HAN_UNIVERSITY
OF APPLIED SCIENCES

Course Descriptions for the Language and Prep Program, university of applied sciences Nature, Technology and Health profile

Contents

1. Introduction

The Language and Prep Program (LPP) offers all courses that meet the legally established exit qualifications of the Education Pathway within the Nature, Technology and Health profile for universities of applied sciences. The exit qualifications for the profile are presented in the appendix at the end of this document.

Are you transferring to Radboud University in your second year? Your participation will then fall under the Education and Examination Regulations (EER) of the Radboud University LPP, where different exit qualifications apply.

The structure of the LPP is described in the main text of the EER. This document provides a description of all courses taught in the LPP, including the number of contact hours and information on the exams and assessment. The description of each course also includes a reference to the exit qualifications that the participant works toward.

The LPP consists of basic courses and specific courses. Basic courses are compulsory courses. All participants must take these. They are:

- Dutch as a Second Language, from A0 to B1;
- Dutch as a Second Language, from B1 to B2;
- Knowledge of Dutch Society;
- English B1 or B2 (B2 is compulsory only if the participant wishes to do an English-taught program;
- Study skills;
- Education and Career Orientation;
- Mathematics A, in preparation for a degree program in the domain of social studies or economics, or Mathematics B, in preparation for a science-based program such as Mechanical Engineering, Civil Engineering or Life Sciences.

Have you passed the exam for the B1 English course and want to study a Dutch-taught program? Then you may take English B2 after that, but it is not compulsory.

Do you already have level English B2 or higher, with which you are already admissible to an English-taught program at a university of applied sciences (see Admission Requirements | International Students | HAN University of Applied Sciences)? Then you may apply for exemption for the English B1 and English B2 courses.

The specific courses are elective courses. You choose those only if you need them for your further studies. The specific courses are:

- Biology
- Physics
- Chemistry

The Mathematics A course and the specific courses of Biology, Physics and Chemistry are largely taught online. These classes are taught by our external educational partner WisMon. All other courses are taught in person on the HAN campus.
Each course is described below.

2. Basic courses

2.1 Dutch as a Second Language, from A0 to B1

Number of contact hours: **364 hours**
Study load: **900 hours (including contact hours)**
Period in the LPP: **Part 1**
Required attendance: **80% or higher**

Goal
This basic course is aimed at achieving a B1 level in the Dutch language. The participant needs to pass this course as a condition for transferring to Part 2 of the LPP.

Contents
In this basic course, you work toward achieving a Dutch language level of B1 according to the Common European Framework Reference of Languages (CEFR), see https://www.coe.int/en/web/common-european-framework-reference-languages). Classes cover the four skills of speaking, reading, listening and writing. Grammar, vocabulary and pronunciation are also covered. The course consists of two blocks:

- Block 1: from A0 to A2, 190 contact hours over 20 weeks of classes
- Block 2: from A2 to B1, 188 contact hours over 20 weeks of classes

Required prior knowledge
No prior knowledge required for Block 1.
The required prior knowledge for Block 2 is Dutch language level A2.

Exit qualifications
Reading, speaking, listening and writing skills in Dutch at CEFR level B1.

Learning method
Classes, group assignments, test days and excursions. Self-study is an important part of this course. Every week the participant should spend around 10 hours working on assignments and preparing for classes.

Course book
Cornax, A., De Groot, F., Mennen, S., Van Sluijs, A. (2020). *Contact! – nieuw* 1, 2 and 3 (1st edition).

Assessment

- Exams (multiple-choice and open-ended questions) at Dutch A2 level in reading, writing, speaking and listening, with one retake for each part. The participant must pass all parts.
- Exams (multiple-choice and open-ended questions) at Dutch B1 level in reading, writing, speaking and listening, with one retake for each part. The participant must pass all parts.

2.2 Dutch as a Second Language, from B1 to B2

Number of contact hours: **300 hours**
Study load: **600 hours (including contact hours) Period in the LPP:** **Part 2**
Required attendance: **80% or higher**

Goal
This basic course is aimed at passing the State Exam for Dutch as a Second Language, Program II. The participant attains at least CEFR level B2 in Dutch. This is the required admission level for a degree program or work situation at university or university of applied sciences level.

Contents
In this basic course, you continue to work on improving your Dutch in the four skills: reading, writing, listening and speaking. Grammar and vocabulary are also covered. The classes also focus on study skills. For example, a speaking exercise will be combined with debating skills; a listening exercise will be combined with listening to an explanation of instructions; the participant needs to be able to read and understand arguments; and during the writing exercises the participant will practice writing notes.
In addition, there is a block of exam training, which prepares the participant to take the State Exam for Dutch as a Second Language, Program II.

Required prior knowledge
Dutch level B1 in the four parts (reading, writing, speaking, listening).

Exit qualifications
Reading, speaking, listening and writing skills in Dutch at CEFR level B2.

Learning method
Classes plus project work. Self-study is an important part of this basic course. Every week the participant should spend around 10 hours working on assignments and preparing for classes.

Course book
De Boer, B., Ohlsen, R. (2015). *Nederlands op niveau* (2nd edition). Uitgeverij Coutinho.

Assessment
State Exam for Dutch as a Second Language, Program II The State Exam for Dutch as a Second Language is not administered by the educational institution, but by DUO. During the State Exam Training, the participant registers with DUO for the next opportunity to take the exam. The participant does so in consultation and with permission from the Dutch teacher.
The State Exam consists of four components: reading, listening, writing and speaking. Each component can be taken a maximum of three times per calendar year. If the participant passes all four components, they receive the diploma for the State Exam for Dutch as a Second Language, Program II.
There is no limit to the number of retakes you can do. Is the government paying for your Language and Prep Program? Then only the first two opportunities are reimbursed by the government.

2.3 Knowledge of Dutch Society

Number of contact hours:	**acquired during Dutch courses**
Study load:	**12 hours of self-study**
Period in the LPP:	**Part 1 & 2**
Required attendance:	**80% or higher**

Goal
The purpose of this basic course is to provide the participant with sufficient tools and knowledge to prepare for Knowledge of Dutch Society, a mandatory part of the integration exam.

Contents
In this course you will learn about some important aspects of Dutch society.
The classes will cover the following themes:
- work and income;
- interactions, values and norms;
- housing;
- health and health care;
- history and geography;
- politics and law;
- education and upbringing.

You will receive various sources of information, including Knowledge of Dutch Society practice exams. You are expected to do a lot of self-study and to practice the Knowledge of Dutch Society practice exams yourself.

Required prior knowledge
Dutch at A2 level

Exit qualifications
For a detailed description of the exit qualifications, see the Dutch Civic Integration Regulations 2021 (*Regeling Inburgering 2021*), Appendix 2 'Exit qualifications for knowledge of Dutch Society within the meaning of article 3.2': https://wetten.overheid.nl/BWBR0045574/2022-01-01#Bijlage2 (in Dutch)

Learning method
Topics from Knowledge of Dutch Society will be covered during Dutch classes and excursions. Self-study using sample exams is an important part of this course. The DUO website has sample exams to practice with.

Assessment
State Exam for Knowledge of Dutch Society. The Knowledge of Dutch Society exam is not administered by the educational institution, but by DUO. The participant must register for this exam on the DUO website. There is no limit to the number of retakes you can do. Is the government paying for your Language and Prep Program? Then only the first two opportunities are reimbursed by the government.

2.4 English at CEFR level B1

Number of contact hours:	**52 hours (+ optional support classes 4 hours)**
Study load:	**104 hours (+ optional support classes 8 hours) (including contact hours)**
Period in the LPP:	**Part 2 semester 1**
Required attendance:	**80% or higher**

Goal
This basic course is aimed at passing the English B1 exam for the skills of reading and listening. The goal is to reach level B1 in English, which is required for a Dutch-taught degree program and/or work situation at university of applied sciences level.

Contents
In this basic course, you work on attaining the CEFR level B1 in English. Attention is given to the four skills of speaking, reading, listening and writing, with an emphasis on reading and listening. Grammar, vocabulary and pronunciation are also covered.

Required prior knowledge
English at A2 level, as demonstrated through an intake test for listening and reading. This is administered to the participant during LPP the intake process.

Exit qualifications
Skills in reading and listening at CEFR level B1.

Learning method
Classes, with frequent group assignments and interactive exercises. Every week the participant should spend around four hours working on assignments and preparing for classes.

Course book
Doff, A., Thaine, C. (2022) *Empower Pre-intermediate/B1 Student's Book with Digital Pack*, 2nd Edition. Cambridge University Press.

Assessment
English B1 listening and reading exam on paper (multiple-choice and fill-in-the-blank questions) with one retake. The exam consists of two components: listening and reading. You have passed the course if you scored an average of 5.5 or higher for the exam and did not score lower than 5 on any of the components. This exam will take place after the final class of the course. After the first exam, two 2-hour support classes are offered to participants who did not pass the exam and need to retake it. Any component you did not pass you can retake once.

2.5 English at CEFR level B2

Number of contact hours: **52 hours**
Study load: **104 hours (incl. contact hours)**
Period in the LPP: **Part 2 semester 2**
Required attendance: **80% or higher**

Goal
This basic course is aimed at attaining a B2 level on the IELTS exam (reading, listening, speaking and writing). The goal is to master English at B2 level, which is a requirement for an English-language degree program and/or work setting at university of applied sciences level.

Contents
In this basic course, you work on attaining the CEFR level B2 in English. Classes cover the four skills of speaking, reading, listening and writing. Grammar, vocabulary and pronunciation are also covered.

Required prior knowledge
English level B1, demonstrated by an officially recognized diploma or by the HAN LPP English B1 exam.

Exit qualifications
Reading, speaking, listening and writing skills in English at CEFR level B2.

Learning method
Classes, with frequent group assignments, interactive exercises and discussion of homework assignments. About four hours per week should be spent on assignments and preparing for classes.

Course book
McCarter, S. (2017) Ready for IELTS, Second edition Student's Book Pack with Answers. Macmillan Education.

Assessment
IELTS (International English Language Testing System). This is a digital exam with multiple-choice and fill-in-the-blank questions for reading and listening, two writing assignments and a speaking test. To pass, the participant must score at least a 5.5 and not score lower than a 5 for any of the components. This exam will be taken no later than three weeks after the last lesson, at an official IELTS exam location in Gelderland. Fees for the IELTS exam will be paid by HAN provided the English teacher has given you a positive recommendation in writing prior to application for the exam. This recommendation is based on your study attitude and attendance in class. You have a right to one retake.

2.6 Study Skills

Number of contact hours:	**12.5 hours**
Study load:	**20 hours (incl. contact hours)**
Period in the LPP:	**Part 2**
Required attendance:	**80% or higher**

Goal
This basic course aims to prepare the participant as well as possible for a successful transition into a degree program at university of applied sciences level.

Contents
In this course, you work on study attitudes and learning skills that are important for successful study at the university of applied sciences level in the Netherlands. You practice identifying your qualities and points for improvement, giving and receiving feedback and reflecting on your own actions. You also work on projects where you learn to collaborate and give presentations. You are introduced to the Dutch higher educational culture and learn to communicate well with teachers and classmates.

You meet the exit qualifications for Study Skills once you have submitted a portfolio containing documentation that you have met all the exit qualifications. In addition to contact hours in the learning skills course, Dutch classes also focus on learning skills. The following skills with exit qualifications are covered:

I. Social and (inter)cultural skills

A. Have knowledge of Dutch educational culture;
B. Respect different views, expressions and behaviors;
C. Recognize and apply behavioral codes in various social situations;
D. Appropriately interact with others in a variety of roles and contexts;
E. Ability to self-regulate.

Intercultural skills are covered through conversations, discussions and debates in Dutch classes. These skills are also discussed during meetings with the mentor.

II. Independent learning ability and project-based (collaborative) work

A. Information literacy skills: search for and select information, process information, analyze and interpret information, evaluate information, present information and report orally;
B. Independent learning: take responsibility for learning process, (re)set learning objectives, select learning activities, plan, reflect on progress;
C. Collaboration: keep appointments, actively participate in meetings, contribute constructively to the end result, give feedback appropriately, receive feedback appropriately, take initiative;
D. Communication: listen to others' input, contribute to a conversation, meeting or discussion, state wishes, state opinions;
E. Problem-solving ability: recognize/define problem, analyze problem, devise solution(s) to a problem, ask for specific help.

Study Skills classes focus on information literacy skills and independent learning. The participant then works on two projects in the Dutch classes B1 to B2 in which they will apply this knowledge. The two projects test your development of the various exit qualifications for learning skills.

III. Language skills for studying

A. Reading: read instructions, read for study and task-oriented reading, read speeches;
B. Listening: listen to a longer explanation, listen to instructions;
C. Conversations: participate in meetings and discussions in the context of the degree program, participate in informal conversations;
D. Speaking: present, explain or substantiate during a discussion, meeting or conversation;
E. Writing: take notes during an assignment or explanation, make reports;
F. Vocabulary: understand and use general school terminology, understand and use general math terminology, understand and use general terminology for the subject area.

These skills are practiced during all classes. Language-based feedback is particularly given during Dutch classes; task-based feedback during all classes.

IV. Digital skills

A. Work with various digital devices;
B. Master basic digital application skills;
C. Work with commonly used applications in vocational and higher education;
D. Use reliable (online) information;
E. Media literacy: observe safety and privacy when using the Internet, recognize fake news and fraud, recognize media influence.

The participant must work with a laptop from the start of the Language and Prep Program. They use OnderwijsOnline/Brightspace and become familiar with educational applications such as Teams. In Study Skills classes, they learn to use reliable (online) information. The classes also focus on competencies needed to actively, critically and consciously participate in the media society (media literacy). The participant then applies these skills to the two projects.

Required prior knowledge
Level B1 in Dutch

Exit qualifications
For a detailed description of the exit qualifications, see Appendix Exit Qualifications.

Learning method
In addition to the Study Skills classes, you work on group projects. You also work on your study skills when carrying out assignments for Dutch, English, Mathematics A/B and the specific courses, for example, while learning professional jargon. Doing assignments outside of class is an important part of this course.

Assessment

Portfolio At the beginning of the course, you are given an explanation of the portfolio and an overview of what should be included in it. You must achieve the result "satisfactory" for the portfolio.

2.7 Education and Career Orientation

Number of contact hours:	**22 hours (14 hours of classroom instruction, 8 hours of individual supervision)**
Study load:	**50 hours (incl. contact hours)**
Period in the LPP:	**Part 2**
Required attendance:	**80% or higher**

Goal
This basic course aims to help you make a conscious and realistic choice about study and career. You will be guided through the Studielink application process to the definite enrollment in the degree program and the application for student finance.

Contents
Alternate between classroom instruction and individual coaching. During classes, you receive information about the Dutch education system and you will also discover your talents, limitations and wishes and which programs best correspond to that. The course also focuses on finding out about and visiting open days. You attend those open days and register for "student for a day" activities, if possible.
In addition to classes, there are individual meetings with the guidance counselor (the course teacher) to discuss your choices and considerations regarding study. In this way, you get a picture of what you want to study and make a plan B (or C) for your studies.
At the end of the course, the teacher discusses with the whole class the process of enrolling for a degree program through Studielink and applying for student finance.

Required prior knowledge
Level B1 in Dutch

Exit qualifications
- The participant can answer the questions: who am I, what can I do and what do I want?
- The participant has basic knowledge of how university of applied sciences education is structured.
- The participant knows which fields of study are appropriate for them.
- The participant knows at what level they will study (vocational education, university of applied sciences, university).
- The participant has been introduced to their desired field of study by attending at least one open day.
- The participant has attended a "student for a day" activity if possible.
- The participant knows how Studielink works.
- The participant has made an appropriate choice A and B.

Learning method
Classes, individual meetings and visiting open days and possibly "student for a day" activities. Doing assignments outside of class is an important part of this course.

Assessment

Portfolio At the beginning of the course, you are given an explanation of the portfolio and an overview of what should be included in it. You must achieve the result "satisfactory" for the portfolio.

2.8 Mathematics A

Contact hours:	**60 hours**
Study load:	**120 hours (incl. contact hours)**
Period in the LPP:	**Part 2, semester 2 or 3, depending on start date of LPP cohort**
Required attendance:	**80% or higher**

Goal

This basic course is aimed at reaching a HAVO-5 level in Mathematics A, which is required for a degree program and/or work situation at the university of applied sciences level. The course prepares participants to study in the field of social and economic studies at the university of applied sciences level. Programs include Educational Theory, Business Administration, Economics, Law, Management, Logistics, Marketing and other programs requiring knowledge of statistics. This basic course is also accepted for programs in medical sciences, such as Physical Therapy, Nutrition and Health and Applied Biology, for example.

Contents

A range of mathematical skills and applications will be covered. The course has two blocks of classes, which are described below.

Block 1 Basic mathematical skills, functions and graphs

- This block uses the following chapters in *Getal & Ruimte Wiskunde A HAVO*:
  - Volume 1 Chapter 1 Rekenregels en verhoudingen (1.1 to 1.4)
  - Volume 1 Chapter 3 Tabellen en grafieken (3.2 to 3.4)
  - Volume 2 Chapter 5 Lineaire verbanden (5.1 to 5.4)
  - Volume 2 Chapter 7 Veranderingen (7.1 to 7.3)
  - Volume 3 Chapter 11 Formules en variabelen (11.1 to 11.5)
- Topics: arithmetic rules, powers, roots, substitution, linear and quadratic equations, linear and quadratic formulas, linear inequalities, systems of linear equations, formulas and variables and changes.
- At the end of the block, the material is briefly reviewed and participants practice with exam-level assignments in preparation for the exam.
- Exit qualifications: A3, B1, B2, C1, C3, C4, D.
- Number of classes: 10.
- The block concludes with Exam 1 on the material covered in the last lesson of Block 1.

Block 2 Counting and Statistics

- This block uses the following chapters in *Getal & Ruimte Wiskunde A HAVO*:
  - Volume 1 Chapter 2 Verwerken van data (2.1 to 2.4)
  - Volume 1 Chapter 4 Handig tellen (4.1 to 4.4)
  - Volume 2 Chapter 6 Statistiek en beslissingen (6.1 to 6.4)
  - Volume 3 Chapter 9 Exponentiële verbanden (9.1 to 9.5)
  - Volume 3 Chapter 10 Statistische verbanden (10.1 to 10.4)
- Topics: counting and statistics, percentages, exponential functions, smart ways of counting, combinatorics, statistics, normal distribution.
- At the end of the block, the material is briefly reviewed and participants practice with exam-level assignments in preparation for the exam.

- Exit qualifications: A3, B3, C5, E1, E2.
- Number of classes: 10.
- The block concludes with Exam 2 on the material covered in the last lesson of Block 2.

Required prior knowledge
Basic mathematics at HAVO-3 level.
Dutch at level B2.

Exit qualifications
For a detailed description of the exit qualifications, see Appendix Exit Qualifications.

Learning method
Classes are largely online, with a few classes including exams at WisMon's venue in Utrecht.
The participant must count on at least two hours of homework and self-study per week.

Course book
Getal & Ruimte Wiskunde A HAVO, volumes 1 to 3.

Assessment
Exam 1 and Exam 2 (written, open-ended questions). These exams are both 100 minutes long and count toward 50% of the final grade. Both exams can be retaken once. The final grade must be at least a 5.5.

2.9 Mathematics B

Contact hours:	**75 hours**
Study load:	**150 hours (incl. contact hours)**
Period in the LPP:	**Part 2**
Required attendance:	**80% or higher**

Goal

This basic course is aimed at reaching a HAVO-5 level in Mathematics B, which is necessary for a degree program or work situation at a university of applied sciences level. The course prepares you for further study in a science-based program at a university of applied sciences such as ICT, Mechanical Engineering, Civil Engineering or Life Sciences.

Contents

The course content mostly deals with analysis and geometry, while also spending significant time on algebra skills, formula skills, reasoning, algebraization, ordering and structuring, analytical and problem-solving approach, manipulating formulas, abstracting and using logic for reasoning and proof.

Block 1

- Block 1 uses the following chapters from *Getal & Ruimte Wiskunde B HAVO*, volumes 1 and 2:
  - Chapter 1 Formules, grafieken en vergelijkingen (1.1 to 1.4)
  - Chapter 2 Veranderingen (2.1 to 2.5)
  - Chapter 3 Hoeken en afstanden (3.1 to 3.4)
  - Chapter 4 Werken met formules (4.1 to 4.4)
  - Chapter 5 Machten, exponenten en logaritmen (5.1 to 5.4)
- Topics: linear functions, quadratic functions, system equations, changes, diagrams, tangent lines, slope graphs, differentiation, trigonometric functions and similarity, higher degree equations, inequalities, fractional formulas, powers and roots, exponential functions and logarithms.
- At the end of the block, the material is briefly reviewed and participants practice with exam-level assignments in preparation for the exam.
- Exit qualifications: A3, B1, B2, C1, D1.
- Number of classes: 12.
- The block concludes with Exam 1 on the material covered in the last lesson of Block 1.

Block 2

- Block 2 uses the following chapters from *Getal & Ruimte Wiskunde B HAVO*, volumes 2 and 3:
  - Chapter 6 De afgeleide functie (6.1 to 6.3)
  - Chapter 8 Goniometrie (8.1 to 8.5)
  - *Getal & Ruimte Wiskunde B HAVO*, volume 3
  - Chapter 9 Exponentiële verbanden (9.1 to 9.3)
  - Chapter 11 Verbanden en functies (11.2 and 11.3)
- Topics: derivative functions, tangents and tops, unit circle, radians, transformations, application and formulas of sinusoids, trigonometric equations, exponential formulas and logarithms, proportional and inverse proportions and standard functions.

- At the end of the block, the material is briefly reviewed and exam-level questions are practiced in preparation for the exam.
- Exit qualifications: A3, B1, B2, B3, B4, D1, D2, D4.
- Number of classes: 12.
- The block concludes with Exam 2 on the material covered in the last lesson of Block 2.

Required prior knowledge
Basic mathematics, HAVO-3 level.
Dutch at level B1

Exit qualifications
For a detailed description of the exit qualifications, see Appendix Exit Qualifications.

Learning method
Classes of 3 hours. The participant must count on at least two hours of homework and self-study per week.

Course book
Getal & Ruimte Wiskunde HAVO B, 11th edition, volumes 1 to 3.

Assessment
Exam 1 and Exam 2 (written, open-ended questions). These exams are both 100 minutes long and count toward 50% of the final grade. Both exams can be retaken once. The final grade must be at least a 5.5.

3 Specific courses

3.1 Biology

Contact hours:	**60 hours**
Study load:	**120 hours (incl. contact hours)**
Period in the LPP:	**Part 2 semester 2**
Required attendance:	**80% or higher**

Goal

This specific course is aimed at reaching a HAVO-5 level in Biology, which is necessary for a degree program or work situation at a university of applied sciences level. The emphasis is on the human body, with significant focus on the terminology.

Contents

The biology course consists of 20 lessons divided into two blocks:

Block 1

- Topics: cells and heredity (cells, DNA, genetics, reproduction, defense systems, enzymes and energy).
- The block concludes with Exam 1.
- Exit qualifications: A11,14,15, B1, B3, B4, B5, C2, E1, E2, E3, E4.
- Number of classes: 10.
- The block concludes with Exam 1 on the material covered in the last lesson of Block 1.

Block 2

- Topics: the human body (metabolism, nutrition, elimination, transport, gas exchange, observation, movement, regulation).
- The block concludes with Exam 2.
- Exit qualifications: A11,14,15, B2, B3, B4, B6, B7.
- Number of classes: 10.
- The block concludes with Exam 2 on the material covered in the last lesson of Block 2.

Required prior knowledge

Basic biology knowledge, HAVO-3 level.
Dutch at level B2.

Exit qualifications

For a detailed description of the exit qualifications, see Appendix Exit Qualifications.

Learning method

Classes are largely online, with a few classes including exams at WisMon's location in Utrecht.
The participant must count on at least two hours of homework and self-study per week.

Course book

The participant will use the following books from *Biologie voor jou* (Malmberg, 5th edition):

- Leeropdrachtenboek HAVO, volume 4a (ISBN: 9789034574244)
- Leeropdrachtenboek HAVO, volume 4b (ISBN: 9789034574251)

- Leeropdrachtenboek HAVO, volume 5a (ISBN: 9789034574268)
- Leeropdrachtenboek HAVO, volume 5b (ISBN: 9789034574275)

The participant will also use BiNaS (Noordhoff, 6th edition, ISBN: 9789001817497).

Assessment
Exam 1 and Exam 2 (written, open-ended and multiple-choice questions). These exams are both 100 minutes long and count toward 50% of the final grade. Both exams can be retaken once. The final grade must be at least a 5.5.

3.2 Physics

Contact hours: **66 hours**
Study load: **132 hours (incl. contact hours)**
Period in the LPP: **Part 2 semester 2**
Required attendance: **80% or higher**

Goal
This specific course is aimed at reaching a HAVO-5 level in Physics, which is necessary for a degree program or work situation at university of applied sciences level. The course prepares the participant for further study in a science-based university of applied sciences program such as natural sciences, engineering sciences and medical sciences.

Contents
The emphasis is on learning to properly apply various physics-related arithmetic and mathematical skills to specific problems. Terminology and interpreting and producing terminology is also covered in the course, including the phrases for formulas, conventions and notations, quantifying physical quantities and relating mathematical phrases to physical concepts. It consists of two blocks of classes:

- Block 1: using the coursebooks *Newton Basisboek HAVO-4* and *Newton Basisboek HAVO-5*.
  - Volume 4 HAVO, chapters 2, 4, 5 and 6
  - Volume 5 HAVO, chapter 7
  - Elective: *Optics*
  - Topics: general skills, motion, forces, radiation and imaging, waves and vibrations, optics
  - Exit qualifications: A, B1, B2, B3, C1
  - Number of classes: 11
  - The block concludes with Exam 1 on the material covered in the last lesson of Block 1.
- Block 2: using the coursebooks *Newton Basisboek HAVO 4* and *Newton Basisboek HAVO 5*.
  - Volume 4 HAVO, chapters 1 and 3
  - Volume 5 HAVO, chapters 8 and 9
  - Elective: Automation Engineering
  - Topics: electrical circuits and energy use, materials and particle models, energy and power, astronomy
  - Exit qualifications: A, C2, D1, E1, G1, G2
  - Number of classes: 11
  - The block concludes with Exam 2 on the material covered in the last lesson of Block 2.

Required prior knowledge
Basic knowledge of physics, HAVO-3 level.
Dutch at level B2.

Exit qualifications
For a detailed description of the exit qualifications, see Appendix Exit Qualifications.

Learning method
Classes are largely online, with a few classes including exams at WisMon's venue in Utrecht.
The participant must count on at least two hours of homework and self-study per week.

Course book

Newton Basisboek HAVO-4 and *Newton Basisboek* HAVO-5 *BiNaS* (Noordhoff, 6th edition, ISBN: 9789001817497)

Assessment
Exam 1 and Exam 2 (written, open-ended and multiple-choice questions). These exams are both 100 minutes long and count toward 50% of the final grade. Both exams can be retaken once. The final grade must be at least a 5.5.

3.3 Chemistry

Contact hours: **66 hours**
Study load: **132 hours (incl. contact hours)**
Period in the LPP: **Part 2 semester 2**
Required attendance: **80% or higher**

Goal
This specific course is aimed at reaching a HAVO-5 level in Chemistry, which is necessary for a degree program or work situation at university of applied sciences level. The course prepares the participant for further study in a science-based university of applied sciences program such as natural sciences, engineering sciences and medical sciences.

Contents
- Block 1: using the coursebook *Chemie Overal HAVO*, 4th edition. The topics relating to the exit qualifications listed below are taught using the following chapters from HAVO volume 4:
    - Chapter 1 Scheiden en reageren
    - Chapter 2 Bouwstenen van stoffen
    - Chapter 3 Stoffen en reacties
    - Chapter 4 Moleculaire stoffen
    - Chapter 5 Zouten en zoutoplossingen
    - Chapter 6 Reacties van zouten
- Exit qualifications: A10, A13, B1, B2, B3, B4, B5, C1, C2, C3, C4, C6, D1
- Number of classes: 11
- The block concludes with Exam 1 on the material covered in the last lesson of Block 1.

- Block 2: Using the coursebook *Chemie Overal HAVO*, 4th edition. The topics relating to the exit qualifications listed below are taught using the following chapters from HAVO volume 5:
    - Chapter 7 Koolstofverbindingen
    - Chapter 8 Zuren en basen
    - Chapter 9 Energieproductie
    - Chapter 10 Polymeren
    - Chapter 11 Duurzaam produceren
- Exit qualifications: A10, A11, A12, A14, A15, B1, B2, B3, B4, B5, C1, C2, C4, C5, C7, C8, D1, F1, F2, F3, G1, G3, G4, G5
- Number of classes: 11
- The block concludes with Exam 2 on the material covered in the last lesson of Block 2.

Required prior knowledge
Chemistry basics, HAVO-3 level.
Dutch at level B2.

Exit qualifications
For a detailed description of the exit qualifications, see Appendix Exit Qualifications.

Learning method
Classes are largely online, with a few classes including exams at WisMon's venue in Utrecht.
The participant must count on at least two hours of homework and self-study per week.

Course book
Chemie Overal HAVO 4th edition, volume 4 and volume 5 *BiNaS* (Noordhoff, 6th edition, ISBN: 9789001817497)

Assessment
Exam 1 and Exam 2 (written, open-ended and multiple-choice questions). These exams are both 100 minutes long and count toward 50% of the final grade. Both exams can be retaken once. The final grade must be at least a 5.5.

Appendix: Exit qualifications

The 2021 Dutch Integration Act includes the following Exit Qualifications for the basic and specific courses of the Language and Prep Program, which prepares for study at a university of applied sciences in the Nature, Technology and Health profile. The numbering below corresponds to the numbering in the legal text as published in the Staatscourant 2021, 25700 (Staatscourant 2021, 25700 | Overheid.nl > Official announcements (officielebekendmakingen.nl)) and we have therefore retained it in this overview.

6.1 Basic courses

Basic course	Exit qualifications for Dutch-taught program at university of applied sciences	Exit qualifications for English-taught program at university of applied sciences
Dutch at CEFR level B1	N/A	Skills: reading, conversation, speaking, listening and writing
Dutch at CEFR level B2	Skills: reading, conversation, speaking, listening and writing	N/A
English at CEFR level B1	Skills: reading and listening	N/A
English at CEFR level B2	N/A	Skills: reading, conversation, speaking, listening and writing
Mathematics A HAVO or Mathematics B HAVO	**MATHEMATICS A** **Domain A: skills** *Subdomain A3: Mathematical skills* 3. The participant masters modeling and algebraizing, ordering and structuring, analytical thinking and problem solving, manipulating formulas, abstracting, and logical reasoning. **Domain B: Algebra and counting** *Subdomain B1: Arithmetic* 4. The participant can perform calculations with numbers using basic arithmetic operations and working with brackets. *Subdomain B2: Algebra*	

Basic course	Exit qualifications for Dutch-taught program at university of applied sciences	Exit qualifications for English-taught program at university of applied sciences
	5. The participant can perform calculations with variables using basic algebraic operations and working with brackets. *Subdomain B3: Counting problems* 6. The participant can structure and schematize counting problems and use that in calculations and reasoning. **Domain C: Functions** *Subdomain C1: Tables* 7. The participant can create a table based on data from a text, graph, formula or other tables and read and interpret tables. *Subdomain C3: Formulas with one or more variables* 9. The participant can calculate values by substitution in a formula with one or more variables and create or modify a formula based on given information. *Subdomain C4: Linear functions* 10. In linear functions, the participant can create a formula and draw a graph, perform calculations with linear functions such as interpolation and extrapolation, solve linear equations and inequalities, and apply outcomes in profile-specific problem situations. *Subdomain C5: Exponential functions* 11. The participant can recognize exponential functions, describe them with formulas, represent them in graphs and perform calculations on them. **Domain D: Change** 12. For a graph, the participant can make statements about rise, fall, maximum and minimum and can describe changes. **Domain E: Statistics** *Subdomain E1: Interpreting and evaluating presentations of data* 13. The participant can interpret and evaluate the relevance of data represented and/or summarized in various ways. *Subdomain E2: Processing data*	

Basic course	Exit qualifications for Dutch-taught program at university of applied sciences	Exit qualifications for English-taught program at university of applied sciences
	14. The participant can process, organize, edit, display data in graphs, tables and diagrams.	
	MATHEMATICS B **Domain A: Skills** *Subdomain A3: Mathematical skills* 3. The participant masters the mathematical thinking activities appropriate to the examination program, including modeling and algebraizing, ordering and structuring, analytical thinking and problem solving, manipulating formulas, abstracting, and using logic for reasoning and proof. **Domain B: Function, graphs and equations** *Subdomain B1: Standard functions* 4. The participant can use standard functions (power functions, exponential and logarithmic functions, and trigonometric functions), interpret them within a context, describe the graphs and record them in a function rule, and work with simple transformations. *Subdomain B2: Equations and inequalities* 5. The participant can solve equations, inequalities and systems of two linear equations, solving graphically where appropriate. *Subdomain B3: Proportional functions* 6. The participant can recognize and apply relationships between the two quantities αα and *BB* of the form αα=cc*bbdd* and draw associated graphs, formulate a formula from the description of such a relationship, determine the proportionality constant, and can calculate and reason about relationships of this form and the effect of scaling. *Subdomain B4: Periodic functions* 7. The participant can describe periodic phenomena using sine or cosine functions, draw the corresponding sinusoids and name their characteristic properties, and determine all solutions of a trigonometric equation on a given interval. **Domain C: Geometric calculations**	

Basic course	Exit qualifications for Dutch-taught program at university of applied sciences	Exit qualifications for English-taught program at university of applied sciences
	Subdomain C1: Distances and angles in concrete situations 8. The participant can calculate distances and angles using trigonometric ratios and the Pythagorean theorem. **Domain D: Applied analysis** *Subdomain D1: Changes* 10. The participant can describe the change behavior of a function given by graph, table or formula. *Subdomain D2: derived functions.* 11. The participant can approximate local changes of function values both with a differential quotient and with a numerical-graphic method. *Subdomain D4: Application of derived functions* 13. The participant can perform analytic-algebraic calculations focused on profile-specific contexts.	

6.2 Specific courses

Specific course	Exit qualifications for Dutch-taught program at university of applied sciences	Exit qualifications for English-taught program at university of applied sciences
English at CEFR level B1	Skills: speaking, conversation and writing	N/A
Biology HAVO	**Domain A: skills** *Subdomain A11: Form-function thinking* 11. The participant can apply contextual reasoning when searching for the function that corresponds to a given form of biological objects at different levels of organization and vice versa. *Subdomain A14: Systems thinking* 14. The participant can distinguish between different organizational levels in contexts, work out relationships within and between organizational levels, and	

Specific course	Exit qualifications for Dutch-taught program at university of applied sciences	Exit qualifications for English-taught program at university of applied sciences
	explain how biological units at different organizational levels sustain and develop themselves. *Subdomain A15: Contexts* 15. The participant will be able to use the skills listed in domain A and the concepts listed in domains B to F at least in occupational contexts and in life-world contexts. **Domain B Self-regulation** *Subdomain B1: Protein synthesis* 17. Using the concepts of DNA and protein synthesis, the participant can explain how building materials of the cell are formed, at least in contexts of health and food production. *Subdomain B2: Cell metabolism* 18. Using the concepts of homeostasis, transport, assimilation and dissimilation, the participant can explain the cell metabolism of prokaryotes and eukaryotes, at least in contexts of health and nutrition. *Subdomain B3: Metabolism of the organism* 19. Using the concepts of organ, photosynthesis, respiration, digestion, excretion and transport, the participant can describe the metabolism of organisms and explain how metabolic disorders can arise and be dealt with, at least in contexts of health and food production. *Subdomain B4: Self-regulation of the organism* 20. Using the concepts of homeostasis, hormonal regulation and neural regulation, the participant can explain how eukaryotes self-regulate, at least in contexts of sport and nutrition. *Subdomain B5: Defense of the organism* 21. Using the concept of defense, the participant can explain, at least in the context of health care and food production, how eukaryotes defend themselves against other organisms, viruses and allergens and the problems that can arise as a result. *Subdomain B6: Movement of the organism*	

Specific course	Exit qualifications for Dutch-taught program at university of applied sciences	Exit qualifications for English-taught program at university of applied sciences
	22. Using the concepts of movement, neural regulation and perception, the participant can explain how humans and animals move, at least in contexts of health and sport. *Subdomain B7: Perception by the organism* 23. Using the concepts of organ, perception and neural regulation, the participant can explain how organisms perceive, at least in contexts of health and sport. **Domain C: Self-organization** *Subdomain C2: Self-organization of the organism* 26. Using the concept of life cycle, the participant can explain how organisms develop, at least in health contexts. **Domain E: Reproduction** *Subdomain E1: DNA replication* 32. Using the concept of DNA replication, the participant can explain how hereditary material is reproduced, at least in contexts of health and safety. *Subdomain E2: Life cycle of the cell* 33. Using the concept of the cell cycle, the participant can explain at least in contexts of energy and health. *Subdomain E3: Reproduction of the organism* 34. Using the concept of reproduction, the participant can explain how reproduction occurs in eukaryotes, at least in contexts related to health and food production. *Subdomain E4: Hereditary trait* 35. Using the concept of hereditary characteristics, the participant can explain how characteristics are transmitted in eukaryotes, at least in contexts of security and food production.	
Physics HAVO	**Domain A: Skills**	

Specific course	Exit qualifications for Dutch-taught program at university of applied sciences	Exit qualifications for English-taught program at university of applied sciences
	Subdomain A10: Knowledge development and application 10. The participant can contextually analyze how physical and technological knowledge is developed and applied. *Subdomain A11: Technical-instrumental skills* 11. The participant can responsibly handle materials, instruments, devices and ICT applications relevant to physics. *Subdomain A12: Arithmetic and mathematical skills* 12. The participant can correctly and routinely apply a range of arithmetic and mathematical skills relevant to physics to problem situations specific to physics. *Subdomain A13: Professional language* 13. The participant will be able to interpret and produce specific professional language and terminology, including formulaic language, conventions and notations. *Subdomain A14: Subject-specific use of the computer* 14. The participant can use the computer in modeling and visualizing phenomena and processes, and for processing data. *Subdomain A15: Quantifying and interpreting* 15. The participant can quantify physical quantities and relate mathematical expressions to relationships between physical concepts. **Domain B: Image and sound technology** *Subdomain B1: Information transfer* 16. Using the properties of vibrations and waves, the participant can contextually analyze and explain information transmission, among other things. *Subdomain B2: Medical imaging* 17. The participant can describe properties of ionizing radiation and its effects on humans and the environment. The participant can also describe and analyze medical imaging techniques using physical principles and explain the diagnostic function of these health imaging techniques.	

Specific course	Exit qualifications for Dutch-taught program at university of applied sciences	Exit qualifications for English-taught program at university of applied sciences
	Subdomain B3: Optics 18. The participant can describe and analyze properties of light based on applications of geometric optics and wave optics.[1] **Domain C: Movement and energy** *Subdomain C1: Strength and movement* 19. The participant can analyze and explain in contexts the relationship between force and changes in motion using Newton's laws. *Subdomain C2: Energy conversions* 20. Using the concepts of energy conservation, efficiency, labor and heat, the participant can contextually describe and analyze energy conversions. **Domain D: Materials** *Subdomain D1: Properties of substances and materials* 21. The participant can describe and explain physical properties of substances and materials in contexts using atomic and molecular models. **Domain E: Earth and universe** *Subdomain E1: Solar system and universe* 23. The participant can describe the origin and development of structures in the universe and analyze and explain movements in the solar system using physical principles. **Domain G: Measure and regulate** *Subdomain G1: Use of electricity* 26. The participant can describe and analyze generation, transmission and applications of electricity using physical concepts. *Subdomain G2: Technical automation* 27. The participant can construct measurement, control and regulation systems and describe the function and operation of the components.[1]	

[1] This exit qualification is optional.

Specific course	Exit qualifications for Dutch-taught program at university of applied sciences	Exit qualifications for English-taught program at university of applied sciences
Chemistry HAVO	**Domain A: Skills** *Subdomain A10: Using chemical concepts* 10. The participant can recognize and relate chemical concepts and physical and biological concepts used in chemistry. *Subdomain A11: Reasoning in terms of context-concept* 11. The participant can recognize and use chemical concepts in the contexts of living environment, profession and technology, and can make predictions, calculations and estimates based on these. *Subdomain A12: Reasoning in terms of structure properties* 12. The participant can relate macroscopic properties to meso- and micro-level structures and recognize aspects of scale in them and conversely can make predictions about macroscopic properties from structures. *Subdomain A13: Reasoning about systems, change and energy* 13. The participant can recognize chemical processes in terms of systems and in doing so use knowledge of substances, particles, reactivity and energy. *Subdomain A14: Reasoning in terms of sustainability* 14. The participant can identify and describe aspects of sustainability in social, professional and technological contexts. *Subdomain A15: Reasoning about developing chemical knowledge* 15. The participant can identify the ways in which scientific, technological and chemical knowledge is developed and applied in contexts. **Domain B: Knowledge of substances and materials** *Subdomain B1: Particle models* 16. The participant can describe and use particle models. *Subdomain B2: Features and models* 17. The participant can relate macroscopic properties of a substance or material to particle models.	

Specific course	Exit qualifications for Dutch-taught program at university of applied sciences	Exit qualifications for English-taught program at university of applied sciences
	Subdomain B3: Bonds and properties 18. The participant can use knowledge of bonds to explain and describe properties of substances and materials. *Subdomain B4: Bonds, structures and properties* 19. The participant can explain a macroscopic property of a substance or material based on knowledge of structures present and the bonds in and between particles. *Subdomain B5: Macroscopic properties* 20. The participant can relate a macroscopic property to the structure of a substance or material. **Domain C: Knowledge of chemical processes and cycles** *Subdomain C1: Chemical processes* 21. The participant can describe chemical reactions and physical processes in terms of forming and breaking (chemical) bonds. *Subdomain C2: Chemical arithmetic* 22. The participant can make calculations about a process using knowledge of chemical reactions and conservation laws. *Subdomain C3: Energy calculations* 23. The participant can describe a chemical process and the energy conversion and energy exchange involved and explain it with a calculation. *Subdomain C4: Chemical equilibrium* 24. In experiments, the participant can measure concentrations and energy exchange and reason about whether equilibrium exists and how the location of equilibrium can be affected. *Subdomain C5: Technological aspects* 25. The participant can recognize and explain aspects of scale, change and reactivity in contexts of a technological nature. *Subdomain C6: Reaction kinetics*	

Specific course	Exit qualifications for Dutch-taught program at university of applied sciences	Exit qualifications for English-taught program at university of applied sciences
	26. The participant can calculate the reaction rate from the concentration change and reason how the reaction rate is affected. *Subdomain C7: Conservation laws and cycles* 27. The participant can relate chemical processes to conservation laws and describe them in terms of cycles. *Subdomain C8: Classification of reactions* 28. The participant can classify and use simple reactions to describe polymerization reactions. **Domain D: Design and experimentation in chemistry** *Subdomain D1: Chemical subject methods* 29. Using knowledge of substances, materials and chemical processes, the participant can explain why certain methods of separation and/or analysis are appropriate for a proposed design or manufacturing process. **Domain F: Processes in the chemical industry** *Subdomain F1: Industrial processes* 35. The participant can describe given industrial processes in block diagrams, make efficiency calculations, and indicate how aspects of green chemistry are involved in the design of the process. *Subdomain F2: Process technology and sustainability* 36. The participant can use knowledge of process technology and reaction kinetics in reasoning about sustainability and safety of a process. *Subdomain F3: Energy conversions* 37. In the context of sustainability, the participant can describe the chemical and/or technological processes used in energy conversions and can reason how sustainability plays a role in energy production. **Domain G: Society and chemical engineering** Subdomain G1: Chemistry of life 41. The participant can recognize and describe chemical processes in living organisms.	

Specific course	Exit qualifications for Dutch-taught program at university of applied sciences	Exit qualifications for English-taught program at university of applied sciences
	Subdomain G3: Sustainable chemical technology 43. The participant can identify how raw materials are produced for the chemical industry and, using knowledge of sustainable principles, can relate local and global quality of life to the contribution of a business process from the chemical industry. *Subdomain G4: Green chemistry* 44. The participant can name aspects of sustainability and green chemistry in large-scale manufacturing processes. *Subdomain G5: Chain analysis* 45. With knowledge of chemical processes in a chain analysis of a process or product, the participant can evaluate proposals for modification of the process or product.	

Exit qualifications for Study Skills

These exit qualifications apply to all language and prep programs. The participant should show development in these exit qualifications.

I Social and (inter)cultural skills

A. Have knowledge of Dutch educational culture

The participant knows the (distinguishing) characteristics of Dutch educational culture, such as the interaction between teachers and participants, and the emphasis on independence and cooperation in learning.

B. Respect different views, expressions and behaviors

The participant interacts respectfully in discussions and dealings with people of different cultural, political and religious backgrounds, with those who think differently, and is attentive to diversity and inclusion.

C. Recognize and apply behavioral codes in various social situations

The participant knows what behavior (manners, appearance) is expected in various situations during their studies and demonstrates this behavior.

D. Appropriately interact with others in a variety of roles and contexts

The participant interacts with fellow participants, teachers and support staff as expected as part of the program.

E. Ability to self-regulate

The participant knows what to do when a situation in the context of their program is challenging for them (personally).

e.1 Reflect on own behavior

Reflects on one's own behavior and adjusts it as appropriate in the context of their program.

e.2 Assess the consequences of choices for yourself and others

Names the consequences for themselves and others when making a choice in an assignment or task in the context of the program.

e.3 Adjust behavior in response to reflection or feedback

If the participant notices, through reflection or comments from others, that their behavior has certain effects, they adjust it accordingly.

II Independent learning ability and project-based (collaborative) work

A. Information literacy skills

The participant handles new information appropriately in the context of their program.

a.1 Find and select information

Knows how to search for and select information in the context of their program.

a.2 Process information

Processes information for the purpose of an assignment or task in the context of their program.

a.3 Analyze and interpret information

Analyzes and interprets found information in the context of their program.

a.4 Evaluate information

Makes judgments about relevance, usefulness and reliability of information.

a.5 Present information and report orally

Presents information they have processed, analyzed and evaluated as part of their program and chooses an appropriate form of presentation.

B. Independent learning

The participant manages their own learning within the context of their program.

b.1 Take responsibility for learning

Takes responsibility for their own learning in the context of their program.

b.2 Set and adjust learning objectives

As part of their program, works out their own learning objectives and adjusts them as needed during the process.

b.3 Select learning activities

Determines what learning activities to undertake in order to achieve their learning objective in the context of their program.

b.4 Planning

Plans their work according to the stated learning objectives in the context of their program.

b.5 Reflect on progress

Regularly verifies (in consultation with their teacher) that progress is proceeding as planned in the context of their program.

C. Collaboration

The participant works with others in groups in a team or in a project in the context of their program.

c.1 Keep agreements

Keeps appointments, such as arriving on time, delivering promised contributions on time, etc. in the context of their program.

c.2 Actively participate in meetings

Actively listens and participates in discussion or meeting on the topic of their program.

c.3 Contribute constructively to the end result

In the context of their program, works according to the agreed upon division of tasks, keeping in mind the expected end result.

c.4 Give feedback appropriately

In the context of their program, addresses others appropriately about their behavior or attitudes.

c.5 Receive feedback appropriately

Responds appropriately to critical comments in the context of their program and indicates what they will do with this feedback.

c.6 Take initiative

Takes steps as necessary in the context of their program to ensure that it runs smoothly.

D. Communication

The participant maintains appropriate contact with others in the context of their program.

d.1 Listen to the input of others

Listens to what others say and think in the context of their program.

d.2 Contribute to a conversation, meeting or discussion

Ensures that they contribute if they have something to say in a conversation, meeting or discussion in the context of their degree program.

d.3 Indicate what you want

Indicates clearly what they want in the context of their program.

d.4 Indicate what you think

Expresses their opinion at times when appropriate in the context of their program.

E. Problem-solving ability

The participant is able to find solutions to problems that arise in an assignment or task during the work process in the context of their program.

e.1 Identify/define problem

Recognizes a problem during the work process and names it in an understandable way in the context of their program.

e.2 Analyze a problem

Identifies the cause and nature of problems that arise during the work process in the context of the program.

e.3 Devise one or more solutions to a problem

Devise (with others) possible solutions to problems encountered in the context of the program.

e.4 Ask for specific help

Asks for specific help in solving a problem in the context of their program at the appropriate time and in the appropriate manner.

III Language skills for study

A. Reading

a.1 Reading instructions

Knows what to do in response to written instructions, such as a step-by-step plan or a manual in the context of their program.

a.2 Study- and task-oriented reading

Reads study texts to memorize, understand and reproduce information in the context of their program.

a.3 Read argumentative texts

Understands argumentative texts and knows what the writer is trying to convince them of in the context of their program.

B. Listening

b.1 Listen to a longer explanation

Understands a longer classroom explanation and can extract appropriate information.

b.2 Listen to instructions

Knows what to do in response to verbal instructions and explanations in the context of their program.

C. Have conversations

c.1 Participate in meetings and discussions in the context of the program

Actively participates in meetings and discussions to exchange information and opinions on topics in the context of their program.

c.2 Participate in informal conversations

Actively participates in informal conversations with fellow participants, during breaks or between classes.

D. Speaking

d.1 Presenting

Gives presentations on topics, results of assignments or research in the context of their program.

d.2 Provide explanation or argumentation during a discussion, meeting or conversation

In the context of their program, spends extended periods of time speaking during a discussion, meeting or conversation to explain something or substantiate their opinion.

E. Writing

e.1 Take notes during an assignment or explanation

In the context of their program, takes comprehensible notes of a brief and structured plenary explanation or of a brief discussion or assignment.

e.2 Make reports

Creates a written report of a project or assignment in the context of their program.

F. Vocabulary

f.1 Understand and use common school language words

Understands and can use the general school language words needed in the context of the program.

f.2 Understand and use general math language

Understands and can use the general math language needed in the context of the program.

f.3 Understand and use general jargon in the intended subject area

Has reasonable mastery of general jargon and can also use such jargon in the context of the program.

IV Digital skills

A. Work with various digital devices

The participant uses various digital devices (such as computer, smartphone) appropriately in the context of their program.

B. Master basic digital application skills

The participant uses interface capabilities for basic functions within applications in the context of their program.

C. Work with commonly used applications in vocational and higher education

In the context of their program, the participant uses multiple relevant applications that are active simultaneously and can exchange information between them.

D. Use reliable (online) information

The participant uses web addresses, portals and search engines in a manner appropriate to the search query to find (reliable) digital resources in the context of their program.

E. Media awareness

e.1 Observe security and privacy when using the Internet

Takes measures to prevent unwanted dissemination of (private) information on the Internet in the context of the program.

e.2 Recognizing fake news and fraud

Knows how to find and assess the source of information such as on social media and online communications and recognizes fake news or fraud.

e.3 Recognize influence of media

Knows, in the context of the program, that the media are trying to influence their Internet use.

Exit qualifications for Education and Career Orientation

These exit qualifications apply to all language and prep programs.

A. The participant can describe their own capabilities (qualities, learning capability, the necessary language skills and expertise).

B. The participant can describe their own wants and dreams in relation to their career path and/or education.

C. The participant can
   - either identify vocational opportunities appropriate to their educational aspirations,
   - or identify educational opportunities appropriate to their professional aspirations.

D. The participant can make a realistic choice for a degree program that suits their capabilities and circumstances.

E. The participant has an accurate and up-to-date understanding of the labor market prospects in relation to their preferred career path/educational options and can describe those prospects.

F. The participant has a realistic understanding of their chosen program and the associated professional field.

G. The participant understands the importance of having their own network in the Netherlands, knows how to build their own network and can describe this.