first lecture week of the academic year.

Deregistration from educational activities is possible up to and including the day before the start of the educational activity.

4 Study coaching and study facilities

The objective and basic principle is that you take the lead in and are responsible for your own learning process.

We also want you to feel acknowledged during your entire time as a student. You are entitled to good study coaching. Each degree programme offers support for this. If needed, HAN can also offer you academic, psychological and financial support. The HAN Student Support Center offers you support for successful study progress.

4.1 What does HAN offer to assist you with your studies?

HAN offers facilities that enable you to do well in your studies. These also include facilities for students who, due to special circumstances, require additional support during their studies. For example, students with disability, pregnancy, caregiving responsibilities, language acquisition delay, elite sport career or top-level entrepreneurship. In addition, HAN offers specific guidance for international students and students from minority groups.

The HAN Student Support Center also offers support aimed at successful study progress and career development. This includes, for example, guidance from student counsellors, student psychologists and study and career guidance coaches, as well as training courses in personal development, study skills and language skills. Students who need this can get extra support. You can contact your Study coach or HAN Student Support Centre for more information about the facilities and coaching offered at HAN. See also Part 1, Chapter 6.

4.2 How is study coaching organised?

The study coaching starts with the introduction to the study coach at the start of the academic year. In the first year of study, your study coach will invite you to come and talk with them at least 1 time(s). Furthermore, student coaching is integrated in the education in the courses.

Conversations with your study coach are confidential. You can use these conversations to discuss your personal progress and graduation trajectory during the Masters and any personal issues that might influence your studies.

5 Exams, modular exams and final assessments

This chapter covers, in general terms, the exams, modular exams and final assessment for your degree programme.

5.1 Exams and modular exams

Each course has a related exam. An exam can consist of two or more modular exams that have a predetermined weight factor and jointly determine the result for the exam of the course.

5.2 Exam

The result of an exam for a course is used to determine whether the student has the knowledge, understanding and/or skills and (if relevant) attitude required to successfully complete that course. The learning outcomes and assessment criteria of the exams and modular exams are set out in Part 2, Chapter 6.

5.2.1 Entry requirements

Some courses have qualitative entry requirements for participating in educational activities, exams and modular exams for that course. The entry requirements are provided in the course descriptions in Part 2, Chapter 6. You can submit a well-reasoned request to the board of examiners for permission to deviate from these entry requirements. The following entry requirements may apply to your degree programme:

5.2.2 Mandatory participation

In some cases you may only do an exam or modular exam if you have actually participated in the educational activities for the course belonging to that exam or modular exam.

Part 2, Chapter 6, further stipulates which courses have full or partial mandatory participation.

The board of examiners may grant full or partial exemption of mandatory participation. In that case, an equivalent requirement is imposed.

5.2.3 Exam and modular exam formats

The format of an exam or modular exam is specified in the description of the relevant course in Part 2, Chapter 6. The board of examiners may deviate from this format in special cases, on request or at their own initiative.

The following exam formats can be used:

Format	Description
GESP	Meeting
KENN	Knowledge exam
PART	Participation
PERF	Performance
PORT	Portfolio
PRES	Presentation
PROD	(Professional) product

Exams and modular exams in oral format are public. The exam commission may, in special cases, deviate from this rule. This decision will be communicated with a motivation to all interested parties.

5.3 Exam and modular exam results

Each exam and modular exam is assessed by one or more examiners, as decided and appointed by the board of examiners.

The examiner determines the outcome of the exam or modular exam and the result. If more than one examiner is appointed, the head examiner sets the final result.

5.3.1 When have you passed an exam?

The examiner expresses the result of an exam in a numerical grade or a word qualification.

The **grade** of an exam is expressed in one of the following numbers: 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10.

A grade for a modular exam is rounded to a number with 1 decimal place.

Grades with the decimals 1; 2; 3 or 4 are rounded down.

Grades with the decimals 5; 6; 7; 8 or 9 are rounded up.

In a **word qualification**, the result is expressed in words. There are 3 options for this.

Option 1

In a **7-level word qualification**, the result is expressed as one of the following qualifications: outstanding, good, more than satisfactory, satisfactory, almost satisfactory, unsatisfactory or poor.

The conversion chart below must be used:

Word qualification	Abbreviation word qualification	Conversion
Outstanding (<i>excellent</i>)	O	10
Good (<i>goed</i>)	G	8
More than satisfactory (<i>ruim voldoende</i>)	MS	7
Satisfactory (<i>voldoende</i>)	S	6
Almost satisfactory (<i>onvoldoende</i>)	AS	5
Unsatisfactory (<i>ruim onvoldoende</i>)	U	4
Poor (<i>slecht</i>)	PR	2

Option 2

In a **3-level word qualification**, the result is expressed as one of the following qualifications: above level (ABL), at

level (ATL) or in development (ID). There is no conversion table to numbers.

Option 3

In a **2-level word qualification**, the result is expressed as one of the following qualifications: pass (P) and fail (F). There is no conversion table to numbers.

In Part 2, Chapter 6, the course description specifies which exams are grades with a numerical grade and which are graded with a word qualification.

You have passed an exam if you receive a grade of 6 or higher, a word qualification of 'satisfactory' or higher, a word qualification of 'conform standard' or higher, or the word qualification 'pass'.

You have **failed** an exam if you receive a grade of 5 or lower, a word qualification of 'almost satisfactory' or lower, the word qualification 'in development', or the word qualification 'fail'.

In the case of fraud or irregularity, an 'invalid' (IV) (or 'niet geldig' (NG)) is recorded for the exam result in Osiris.

5.3.2 When have you passed a modular exam?

The examiner expresses the result of a modular exam in a numerical grade or one of the word qualification as described in section 5.3.1.

A grade for a modular exam is rounded to a number with 1 decimal place. When rounding to a grade with 1 decimal place, grades with decimals 1, 2, 3 or 4 are rounded down.

Grades with the decimals 5; 6; 7; 8 or 9 are rounded up.

You have passed an modular exam if you receive a grade of 5,5 or higher, a word qualification of 'satisfactory' or higher, a word qualification of 'conform standard' or higher, or the word qualification 'pass'.

You have **failed** an modular exam if you receive a grade of 5,4 or lower, a word qualification of 'almost satisfactory' or lower, the word qualification 'in development', or the word qualification 'fail'.

In Part 2, Chapter 6, the course description specifies which exams are grades with a numerical grade and which are graded with a word qualification.

In the case of fraud or irregularity, an 'invalid' (IV) (or 'niet geldig' (NG)) is recorded for the exam result in Osiris.

5.3.3 How is the overall grade calculated for an exam with modular exams?

When the overall grade for the exam is calculated, the grades for the modular exams passed are weighted as specified in the course descriptions given in Part 2, Chapter 6.

In this calculation, a word qualification as described under option 1 in section 5.3.1 is converted according to the conversion table included in section 5.3.1.

Some courses allow you to compensate for modular exams. If compensation for modular exams is possible, the compensation scheme is included in the courses description in Part 2, Chapter 6.

The final exam grade is then rounded as follows:

Exam grades with a 1, 2, 3 or 4 after the decimal point are rounded down to whole numbers.

Exam grades with a 5, 6, 7, 8 or 9 after the decimal point are rounded up to whole numbers.

5.3.4 Applicable result

The final grade for an exam or modular exam is the highest grade achieved. You are allowed to resit an exam or modular exam even if you pass it.

5.3.5 Weighted average

The weighted average is the average grade of all completed exams within the examination programme, not including extracurricular education. Grades that have both a word qualification and a numerical equivalent are included in the calculation.

5.4 How often can you take an exam or modular exam each academic year

An exam or modular exam is offered at least twice per academic year. The course description in Part 2, Chapter 6, describes how often and in which terms an exam or modular exam is offered.

Some exams and modular exams are offered only once per academic year. The degree programme may decide to offer exams and modular exams only once per academic year if:

- the nature of the education and assessment makes it impossible to offer them more often;
- physical reasons (such as use of actors) or logistical reasons (such as the inability to offer an additional opportunity at the end of the academic year) make more frequent offerings impossible.

If it is not possible to offer an exam or modular exam at least twice per academic year, you will be informed of this when registering for the course and, where possible, before the start of the academic year.

If an exam or modular exam is offered more than twice per academic year, you may not be able to participate in every exam or modular exam sitting. In your degree programme, you may participate in exams and modular exams a maximum of 2 times per academic year.

5.4.1 Registering for exams and modular exams

If you want to participate in exams or modular exams you must register for these exams or modular exams. Registration takes place in Osiris. If you are not registered, you cannot participate in an exam or a modular exam. This does not apply to exams or modular exams that take place in the first month after the start of the degree programme. You will be registered for these exams and modular exams by the degree programme.

You can register for exams and modular exams from 20 to 10 work days before exam or modular.

After this period you cannot register anymore. After this deadline you may submit a request for a late registration.

Such a request may be submitted no later than 9.00 AM on the work day before the exam or modular exam. A request for a late registration will be granted if it is your last modular exam before an exam or if an exam is conducted for the last time before a change in the degree curriculum. A request for a late registration will not be granted if it is impossible to arrange for the necessary resources, facilities or support.

If you have registered for an exam or modular exam but do not wish to take the exam or modular exam you must deregister for the exam or modular exam. Deregistering for an exam or modular exam is possible up to and until a work day before the exam or modular exam is conducted. If you don't deregister and don't participate in an exam or modular exam, the examiner will register a ND (niet deelgenomen/did not participate) for your result and you will have used one of your allowed exam or modular exam opportunities.

Should you be unable to deregister on time due to exceptional circumstances you may request an extra exam or modular exam opportunity to the board of examiners.

5.4.2 Request for extra exam opportunity or different exam format

You can submit a request to the board of examiners for an extra opportunity to sit an exam or modular exam. The request must include a good motivation and at least a description of the reason and importance. In the

Regulations of the Board of Examiners (see Part 3) gives further details on the procedure are explained.

5.5 Modified exam or modular exam format

Do you have a disability or chronic illness, or is there another reason that means you cannot participate in the regular format of the exam or modular exam? Then you can ask the board of examiners to conduct the exam or modular exam in a format adjusted to your situation.

The board of examiners will decide, if needed after consultation with you and the examiner, which format can reasonably be used for the exam or modular exam, which facilities will be offered and which different rules will apply.

5.6 When is the result of an exam or modular exam announced?

The result of an oral exam or modular oral exam will be posted in Osiris within five working days. The result of a knowledge exam or knowledge (modular) exam, participation, performance, portfolio or (professional) product will be announced in Osiris within 15 working days.

A result entered into Osiris may only be changed in the following cases:

- If a demonstrably incorrect result has been entered into Osiris.
- In cases of fraud, deceit or impersonation.
- If an examiner has revised their assessment for well-founded reasons.
- If you have lodged an appeal to the Examination Appeals Board or the Higher Education Appeals Tribunal against an assessment, the appeal is judged to be valid and the result has been revised by the examiner.

You will be notified if a result changes after it has been entered in Osiris.

5.7 Review, clarification and follow-up discussion

5.7.1 Review with clarification

Within 15 working days after the results of an exam or modular exam are announced, the student will be given the opportunity to review their own assessed exam work. During this review session, the student is given the opportunity to see the questions and assignments of the exam or modular exam, the criteria by which the exam was graded (answer key) and the assessment made by the examiner.

During the review session, students receive clarification on the assessment. This includes at least the provision of a clear answer model but may also be more in-depth, such as a joint discussion of the exam or modular exam.

In principle, the review with clarification is organised for all students at the same time (group review/clarification session). Review/clarification may be provided digitally when possible. This clarification may be provided verbally or in writing. Whenever possible, the examiner(s) will be present at the review/clarification session.

Place and time of the review session are determined by the examiner (in coordination with the degree programme) and announced before the course begins. If this is not possible, the announcement must be made no later than before the exam or modular exam takes place.

For exams and modular exams in the months of July and August, the review including clarification must take place as soon as possible but before the start of the new academic year.

5.7.2 Follow-up discussion

In addition to the review with clarification referred to in section 5.7.1, students may be offered further clarification through a follow-up discussion if they feel it is needed. This discussion covers the questions and assignments in the exam or modular exam, the grading criteria (answer key), and the grade given by the examiner.

As an interested party, you have the right to review and discuss your work with your lecturer and the examiner. This follow-up discussion can take place either digitally or physically at a HAN location. The examiner decides the place and time of this follow-up discussion. The examiner will provide advance notice of the place and time for this follow-up discussion.

If the examiner chooses to provide an opportunity for follow-up discussion, this will occur prior to the next opportunity to take the exam or modular exam.

5.8 Exams taken independently of the standard programme

An exam or modular exam taken independently of the standard programme is an exam or modular exam that you may take without participating in the educational components of the course. If a course does not offer an exam or modular exam that can be taken independently of the standard programme, you may submit a reasoned request to the board of examiners for permission to take an exam or modular exam independently of the standard programme instead of the regular exam or modular exam. The request must include at least a description of the reason for the request and its relevance.

The board of examiners will issue a reasoned decision based on the documents submitted within 20 workdays.

If the decision is positive, the board of examiners will appoint the examiners and determine the exam format, taking into account the relevant learning outcomes, exit qualifications, and/or assessment criteria as set out in Part 2, Chapter 6.

In your degree programme, exams and modular exams are not taken independently of the standard programme.

5.9 When and how can you request exemption from an exam or modular exam?

Part 2, Chapter 6, describes for each exam and modular exam which knowledge, understanding, skills and attitude you need to demonstrate and how they will be assessed. You can request an exemption from the board of examiners for one or more exams or modular exams if you demonstrate that you master the knowledge, understanding, skills and attitude associated with the exam concerned. You can demonstrate this with:

- evidence showing you previously passed an exam in higher education;
- an official report showing recognition of prior learning;
- evidence you gained the required knowledge, the required understanding and/or the required skills elsewhere.

The learning outcomes and assessment criteria of the exams and modular exams as specified in Part 2, Chapter 6, form the guidelines for the board of examiners to grant the exemption.

Further rules for granting exemptions can be found in the Regulations of the Board of Examiners (Part 3).

The board of examiners may designate certain previously passed exams and modular exams and/or any previously earned credits and degree certificates as entitling students to exemption from one or more exams or modular exams.

The designated exams, credits and certificates are outlined in an appendix to the Regulations of the Board of

Examiners. The board of examiners may also consider these as grounds for exemptions from one or more exams or modular exams for courses that are part of abridged tracks.

You do not receive a grade or word qualification for an exam or modular exam you have been exempted for, but the qualification of 'exemption'. Only in exceptional circumstances will it be possible to use a previously earned grade instead of an exemption. The board of examiners assesses whether the grade can be adopted.

5.10 The final assessment

You pass the final assessment of the master degree programme if you have passed all of the exams related to that final assessment.

This will differ if the board of examiners has specified that an extra assessment is needed of your knowledge, understanding and skills. In that case, you will also need to pass that extra assessment (exam). Only then will you pass the final assessment.

5.10.1 Cum laude regulations

'Cum laude' distinction in the master programme

The degree programme awards the 'cum laude' distinction based on one of the following options.

- Grade-based qualification or word-based qualification with 7-levels

If you pass all the exams that count towards the final assessment with a grade of 8 or higher, you will pass that assessment cum laude. These are the overall exam grades for each course; separate grades for the modular exams are not taken into account.

Exams assessed with a 7-level word qualification will be converted in accordance with the conversion table in section 5.3.1.

When the 'cum laude' distinction is determined, the exam results per course are used; individual results for modular exams are not considered.

Exams that are part of an increase of your study load, as described in Part 2, Chapter 5, are not considered when determining the 'cum laude' distinction. Exemptions and the 'pass' qualification are also excluded from the calculation of the 'cum laude' distinction.

No more than 15 credits may be gained as exemptions or 'pass' qualifications in the degree programme.

5.10.2 With merit regulations

"With merit" distinction in the master degree programme

The degree programme awards the 'with merit' distinction based on one of the following options.

- Grade-based qualification or word-based qualification with 7-levels

If you pass all the exams that count towards the final assessment with a grade of 7 or higher, you will pass that assessment with merit. These are the overall exam grades for each course; separate grades for the modular exams are not taken into account. Exams assessed with a 7-level word qualification will be converted in accordance with the conversion table in section 5.3.1.

When the 'with merit' distinction is determined, the exam grades per course are used; individual grades for modular exams are not considered.

Exams that are part of an increase of your study load, as described in Part 2, Chapter 5, are not considered when

determining the 'with merit' distinction. Exemptions and the 'pass' qualification are also excluded from the calculation of the 'with merit' distinction.

No more than 15 credits may be gained as exemptions or 'pass' qualifications in the degree programme.

5.11 Overview of results, supporting documents, and declarations

5.11.1 How to request a - certified - overview of your study results

You can make a printout of your exam results as recorded in Osiris. If you want to use this overview as an official document outside HAN, you can submit a request via ASK@han.nl for a certified overview of study results. This certification does not guarantee that the relevant authorities will also consider the document official.

5.11.2 Documentation for exam/modular exam

You will receive a digital document from the examiner for each exam or modular exam you take. It gives the name and code of the exam or modular exam, the course and your result. The examiner is required to provide you with this documentation.

Keep these documents in a safe place.

5.11.3 Statement

Are you dropping out of the degree programme and not entitled to a master degree certificate? If you have passed more than one exam, you can ask the board of examiners for a statement listing the exams you passed, for which degree programme, and, if applicable, the programme for which the statement is being issued.

5.11.4 Module certificate

You can request a statement from the board of examiners for each module you have passed.

This statement specifies the name of the module, the courses within the module, the accompanying number of credits and the results you earned for the exams.

5.12 Degree certificate, degree and diploma supplement

5.12.1 Master degree certificate and diploma supplement

In the month when you expect to have passed all the exams for the degree programme, you can apply for your certificate through Osiris. Only after you apply, does the board of examiners check whether you have indeed passed all exams for the degree programme, whether you are enrolled in the degree programme, and whether you have met all your financial obligations towards HAN.

Following this, the board of examiners will award the degree certificate and the accompanying diploma supplement in English. The official date of graduation is the day the board of examiners determines that you have earned all the required credits.

5.12.2 Degree and degree title

Once the board of examiners has confirmed you have passed the final assessment, the HAN Executive Board will award you the degree for your degree programme. This degree comes with an official abbreviation you can place after your surname in the Netherlands and abroad.

Degree programme	Degree and degree title	Official abbreviation
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Applied Data Science	Master of Science	MSc
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The degree title is also stated on the certificate.

5.12.3 Postponement of the degree certificate

You are allowed to postpone the request for your master degree certificate. The maximum period for a postponement is two years.

The board of examiners will determine the duration of the postponement, taking into account the reasons for the delay. You must request the degree certificate within the timeframe specified. If you do not do so, the board will issue the degree certificate after this timeframe, unless you have requested an extension to the timeframe on time.

5.13 Appeal

You can lodge an appeal with the HAN Examination Appeals Board against a decision concerning education, exams, modular exams and final assessments within 6 weeks based on the education and examination regulations.

For more information about which decisions you can appeal and how, go to HAN Insite Complaints and Disputes Office.

6 Description of the educational programme

This chapter describes your degree programme.

Below you will find, for each degree programme, its structure, its courses and its educational arsenal.

Name of degree programme: Applied Data Science	
CROHO number: 49164	
Degree format	Part-time
Language	English

6.1 Courses

Courses of the degree programme

See Part 3, Appendix to Chapter 6.

6.2 Graduation specialisations

Not applicable.

6.3 Other

Not applicable.

7 Evaluation of the degree programme

7.1 Evaluation structure

A quality framework has been adopted for all HAN degrees. This is in line with the accreditation framework of the Accreditation Organisation of the Netherlands and Flanders (NVAO) and the education policy formulated by HAN. This framework stipulates, among other things, that regular evaluations must be held among students, graduates, the professional field and staff.

Various surveys are conducted at the HAN-wide level:

- The startmonitor is a national survey of students' use of information about their choice of degree, the process by which they make that choice, and how they end up in their degree programme.
- Each year, HAN also participates in the National Student Survey in which students indicate how satisfied they are with different aspects of their degree programme.
- Every year, an alumni survey is conducted via the University of Applied Sciences-monitor. This survey examines how alumni look back on their studies and how they perceive the connection to the labour market.
- All HAN students who leave a degree programme without a degree certificate are contacted to enquire about their reason for leaving (exit interview).
- Also, study progress and drop-out rate are monitored for each degree programme.

Degree programmes are accredited by the NVAO every six years, following an external inspection by a committee of experts. Halfway through this accreditation cycle, programmes undergo an internal audit or development session conducted by a panel of external experts, possibly supplemented by internal parties. The audit or development session provides input for further improvement activities. Degree programmes can opt for an audit based on the four standards (of the NVAO's limited degree programme assessment)) or a development session based on topics chosen by the degree programme itself. The assurance of the exit level achieved (standard 4) is always part of the audit or development session.

7.2 Evaluation by the degree programme

The dean is responsible for the structure and the quality of the degree programme.

Input from various evaluations is structurally included in the ongoing development of education. Each year the dean adopts an annual (quality) report on the degree programme. This document, together with the internal audit report, the inspection report and the results of the various evaluations, forms the basis for dialogue on the quality of the degree programme. This annual (quality) report concerns the improvement activities that were agreed on for the reported year, how they were implemented and what results they delivered.

Based on the analysis of evaluation data for the reported year, a description follows of the improvement activities to be implemented in the current year. The evaluation data come about through evaluations of courses, annual evaluations and curriculum evaluations by lecturers, students, alumni and the professional field. Also through evaluation studies conducted centrally by HAN.

The dean and/or the degree committee, curriculum committee and the board of examiners are involved in this cycle at degree programme level by means of a brief response to this. Their responses are included in the appendixes to the annual report.

7.3 Role of the degree committee

The tasks, role and responsibilities of the degree committee in the evaluation are set out in the Regulations of the Degree Committee (see Part 3). The degree committee can also take the initiative to conduct specific evaluations.

7.4 Degree-specific quality assurance

The quality of our curriculum is continuously monitored and improved by regularly collecting feedback from students and other stakeholders on the curriculum. Feedback is collected both orally and in writing. The programme applies the quality assurance cycle, PDCA, of HAN University and evaluation results and actions are published in the school's quality assurance plan. Evaluation results are used to improve our education programme in dialogue with all stakeholders and actions are communicated transparently.

8 Transition regulations

8.1 Effective date for amendments

An amendment to the education and examination regulations can only become effective as of 1 September in the following academic year. Exceptions to this rule are clerical error, force majeure, fulfilment of legal regulations or when the amendment is in your favour.

This chapter sets out the rules for respecting acquired rights and legitimate expectations.

8.2 Validity of final assessments

A successful final master assessment is inviolable, except in the case of proven fraud in the process of earning this.

8.3 Obtained credits and study results

The result of an exam and its corresponding credits remain valid until the board of examiners has made a substantiated decision that the examined material is so outdated that it can no longer be used in the profession and the term of validity has expired as of a date stipulated by the board of examiners.

Results obtained for modular exams remain valid and may – if they still fit in the new programme – lead to exemptions for modular exams. A modular exam can, if possible, be added to another course to replace a different modular exam that had the same learning outcomes or learning goals.

8.4 Participation in education, but not in exam or exam not passed

A student who took a course or a module in the academic year preceding the curriculum change, but who did not take the exam or modular exam or who failed the exam or modular exam, is entitled to at least two additional opportunities to take the exam or modular exam.

The student is also entitled to a choice of repeated educational activities offered (again if needed) in preparation for the exam or modular exam.

In exceptional cases, the board of examiners may deviate from these provisions in favour of the student. The student may also choose to participate in the new programme structure and register for a renewed or modified course. By doing so, the student waives all rights arising from the transition rules.

8.5 Transition regulations for new regulations on 'cum laude' and 'with merit' distinctions

Not applicable.

8.6 Degree-specific transition regulations

The following table describes how exams from the previous year relate to the exams of this year. The exams of the first column are covered by the exams in the same row in the second column.

Exam from 2024/2025	Exam from 2025/2026
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PREMOD03, TOETS-01	PREMOD04, TOETS-01
PREMOD03, TOETS-02	PREMOD04, TOETS-02
DATEXP03, TOETS-01	DATEXP04, TOETS-01
DATEXP03, TOETS-02	DATEXP04, TOETS-02
DLDEPL01, TOETS-01	DLDEPL02, TOETS-01
DLDEPL01, TOETS-02	DLDEPL02, TOETS-02
GRAPRO02, TOETS-01	GRAPRO03, TOETS-01
GRAPRO02, TOETS-02	GRAPRO03, TOETS-02

8.7 Adopted amendments to this degree statute

Not applicable

PART 3 Other regulations

1 Regulations on written and digital exams and modular exams

These regulations describe what is expected of students and what students can expect from HAN to ensure that the written and digital exams and modular exams can run smoothly.

These regulations set out:

1. The rules of conduct for students in written and digital exam and modular exam sessions, insofar as these are not laid down in the Student Charter, the Education and Examination Regulations or related regulations.
2. The rules of conduct for students in review sessions and for receiving clarification on written and digital exams and modular exams, where these are not set out in the Student Charter, the Education and Examination Regulations or related regulations.

The supervisor is the person who is present when the exam or modular exam is administered and who ensures it is conducted correctly.

1 Code of conduct for students during exam sessions

The facilities provided by HAN for students with respect to written and digital exams and modular exams are laid down in the Student Charter and Education and Examination Regulations or related regulations. HAN also has a general code of conduct for students. In addition to general provisions, this code of conduct contains provisions governing the conduct of students at exam venues. These exam regulations contain additional provisions regarding student behaviour during written and digital exams in particular.

Behaviour

The student:

1. must follow the instructions given by the supervisor and treat the supervisor with respect;
2. must behave in such a way that they do not disturb other students at any time during the exam or when entering or leaving the exam venue. The student must be silent before, during and after the exam when in and near the room where the exam is being held;
3. must contact the supervisor as soon as possible if anything is unclear before and/or during the exam or modular exam.

Identification and admission

The student:

1. must report to the supervisor at the exam room 15 minutes before the start of the exam;
2. will only be admitted to the HAN exam if they can identify themselves with a valid HAN student card or a valid proof of identity. This includes:
 - a passport;
 - a European identity document;
 - a Dutch driving licence;
 - a European driving licence;
 - a Dutch residence permit;
3. may only use an identity document to identify themselves if they are sitting for a national exam or modular exam;
4. must place their valid student card or proof of identity at the top right-hand corner of the desk during the exam

- so the supervisor can check their identity;
- signs the attendance list upon entry to confirm participation in the exam or modular exam;
 - who is not listed on the attendance list may not participate in the exam or modular exam. If a student can show in the Osiris app that there is a registration for the exam or modular exam, the school will be contacted for verification.
 - For identification, the supervisor may take reasonable measures to enable the student to identify themselves.

Theft/loss of identification

If the student cannot show valid identification due to theft or loss, they can participate in the exam or modular exam using an original police report of the theft and/or official request to the municipal authorities for new identity papers. In order to gain access to the exam room, the student must apply to the Central Examination Organisation for permission to attend in good time, together with the police report and/or application for new identity document. The student will receive a form from the Central Examination Organisation that the supervisor can use to allow the student access to the room to take the exam or modular exam. The form is valid for one exam or modular exam and must be requested again for the next written or digital exam or modular exam.

Extra requirements for digital exam or modular exam

- When taking a digital exam or modular exam, the student is required to have actively participated in the mock exam organised by the degree course and to have been informed about the exam application, about the fraud prevention application and about the use of personal data;

Additional requirement for digital BYOD exams and modular exams

- The laptop the student brings with them for the digital exam or modular exam must meet the HAN requirements. These can be found at HAN Insite: <https://han.nl/insite/byod>.
- If the student's laptop is not compatible with the exam and fraud prevention software, or if the student is unwilling or unable to install the software, the student may request a BYOD loaner laptop through Osiris for participation in the digital exam or modular exam. The deadline for applications is up to 11 working days prior to taking the exam or modular exam, with the exception of an emergency. In the event of a calamity, students may be provided with a BYOD loan laptop up to 11 working days before the exam or modular exam, at the start of and/or during the exam or modular exam.

Before the start of the written or digital exam or modular exam

The student:

- may only place items needed to complete a written or digital exam or modular exam on or next to the table;
- may not – unless expressly stated otherwise – be in possession of any digital data carriers during the written or digital exam or modular other than those expressly permitted and necessary for taking the exam or modular exam. This includes equipment with integrated digital data carriers, such as USB flash drives, calculators, special watches, special glasses, special earphones, etc.;
- may not wear a watch. A clock is provided in all exam venues to show the time. Supervisors take the lead in communicating the correct time;
- may not – unless expressly stated otherwise – use the following resources during the written or digital exam or modular exam: hard-copy or digital versions of dictionaries, law books, textbooks, etc. If these resources are permitted, the hard-copy or digital resources will be made accessible and may be checked by the supervisors;
- must put their coat, scarf, hat, bags, cases, mobile phone(s), smartphone(s), digital data carrier(s) and any

- equipment with integrated digital data carrier(s) in the place specified by the supervisor;
6. must turn off mobile phones, smartphones, etc. before putting them away, unless Multi-Factor Authentication and/or password manager/reset are required. Phones are then allowed until the password to start the exam or modular exam is communicated;
 7. must write their name, student number, class/group and other details requested by the supervisor on all written exam and modular exam documents at the start of the written or digital exam or modular exam. The student must also write these details on any note paper they use;
 8. will not have direct access to the exam or modular exam venue after the actual start of the exam or modular exam. Students who do not make it to the exam or modular exam venue on time are allowed to enter the exam or modular exam venue when 30 minutes of the exam have passed and are allowed to sit the exam or modular exam for the remainder of the exam time. The supervisor makes a note of which students are late. Students must strictly observe any instructions given by the supervisors regarding where they are allowed to sit and they may not disturb students who have already started the exam or modular exam;
 9. may log in to the exam application prior to a digital exam or modular exam only with their own personal login information. The student will be given the password or access code to start the digital exam or digital modular exam at the start time.

During the written or digital exam or modular exam

The student:

1. may not take toilet breaks during exam sessions of 120 minutes or less. During exams that last longer than 120 minutes, students may take a toilet break after 120 minutes if accompanied by a supervisor. Exceptions are possible for all written or digital exam or modular exam in cases of physical discomfort, provided the supervisor is notified no later than 15 minutes before the start of the exam or modular exam or immediately upon entry when arriving 30 minutes after the start of the written or digital exam or modular exam;
2. may not leave or submit their work during the first 30 minutes of the actual start of a written or digital exam or modular exam (to prevent disruption to other students and/or irregularities). If there are any students who enter the exam venue 30 minutes after the start, any students who want to leave may only do so after the late students have started their exam or modular exam;
3. will be given access to additional exam facilities if they are entitled to those facilities according to Osiris or a decision to that effect by the board of examiners. These facilities are applicable if the student indicated when registering for the written or digital exam or modular exam that they wanted to use these facilities;
4. may not consume any food during written or digital exams and modular exams that are shorter than 150 minutes; students may consume food during exam sessions of 150 minutes or longer if this does not cause a nuisance to fellow students;
5. may only consume drinks from a resealable bottle/container;
6. must take the written exam or modular exam with the required writing materials (black or blue pen for written exams and modular exams and pencil for multiple choice forms);
7. must ensure that multiple-choice forms are filled in correctly and according to the instructions given by the supervisor;
8. may not copy or scan a written or digital exam or modular exam or parts thereof in any way or take the exam or modular exam or its contents outside the exam venues in any manner;
9. may not use unauthorised digital resources, facilities or functions.

Resources

The student:

1. may not use resources other than those permitted. The permitted resources will be announced in advance by the department and will be listed on the exam cover sheet;
2. must ensure that resources do not have notes, etc. on them unless the exam cover sheet states that this is permitted;
3. may use a mouse and earbuds. In the case of BYOD, the student must ensure that these meet HAN's requirements. These requirements can be found on HAN Insite: Digital testing and submission;
4. must make sure that the laptop they bring for digital BYOD exams meets the requirements set by HAN. These requirements can be found on HAN Insite: <https://han.nl/insite/byod>.

Suspected irregularity or fraud

1. The student will be referred to Part 2 of the degree statute (the education and examination regulations), and Part 3, chapter 3, of the degree statute (the regulations of the board of examiners) for provisions concerning irregularities or fraud, penalties for irregularities or fraud, and confiscation of evidence;
2. If the supervisor has identified a suspected irregularity or fraud, the student will be allowed to complete the written or digital exam or modular exam, and the student signs the 'Official exam report form' completed by the supervisor to acknowledge receipt.

Handing in exam documents

The student:

1. must check before handing in the exam script and assignment(s) whether their name, student number, class/group number and any other details requested by the supervisor have been written correctly on all of the exam documents to be submitted;
2. must submit all the exam documents including used and unused note paper to the supervisor;
3. must make sure everything is left neat and tidy before leaving the exam venue;
4. in the case of digital exams, must make sure that the exam application and the fraud prevention application is closed under the supervision of the supervisor.

2 Code of conduct for students during review/discussion sessions of assessed exam work

There is a code of conduct for students. In addition to general provisions, this code of conduct contains provisions governing the conduct of students at exam venues.

Below are additional regulations regarding the review of assessed written and digital exam work, hereafter referred to as a 'review session'.

Beforehand: Only students who have taken part in the written or digital exam or modular exam for which the review/clarification session is organised may be present in the classroom. A lecturer and/or a supervisor will be present during the review session. An examiner will be present during a clarification session.

Where it says supervisor below, it means the person who is present at the review/clarification session and who ensures it is conducted correctly.

Behaviour

The student:

1. must follow the instructions given by the supervisor and treat the supervisor with respect;
2. must behave in such a way that they do not disturb other students at any time during the review session or when entering or leaving the room where the review session takes place (hereafter referred to as the 'room');

3. must contact the supervisor a.s.a.p. if anything is unclear during the review session.

Identification and admission

The student:

1. must show the supervisor a valid HAN student card or another valid form of identification:
 - a passport;
 - a European identity document;
 - a Dutch driving licence;
 - a European driving licence;
 - a Dutch residence permit.

If the student cannot show a HAN student card or a valid form of identification, they will not be allowed to take part in the review session/discussion;

2. In the case of theft or loss of the identity document, the student can apply for a certificate of enrolment at the exams office, which will give them admittance to the room. This certificate will only be issued if the student can show the original police report and/or official request to the municipal authorities for new identity papers;
3. must write their name on the attendance list provided by the supervisor to confirm their participation in the review session/discussion;
4. must place their valid student card or other form of identification at the top right-hand corner of the desk during the review session/discussion so the supervisor can check their identity;
5. will only be admitted to a digital review session if they have a laptop with them that meets the requirements set by HAN. These can be found at [HAN Insite](#). Students without a suitable laptop can use available loaner BYOD laptops.

Start and resources

The student:

1. must ensure they have a copy of their answer sheet (yellow carbon copy) when reviewing/clarifying a multiple-choice exam with OMR answer sheet;
2. may only log in to the exam application with their own personal login details at the digital exam or modular exam review/clarification;
3. may only place on the table the permitted resources listed on the review cover sheet or announced by the supervisor at the start of the review/clarification session;
4. may not – unless expressly stated otherwise – have any of the following in their possession during the review/clarification session: digital data carriers or equipment with an integrated digital data carrier, such as mobile phone, smartphone, USB flash drive, calculator, special watch, special glasses, special earphones, etc.;
5. must put their coat, scarf, hat, bags, cases, mobile phone(s), smartphone(s), digital data carrier(s) and any equipment with integrated digital data carrier(s) in the place specified by the supervisor;
6. must ensure their mobile phone(s), smartphone(s) or other digital data carrier(s) and any equipment with integrated digital data carrier(s) are switched off before putting them away.

During the review session/discussion

The student:

1. may not take a toilet break during the review/clarification session;

2. may not eat anything during the review/clarification session;
3. may only consume drinks from a resealable bottle/container;
4. in the case of a written exam, may only have documents on the table that the invigilator has indicated may be on the table;
5. may not make any annotations or amendments to the exam script. If the student does this anyway, this is reported to the board of examiners as an irregularity;
6. may not copy, scan or take with them any model answers or assignments. Neither may students copy their own exam scripts and/or those of other students;
7. may not copy or scan a written or digital exam or modular exam or parts thereof in any way or take the written or digital exam or modular exam or its contents outside the exam venues by any other means;
8. may not use unauthorised digital resources, facilities or functions.
9. may start a discussion on a corresponding question in the ANS exam application during digital review.

Request for correction of assessment

The student:

1. must accurately complete all requested information on the Request for Correction of Assessment form.

(Suspected) Irregularity

For the applicable provisions concerning irregularity or fraud, sanctions for irregularities or fraud and confiscation of evidence, please refer to the applicable provisions in Part 2 of the degree statute (the education and examination regulations), and Part 3, Chapter 3 of the degree statute (the regulations of the board of examiners).

Submitting reviewed (assessed) exam work

The student:

1. must submit all documents received for the review/clarification session to the supervisor;
2. in the case of digital exams, must make sure that the exam application and the fraud prevention application is closed under the supervision of the supervisor;
3. must make sure everything is left neat and tidy before leaving the room.

3 Final provisions

Unforeseen circumstances

In exceptional situations and cases not provided for by these regulations and in which an immediate decision is necessary, the decision will be taken by:

- a. the head of the exams office (in so far as this is within the powers of the exams office);
- b. the examiner (in so far as this is within their powers);
- c. the chair of the board of examiners (in so far as this is within their powers);
- d. the supervisor, in consultation with the coordinating supervisor if it is not possible to wait until one of the above authorised people is present.

The interested parties will be informed of the decision as soon as possible.

Complaints and appeals concerning decisions and procedures of the exams office

For more on this, see these HAN regulations:

- 'Complaints Regulations';
- 'Regulations for Legal Protection of Decisions Concerning Education'.

The supervisor intervenes immediately in case of a suspected irregularity or fraud. The supervisor provisionally allows the student to finish the exam, and seizes all documents that they suspect are involved in the suspected irregularity/fraud. The supervisor fills in this form and submits it to the coordinating supervisor along with all accompanying items immediately after the exam. The student in question receives a copy of the completed form. The form is then sent to the board of examiners via the exams office. The board of examiners will contact the student.

De surveillant grijpt in geval van een redelijk vermoeden van een onregelmatigheid of fraude direct in. Hij laat de student onder voorbehoud het tentamen afmaken en neemt alle bescheiden in waarmee de vermoedelijke onregelmatigheid/fraude heeft plaatsgevonden. De surveillant vult dit formulier in en levert dit met alle bescheiden na afloop van het tentamen direct in bij de coördinator-surveillant. De student ontvangt een kopie van het ingevulde formulier. Via het Tentamenbureau gaat het formulier vervolgens naar de examencommissie. De examencommissie neemt contact op met de student.

2 Regulations of the Board of Examiners

2 Regulations of the Board of Examiners AIM 2026-2027

(Regulations can be drafted and adopted by the board of examiners to which the degree programme or group of degree programmes belong, based on the following model regulations of the board of examiners for bachelor, associate and master degree programmes offered at HAN).

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Section 1: General provisions

Article 1.1 Terms and definitions

The terms and definitions applied in these regulations are those set out in section 1.1 of the Education and Examination Regulations.

Article 1.2 Status and scope of application of the regulations

1. These regulations contain rules about the duties and powers of the AIM Board of Examiners and the measures available to them, as well as rules about their implementation.

2. The model regulations are adopted annually, as part of the model degree statute, by the Executive Board with consent from the participation council.

The board of examiners may change paragraphs, articles and sections, provided the changes do not conflict with the Education and Examination Regulations of the degree programme(s), the HAN Student Charter or the Higher Education and Research Act.

3. These regulations were adopted by the board of examiners. They apply to the courses, exams, modular exams and final assessments for the following degree programmes:

- Bachelor degree programme in CMD
- Bachelor degree programme in ICT
- Master degree programme in Datascience (MADS)
- Master degree programme Accessible and Inclusive Design (MAID)

Students of the bachelor degree programmes ICT and CMD better use the Dutch version of these regulations. The Dutch version contains extra appendices and rules for students that have followed older curricula. These regulations are available in the OSOER documents of ICT and CMD.

Section 2: Decision-making and authorisations, duties and meetings

Article 2.1 Decision-making and authorisations

1. The chair of the board of examiners signs resolutions by the board of examiners, unless this duty has been delegated to someone else.

2. The board of examiners can appoint a managing committee for matters concerning day-to-day business. This committee is composed of the chair of the board of examiners and another member – insofar as this position is occupied – with assistance from the official secretary. The managing committee has a general authorisation which grants it the power to make provisions for ongoing matters. If a situation arises where the managing committee is unable to reach a decision, the situation will be presented to the board of examiners as soon as possible for a resolution.

3. The board of examiners may be assisted in its activities by an official secretary.

4. Duties that are delegated by the board of examiners are included in appendix 1 to these regulations. Full responsibility for any duties and/or powers that the board of examiners delegates remains with the board of examiners.

5. Duties that are delegated by or on behalf of the Executive Board to the board of examiners are included in an overview that is available in appendix 2.

6. The board of examiners ensures that it receives regular (written) reports about the progress of duties and/or powers it has delegated.

Article 2.2 Duties and powers of the board of examiners

The board of examiners has the following duties and powers:

1. Ensuring the quality of exams, modular exams and final assessments.
2. Adopting guidelines and instructions in addition to the Education and Examination Regulations (EER) to ensure an objective, reliable, valid and transparent manner for assessing and grading exams, modular exams and final assessments.
3. Deciding that the period of validity of exam or modular exam results and the corresponding credits have expired as of a date determined by the board of examiners. This is only done in cases where reasoned arguments can be given showing the knowledge, understanding and/or skills are so outdated that they are no longer useful for the profession.
4. Deciding on student requests for exemptions. If it later emerges that the supporting documentation submitted by the student that formed the basis for the decision was incorrect, the board of examiners is authorised to reverse its decision.
5. Deciding that certain exams and modular exams, certificates and other declarations, diplomas and degree certificates that a student has passed or obtained entitle that student to an exemption for one or more exams and/or modular exams. An overview of designation decisions (in Dutch *aanwijzingsbesluiten*) for groups of students is included in appendix 3 of these regulations.
6. Adopting further rules and regulations regarding the possibility of fraud and/or irregularities by students, prospective students or external students, including what action may be taken.
7. Adopting policies and rules with regards to exercising the duties and powers described in paragraphs 1, 2, 3, 4 and 5.
8. Ensuring the quality of the organisation of and the procedures for exams and final assessments.
9. When adopting the guidelines and instructions as referred to in paragraph 2: following national requirements as closely as possible for the protocols for assessing final projects and other assignments.
10. Appointing examiners and head examiners for the purpose of administering and grading exams and modular exams. The board of examiners establishes guidelines for appointing examiners and head examiners and assigning them their duties per exam format.
11. Terminating the appointments of examiners.
12. Making proposals to the Executive Board for terminating a student's enrolment in the event of serious fraud.
13. Advising the Executive Board on the termination of a student's enrolment in a degree programme as a consequence of the student's conduct in relation to future professional practice.
14. Deciding on situations where a student is suspected of committing an irregularity and/or fraud and, if necessary, taking appropriate action, in accordance with the regulations of the board of examiners as adopted by the board of examiners.
15. Deciding on requests from students to take a particular minor in accordance with the EER.
16. Establishing which HAN minors are approved as minors for the degree certificate of the degree programme(s). The overview of these HAN minors approved by the board of examiners can be found through

[Rechten en Plichten CMD DT](#) ; [Rechten en Plichten CMD VT](#) ; [Rechten en Plichten ICT DT](#) ; [Rechten en Plichten ICT VT](#). There are no minors in the Datascience masterprogram.

17. Deciding on student requests for extra opportunities to take an exam or modular exam.
18. Only for degree programmes consisting of units of study: deciding on student requests to take an exam or modular exam for a course independently of the standard programme.
19. Deciding on bachelor student requests to take exams and modular exams from the final bachelor assessment before successfully completing the final assessment of the propaedeutic phase.
20. Deciding on student requests to take educational components and exams and modular exams contrary to the applicable entry requirements.
21. Deciding on student requests to take exams and modular exams in a different format from what is set out in the education and examination regulations.
22. Deciding on student requests to take exams and modular exams in an adapted format, due to disability or chronic illness or another situation such as pregnancy.
23. Deciding on student requests for an oral exam to be closed to the public. The board of examiners may also decide (in practice or in principle) to close certain exams and modular exams to the public without a student's request in cases where there are special reasons such as company confidentiality during a graduation meeting.
24. Issuing documentation, module certificates and declarations.
25. Helping design the examination policy for the degree programme or group of degree programmes.
26. Advising the dean on the education and examination regulations.
27. Awarding a certificate as proof that the final assessment has been passed after the Executive Board has declared that the procedural requirements for awarding the certificate have been met.
28. These requirements are as follows:
 - the student must be enrolled at HAN University of Applied Sciences.
 - the tuition fees must be paid.
29. Deciding on the postponement term when a student has not requested the degree certificate, after the student has passed all parts of the final assessment.
30. Issuing statements of successfully completed exams, at the student's request, when the student has successfully completed more than one exam but cannot be awarded a degree certificate as referred to in article 7.11 paragraph 2 of the Higher Education and Research Act.
31. Issuing a competence assessment certificate to individuals entering the teaching field from another career background as evidence that they have passed the competence assessment.
32. Only for degree programmes consisting of units of study: Deciding on requests for exemption from mandatory participation, with or without the option of imposing additional requirements.

Article 2.3 Meetings of the board of examiners

1. The board of examiners meets at least 8 times a year.
2. The meetings of the board of examiners are scheduled to concur with the scheduling cycles of the degree programme(s) and the school.
3. The board of examiners passes its resolutions by a simple majority of votes.
4. If the vote is tied, the chair has the deciding vote.
5. At each meeting, the board of examiners ratifies decisions taken by the managing committee in the intervening period based on its general authorisation regarding day-to-day business, as well as any other decisions taken on the basis of delegated duties/powers.

6. The (official) secretary to the board of examiners ensures that a report is made of each meeting. The report is adopted at the following meeting of the board of examiners. The report includes a list of resolutions passed during the meeting.
7. The (official) secretary to the board of examiners ensures that the dean¹ and any other members of the board of examiners receive a timely copy of the adopted report.
8. The (official) secretary to the board of examiners ensures that finalised anonymised meeting reports are digitally accessible to lecturers/students/professors and other interested parties from the relevant degree programme(s).

Article 2.4 Joint meeting of the dean and board(s) of examiners

1. The chair of the board of examiners meets 2 times each academic year with all chairs of all other boards of examiners within the school.
2. The board of examiners meets with the dean 2 times each academic year.
3. NA

Section 3: Quality assurance of final assessments, exams and organisation

Article 3.1 Ensuring the quality of exams

1. The board of examiners is responsible for ensuring the quality of exams and modular exams.
2. The board of examiners checks whether the guidelines and instructions as referred to in article 3.2 are followed in practice and result in good quality exams and modular exams.
3. Where needed, the board of examiners gives instructions for improvement.
4. Each year, the board of examiners prepares a monitoring plan / quality control plan to ensure the validity, reliability, feasibility and transparency of examination. This plan can be consulted via [AIM-ExCie - Home](#)

Article 3.2 Guidelines and instructions for exams

1. Exams and modular exams are administered and graded by examiners and head examiners who are appointed by the board of examiners.
2. The examiners and head examiners examine and assess the exams and modular exams based on the criteria listed in the education and examination regulations and the guidelines and instructions adopted by the board of examiners.
3. The board of examiners establishes guidelines and instructions for the following:
 - the construction of exams and modular exams. These can be consulted via [AIM-ExCie - Home](#)
 - the administering of exams and modular exams. These can be consulted via [AIM-ExCie - Home](#)
 - the assessment and results of exams and modular exams. These can be consulted via [AIM-ExCie - Home](#)

¹ This means: the person who is in charge of the degree programme and acts as direct discussion partner for the board of examiners. Due to the new HAN2020 reorganisation, we cannot yet indicate in this model exactly which official this should be. The board of examiners can adjust this in their own regulations.

Article 3.3 Ensuring the quality of the final assessment

1. The board of examiners is responsible for ensuring the quality of the final assessments. It adopts and follows a policy for this.
2. The board of examiners regularly inspects whether the exams together cover all the intended exit qualifications.
3. The board of examiners determines whether a student has the knowledge, understanding, skills and (if relevant) attitude, as described in the EER, that are required for obtaining a degree. The board of examiners also determines whether to award distinctions. The board of examiners uses a protocol (for graduation projects) for this purpose that can be consulted via [AIM-ExCie - Home](#)
4. The board of examiners has the authority to administer its own further investigation or exam to reach a carefully considered decision about the matters outlined in the previous paragraph.
5. The board of examiners periodically reviews the quality of graduation assignments. The board of examiners may have these reviewed by others, who then submit a report to the board of examiners.
6. The board of examiners will oppose and counteract any unjustified awarding or withholding of credits by examiners.

Article 3.4 Ensuring the quality of the organisation and procedures for exams and final assessments

1. The board of examiners is responsible for ensuring the quality of the organisation and procedures for exams, modular exams and final assessments.
2. The board of examiners monitors the compliance with the guidelines and instructions for administering exams and modular exams as set out in article 3.2 paragraph 3. The board of examiners meets periodically with the exams office, and if needed with the Executive Board, to discuss this compliance.

Article 3.5 External validation of the quality of final assessments

The board of examiners ensures the external validation of the quality of final assessments by fostering:

- school-wide and institution-wide examination;
- a joint protocol for assessing graduation projects;
- engagement of external experts to assist in preparing exams and modular exams and assessment procedures;
- engagement of external experts to inspect exam results;
- the possible engagement of external supervisors to monitor the quality of the assessment of graduation projects.

Section 4: Appointment and expertise of examiners

Article 4.1 Appointment and expertise of examiners

1. The board of examiners appoints internal and/or external examiners for creating, administering, assessing and grading exams and modular exams. If there is more than one examiner for an exam or modular exam, the board of examiners will also appoint a head examiner.
2. Depending on their role in the examination process, examiners and head examiners must be experts in their subject field, and must possess the necessary knowledge and skills to

construct exams and modular exams, establish methods and standards for assessing exams and modular exams, organise exams and modular exams and analyse the results based on guidelines and criteria for reliable, legitimate and transparent assessment and grading.

3. The board of examiners ensures examiners possess the required expertise. If necessary, the board of examiners may ask the dean to take measures to foster the professional development of examiners.
4. To ensure the expertise of examiners and head examiners, the board of examiners uses a profile for appointing examiners. These profiles can be consulted via [AIM-ExCie - Home](#)
5. Examiners are appointed to one or more specific programme components (course, exam or modular exam, phase, subject area) and for a specific period.
6. The board of examiners informs examiners about their appointment and the profile used.
7. If necessary, the board of examiners may hear examiners and other parties involved, who then provide the board with the requested information and/or advice.
8. If so requested, examiners must be able to provide the board of examiners with materials for evaluating the quality of exams, assessment methods and assessment results (such as learning outcomes, test plans, test matrices, an answer key, assessment schemes, assessment criteria for assignments, the actual exam or modular exam and/or assignments and the exam results, plus an analysis of them).
9. If at any moment an examiner does not meet the required level of expertise, the board of examiners has the authority to revoke that examiner's appointment.

Section 5: Specific rules for decisions regarding individual students

Article 5.1 EER as model document

The EER sets out model provisions regarding exams, modular exams, minors, assessment criteria, exemptions, exams and modular exams taken independently of the standard programme, Dutch proficiency, extended study load, study advice and studying with a disability, chronic illness or other special condition such as a pregnancy.

Article 5.2 General principles for decisions concerning individual students

1. The offered assessment program is the best guarantee for the quality of the assessment. Therefore, there must be compelling reasons to deviate from it.
2. Deviations from regular assessment should not compromise the quality of assessment.
3. Students from a program or profile should be treated as equally as possible.
4. The examination committee may ask the student to provide a medical certificate and/or have the student's situation assessed by a (medical) expert.
5. The student has raised the circumstances and issues at an early stage with their academic advisor or the examination committee.
6. The examination committee may, unless the student objects and explicitly states so, seek information from the student's academic advisor.

Article 5.3 Further rules regarding exemptions from exams and modular exams

1. The procedure for requesting and granting exemption(s) can be found at: [AIM-ExCie - Home](#)

2. Designation decisions which offer the prospect of exemptions for special target groups (e.g. as part of an abridged route), can be found in appendix 3.

Article 5.4 Further rules regarding flexible minors

The board of examiners receives documentation from the student showing they passed the exams approved by the board of examiners for a flexible minor. This documentation may comprise a certificate, a statement or other documents showing the student passed the approved exam.

1. The documentation will be archived by the board of examiners.
2. After the board of examiners has received the documentation, the board will record the results of the exam or the exams for the flexible minor in OSIRIS.
3. Students should have access to the main phase before applying. The entrance requirements for the minor still apply. The procedure for approval can be found at [AIM-ExCie - Home](#)

Article 5.5 Additional assessment of the student's knowledge and abilities

If an examiner has doubts about the authenticity of the work submitted for an exam or partial exam, the instructor may conduct an additional assessment of the student's knowledge and abilities. Only the learning outcomes and assessment criteria of the relevant test will be used as the basis for this (usually oral) assessment.

Article 5.6 Further rules on requesting an extra exam opportunity

A request will be considered if both of the following situations apply:

- There is a compelling reason. The student is experiencing study delay beyond their control or due to circumstances outside of their own choices. This may include a prolonged illness.
- The student has not had sufficient opportunities.
- A request will not be granted if:
 - The student has had enough opportunity.
 - A (partial) examination is yet to be conducted within three blocks, or if an alternative assessment can be designated. The latter may involve additional examination requirements.
 - A student misses a partial examination opportunity due to work, internship, or graduation requirements.
 - A student misses an examination opportunity because they were abroad (including for study purposes).
 - A student forgot to register.

Article 5.7 Further rules for requesting a different exam format

An alternative form of examination can only be granted if there is a clear and compelling reason. The underlying idea is that assessment methods should reflect the qualities that a student must possess to successfully complete the study. Assessment methods have been carefully chosen by the program, and it is the defined assessments that are ensured by the examination committee.

The primary requirement for an alternative form of examination is that it fully meets the assessment quality intended by the original assessment. Below are two examples of suitable alternative forms of examination.

Example 1:

Instead of a written exam, the exam will be conducted orally. The number and type of questions will be comparable to those on the regular exam. The answers will be evaluated according to the same assessment model. The oral exam should not be understood as a conversation where the student arrives at an answer with the help of responses from the examiners. To ensure validity and reliability, oral exams are always conducted by at least two examiners appointed by the examination committee.

Example 2:

The student participates in the next administration of the regular exam and then, under the guidance of a teacher with a second teacher as an observer, is given the opportunity to orally explain their exam answers. The purpose of this is twofold:

The teacher obtains additional information from the student regarding their answers. The teacher may potentially ask a question about the student's intended answer.

The teacher gains an extra opportunity to determine which parts the student has not yet mastered and, most importantly, what the cause of this may be.

Article 5.8 Further rules for requesting to take an exam independently of the standard program

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Article 5.9 Further rules for determining the term of postponement if a Degree Certificate is not requested

You are allowed to postpone your graduation for a maximum of two years. If you do not submit an application for the diploma within two years, your diploma will be automatically issued in OSIRIS after the two-year period. The examination committee will include you in the examination procedure two years after you have passed all the exams of the program and proceed with the diploma issuance.

Section 6: Irregularity and fraud in exams and modular exams

Article 6.1 Definition of irregularity and fraud

1. An irregularity is defined as: 'any action or omission by a party through which they either intentionally or unintentionally give the wrong impression of their own or one or more other parties' knowledge, understanding, skills and (if relevant) attitude.'
2. Fraud is defined as 'any action or omission of which the party knew or should have known that this action or omission made it partly or wholly impossible to form a correct judgement of their or someone else's knowledge, understanding and (if relevant) attitude. And/or intentionally influencing (components of) the exam, modular exam or exemption awarding process with the purpose of influencing the results of the exam or modular exam or decision about exemption or with the purpose of obtaining a different result for the exam or modular exam or request for exemption.'
3. The following acts always constitute an irregularity or fraud:
 - a. intentionally or unintentionally submitting work in a portfolio and/or presenting or submitting work as the group's or individual's own work (such as a thesis, project, assignment or other written exam or paper for submission), while it was wholly or partly copied or created by the student in unauthorised collaboration with one or more other students. This also includes the following rules:
 - i. paraphrasing the content of another person's texts without properly crediting the sources;

- ii. using or copying another person's texts, data or ideas without providing the complete and correct sources;
 - iii. failing to clearly indicate in the text, for example by using quotation marks or specific formatting, that an excerpt has been copied verbatim from another author, even if the source is properly credited;
 - iv. submitting text previously submitted or text that is comparable to what was previously submitted for other exams or modular exams;
 - v. submitting other written pieces acquired from a commercial institute or written by someone else (whether or not for a fee);
 - vi. failing to contribute, or barely contributing, to a group assignment, while placing or having someone else place the student's name under the group's work;
- b. sharing or obtaining exam/modular exam questions and/or answers during, before and/or after sitting the exam or modular exam;
 - c. aiding or assisting another student in a way that results in an incorrect impression being given of that other student's knowledge, understanding and/or skills;
 - d. seeking and/or receiving help or assistance from a fellow student or other person that results in creating an incorrect impression of the student's knowledge, understanding and/or skills;
 - e. having access to unauthorised resources during an exam or modular exam;
 - f. using permitted resources during an exam or modular exam that contain unauthorised notes and/or additions (e.g. written in the margin or on separate pieces of paper);
 - g. leaving and returning to the exam venue during an exam or modular exam without explicit permission;
 - h. leaving the exam room with the completed exam or modular exam (or part of it), also when it is subsequently handed in to the supervisor or their substitute;
 - i. altering written exams or modular exams that have already been submitted to the examiner or assessed by the examiner;
 - j. doing an exam or modular exam in someone else's name or having someone do this;
 - k. violating the rules that apply to reviewing and discussing marked exam work;
 - l. any and all other situations or incidents which the board of examiners sees as constituting fraud.

Article 6.2 Confiscation of evidence

If there is reasonable suspicion of an irregularity or fraud, the board of examiners, examiner, head examiner and any other person who is present at an exam or modular exam on the Executive Board's behalf are authorised to confiscate materials that could serve as evidence of the irregularity or fraud. At the latest, the board of examiners will return the material to the person concerned once its decision, as referred to in article 6.5, has become final and conclusive.

Article 6.3 Measures in case of irregularity or fraud

1. If a student has committed any irregularity or fraud with respect to any part of an exam or modular exam, the board of examiners may take one or more of the following measures:
 - a. issue a written warning;
 - b. issue a written reprimand;

- c. invalidate an administered exam or modular exam and the result of the exam or modular exam if the board of examiners is unable to guarantee the quality due to the irregularity or fraud. If an exam or modular exam is declared invalid, an 'NV' will be recorded for the exam or modular exam result in Osiris;
 - d. withhold the student's degree certificate (if the irregularity or fraud is not discovered until after the exam or modular exam);
 - e. decide the degree certificate can only be awarded after the student resits an exam in a manner, on a date and at a time to be decided by the board of examiners (if the irregularity or fraud was not discovered until after the exam or modular exam);
 - f. revoke the degree certificate after it has been awarded (if the serious fraud was not discovered until after the certificate was issued to the student).
2. In the event of an irregularity or fraud, the board of examiners may deny a student access to one or more exams or modular exams for a period not exceeding one year;
 3. In the event of serious fraud, the board of examiners may recommend that the Executive Board terminate the student's enrolment in the degree programme.
 4. If according to the board of examiners an administered exam or modular exam does not meet the quality criteria for examination as a result of an irregularity or fraud committed by someone other than the student, the board of examiners may decide to annul the exam or modular exam (or part of it) and/or the result of the exam. Invalidating a past exam or past modular exam leads to the result of the exam being annulled or not being awarded. Students affected by this will be offered the opportunity to redo the relevant exam or modular exam (or the relevant parts).

Article 6.4 Hearing the student, the person who reported the irregularity and any relevant third parties

1. If any irregularity or fraud is reported at an exam or modular exam, the board of examiners will immediately notify the student concerned, if possible in person but always in writing.
2. The student will be given the opportunity to be heard by the board of examiners before a final decision is made.
3. If the student wishes to be heard, they must make this known in writing within eight working days of the date on which they were notified of the opportunity to be heard.
4. The student will be heard no later than 10 working days after receipt of their request.
5. The board of examiners may hear the person who reported the irregularity, plus any third parties, before making a final decision on the irregularity or fraud.
6. Before the hearing takes place, the student will be informed of their right not to answer the questions posed by the board of examiners.
7. Any third parties accompanying the student may not be refused. They are permitted to be present as observers.

Article 6.5 Announcement of the decision

1. If the student does not respond in writing within eight working days of being informed about the possibility to be heard, the board of examiners will presume that the student does not wish to be heard. After expiry of this period, the board of examiners will inform the student in writing of a decision or proposal/recommendation to the Executive Board within 10 working days.
2. If the student, reporter or any third parties are heard, the board of examiners will inform the student in writing of the decision or of a proposal/recommendation to the Executive Board within 10 working days after the hearing.

Section 7: Degree certificate and diploma supplement

Article 7.1 EER as a model document

1. The EER sets out model provisions with regard to units of learning outcomes / units of study, exams and degree certificates.
2. The board of examiners uses the formats for degree certificates, diploma supplements and other certificates provided by the Executive Board. When awarding certificates² the board of examiners applies the principles and procedures set out in the notes accompanying the Executive Board's decision. (Regular protocol can be found at: [Examencommissie MADS](#))
3. After the board of examiners has established that a student has passed their final bachelor assessment, that student may submit a request to be awarded their degree certificate before the set dates. The board of examiners will grant such requests, although the student should allow for at least 10 working days for processing the request.

Article 7.2 Translations of degree certificates

For translations, graduates should contact a certified translator at their own expense (see: www.ngtv.nl). All costs for the translation are for the student's own expense.

Section 8: Annual report of the board of examiners

Article 8.1 Annual report of the board of examiners and dean

1. Each year in November, the board of examiners writes a report on its activities during the previous academic year and submits it to the Executive Board and dean.
2. The board of examiners uses the guidelines for annual reports.
3. If applicable: The relevant school manager³ will receive a copy of the annual report.

Section 9: Final provisions

Article 9.1 Unforeseen circumstances

Matters not provided for by these regulations in which an immediate decision is needed are decided on by the chair of the board of examiners, provided that doing so falls within the powers of the board of examiners. The chair communicates their decision to all relevant parties as soon as possible.

Article 9.2 Complaints and appeals concerning decisions and procedures of a board of examiners

1. Students may appeal to the Examination Appeals Board against a decision made by the board of examiners or an individual examiner within six weeks after that decision was announced. The procedure is outlined in the 'Regulations for Legal Protection of Decisions Concerning Education' of the HAN Student Charter.

² Last adopted version: Executive Board decision 2021/1883. Always check if a more recent version has been adopted.

³ The point here is that those who are most closely involved in the degree programme receive a copy of the annual report. If a school manager is responsible for (the quality of) the degree programme, they should receive that report. Arrange this in a way that suits the organisation of the degree programme/school.

2. Every decision made by the board of examiners or individual examiner contains a remedy clause. This clause stipulates at least the following:
 - a) an appeal can be made within six weeks of the date of the decision;
 - b) the appeal should be lodged with the Examination Appeals Board;
 - c) the correct and current address details of the Examination Appeals Board.
 - d) a reference – for more information – to the ‘Regulations for Legal Protection of Decisions Concerning Education’ of the HAN Student Charter.
3. If a student wants to file a complaint against an examiner or member of the board of examiners, they can consult the procedure set out in the complaints regulations of the HAN Student Charter.
4. If a complaint or appeal concerns a member of the board of examiners, that member of the board of examiners will not be involved in handling the complaint or appeal on behalf of the board of examiners.

Article 9.3 Adoption, effective date and amendments

1. These regulations were adopted by the Board of Examiners for AIM Board of Examiners on 12 April 2026. They come into effect on the 1st of September 2026.
2. These regulations replace the Regulations of the Board of Examiners for AIM Board of Examiners adopted on 12 April 2024.
3. These regulations will be made available to the students and staff of the degree programme(s) specified in article 1.2 paragraph 3 of these regulations by inclusion in the degree statute.
4. Amendments to these regulations will be adopted by the relevant board of examiners in a separate decision. Amendments during the course of the academic year will be made only if this is necessary to protect students’ interests.
5. Amendments to these regulations may not have any adverse impact on the student with respect to decisions previously made by the board of examiners pursuant to these regulations.

Arnhem/ Nijmegen 12 April 2026

On behalf of the board of examiners Jan-Hugo Wijbenga, chair

Appendix 1: Duties delegated by the board of examiners

Overview of duties delegated by the board of examiners (by board of examiners – principle – authorisation decision(s) taken)

	Duties mandated by the board of examiners	Mandated body ⁴ , or job title or specific duties of the mandated staff member ⁵
1	Approval of minors chosen by students, provided that these minors take place abroad and the content of these minors has been coordinated with the Examination Committee.	Bureau Internationalisering
2	Approval of minors chosen by students, as long as the chosen minor is listed in the pre-approved minors list of AIM as described on the Education Online website, under 'Minors - information for AIM students.'	Onderwijsbureau AIM
3	Entering the results of (partial) exams and sending the exam proof related to the exam administered by the examiner, upon specific request of the examiner or assessments from iSAS, with a note made in the study monitoring system in the former case.	Onderwijsbureau AIM
4	Entering the grades for approved free minors in the study monitoring system upon request of the student, only if the request is accompanied by a valid and archived minor certificate.	Onderwijsbureau AIM
5	Generating transcripts and issuing diplomas upon request and under the control of the Examination Committee AIM.	Onderwijsbureau AIM
6	Processing pass statuses in Alluris for the propaedeutic phase and bachelor's degree.	Onderwijsbureau AIM
7	Entering study advice in the study monitoring system, upon request and under the control of the	Onderwijsbureau AIM
8	Signing decisions on individual requests.	Secretaris Examinatoren
9	Entering the grades achieved by students in the study monitoring system.	Examinatoren
10	N/A	
11	Organizing a capacity test in the context of the 21+ regulation, including signing colloquium doctum declarations.	(Ambtelijk) secretaris

Note:

- The authorisation remains valid unless revoked by the board of examiners and as long as the authorised person remains employed by HAN and performs the duties specified above.
- Unless explicitly stated otherwise, those authorised may not delegate their duties to third parties.

Arnhem/ Nijmegen 12 April 2026

Board of Examiners AIM

⁴ For example, committee or office (managing committee, assessment committee, examination task team, exams office).

⁵ The official job titles of employees (e.g. dean, lecturer, senior lecturer, educator, trainer, adviser, secretary) can be found on HAN Insite under 'Our staff'. A duty is a specific work activity carried out by an employee – and may or may not be officially assigned to or requested of them (e.g. chair of the board of examiners, official secretary, study coach, team leader, administrative staff member or examiner). This column lists the specific duties relevant in the context of the mandate given by the board of examiners.

Appendix 2: Duties delegated to the board of examiners by or on behalf of the Executive Board

Overview of duties delegated to the board of examiners

	Duties mandated to the board of examiners
1	Execution of study advice and associated hearings
2	Admissions Committee
3	

Note:

- The authorisation remains valid unless revoked and as long as the authorised person remains employed by HAN and performs the duties specified above.
- Unless explicitly stated otherwise, those authorised may not delegate their duties to third parties.

Appendix 3: Designated previous exams and modular exams, certificates and other statements, diplomas and degree certificates carrying an entitlement to specific exemptions

Not applicable for the master Datascience or master MAID.

3 Regulations of the Degree Committee

3 Reglement opleidingscommissie

Inhoud

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Hoofdstuk 1 Inleidende bepalingen

Artikel 1 Status en begripsbepalingen

1. Dit reglement is een reglement als bedoeld in het bestuurs- en beheersreglement van HAN University of Applied Sciences (hierna: HAN).
2. Dit reglement is van toepassing op de gemeenschappelijk opleidingscommissie (GOC) voor de bacheloropleidingen ICT VT en DT en Communication & Multi Media Design (CMD) VT en DT en voor de masteropleiding Applied Data Science (MADS)
3. De definities en bepalingen uit de begrippenlijst van bijlage 1 bij het Opleidingsstatuut zijn op dit reglement van toepassing.

Hoofdstuk 2 Opleidingscommissie

Artikel 2 Instellen opleidingscommissie(s)

1. Voor elke opleiding of voor een groep van opleidingen wordt een opleidingscommissie ingesteld.
2. Indien een academie slechts één opleiding omvat worden de taken en bevoegdheden van de opleidingscommissie door de academieraad uitgeoefend.
3. In het geval een opleidingscommissie voor twee of meer opleidingen wordt ingesteld, wordt die opleidingscommissie een gemeenschappelijke opleidingscommissie genoemd. Het besluit tot instelling of opheffing van een gemeenschappelijke opleidingscommissie wordt door de academiedirecteur genomen en vereist de instemming van de academieraad van de desbetreffende academie. Bij het besluit tot instemming consulteert de desbetreffende academieraad de desbetreffende opleidingscommissies.
4. De bepalingen in dit reglement gelden ook voor de gemeenschappelijke opleidingscommissie, tenzij de aard van de bepaling zich tegen toepassing verzet.
5. Binnen een opleidingscommissie kunnen zo nodig één of meerdere kamers worden ingesteld. Een kamer kan worden ingesteld naar inrichtingsvorm, naar de bijzondere eigenschap van de opleiding (bijvoorbeeld Engelstaligheid), naar locatie van de opleiding of naar gelang een andere bijzonderheid van de opleiding daartoe noodzaakt.¹
6. De GOC voor de opleiding(en) binnen de academie AIM is voor een groep van opleidingen ingesteld. De GOC academie AIM bestaat uit 3 kamers: een kamer voor de bacheloropleiding ICT, een kamer voor de bacheloropleiding CMD en een kamer voor de masteropleiding MADS.

Artikel 3 Gezamenlijke vergadering

Indien de opleidingen van één academie niet een gemeenschappelijke opleidingscommissie hebben, vergaderen alle opleidingscommissies behorend tot de academie ten minstekeer per jaar in een gezamenlijke vergadering over gemeenschappelijke punten, waaronder ten minste de punten genoemd in artikel 27 lid 4 van dit reglement

¹ Zie voor de taken en bevoegdheden van een kamer de omschrijving in artikel 27 lid 3 van het reglement.

Artikel 4 Samenstelling opleidingscommissie

1. De GOC AIM bestaat uit 14 leden. De kamer ICT van de GOC bestaat uit 6 leden, de kamer CMD bestaat uit 6 leden, de kamer MADS bestaat uit 2 leden.
2. De helft van de leden van de (kamer van de) opleidingscommissie bestaat uit studenten van de desbetreffende opleiding en de andere helft van de leden van de (kamer van de) opleidingscommissie bestaat uit personeel van de desbetreffende opleiding
3. Zij die deel uitmaken van het academie- of opleidingsmanagement of werkzaam zijn als *onderwijsmanager* kunnen niet tevens lid zijn van de opleidingscommissie.

Artikel 5 Zittingsduur

1. De leden van een opleidingscommissie, kamer(s) en leden van de gezamenlijke vergadering die uit en door de studenten zijn benoemd, hebben 2 jaar zitting. De leden van een opleidingscommissie, kamer(s) en leden van de gezamenlijke vergadering die uit en door het personeel zijn benoemd, hebben 4 jaar zitting.
2. De zittingstermijn vangt aan op 1 september.
3. Alle leden treden aan het einde van hun zittingsperiode tegelijk af.
4. De leden van een opleidingscommissie, kamer(s) en leden van de gezamenlijke vergadering kunnen aan het einde van hun zittingsperiode herbenoemd worden, met dien verstande dat de leden die uit en door het personeel zijn benoemd twee aansluitende termijnen zitting kunnen hebben en daarna eerst weer benoemd kunnen worden na één termijn geen zitting te hebben gehad. De leden die uit en door de studenten benoemd zijn kunnen na aftreden herbenoemd worden met een maximum van vier aansluitende studie jaren.

Artikel 6 Beëindiging lidmaatschap

1. Het lidmaatschap van een opleidingscommissie, kamer en de gezamenlijke vergadering eindigt door:
 - a. het aflopen van de zittingsperiode, tenzij het lid opnieuw benoemd wordt;
 - b. tussentijds:
 - in geval van overlijden;
 - indien de samenstelling van de opleidingscommissie niet meer voldoet aan de eisen zoals opgenomen in dit reglement;
 - in het geval de docent niet meer aan de academie, respectievelijk de betreffende opleiding verbonden is;
 - in geval de student de opleiding verlaten heeft.
2. Een lid van de opleidingscommissie kan te allen tijde het lidmaatschap beëindigen, door het lidmaatschap *met vermelding van reden-* schriftelijk bij de desbetreffende academiecteur op te zeggen.

Artikel 7 Wijze van samenstellen

1. De samenstelling van de opleidingscommissie geschiedt op basis van voordracht en benoeming.
2. Jaarlijks wordt bezien of het wenselijk is de wijze van samenstelling te handhaven
Indien de opleidingscommissie in het hiervoor gaande artikel voor verkiezingen heeft gekozen, dan zijn de bepalingen in hoofdstuk 3 van toepassing. Indien de opleidingscommissie in het hiervoor gaande artikel voor benoeming gekozen heeft, dan zijn de bepalingen in hoofdstuk 4 van toepassing. Bij een keuze voor benoeming dient jaarlijks bezien te worden of het wenselijk is deze wijze van samenstelling te handhaven.

Hoofdstuk 3 Verkiezingen

N.v.t.

Hoofdstuk 4 Benoeming

Artikel 16 Benoeming

De leden van de opleidingscommissie worden door de academiedirecteur benoemd.

Artikel 17 Procedure

1. Voor afloop van de zittingstermijn dragen de leden van de studentengeleding van de opleidingscommissie met inachtneming van artikel 4 van elke (tot de groep van opleidingen behorende) opleiding 7 studenten ter benoeming aan de academiedirecteur voor. De voordracht wordt opgesteld door de opleidingscommissie van de betreffende opleiding(en), dan wel door of namens de academiedirecteur.
2. Voor afloop van de zittingstermijn dragen de leden van de personeelsgeleding van de opleidingscommissie met inachtneming van artikel 4 van elke tot (tot de groep van opleidingen behorende) opleiding 7 personeelsleden voor de komende zittingsperiode aan de academiedirecteur ter benoeming voor. De voordracht wordt opgesteld door de opleidingscommissie van de betreffende opleiding(en), dan wel door of namens de academiedirecteur.
3. Indien voor de opleidingen van een academie niet één gezamenlijke opleidingscommissie is ingesteld, kiest elke afzonderlijke opleidingscommissie behorend tot de academie jaarlijks uit haar midden een medewerker en een student, die naast de voorzitter, in de gezamenlijke vergadering worden afgevaardigd.

Artikel 18 Tussentijdse vacature bij benoeming

1. In het geval van een tussentijdse vacature bij een opleidingscommissie of kamer benoemt de academiedirecteur een opvolger. De benoemingsprocedure uit artikel 17 wordt gevolgd.
2. De benoeming van een opvolger geschiedt binnen 4 weken na het ontstaan van de tussentijdse vacature.
3. De tussentijdse opvolger treedt af op het moment dat degene wiens lidmaatschap tussentijds is geëindigd had moeten aftreden.

Hoofdstuk 5 Functies en functioneren

Artikel 19 Functies

1. De opleidingscommissie en kamer kiest uit haar midden een voorzitter en een secretaris, en voor elk van beide een plaatsvervanger.

2. Een (kamer van een) opleidingscommissie wordt vertegenwoordigd door de voorzitter of diens plaatsvervanger.

Artikel 20 Besluitvorming

1. De opleidingscommissie of kamer beslist met gewone meerderheid van stemmen. Een onthouding wordt niet meegerekend. Er kan alleen gestemd worden als de meerderheid van de leden bij de vergadering aanwezig is.
2. Stemming vindt plaats zonder aanwezigheid van de directie of gesprekspartner.
3. De leden van de opleidingscommissie adviseren en stemmen zonder last of ruggenspraak.
4. Bij afwezigheid kan een lid zijn stem per volmacht uitbrengen. Volmachten worden aan het begin van de vergadering schriftelijk afgegeven. Een lid kan slechts door een ander lid per keer gevolmachtigd worden. De gevolmachtigde stemt zonder last of ruggenspraak. Een volmacht telt mee bij het bepalen van het quorum van de vergadering.
5. Eenieder die bij de uitvoering van de taak van de commissie betrokken is en daarbij de beschikking krijgt over gegevens waarvan hij het vertrouwelijke karakter kent of redelijkerwijs moet vermoeden, is verplicht tot geheimhouding.
6. De (kamer van de) opleidingscommissie draagt er in voorkomende gevallen zorg voor dat ook het standpunt van de minderheid van de uitgebrachte stemmen aan de academiedirecteur en/of academiemanager kenbaar wordt gemaakt.
7. De opleidingscommissie draagt er zorg voor dat haar besluiten, adviezen en voorstellen ter inzage liggen op een voor de docenten en de studenten van de academie, respectievelijk de opleiding toegankelijke plaats.

Artikel 21 Vergaderingen

1. De (kamer van de) opleidingscommissie vergadert (minimaal) acht maal per jaar en voorts in het geval minstens de helft van de leden van de (kamer van de) opleidingscommissie hierom verzoekt. De vergadering wordt bijeengeroepen door de voorzitter van de opleidingscommissie of kamer. Op de eerste vergadering wordt in overleg met de academiedirecteur een vergaderrooster opgesteld, dat op de website van de opleiding wordt gepubliceerd.
2. De leden van de (kamer van de) opleidingscommissie ontvangen uiterlijk vijf werkdagen voor aanvang van de vergadering een schriftelijke uitnodiging voor de vergadering. De uitnodiging is voorzien van een agenda.
3. De vergaderstukken worden uiterlijk vier werkdagen voor aanvang van de vergadering aan de leden van de opleidingscommissie gezonden. Bij latere toezending kunnen de leden ter vergadering met meerderheid van stemmen besluiten om de vergaderstukken niet te behandelen.
4. De opleidingscommissie kan zich op de vergadering door een deskundige laten voorlichten. De deskundige wordt minimaal zeven dagen voorafgaand aan de vergadering bij de secretaris aangemeld.
5. De opleidingscommissie kan uit haar midden een tijdelijke commissie samenstellen, die een onderwerp voorbereidt. Deze commissie rapporteert aan de opleidingscommissie.

Artikel 22 Openbaarheid

1. De vergaderingen van de (kamer van de) opleidingscommissie zijn openbaar, tenzij de (kamer van de) opleidingscommissie anders beslist. De (kamer van de) opleidingscommissie bepaalt

zelf of zij ter voorbereiding van een openbare vergadering een besloten vergadering houdt. In besloten vergaderingen kunnen geen besluiten genomen worden.

2. De opleidingscommissie houdt ten minste twee maal per jaar een openbare vergadering. De data van de openbare vergaderingen worden, in overleg met de academiedirecteur, zodanig gepland dat zij aansluiten bij de officiële jaarplanning van de HAN.

Artikel 23 Verslaglegging

1. Van iedere vergadering wordt door de secretaris van de (kamer van de) opleidingscommissie een verslag gemaakt.
2. Dit verslag bevat ten minste:
 - de datum, tijd en plaats van de vergadering;
 - de namen van de op vergadering aanwezige en afwezige leden;
 - de agendapunten;
 - de hoofdlijnen van de discussie;
 - eventuele stemverklaringen;
 - de adviezen;
 - de besluiten over advies en instemming met vermelding van stemmingen en uitslagen van stemmingen;
3. Het verslag wordt uiterlijk 15 werkdagen na afloop van de vergadering in concept naar de leden van de opleidingscommissie gestuurd, waarna het verslag in de eerstvolgende vergadering wordt vastgesteld.
4. De verslagen van de openbare vergaderingen van de (kamer van de) opleidingscommissie worden digitaal beschikbaar gesteld opdat de docenten en studenten van de academie, respectievelijk de betreffende opleiding er kennis van kunnen nemen.

Artikel 24 Contact met directies

1. De academiedirecteur van de betreffende inrichtingsvorm/opleiding met een bijzondere eigenschap verstrekt de opleidingscommissie respectievelijk de kamer ongevraagd tijdig alle inlichtingen die deze voor de vervulling van haar taak naar redelijkheid en billijkheid nodig kan hebben en, gevraagd, tijdig alle inlichtingen die deze voor de vervulling van haar taak naar redelijkheid en billijkheid nodig acht.
2. De opleidingscommissie is bevoegd de academiedirecteur ten minste twee maal per jaar uit te nodigen om het voorgenomen beleid te bespreken aan de hand van een door haar opgestelde agenda.
3. Bij aanvang van het studiejaar stelt de opleidingscommissie een beleidsplan op, waarin de opleidingscommissie de visie en speerpunten van de opleidingscommissie voor het komende studiejaar formuleert. Het beleidsplan wordt met de academiedirecteur gedeeld.
4. Op verzoek van de academiedirecteur -of de door hem aangewezen plaatsvervanger- dan wel op verzoek van de (kamer van de) opleidingscommissie woont de academiedirecteur -of de door hem aangewezen plaatsvervanger- de vergaderingen van de (kamer van de) opleidingscommissie of een gedeelte daarvan, bij.
5. De academiedirecteur draagt er zorg voor dat de studenten en de medewerkers van de betreffende academie voldoende op de hoogte zijn van het bestaan en het functioneren van de (kamer van de) opleidingscommissie.

Artikel 25 Jaarlijkse rapportage

1. De voorzitter van de opleidingscommissie brengt jaarlijks uiterlijk in de maand november schriftelijk verslag uit aan de academiedirecteur over de werkzaamheden en het functioneren van de opleidingscommissie in het voorgaande studiejaar. De voorzitter zendt het verslag ter kennisneming aan de academieraad.
2. De rapportage bevat in elk geval informatie over:
 - de samenstelling van opleidingscommissie;
 - de visie van de opleidingscommissie op haar taak en werkwijze;
 - het beleidsplan van de opleidingscommissie en de evaluatie daarvan;
 - de door de opleidingscommissie uitgebrachte adviezen en besluiten, waaronder de instemmingsverzoeken;
 - de reactie van het bestuur op de adviezen en besluiten;
 - conclusies en aanbevelingen.
3. Het in de leden 1 en 2 bedoelde verslag wordt in ieder geval digitaal en indien gewenst schriftelijk beschikbaar gesteld voor de medewerkers en studenten van de academie, respectievelijk de betreffende opleiding(en).

Artikel 26 Contact met academieraad

De voorzitter van de opleidingscommissie draagt er zorg voor dat daar waar nodig overleg met de (voorzitter van de) academieraad plaatsvindt.

Hoofdstuk 6 Taken en bevoegdheden opleidingscommissie

Artikel 27 Taakstelling opleidingscommissie

1. De opleidingscommissie heeft tot taak te adviseren over het bevorderen en waarborgen van de kwaliteit van de opleiding.
2. De opleidingscommissie heeft voorts als taak:
 - het jaarlijks beoordelen van de wijze van uitvoeren van de onderwijs- en examenregeling (OER) van de betreffende opleiding;
 - het desgevraagd of op eigen beweging advies uitbrengen of voorstellen doen aan de academieraad en de academiedirecteur over alle andere aangelegenheden betreffende het onderwijs in de betreffende opleiding(en).
3. Een kamer van de opleidingscommissie heeft tot taak de opleidingscommissie te adviseren over:
 - het bevorderen en waarborgen van de kwaliteit van de opleiding;
 - het jaarlijks beoordelen van de wijze van uitvoeren van de OER van de betreffende opleiding;
 - het desgevraagd of op eigen beweging advies uitbrengen of voorstellen doen aan de opleidingscommissie over alle andere aangelegenheden betreffende het onderwijs in de betreffende opleiding(en).
4. De gezamenlijke vergadering heeft tot taak:
 - de afzonderlijke adviezen over de OER, van de opleidingscommissies die tot een academie behoren, te bespreken, om tot één gezamenlijk besluit of advies te komen in het geval de OER op academieniveau wordt vastgesteld.

- de afzonderlijke beoordelingen van de opleidingen over de wijze van uitvoeren van de OER te bespreken om tot een beoordeling over de wijze van uitvoeren van de OER op academieniveau te komen.
- het desgevraagd of op eigen initiatief advies uitbrengen aan de academiecteur, en/of de academierraad over alle andere aangelegenheden betreffende het onderwijs in de betreffende opleiding(en) op academieniveau.

Artikel 28 Instemmingsrecht

1. De opleidingscommissie heeft instemmingsrecht ten aanzien van het bestuurs- en beheersreglement voor zover:
 - daarin een andere wijze van samenstelling van de opleidingscommissie wordt vastgelegd dan verkiezing;
 - het de jaarlijkse beoordeling van de wenselijkheid van deze andere wijze van samenstelling betreft;
2. De opleidingscommissie heeft instemmingsrecht ten aanzien van de OER van de betreffende opleiding voor zover het betreft:
 - de wijze waarop het onderwijs in de desbetreffende opleiding wordt geëvalueerd;
 - de inhoud van de afstudeerrichtingen binnen een opleiding;
 - de kwaliteit op het gebied van kennis, inzicht en vaardigheden die een student zich bij beëindiging van de opleiding moet hebben verworven;
 - waar nodig de inrichting van praktische oefeningen;
 - de studielast van de opleiding en van elk van de daarvan deel uitmakende onderwijseenheden en eenheden van leeruitkomsten;
 - indien van toepassing, de wijze waarop de selectie van studenten voor een speciaal traject binnen een opleiding gericht op het behalen van een hoger kennisniveau van studenten plaatsvindt;
 - indien van toepassing, de regeling dat de studielast voor een versneld traject gericht op studenten met een vwo-diploma 240 in plaats van 180 studiepunten bedraagt.
 - indien van toepassing, de wijze waarop en de termijn waarbinnen het leerwegplan, bedoeld in de OSOER deel 2 art. 2.5, wordt vastgesteld.

Artikel 29 Adviesrecht

De opleidingscommissie heeft adviesrecht ten aanzien van de OER van de betreffende opleiding voor zover het betreft:

- de inhoud van de opleiding en van de daaraan verbonden examens;
- de nadere regels ter uitvoering van het studieadvies propedeutische fase bacheloropleiding of eerste studiejaar associate degree-opleiding en de nadere regels ter uitvoering van de verwijzing in propedeutische fase/het eerste studiejaar indien een opleiding na de propedeutische fase/het eerste studiejaar meer dan een afstudeerrichting omvat;
- het aantal en de volgtijdelijkheid van de tentamens alsmede de momenten waarop deze afgelegd kunnen worden;
- de voltijdse, deeltijdse of duale inrichting van de opleiding;

- waar nodig, de volgorde waarin, de tijdvakken waarbinnen en het aantal malen per studiejaar dat de gelegenheid wordt geboden tot het afleggen van tentamens en examens alsmede de wijze waarop intekenen hiervoor plaatsvindt en de reguliere intekenperiode die van toepassing is;
- waar nodig, de geldigheidsduur van met goed gevolg afgelegde tentamens, behoudens de bevoegdheid van de examencommissie die geldigheidsduur te verlengen;
- of de tentamens mondeling, schriftelijk of op een andere wijze worden afgelegd, behoudens de bevoegdheid van de examencommissie in bijzondere gevallen anders te bepalen;
- de wijze waarop studenten met een functiebeperking of chronische ziekte redelijkerwijs in de gelegenheid worden gesteld de tentamens af te leggen;
- de openbaarheid van mondeling af te nemen tentamens, behoudens de bevoegdheid van de examencommissie in bijzondere gevallen anders te bepalen;
- de termijn waarbinnen het resultaat van een tentamen bekend wordt gemaakt alsmede of en op welke wijze van deze termijn kan worden afgeweken;
- de wijze waarop en de termijn gedurende welke degene die een schriftelijk tentamen heeft afgelegd, inzage verkrijgt in zijn beoordeeld werk;
- de wijze waarop en de termijn gedurende welke kennis genomen kan worden van vragen en opdrachten, gesteld of gegeven in het kader van een schriftelijk afgenomen tentamen en van de normen aan de hand waarvan de beoordeling heeft plaatsgevonden;
- de gronden waarop de examencommissie voor eerder met goed gevolg afgelegde tentamens of examens in het hoger onderwijs, dan wel voor buiten het hoger onderwijs opgedane kennis of vaardigheden, vrijstelling kan verlenen van het afleggen van een of meer tentamens;
- waar nodig, dat het met goed gevolg afgelegd hebben van tentamens voorwaarde is voor de toelating tot het afleggen van andere tentamens;
- waar nodig, de verplichting tot het deelnemen aan praktische oefeningen met het oog op de toelating tot het afleggen van het desbetreffende tentamen, behoudens de bevoegdheid van de examencommissie vrijstelling van die verplichting te verlenen, al dan niet onder oplegging van vervangende eisen;
- de bewaking van studievoortgang en de individuele studiebegeleiding;
- de feitelijke vormgeving van het onderwijs.

Artikel 30 Voorwaarden instemming en advies

De academiecteur draagt er zorg voor dat:

- a. een advies op een zodanig tijdstip wordt gevraagd dat het advies van wezenlijke invloed kan zijn op de besluitvorming,
- b. de commissie in de gelegenheid wordt gesteld met de directeur overleg te voeren voor dat het advies wordt uitgebracht,
- c. de commissie zo spoedig mogelijk schriftelijk in kennis wordt gesteld van de wijze waarop aan het uitgebrachte advies gevolg wordt gegeven.

Artikel 31 Procedure instemming en advies

1. De opleidingscommissie deelt de academiecteur zo spoedig mogelijk, doch uiterlijk binnen 6 weken nadat instemming of een advies is gevraagd, schriftelijk mede of de opleidingscommissie instemming verleent respectievelijk wat het advies van de opleidingscommissie is.
2. De opleidingscommissie en academiecteur kunnen overeen komen de in het vorige lid genoemde termijn te verlengen, dan wel te verkorten in het geval het spoedeisende karakter van het te nemen besluit dat verlangt, dan wel indien het besluit genomen dient te worden ter voldoening aan een wettelijk voorschrift.
3. Indien de opleidingscommissie het advies dan wel de beslissing met betrekking tot de gevraagde instemming niet binnen de in lid 1 van dit artikel genoemde termijn c.q. binnen de verlengde of verkorte termijn aan de academiecteur kenbaar heeft gemaakt, dan wordt de opleidingscommissie geacht van zijn bevoegdheden geen gebruik te maken.
4. De opleidingscommissie kan studenten en/of medewerkers van de betreffende opleiding raadplegen, alvorens te besluiten op het instemmingsverzoek respectievelijk een advies af te geven.

Artikel 32 Afwijken advies

1. Indien de academiecteur een advies van de opleidingscommissie niet of niet geheel wil volgen, deelt hij dit binnen vier weken en met redenen omkleed aan de opleidingscommissie mede.
2. De academiecteur draagt er zorg voor dat de opleidingscommissie in de gelegenheid gesteld wordt nader overleg met hem te voeren alvorens tot definitieve besluitvorming over te gaan.
3. De academiecteur schort de uitvoering van zijn besluit op tot 4 weken na de dag waarop hij de opleidingscommissie het besluit heeft medegedeeld, tenzij de commissie tegen onmiddellijke uitvoering geen bedenkingen heeft.
4. De academiecteur stelt de opleidingscommissie en de academieraad schriftelijk van het definitieve besluit in kennis en vermeldt in het besluit dat wordt afgeweken van het advies van de opleidingscommissie.

Artikel 33 Initiatiefrecht

1. Indien de opleidingscommissie desgevraagd of op eigen beweging een voorstel als bedoeld in artikel 27 lid 2 van dit reglement aan de academieraad of academiecteur doet, reageert de academiecteur binnen twee maanden na ontvangst van het voorstel. De opleidingscommissie zendt de adviezen en voorstellen ter kennisneming aan de medezeggenschapsraad of desbetreffende academieraad.

Hoofdstuk 7 Kwaliteitszorg

Artikel 34

1. Bij aanvang van het studiejaar maken de opleidingscommissie en de academiecteur afspraken over de wijze waarop de kwaliteitszorg wordt uitgevoerd.

Hoofdstuk 8 Betrokkenheid bij accreditatie

Artikel 35

In het kader van en ten behoeve van de accreditatie van de opleiding:

- geeft de opleidingscommissie op verzoek van de academiedirecteur een advies af voor de zelfevaluatie van de opleiding;
- heeft de opleidingscommissie in voorkomende geval adviesrecht op het herstelplan.

Hoofdstuk 9 Geschillen

Artikel 36 Toegang tot de geschillencommissie

De geschillencommissie medezeggenschap neemt kennis van geschillen tussen de opleidingscommissie of academiedirecteur over:

- a. de toepassing van het reglement opleidingscommissies;
- b. geschillen die voortvloeien uit de artikelen 27 tot en met 30 van dit reglement.

Artikel 37 Minnelijke schikking

Indien er een geschil is tussen de opleidingscommissie en de academiedirecteur onderzoekt het college van bestuur of een minnelijke schikking mogelijk is. Indien dit niet mogelijk blijkt, legt de academiedirecteur of de opleidingscommissie het geschil voor aan de geschillencommissie.

Artikel 38 Bindende uitspraak geschillencommissie

De geschillencommissie is bevoegd een minnelijke schikking tussen partijen tot stand te brengen. Indien geen minnelijke schikking wordt bereikt, beslecht de geschillencommissie een aan haar voorgelegd geschil door een bindende uitspraak te doen waarbij zij toetst of:

- a. de academiedirecteur zich heeft gehouden aan de eisen van de wet en het huishoudelijk reglement opleidingscommissies;
- b. de academiedirecteur bij de afweging van de betrokken belangen in redelijkheid tot het voorstel of de beslissing heeft kunnen komen en;
- c. de academiedirecteur onzorgvuldig heeft gehandeld ten opzichte van de opleidingscommissie.

Artikel 39 Opschorting uitvoering beslissing

Indien het geschil betrekking heeft op het niet of niet geheel volgen van het advies van de opleidingscommissie, wordt de uitvoering van de beslissing opgeschort met vier weken, tenzij de opleidingscommissie geen bedenkingen heeft tegen onmiddellijke uitvoering van de beslissing.

Artikel 40 Toestemming bij ontbreken instemming

Indien de academiedirecteur voor de voorgenomen beslissing geen instemming van de opleidingscommissie heeft gekregen, kan de academiedirecteur de geschillencommissie, in afwijking van artikel 31, toestemming vragen om de beslissing te nemen. De geschillencommissie geeft slechts

toestemming indien de beslissing van de opleidingscommissie om geen instemming te geven onredelijk is of indien de voorgenomen beslissing van de academiedirecteur gevegd wordt door zwaarwegende organisatorische, economische of sociale redenen.

Hoofdstuk 10 Faciliteiten

Artikel 41 Faciliteiten (leden) opleidingscommissies

1. De academiedirecteur staat de opleidingscommissie het gebruik toe van de voorzieningen waarover de commissie kan beschikken en die de commissie voor de vervulling van haar taak redelijkerwijs nodig heeft, waaronder in ieder geval wordt verstaan ambtelijke, financiële en juridische ondersteuning.
2. Meer in het bijzonder heeft de opleidingscommissie recht op:
 - vergaderruimte;
 - mogelijkheden tot reproductie/distributie van vergaderstukken;
 - secretariële ondersteuning;
 - restauratieve voorzieningen;
3. De academiedirecteur stelt de leden van de opleidingscommissie een scholingsbudget ter beschikking. Het scholingsbudget wordt bij aanvang van het studiejaar in onderling overleg tussen de opleidingscommissie en de academiedirecteur bepaald (en maakt mogelijk dat de leden van de opleidingscommissie in ieder geval deel kunnen nemen aan het scholings- en professionaliseringsaanbod van de HAN Academy. Het scholingsbudget voor de GOC AIM bedraagt minimaal € 2000,- incl. BTW per studiejaar. Het scholingsbudget bedraagt minimaal 2.000 euro inclusief btw per opleidingscommissie.
4. De leden van de opleidingscommissie die als medewerker werkzaam zijn worden in de gelegenheid gesteld om deze scholing in werktijd en met behoud van salaris te ontvangen.
5. De academiedirecteur stelt de opleidingscommissies in de gelegenheid om zoveel mogelijk tijdens werktijd te vergaderen. De studentleden en personeelsleden van de opleidingscommissie worden voor het geheel aan activiteiten van de opleidingscommissie voor 80 uur per lid per studiejaar gefaciliteerd, waarbij voor het voorzitterschap een aanvullende facilitering van 40 uur per studiejaar geldt.

Hoofdstuk 11 Slotbepalingen

Artikel 42 Rechtsbescherming

Het college van bestuur, de academiedirecteur en de academiemanager van de betreffende inrichtingsvorm/opleiding met een bijzondere eigenschap dragen er zorg voor dat de leden van de opleidingscommissie, de kamer en de leden van de gezamenlijke vergadering - uit hoofde van hun lidmaatschap van de opleidingscommissie - niet worden geschaad in hun positie en/of belangen met betrekking tot de hogeschool.

Artikel 43 Onvoorziene omstandigheden

In gevallen waarin dit reglement niet voorziet en waaromtrent een onmiddellijke beslissing van de opleidingscommissie respectievelijk kamer respectievelijk gezamenlijke vergadering, noodzakelijk is, beslist de voorzitter van de opleidingscommissie respectievelijk de voorzitter van de gezamenlijke vergadering. De voorzitter deelt zijn/haar besluit zo spoedig mogelijk mede aan de overige leden van de (*kamer van de*) opleidingscommissie respectievelijk de overige leden van de gezamenlijke vergadering, en aan de academiedirecteur *en de betreffende academiemanager*.

Artikel 44 Inwerkingtreding

Dit reglement is door de academiedirecteur vastgesteld 3 juni 2026 en geldt met ingang van 1 september 2026.

Appendix to chapter 6 description of the education

Course description of the **MERGED** Educational Programme Units of Study and Units of Learning Outcomes 2026-2027

GENERAL DESCRIPTION	
Naam module long Dutch	Predictive Modelling
Naam module long English	Predictive Modelling
Naam module short Dutch	Predictive Modelling
Naam module short English	Predictive Modelling
Code course Osiris	PREMOD04
Number of credits	15
Study load in hours	420
Learning outcome(s) module	<p>The student is able to:</p> <ol style="list-style-type: none"> 1. translate a business problem into research questions aimed at data science solutions in the context of predictive models in collaboration with a group of peers (A) 2. critically analyse research problems to determine objectives and success criteria (e.g. using the machine learning canvas), (A,E) 3. assess the quality of data sets for given research problems, (B) 4. apply specific preprocessing methods (e.g. data cleaning & normalization, feature selection, feature extraction) applicable to for the data set and the problem context, (C) 5. systematically build models using machine learning techniques (e.g., regression, classification, clustering) (C), 6. critically evaluate model performances using predefined criteria, test designs and domain knowledge, (C) 7. Present own realized results, discuss these results with respect to the problem using supporting arguments and recommend follow-up actions, (A,F) 8. Assess research conducted by others in the field of applied data science with respect to objectives, value, success criteria

	and methods, (F) 9. Reflect on their role as data scientists, (E)
Inrichtingsvorm	<ul style="list-style-type: none"> - Lectures and workshops on business understanding, value creation, design science research, predictive modelling and machine learning. - Workshops on professional skills and research skills. - Projects on model building. - Self-study.
General description	<p>In this first unit, you will get acquainted with all aspects of the machine learning pipeline. Starting out at problem definition, you will investigate how a business problem can be translated into a data science objective and adequate performance metric. You will learn how to import and prepare data suited to the relevant models. You will learn the difference between different types of tasks such as regression, classification, and clustering, and get familiar with a diverse set of models to deal with these tasks. Finally, you will learn to evaluate your results based on a performance metric and over-, and underfitting. In the research skills line, you work towards obtaining a critical stance towards research endeavors. The paradigm of design science research is discussed as a way to think about research in applied data science contexts. In these sessions, you learn how to motivate the value of your research. During the practical exercise sessions, you get to work on the same datasets discussed during the research skills. In these lectures, you will get hands-on experience with implementing data science techniques aimed towards solving real-life problems</p>
Course entry requirements	-
Eigen leerweg mogelijk	Nee

WRITTEN EXAM PREMOD04	
Dutch name	Written Exam Predictive Modelling
English name	Written Exam Predictive Modelling
Osiris code	TOETS-01

Omvat de leeruitkomst(en)	<p>4. apply preprocessing methods (e.g. data cleaning & normalization, feature selection, feature extraction) appropriate for the data set and the problem context, (C)</p> <p>5. systematically build models using machine learning techniques (e.g., regression, classification, clustering),</p> <p>6. critically evaluate model performances using predefined criteria, test designs and domain knowledge, (C)</p>
Assessment criteria	<ul style="list-style-type: none"> • The student identifies, selects, motivates and evaluates the type and task of machine learning in a given case description (5). • The student identifies and explains key challenges of a machine learning application in a given case description and proposes a motivated approach to address or mitigate these challenges (4,6). • The student explains the different aspects of a machine learning pipeline, and evaluates them in a given case description (4,5,6). • The student explains classification methods and performance metrics and evaluates them in a given case description (5,6). • The student explains overfitting, underfitting, and learning curves, and analyses them in a given case description (6). • The student explains performance criteria (such as cost functions and likelihood-based functions), and identifies, analyses, selects and evaluates them in a given machine learning scenario (6). • The student explains properties of machine learning models and advices on their application in a given case description (5,6). • The student explains principles and properties of dimensionality reduction methods such as PCA, and selects and justifies their application in a given case description (4,5,6). • The student explains principles and properties of clustering and unsupervised learning methods, evaluates the application of these methods in a given case description (4,5,6).
Exam and modular exam format(s)	KENN

Exam or modular exam moment	P2A, P3A, P4A, P5A
Permitted resources	Lined paper, graph paper, scrap paper
Weight factor of modular exam	50%
Exam type	Written open questions and multiple choice
Minimum result	5.5
<u>Exam opportunities</u>	<u>2</u> <Only add this row if the number of exam opportunities deviates from the number specified in section 8.5 >
Minimaal oordeel (deel)tentamen	Minimal to pass: 5.5; minimal possible grade: 1.0; maximal possible grade: 10.0
Compensation options	-
Minimum result for course	5.5

EXAMINATIONS PREMOD04	
Dutch name [exam or modular exam]	Portfolio Predictive Modelling
English name [exam or modular exam]	Portfolio Predictive Modelling
Osiris code [exam or modular exam]	TOETS-02
Omvat de leeruitkomst(en)	<p>The student is able to:</p> <ol style="list-style-type: none"> 1. translate a business problem into a research objective in the context of predictive models in collaboration with a group of peers; (A) 2. determine realistic objectives, success criteria and clear project requirements (e.g. using the machine learning canvas); (A,E,F) 3. apply preprocessing methods relevant for the data set and the problem context; (C) 4. systematically build machine learning models aimed towards solving the problem at hand; (C) 5. critically evaluate model performances using pre-defined

	<p>criteria, test designs and domain knowledge; (C)</p> <p>6. assesses the value of their work in relation to the initial problem and existing solutions (C)</p> <p>7. Present own realized results, discuss these results with respect to the problem using supporting arguments and recommend follow-up actions; (A,F)</p> <p>8. Assess research conducted by others in the field of applied data science with respect to objectives, value, success criteria and methods; (F)</p> <p>9. Reflect on their role as data scientists. (E)</p>
Assessment criteria	<ul style="list-style-type: none"> • The student analyses the broader context of the business problem and describes the relevance of the problem (1) <p>The student translates a business problem into a data science problem, naming objectives and challenges (1).</p> <ul style="list-style-type: none"> • The student identifies a primary performance metric used to train and evaluate models and relates this to stakeholder value (2) • The student creates a design science template outlining the problem, solution and requirements (2) • The student relates a data science problem to specific data requirements and assesses the available data in this context (3). • The student applies data processing techniques suitable to the proposed machine learning models (3) • The student trains (a) machine learning model(s) suitable for the task at hand (4) • The student evaluates the trained model(s) on over-, and underfitting (5) • The student evaluates the model performance using predefined performance metrics and other requirements and criteria (5) • The student identifies strong and weak aspects of their solution and implements some possible improvements (5) • The student presents the main conclusions from their models (6)

	<ul style="list-style-type: none"> • The student evaluates the results of their models and relates these back to stakeholder value (6) • The student presents their main methods and findings in a way that is appropriate for the target audience (7). • The student answers questions by peers, stakeholders and the general public correctly and in detail (7) • The student actively participates in presentations and peer feedback sessions (8) • The student reflects on their progression as a data scientist in this project by comparing different iterations of their ML canvas (9) • The student proposes suitable methods for improving on their weak points (9).
Exam and modular exam format(s)	PORT
Exam or modular exam moment	JAARA
Permitted resources	-
Weight factor of modular exam	50%
Exam type	Portfolio report/product evaluation, presentation
Minimum result	5.5
Exam opportunities	2 <Only add this row if the number of exam opportunities deviates from the number specified in section 8.5 >
Minimaal oordeel (deel)tentamen	Minimum to pass: 5.5; Minimum possible grade: 1.0; Maximum possible grade: 10.0
Compensation options	-
Minimum result for course	5.5

ONDERWIJSAANBOD PREMOD04	
Term	P1A+P2A, P3A+P4A
Mandatory participation onderwijs	-
Maximum /minimum number of	Min. 15, Max. 32

participants	
Language, if not Dutch	The educational arsenal of this course is offered in English
Onderwijsaanbod	<p>The data science for this course is centered around predictive modelling. Since this is the first semester of the degree, the students will learn how to set up a data science project from scratch starting from a business problem, how to train and improve a machine learning model and how to evaluate their model on predefined metrics. Several common machine learning methods are introduced. At the end of this unit of study, the student understands all parts of a typical machine learning pipeline in an applied context and can implement such a pipeline using simple models.</p> <p>The research skills part for this course is focused on design science. The concepts of design science are introduced and the students will read and discuss the strong and weak points of several papers.</p> <p>The activities for this unit of study can be summarized as follows:</p> <ul style="list-style-type: none"> - Theoretical lectures on data science material - Theoretical lectures on design science - In-depth coding exercises where theoretical concepts are applied - Presenting your work to peers - Writing a report using the design science methodology <p>This first unit of study introduces many key concepts in applied data science and design science necessary for subsequent units of study.</p>
Choices (in Osiris: working formats)	
Required literature	<p>Géron, A. (2025). Hands-On Machine Learning with Scikit-Learn and PyTorch. O'Reilly Media. ISBN 9798341607989</p> <p>Wieringa, R.J. (2014) Design Science Methodology for Information Systems and Software Engineering (1st edition). Springer. ISBN: 978-3-662-43838-1 (paperback version from 2016 is also fine)</p>
Required software / required materials	-

Course description of the MERGED Educational Programme Units of Study and Units of Learning Outcomes 2026-2027

GENERAL DESCRIPTION	
Naam module long Dutch	Data Exploration
Naam module long English	Data Exploration
Naam module short Dutch	Data Exploration
Naam module short English	Data Exploration
Code course Osiris	DATEXP04
Number of credits	15
Study load in hours	420
Learning outcome(s) module	<p>The student is able to:</p> <ol style="list-style-type: none"> 1. translate (business) problems into data science problems with a group of peers in context of data exploration, (A,E) 2. critically analyse the problem in dialogue with the problem owner to determine realistic objectives, success criteria and clear project requirements, (A,E) 3. determine the relevance and suitability of available data sources or subsets of available data sources to solving a given data science or research problem, (C) 4. apply methods of exploratory data analysis (including visualisation, regression and clustering techniques) to determine data properties and data quality and evaluate functional relations, (B,C) 5. critically analyse data using relevant machine learning techniques and relate findings to conclusions from exploratory data analysis, (B,C) 6. present results of data science projects using storytelling and visualisation techniques and relevant arguments attuned to a specified target audience such as fellow data scientists and problem owners, (E,F)

	<p>7. methodically develop test designs suited for the respective data science problems and apply these for evaluation, (C,F)</p> <p>8. present and discuss results with respect to the research problems, the stakeholder and the (scientific) literature, with supporting arguments and recommend follow-up actions, (E,F)</p> <p>9. reflect critically on their accomplished work and role as data scientist in a reflection report, (E)</p>
Inrichtingsvorm	<ul style="list-style-type: none"> - Lectures and workshops on statistics, data exploration, data semantics and data management. - Workshops on business understanding and research skills. - Project for a company. - Self-study
General description	<p>During this course, you will learn about methods of data exploration like visualization, distributions, statistical tests, correlation, outliers, missing values, etc. Furthermore, you will learn to work with textual data and covers topics like fairness, data semantics and data management. During the research lessons you will focus on practical topics like preparing stakeholder interviews, literature reviews, writing and research methodology. Simultaneously, you will execute a research project for a company or research group and report your process and findings.</p>
Course entry requirements	-
Eigen leerweg mogelijk	no

WRITTEN EXAM DATEXP04	
Dutch name	Written Exam Data Exploration
English name	Written Exam Data Exploration
Osiris code	TOETS-01
Omvat de leeruitkomst(en)	<p>3. determine the relevance and suitability of available data sources or subsets of available data sources to solving a given data science or research problem.</p> <p>4. apply methods of exploratory data analysis (including visualization, regression and clustering techniques) to</p>

	<p>determine data properties and data quality and evaluate functional relations, (B,C)</p> <p>5. critically analyse data using relevant machine learning techniques and relate findings to conclusions from exploratory data analysis, (B,C)</p> <p>6. present results of data science projects using storytelling and visualization techniques and relevant arguments attuned to a specified target audience such as fellow data scientists and problem owners, (E,F)</p>
Assessment criteria	<ul style="list-style-type: none"> • The student evaluates and discusses a given case on data fairness (3) • The student identifies and discusses aspects of data semantics and data quality (3) • The student identifies and discusses outliers and missing values (4). • The student identifies and explains various probability distributions underlying a given dataset (4). • The student understands and advises on suitable techniques to prepare textual data in a machine learning pipeline and textual model evaluation methods(4). • The student understands and advises on suitable techniques to prepare timeseries data in a machine learning pipeline (4) • The student uses relevant hypothesis testing techniques and evaluates them according to statistical tests and correlation metrics (5). • The student explains quality related attributes of specific pipelines (5). • The student explains and applies Bayesian modelling (5). • The student evaluates given visualizations on technical aspects (6) • The student identifies and describes what story a given visualization conveys (6) • The student evaluates the suitability of a given visualization for conveying information to a specific audience (6)

Exam and modular exam format(s)	KENN
Exam or modular exam moment	<u>P2A, P3A, P4A, P5A</u>
Permitted resources	Lined paper, Graph paper, Scrap paper.
Weight factor of modular exam	50%
Exam type	Written open questions and multiple choice questions
Minimum result	5,5
<u>Exam opportunities</u>	2 <u><Only add this row if the number of exam opportunities deviates from the number specified in section 8.5 ></u>
Minimaal oordeel (deel)tentamen	Minimum to pass: 5.5; Minimum possible grade: 1.0; Maximum 10.0
Compensation options	-
Minimum result for course	5,5

PORTFOLIO DATEXP04	
Dutch name	Portfolio Data Exploration
English name	Portfolio Data Exploration
Osiris code [exam or modular exam]	TOETS-02
Omvat de leeruitkomst(en)	1, 2, 3, 4, 5, 6, 7, 8, 9
Assessment criteria	<ul style="list-style-type: none"> • The student translates a business problem into a data science problem in collaboration with a group of peers (1). • The student identifies specific data requirements relevant to a business problem (1). • The student describes the relevance of the problem in a broad context (2). • The student defines clear and quantifiable success criteria (2). • The student formulates clear and unambiguous research question(s) or research objective(s) (2). • The student evaluates the suitability of a dataset in relation to a

	<p>research or business problem (3)</p> <ul style="list-style-type: none"> • The student discusses data relevance and possible ethical and fairness concerns with the stakeholder (3) • The student applies suitable visualisation tools to determine data properties relevant to the problem at hand (4) • The student applies suitable exploratory data analysis tools to assess structural relations within the data (4) • The student critically discusses results of the data exploration and relates them to artefact design and methodology (4). • The student creates a machine learning pipeline motivated by their exploratory data findings (5) • The student explains and motivates methodological choices (5). • The student concisely presents main findings and supports them by visualizations (6). • The student participates in regular stakeholder meetings on problem identification, solution iteration and conclusions (6) • The student lists (issues with) the quality of the data and relates them to artefact design and methodology (7). • The student analyses their conclusions methodically and evaluates their results using a predefined performance metric (7) • The students connects the main notions of the problem and its context in a theoretical framework (8). • The student lists and discusses relevant references to the literature (8). • The student coherently and professionally reports their findings and relates these to the research questions (8). • The student actively engages in discussions on their work and conclusions and discusses follow-up actions (8) • The student reflects on their work (9). • The student reflects on their possibly changing views on data science (9). • The student evaluates their developments in data science and plans actions for further development (9).
Exam and modular exam format(s)	PORT

Exam or modular exam moment	<u>JAARA</u>
Permitted resources	-
Weight factor of modular exam	50%
Exam type	Portfolio report/product evaluation, presentation
Minimum result	5,5
<u>Exam opportunities</u>	2 <u><Only add this row if the number of exam opportunities deviates from the number specified in section 8.5 ></u>
Minimaal oordeel (deel)tentamen	Minimum to pass: 5.5; Minimum possible grade: 1.0; Maximum possible grade: 10.0
Compensation options	-
Minimum result for course	5,5

ONDERWIJSAANBOD DATEXP04	
Term	P1A+P2A, P3A+P4A
Mandatory participation onderwijs	
Maximum /minimum number of participants	Min. 15, Max. 32
Language, if not Dutch	The educational arsenal of this course is offered in English
Onderwijsaanbod	<p>The data science for this course is centered around data exploration and visualization. The students will learn how to perform tasks focused on exploratory data analysis such as outlier detection and statistical analyses. The students will learn several key aspects regarding data visualization.</p> <p>The research skills part for this course is focused on design science. The student uses the concepts from design science in a real-life project in collaboration with a company to identify a business problem and design and implement a solution (artefact).</p> <p>The activities for this unit of study can be summarized as follows:</p> <ul style="list-style-type: none"> - Theoretical lectures on data science material

	<ul style="list-style-type: none"> - Theoretical lectures on design science - Regular meetings with problem stakeholders - Group project work including coding - Presenting your work to peers and stakeholders - Writing a report using the design science methodology <p>This second unit of study introduces many key concepts in statistics and data exploration necessary for subsequent units of study.</p>
Choices (in Osiris: working formats)	??
Required literature	<p>van Gils, B. (2020). Data management, a Gentle Introduction (1st edition). Van Haren Publishing. Wieringa, R.J. (2014)</p> <p>Design Science Methodology for Information Systems and Software Engineering (1st edition). Springer. (paperback version from 2016 is also fine)</p> <p>Other literature will be made available through Brightspace</p>
Required software / required materials	-

Course description of the MERGED Educational Programme Units of Study and Units of Learning Outcomes 2026-2027

GENERAL DESCRIPTION	
Naam module long Dutch	Deep Learning and Deployment
Naam module long English	Deep Learning and Deployment
Naam module short Dutch	Deep Learning and Deployment
Naam module short English	Deep Learning and Deployment
Code course Osiris	DLDEPL02
Number of credits	10
Study load in hours	280
Learning outcome(s) module	<p>The student is able to:</p> <ol style="list-style-type: none"> 1. systematically and individually translate a business problem into a data science problem in the context of deep learning and deployment (A) 2. identify specific model requirements in context of model deployment (A,D) 3. systematically build deep learning models (C) 4. critically evaluates deep learning models using performance metrics relevant to the problem at hand (C, F) 5. critically reflect on the possible implications of their solution in terms of data privacy and ethics. (D,E) 6. Iterate and improve on their data science solution in order to deal with privacy and ethics concerns (C) 7. create and assess a deployment architecture suitable for a specific data science solution (D) 8. critically evaluate model performance and evolution after deployment (A, D) 9. translate their result into possible impact and implications on

	<p>stakeholder value (E)</p> <p>10. advise on strategic implications of their data science solution in business processes (E,F)</p>
Inrichtingsvorm	<p>- Lectures, assignments and workshops on business understanding, deep learning, deployment and data privacy/ethics.</p> <p>- Hackathon.</p> <p>- Self-study.</p>
General description	<p>Various topics in deep learning will be discussed, including various types of neural networks (including RNN, CNN, GNN), hypertuning, encoders and transformers. Furthermore, you will learn about practical aspects such as model complexity and efficiency, integration in the current workflow and integration with other models. You will work with application containers for model deployment and APIs. Finally, you will learn how to test and re-evaluate solutions in order to maintain an optimal model and deal with aspects such as model drift. In the professional skills line, you will be introduced to the ethical and privacy considerations involved in data science projects and you will learn to analyse projects on these aspects in practice.</p>
Course entry requirements	<p>Passed the course Predictive Modelling (PREMOD01, PREMOD02, PREMOD03 or PREMOD04)</p>
Eigen leerweg mogelijk	No

WRITTEN EXAM DEEP LEARNING AND DEPLOYMENT	
Dutch name	Written Exam Deep Learning and Deployment
English name	Written Exam Deep Learning and Deployment
Osiris code [exam or modular exam]	TOETS-01
Omvat de leeruitkomst(en)	3, 4, 5, 6, 7, 8,
Assessment criteria	<ul style="list-style-type: none"> The student understands and explains different types of deep learning models (3).

	<ul style="list-style-type: none"> • The student understands and discusses the main challenges in architecture creation for deep learning (3) • The student understands and discusses the main challenges in hypertuning for deep learning (3) • The student selects suitable deep learning models with respect to a given business or research problem (4) • The student identifies possible privacy and ethics concerns with a given deployment pipeline (5) • The student explains and advises on different ways to monitor the training of a deep learning model (6). • The student proposes improvements to a data science solution to deal with privacy and ethics concerns (6) • The student explains and advises on ways of model containerization, including APIs (7). • The student identifies technical problems with given deployment architectures and proposes solutions (7) • The student evaluates and reflects on given methods for continuous evaluation of deployed models (8) • The student discusses and proposes solutions to technical problems identified in a deployed model (8)
Exam and modular exam format(s)	KENN
Exam or modular exam moment	P2A, P3A, P4A, P5A
Permitted resources	Lined paper, Graph paper, Scrap paper
Weight factor of modular exam	100%
Exam type	Written open questions and/or multiple choice questions
Minimum result	5,5
<u>Exam opportunities</u>	<u>2</u> <u><Only add this row if the number of exam opportunities deviates from the number specified in section 8.5 ></u>
Minimaal oordeel (deel)tentamen	Minimum to pass: 5,5; Minimum grade possible: 1,0; Maximum grade possible: 10,0
Compensation options	-

Minimum result for course	5,5

PORTFOLIO DEEP LEARNING AND DEPLOYMENT	
Dutch name	Portfolio Deep Learning and Deployment
English name	Portfolio Deep Learning and Deployment
Osiris code	TOETS-02
Omvat de leeruitkomst(en)	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
Assessment criteria	<ul style="list-style-type: none"> • The student evaluates a (business or research) problem in terms of risks and contingencies, cost-benefit, data privacy and ethics (1) • The student correctly identifies data science requirements in a specific business case and relates these requirements to model deployment (2) • The student identifies a primary performance metric suitable for deep learning motivated by the business or research problem (2) • The student creates a pipeline architecture tailored to the business or research problem including several (un)supervised deep learning models (3). • The student correctly applies preprocessing and hypertuning techniques and suited to for their deep learning in their pipeline (3) • The student evaluates model performance using suitable performance metrics for deep learning and analyses the result with respect to stakeholder value (4) • The student identifies possible data privacy and ethics concerns with their deep learning pipeline (5) • The student proposes appropriate solutions to deal with privacy and ethics concerns of given cases (6) • The student creates different ways to monitor the training of a deep learning model suitable to the specific models and the problem at hand (7). • The student monitors performance of their ML pipeline using appropriate tools (8) • The student proposes suitable updates to their models based on

	<p>monitoring results (8)</p> <ul style="list-style-type: none"> • The student evaluates their pipeline using suitable performance metrics to deep learning (9) • The student relates their model performance to stakeholder value (9) • The student evaluates the workings of their pipeline in the business context and advises on integration (10)
Exam and modular exam format(s)	PORT
Exam or modular exam moment	JAARA
Permitted resources	-
Weight factor of modular exam	Pass/Fail
Exam type	Portfolio product
Minimum result	Pass
<u>Exam opportunities</u>	<p><u>2</u></p> <p><u><Only add this row if the number of exam opportunities deviates from the number specified in section 8.5 ></u></p>
Minimaal oordeel (deel)tentamen	Pass
Compensation options	-
Minimum result for course	Pass

ONDERWIJSAANBOD DEEP LEARNING AND DEPLOYMENT	
Term	P1A+P2A, P3A+P4A
Mandatory participation onderwijs	-
Maximum /minimum number of participants	Min. 15, Max. 32
Language, if not Dutch	The educational arsenal of this course is offered in English
Onderwijsaanbod	This semester focuses on deep learning models and the integration of a machine learning pipeline in a real life context. The students will learn the theoretical background of state-of-the-art deep learning models and deployment methods. The students will apply this in exercises in class and during a

	<p>hackathon with a real-life problem.</p> <p>Another central theme in this unit of study is data privacy and ethics. The students learn several ethical contexts in which to evaluate their actions and models, and the students can motivate their decisions based on different ethical paradigms. The activities for this unit of study can be summarized as follows:</p> <ul style="list-style-type: none"> - Theoretical lectures on data science material - Theoretical lectures on data privacy and ethics - In-depth coding exercises where theoretical concepts are applied - Presenting your work to peers - A hackathon on a real-life problem in collaboration with a company <p>In this third semester, the students will learn about state-of-the-art machine learning models, deployment of these models in a real-life environment and privacy and ethics concerns. This semester prepares the students for data science in practice and for the final semester of the degree.</p>
Choices (in Osiris: working formats)	
Required literature	<p>Prince, Simon J.D. (2023) Understanding Deep Learning (1 st edition). The MIT Press.</p> <p>Other literature will be made available through Brightspace.</p>
Required software / required materials	-

Course description of the MERGED Educational Programme Units of Study and Units of Learning Outcomes 2026-2027

GENERAL DESCRIPTION	
Naam module long Dutch	Graduation Project
Naam module long English	Graduation Project
Naam module short Dutch	Graduation Project
Naam module short English	Graduation Project
Code course Osiris	GRAPRO03
Number of credits	20
Study load in hours	560
Learning outcome(s) module	<p>The student is able to:</p> <ol style="list-style-type: none"> 1. systematically and independently translate a (business or research) problem into a fitting data science problem based on literature, previous work and stakeholder input(A, E, F) 2. systematically design a fitting data science solution, (by e.g. determining business and data requirements, success criteria, data sources, deployment requirements) (B,C,D,F) 3. analyse the data and results in a structured way and in relation to the problem and solution (B,C,D) 4. present their findings in a coherent, structured and unambiguous way adapted to the target audience. (E,F) 5. formulate recommendations on deployment and monitoring the proposed solution in a real-world environment. (D,F) 6. review the project and personal development by conducting a project retrospective about what went well, what could have been better, and how to improve in the future. (E,F)

	7. critically discuss the accomplished work by reflecting on realized results with respect to the problem and recommending follow-up actions. (E,F)
Inrichtingsvorm	- Supervision. - Self-study.
General description	In the graduation project you individually conduct research on a project at your company or within a project at the HAN or other company. You will translate a real-life (business) problem into a data science research project. You will work on the full data science pipeline, including cleaning and preprocessing data, training, evaluating and revising models, deploying your results and communicating to the stakeholders.
Course entry requirements	- Passed Predictive Modelling (PREMOD01, PREMOD02, PREMOD03 or PREMOD04) - Passed Portfolio Data Exploration
Eigen leerweg mogelijk	-

PROJECT PROPOSAL GRADUATION PROJECT	
Dutch name [exam or modular exam]	Project Proposal
English name [exam or modular exam]	Project Proposal
Osiris code [exam or modular exam]	TOETS-01
Omvat de leeruitkomst(en)	1,2,3,4
Assessment criteria	<ul style="list-style-type: none"> • The student analyses a business problem in detail in the business context and convincingly describes the relevance of the problem and the value of the proposed solution (1). • The student translates a business problem into a fitting data science problem (1) • The student evaluates relevant literature on current relevant methods and approaches to their problem and solution (1,2) • The formulation of the data science problem is motivated by

	<p>requirements from stakeholder conversations and literature (1)</p> <ul style="list-style-type: none"> • The student formulates clear and unambiguous research question(s) or research objective(s) (1). • The student identifies the broad business context to the business problem in communication with the stakeholders (1) • The student evaluates relevant data sources, objectives, challenges and possible ethical and privacy issues and proposes suitable solutions and mitigations (2). • The student defines clear and quantifiable success criteria and/or performance metrics (2) • The provided data is explained concisely and provides necessary insights into the size and characteristics of the problem (3). • The student explains and motivates methodological choices (2,3). • The student presents their project proposal coherently and professionally to the various stakeholders(4). • The student engages in active discussion and feedback sessions regarding their proposal (4).
Exam and modular exam format(s)	<u>PROD</u>
Exam or modular exam moment	JAAR
Permitted resources	-
Weight factor of modular exam	40%
Exam type	Project Proposal
Minimum result	5,5
<u>Exam opportunities</u>	<u>2</u> <Only add this row if the number of exam opportunities deviates from the number specified in section 8.5 >
Minimaal oordeel (deel)tentamen	<u>Minimum grade to pass: 5,5; Minimum grade possible: 1,0;</u> <u>Maximum grade: 10,0</u>
Compensation options	-
Minimum result for course	5,5

GRADUATION PROJECT	
Dutch name [exam or modular exam]	Portfolio
English name [exam or modular exam]	Portfolio
Osiris code [exam or modular exam]	TOETS-02
Omvat de leeruitkomst(en)	1,2,3,4,5, 6, 7, 8, 9, 10, 11
Assessment criteria	<ul style="list-style-type: none"> • The student translates a business problem into a data science problem, discussing objectives, challenges and possible ethical and privacy issues (1). • The student identifies the broad business context to the business problem in communication with the stakeholders and identifies the role of their own project in this context (2) • The student provides stakeholders with data insights obtained from exploratory data analysis (2) • The student obtains, discusses and applies feedback from stakeholders to their problem (2) • The student analyses a business problem in detail and convincingly describes the value that their project contributes and achieved in this context (2). • The student evaluates relevant literature on current relevant methods in relation to their project and evaluates their contributions in this context (3) • The students connects the main notions of the problem and its context in a theoretical framework (3). • The student evaluates prior work related to their solution (3) • The student defines clear and quantifiable success criteria and/or performance metrics motivated from the business problem (4) • The provided data is explained concisely (6). • The data is prepared, analysed, interpreted and evaluated

in a structured way (6).

- The student discuss (issues with) the quality of the data and relates them to artefact design and methodology (6).
- The student explains and motivates methodological choices (4).
- The student designs and implements a data processing pipeline to solve the problem at hand (5)
- The student designs and implements a data analysis and/or model training pipeline to solve the problem at hand (5)
- The student evaluates the data solution performance using their primary performance metric (7)
- The student positions their results in the domain context and evaluates the value of their solution (7)
- The student concisely presents main findings (data exploration and/or model evaluations) and supports them by visualizations (8).
- The student designs a deployment architecture for their solution specific to the business context (9)
- The student deploys their solution in the business context if relevant (9)
- The student gives advice on data analytics or data science solutions (10).
- The student advises on the deployment (monitoring, maintenance) of the proposed solution (10)
- The student critically discusses results and relates them to artefact design and methodology (10).
- The student coherently and professionally reports about the findings and relates these to the research questions (13).
- The student presents their methodologies and main findings in a structured report (12)
- The student engages in active discussion and evaluation on their results and findings with the main stakeholders (12)

	<ul style="list-style-type: none"> • The student identifies and discusses strong and weak points in their work on the project (11) • The student relates their strong and weak points to improvements and actions in the future (11) • The student reflects on their work (14). • The student evaluates their developments in data science and plans actions for further development (14).
Exam and modular exam format(s)	<u>PROD</u>
Exam or modular exam moment	JAAR
Permitted resources	-
Weight factor of modular exam	60%
Exam type	Project Proposal
Minimum result	5,5
<u>Exam opportunities</u>	<u>2</u> <Only add this row if the number of exam opportunities deviates from the number specified in section 8.5 >
Minimaal oordeel (deel)tentamen	<u>Minimum grade to pass: 5,5; Minimum grade possible: 1,0;</u> <u>Maximum grade possible: 10,0</u>
Compensation options	-
Minimum result for course	5,5

ONDERWIJSAANBOD GRADUATION PROJECT	
Term	P1A+P2A, P3A+P4A
Mandatory participation onderwijs	-
Maximum /minimum number of participants	Min. 15, Max. 32
Language, if not Dutch	The educational arsenal of this course is offered in English
Onderwijsaanbod	In this final semester, the students work on their own graduation projects. In these projects, the students independently tackle a real-life business problem using the data science methodologies they have learned during the degree.

	<p>Activities can be summarized as:</p> <ul style="list-style-type: none">- Regular discussions with stakeholders and- Designing a research project, formulating research questions- Performing a literature review on relevant topics- Implementing and deploying a data science pipeline/solution- Presenting their work- Writing a thesis- Engaging in active discussion <p>This final semester serves as the crowning achievement for students to show that they have mastered all things necessary to be a data scientist in an applied context.</p>
Choices (in Osiris: working formats)	
Required literature	-
Required software / required materials	-