

Implementation Regulation CER HZ

Bachelor

Logistics Engineering

Full-time

CROHO 34390

2022-2023

Version management:

This version has been updated compared to the previous version (01092022) due to incorrectly entered competences for the courses CU70131V2/CU70132V2 and CU70133V2/CU70134V2. The wrong competences have been taken from the coverage matrix.



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CHAPTER 1 GENERAL PROVISIONS

1.1 General

- 1.1.1 The HZ Course and Examination Regulation for the bachelor programme full-time (hereinafter: CER HZ Ba vt) encompasses the core of the education within HZ. The HZ CER provides a general overview of all course programmes taught at HZ. The CER HZ Ba vt contains institution-specific provisions, which therefore apply across the entire HZ. Annually, a programme-specific Implementation Regulation CER HZ bachelor programme (hereinafter: Implementation Regulation) is established for each course programme by the Executive Board.
- 1.1.2 This Implementation Regulation pertains to the CER HZ bachelor full-time (CER HZ Ba vt).
- 1.1.2 Both the Dutch Higher Education and Scientific Research Act (WHW; Wet hoger onderwijs en wetenschappelijk onderzoek) and the CER HZ Ba vt refer to study credits. These Implementation Regulations, in addition to the term study credits, also refer to ECTS (European Credits Transfer System), where 1 ECTS is equal to 1 study credit and thus a study load of 28 hours (article 7.4 section 1 WHW).

1.2 Assessment and evaluation

- 1.2.1 The assessment and evaluation method for this Implementation Regulation is set out in article 1.3 CER HZ Ba vt.
- 1.2.2 Annually, the programme committee evaluates the implementation method for the Education and Examination Regulations and the relevant Implementation Regulation (article 1.3.4 CER HZ Ba vt).

CHAPTER 2 IMPLEMENTATION REGULATIONS

2.1 Registration, prior education requirements, and admission policy

2.1.1 **Overview of additional prior education requirements** (article 2.3 CER HZ Ba vt, in addition to the requirements as set out in article 2.2, 2.2A and 2.2B of CER HZ Ba vt)

1. The following additional prior education requirements apply for admission to the Logistics Engineering programme with a HAVO diploma:				
HAVO profiles	NT	NG	EM	CM
Student with a HAVO diploma before 1-8-2009	v	v	mathematics b1 or mathematics a12	(mathematics b1 or mathematics a12) + physics1
Student with a HAVO diploma after 1-8-2009	v	v	v	-/-
2. The following additional prior education requirements apply for admission to the Logistics Engineering programme with a VWO diploma:				
VWO profiles	NT	NG	EM	CM
Student with a VWO diploma before 1-8-2010	v	v	v	(mathematics b1 or mathematics a12) + physics1
Student with a VWO diploma after 1-8-2010	v	v	v	-/-

Legend: V = sufficient; -/- = not admissible; name of a subject = exam must be completed in addition to the profile.

Overview of MBO domains that do not offer direct admission to the HBO sector technology, which the Logistics Engineering programme is part of
Not applicable.
Admission: for students with a MBO 4 diploma in Handel en ondernemerschap (Trade and Entrepreneurship) or Economie en administratie (Economics and Administration), the limited admission to the HBO sector technology has been revoked as of 1 September 2020. This means that students with this type of MBO diploma can now also be directly admitted.

2.1.1a **Selection criteria special course programme** (article 2.2b CER HZ Ba vt)

N/A

2.1.2 **Deficiency examination** (article 2.4 CER HZ Ba vt)

- The deficiency examination to register for the Logistics Engineering programme with a HAVO CM or VWO CM diploma, or with a MBO diploma that does not provide direct admission (see 2.1.1), consists of: mathematics B at the final level of HAVO EM.
- The procedure in case of deficiency consists of the following steps:
 - Upon registration, the candidate submits a request for a deficiency examination to the programme coordinator.
 - The programme will discuss the way in which the deficiency examination will take place with the candidate in a timely fashion.

- Preferably, the candidate takes part in the self-study mathematics course (Learn) and completes this with the associated test. If this is not possible, the programme will organise its own extra mathematics examination in a timely fashion. There is one retake opportunity.
- The candidate will be informed of the result within two weeks.
- The deficiency must have been rectified before the start of the course programme, which means that a mark of 5.5 or higher must have been scored on the self-study mathematics course (or the additional mathematics test organised by the course programme).

2.1.3 **Additional requirements** (article 2.5 CER HZ Ba vt)

N/A

2.2 Structure of course programme and education

2.2.1 Programme profile (article 3.2 CER HZ Ba vt)

[The following text is taken from paragraphs 2.1 and 2.3 of “Landelijk Beroeps- en Opleidingsprofiel Logistiek” (“National Professional and Education Profile Logistics”) (the Landelijk Platform Logistiek HBO (National Platform Logistics HBO), November 2019), with the footnotes removed. For a comprehensive description, we refer to that document.]

Definitions

In the report *Partituur naar de top (Score to the top)*, Logistics is defined as: The knowledge and skills required to efficiently, sustainably and effectively plan, organise, execute and manage the goods and information flows and any associated financial flows from raw material to the end product. This includes return flows and reuse, both within one company and between companies. Logistics is a very broad sector. Logistics is often considered an *enabler* and driver of changes for other (top) sectors. The contribution to the gross national product is evident. Logistics goes beyond merely managing logistical streams within and between organisations; it encompasses the smart and responsible organisation of the entire chain in all of its facets. This aligns with the term Supply Chain Management which, in line with the American professional body Council of Supply Chain Management Professionals (CSCMP), is defined as follows:

Supply chain management encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities. Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third party service providers, and customers. In essence, supply chain management integrates supply and demand management within and across companies.

Supply chain management is an integrating function with primary responsibility for linking major business functions and business processes within and across companies into a cohesive and high-performing business model. It includes all of the logistics management activities noted above, as well as manufacturing operations, and it drives coordination of processes and activities with and across marketing, sales, product design, finance, and information technology.

Subareas within logistics

The classical structure of the professional field of logistics is that of Material Management and Physical Distribution. Material Management focuses on the efficient supply of natural resources and half-finished products to the production process, striving for the efficient use of the production resources. Physical Distribution concerns the goods and data streams that begin at the end of the production process and end with the customer.

The classical structure is inadequate for responding to current risks and opportunities, such as technological development, globalisation and sustainability. There is a need for proper management from the supply streams right through to the creation of products and services. The subarea that aligns with this is Demand & Supply Management. This subarea strives for optimal alignment between supply, demand and output functions. In addition, there is not only a need for management of the streams towards the end user but also for management of the return streams. The subarea that aligns with this is Reverse Logistics. This subarea strives, among other things, to increase the performance with regard to reuse of materials.

The subareas of logistics described above will change very little, if at all, in the future. It is therefore important that current and future logisticians understand these subareas. However, due to technological, economical and societal developments, the logisticians will need a greater affinity with adjacent professional fields such as ICT, sustainability and corporate social responsibility. Especially the technological developments are increasingly affecting the shelf life of existing logistical concepts and business models. Developments such as Blockchain, Big Data, relocating of trade routes, change and improvement programmes and physical internet are forcing a redefinition of logistical concepts and the implementation of innovations within the entire logistical chain.

Logistics will see further challenges in the form of an increasingly competitive market as well as growing shortages of qualified personnel. This all culminates in Logistics experiencing a phase of technological, social and economic transition. Think, for example, about the potential and valorisation of 3D printing, IoT, Smart Industry, Hyperloop, autonomous vehicles, augmented and virtual reality, AI and Blockchain, but most definitely also in chain collaboration and management and programmes for supporting organisations in the engagement and adoption of these innovations. Structural change in the labour market and technological innovations will be decisive for the form and speed of the logistical changes.

2.2.2 Learning outcomes (article 3.2 CER HZ Ba vt)

[The following text is taken from paragraphs 5.1 and 5.3 of “Landelijk Beroeps- en Opleidingsprofiel Logistiek” (“National Professional and Education Profile Logistics”) (the Landelijk Platform Logistiek HBO (National Platform Logistics HBO), November 2019), with the footnotes removed. For a comprehensive description, we refer to that document.

This document defines the general logistics competency as follows: “Professionally developing, managing and executing logistical processes”.

The Landelijk Platform Logistiek HBO has developed this competency into the sub-competencies below. These fulfil the Dublin Descriptors, the HBO standard and the domain competencies of the Bachelor of Engineering Standards.

Description of the course programme competency:	
A	Developing logistics policy
	A.1 Analyses internal and external developments, translates these towards the organisation and its stakeholders in order to, based on that context, contribute to the (logistics) strategy of the company.
	A.2 With the help of responsibly selected methods and techniques, research a (economical/technological) logistics question for the improvement/innovation of the logistics process, product, and/or service.
	A.3 Based on responsibly selected methods, designs a logistics process, product, and/or service that aligns with the wishes of the client and other links in the supply chain.
	A.4 Generates support for a substantiated recommendation about the designing, improving, or applying of the logistics process, product, and/or service.
	A.5 Prepares an implementation plan for the new/improved logistics process, product, and/or service which takes into consideration the logistical objectives.
B	Managing operational logistics processes
	B.1 Effectively manages a logistics process and/or project.
	B.2 Contributes to a change process which enables the logistics objectives of an organisation or part of an organisation to be realised and which takes into consideration any consequences for and support within the organisation.
	B.3 Steers and regulates their own development in terms of knowledge and skills (soft and hard skills) relevant to the profession and demonstrates personal leadership with this.
	B.4 Can manage (international) logistics processes from an interdisciplinary perspective, with consideration for the dynamics of the business environment and cultural differences.
	B.5 Can give direction and guidance to logistics (change) processes and the associated employees, for the purpose of realising the objectives of the part of the organisation or project that is being managed and with consideration for its consequences for the organisation.
C	Executing logistical operations
	C.1 Realises solutions for bottlenecks in the logistics operations.
	C.2 Plans, manages, and takes responsibility for the implementation of logistics operations and does this with a professional and entrepreneurial attitude.
	C.3 Works together in a professional logistics environment, shows consideration for cultural differences and acts ethically and responsibly.
	C.4 Communicates effectively and professionally in the common business language, at all levels.

The course programme Logistics Engineering has further elaborated the sub-competencies. Please refer to annex 1. References to these elaborations are made in the form of codes, such as A1.1, in the “Contents” category of the course programme tables.

2.2.3 Programme structure (articles 3.3 and 3.11a and 3.13 CER HZ Ba vt)

Programme structure	
National name	Logistics Engineering
International name	Logistics Engineering
Orientation (Ad, Ba, Master)	Bachelor
Title conferred	Bachelor of Science
Study load	240 study credits (ECTS)
Study load propaedeutic phase	60 study credits (ECTS)
Concluded with propaedeutic exam?	Yes
Study load main phase	180 study credits (ECTS)
Variant	Full-time
ISAT code	34390
Location	Vlissingen
Language	Dutch / English
Accreditation - Implementation	30-11-2017
Accreditation - submission date	01-05-2023
Joint course programme	N/A
Accelerated HBO (VWO) pathway	N/A

Block diagram course programme

Year 1 (propaedeutic phase) 2022-2023 students enrolling in September 2022

Dutch language programme

	Block 1		Block 2		Block 3		Block 4	
	De Transportspecialist		De DC-engineer		De Evenementenorganisator		De Inkoop- en Operations manager	
Year 1	CU70101V2 De Transportspecialist	5	CU70111V2 De DC-engineer	5	CU70131V2 De Evenementenorganisator	5	CU70141V2 De Inkoop- en Operations manager	2.5
	CU70103V3 Inleiding internationale logistiek	2.5	CU70113V2 Magazijnen en DCs	2.5	CU70133V2 Human logistics 1 – Evenementenlogistiek	2.5	CU70143V2 Inkoopmanagement	2.5
	CU70105V2 Intermodaal transport	2.5	CU70115V2 Business & Information Systems NL	2.5	CU70135V3 Practicum Toegepaste statistiek voor Logistiek	2.5	CU70145V3 Practicum Operations management	2.5
	CU70107V2 Logistiek financieel management 1	2.5	CU70117V2 Logistiek financieel management 2	2.5	CU70137V2 Organisatie & Management LE 1	2.5	CU70147V3 Workshops Excel & Simulatie	2.5
	CU70121V3 Persoonlijke vorming voor studie en beroep LE 1			1.25	CU70151V3 Persoonlijke vorming voor studie en beroep LE 2			1.25
	CU70123V3 Practicum Toegepaste wiskunde voor Logistiek			2.5	CU70153V3 Onderzoek van logistieke processen			2.5
	CU70125V2 Logistics English 1			1.25	CU70155V2 Logistics English 2			1.25

International (English language) programme

	Quarter 1		Quarter 2		Quarter 3		Quarter 4	
	The Transport Specialist		The DC Engineer		The Event Organiser		The Purchasing and Operations Manager	
Year 1	CU70102V2 The Transport specialist	5	CU70112V2 The DC engineer	5	CU70132V2 The Event organiser	5	CU70142V2 The Purchasing and Operations manager	2.5
	CU70104V3 Introduction to international logistics	2.5	CU70114V2 Warehouses and DCs	2.5	CU70134V2 Human Logistics 1 – Event Logistics	2.5	CU70144V2 Purchasing management	2.5
	CU70106V2 Intermodal Transport	2.5	CU70116V2 Business & Information Systems INT	2.5	CU70136V3 Workshop Applied Statistics for Logistics	2.5	CU70146V3 Workshop Operations management	2.5
	CU70108V2 Logistics Financial Management 1	2.5	CU70118V2 Logistics Financial Management 2	2.5	CU70138V2 Organisation & Management LE 1	2.5	CU70148V3 Workshops Excel & Simulation	2.5
	CU70122V3 Personal development for study and profession LE 1			1.25	CU70152V3 Personal development for study and profession LE 2			1.25
	CU70124V3 Workshop Applied mathematics for Logistics			2.5	CU70154V3 Research of logistical processes			2.5
	CU70125V2 Logistics English 1			1.25	CU70155V2 Logistics English 2			1.25

Year 2 2022-2023 for students enrolling in September 2021

Dutch language programme

	Block 5		Block 6		Block 7		Block 8	
Year 2	De Productieplanner		De Internationale distributiemanager		The Logistical Project- and Change Manager		The Supply Chain Manager	
	CU70201V3 Practicum Productieplanning & voorraadbesturing	5	CU70205V2 Fysieke distributie	5	CU70212V3 De Logistieke project- en verandermanager	5	CU70220V3 De Supply Chain Manager	2.5
	CU70203V3 Maritime Logistics and Law	2.5	CU70207V3 Marketing en exportmanagement	2.5	CU70214V4 Project- & veranderingmanagement	2.5	CU70222V3 Supply Chain Management NL	2.5
	CU22627V4 Logistics English 3	1.25	CU22628V3 Logistics English 4	1.25	CU70216V4 Training management-vaardigheden	2.5	CU70224V4 Lean Six Sigma voor logistiek	2.5
					CU70218V4 De maritieme cold supply chain	2.5	CU70226V3 Smart Logistics & Big Data NL	2.5
	CU70209V4 Tweedaagse stage S3 of CU70210V4 Logistiek advies aan een onderneming S3		10		CU70230V2 Logistics English 5		2.5	
	VCCU70285V1 HZ Personality LE1		1.25		VCCU70287V1 HZ Personality LE3		1.25	
	VCCU70286V1 HZ Personality LE2		1.25		VCCU70288V1 HZ Personality LE4		1.25	

International (English language) programme

	Quarter 5		Quarter 6		Quarter 7		Quarter 8	
Year 2	The Production planner		The International distribution manager		The logistics project and change manager		The Supply Chain Manager	
	CU70202V3 Workshop Production planning & stock control	5	CU70206V2 Physical Distribution	5	CU70213V3 The Logistics Project & Change Manager	5	CU70221V3 The Supply Chain Manager	2.5
	CU70204V3 Maritime Logistics and Law	2.5	CU70208V3 Marketing and Export Management	2.5	CU70215V4 Project & Change Management	2.5	CU70223V3 Supply Chain Management INT	2.5
	CU22627V4 Logistics English 3	1.25	CU22628V3 Logistics English 4	1.25	CU70217V4 Management Skills Training	2.5	CU70225V4 Lean Six Sigma for Logistics	2.5
					CU70219V4 The maritime cold supply chain	2.5	CU70227V3 Smart Logistics & Big Data INT	2.5
	CU70209V4 Two day internship S3 or CU70211V4 Logistics advice to a company S3		10		CU70230V Logistics English 5		2.5	
	VCCU70285V1 HZ Personality LE1		1.25		VCCU70287V1 HZ Personality LE3		1.25	
	VCCU70286V1 HZ Personality LE2		1.25		VCCU70288V1 HZ Personality LE4		1.25	

Year 3 2022-2023 for students enrolling in September 2020

- Semester 5: CU11112V13 Internship for professional orientation (30 EC, see 2.2.8)
- Semester 6: free minor (30 EC, see 2.2.9).

Year 4 2022-2023 for students enrolling in September 2019

- Semester 7: specialisations Supply chain management, Human logistics or Maritime logistics (30 EC, see 2.2.7)
- Semester 8: CU11113V13 Afstuderen / Graduation (30 EC; see 2.2.11).

	Semester 7 *		Semester 8	
	Specialisations Supply chain management, Human logistics or Maritime logistics		Graduation	
Jaar 4 / Year 4	CU05970V10 Logistics Information Systems	5	CU11113V13 Afstuderen / Graduation	30
	CU15377V4 Preparation Graduation Logistics	2.5		
	CU15379V5 Management Development Training	5		
	CU70401V1 Sustainable Supply Chains	2.5		
	CU17009V4 Specialisation Supply chain management or CU17010V4 Specialisation Human logistics or CU17011V6 Specialisation Maritime logistics	15		

* The programme in semester 7 is taught in English and is taught jointly to the Dutch and international students

Deviating inflow cohorts:

Each of the tables above states the inflow cohort for the relevant academic year on the basis of the standard pathway (for example, a student entering the programme in September 2021 and following the regular pathway would be in their second academic year in 2022-2023). Students who are working ahead of schedule would follow the same programme as the previous cohort in the relevant academic year following the regular pathway (for example, a student entering the programme in September 2020, who has already advanced to the fourth academic year in 2022-2023, follows the courses of the table above for the fourth year of the inflow cohort September 2019).

Students who have not completed terminated or amended course for their regular inflow cohort from the UR 2021-2022, are, in accordance with article 6.2 section 11 of the CER, entitled to complete a further two assessments in 2022-2023. If it concerns terminated or amended courses from UR 2020-2021 or earlier, no such option exists and the student will be required to attend replacement courses from the academic year for the relevant inflow cohort as identified in the tables above (for example, a student from inflow cohort September 2019, who has failed to complete a terminated/amended course from their second study year, must complete a replacement second year course for the inflow cohort September 2021). Which course should be completed as the replacement shall be determined by the Examination Sub-Committee, on the advice of the Programme Coordinator Logistics Engineering.

2.2.3a ***Transition with an Associate Degree certificate*** (article 3.3 section 4 sub I. CER HZ Ba vt)

Students with an Ad Logistics, ISAT code 80148, awarded by Avans Hogeschool (Brin 07GR), located in Roosendaal and 's-Hertogenbosch, are directly admissible. During the first year of registration, these students can also register for the post-propaedeutic phase of the programme. The institutional board exempts them from the requirement of having a certificate for the successful completion of the propaedeutic examination (via WHW art. 7.30 section 2). The Examination Committee grants students with this certificate individual exemption from taking those examinations for which the Examination Board, prior to the first year of enrolment, has established, based on a programme comparison, that the student possesses the knowledge, insight and skills at the level that is being investigated through these examinations. The students are therefore required to request exemptions in accordance with CER HZ Ba. The above does not apply to students with an Ad Logistics certificate awarded by universities of applied sciences other than the one mentioned, nor to students with an Ad certificate from a programme other than Ad Logistics. For these students, the usual procedure for requesting exemptions under the exemptions policy applies.

2.2.4 Courses propaedeutic phase (article 3.5, 3.11A CER HZ Ba vt)

Year 1 - Block 1

Block 1 / Semester 1															
CU70101V2 CU70102V2		Title: De Transportspecialist The Transport Specialist				Number of ECs: 5		Number of contact hours: 70		Mandatory: Yes		Language: NL ENG			
Conditions for course participation: none															
Conditions for assessment participation: A complete and timely submitted portfolio for which the specific criteria are shared in the digital learning environment, LEARN, at the commencement of the course.															
Brief description of the course content: The logistical position of Transport Specialist is the focus of this first block. The other courses of the block are a bit more theoretical in nature and provide the necessary basic knowledge and skills for the position. The course "The Transport Specialist" runs parallel to this. You directly apply that which you have learned to a relatively large, integral assignment derived from professional practice. This partly takes place in small groups and partly individually. When you successfully complete the integral assignment, you show that you have mastered the competencies for the position of transport specialist at the "beginner level" (level 1) of the programme.															
Mandatory literature: none															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (< 10 Business days after receipt of mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)	X				X	Criterion-oriented interview	8 hours (all groups)	A2.1, A3.1, A3.2, A3.3, A5.1, C1.1 *	100%	5.0	5.5	S1.7	S1.9	S1.10	S1.12

* See annex 1

Block 1 / Semester 1															
CU70103V3 CU70104V3		Title: Inleiding internationale logistiek Introduction to International Logistics				Number of ECs: 2.5		Number of contact hours: 24		Mandatory: Yes		Language: NL ENG			
Conditions for course participation: none															
Conditions for assessment participation: N/A															
Brief description of the course content: Logistics is sometimes described as “integral management of goods flows”, in other words, logistics ensures that projects flow through the chain on time and at low cost. This includes activities such as: planning, warehouse management, stock control, purchasing and physical distribution. Logistical principles can, in addition to physical goods flows, also be applied to administrative processes, data flows and financial flows among others. This introductory course provides a broad overview of the field.															
Mandatory literature: most recent edition of the book “Working with logistics” by Visser & Van Goor. And for the English language course, the translation thereof; ‘Logistics: principles and practice’.															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Written knowledge assessment	90 minutes	A3.2, A3.3*	70%	1.75	5.5	S1.7	S1.9	S1.10	S1.12
ASSESSMENT02 (FT)		X		X		Assignment		A2.3*	30%	0.75	5.5	S1.7	S1.9	S1.10	S1.12

* See annex 1

Block 1 / Semester 1															
CU70105V2 CU70106V2		Title: Intermodaal transport Intermodal Transport				Number of ECs: 2.5		Number of contact hours: 24		Mandatory: Yes			Language: NL ENG		
Conditions for course participation: none															
Conditions for assessment participation: N/A															
Brief description of the course content: This course will introduce you to means of transport with their distinctive characteristics, including costs, technology, (legal) limitations and regulations and their suitability for: long or short distances, and the characteristics of the products they transport. Characteristics of goods such as solid, liquid, gas, bulk, packaged, palletised etc. are also important aspects. How are the modes of transport connected? Who are the parties involved in the chains?															
Mandatory literature: most recent edition of the book 'Handboek Modal Shift' by Zeeland Seaports. And for the English language course there is no mandatory literature.															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Written knowledge assessment	90 minutes	A2.2, A2.3, A2.4, C2.1*	100%	2.5	5.5	S1.7	S1.9	S1.10	S1.12

* See annex 1

Block 1 / Semester 1															
CU70107V2 CU70108V2		Title: Logistiek financieel management 1 Logistics Financial Management 1				Number of ECs: 2.5		Number of contact hours: 24		Mandatory: Yes		Language: NL ENG			
Conditions for course participation: none															
Conditions for assessment participation: N/A															
Brief description of the course content: Knowledge and insight into the financial situation is an important success factor for a company. How do you stimulate sound financial management? You will face this question as a logistician as well. How do you justify choosing a certain mode of transport (for example, road, rail or air transport) with a cost-price analysis? And how do you monitor the previously established cost budget? In addition to these matters, we also discuss the balance sheet and the profit and loss account.															
Mandatory literature: NL: - Koetzier, W. en Brouwers, M.P. (2 15). Basisboek Bedrijfseconomie, Noordhoff. Groningen/Houten, Elfde druk, ISBN: 97891829544. - Koetzier, W. en Brouwers, M.P. (2 15). Basisboek Bedrijfseconomie, Opgaven, Wolters-Noordhoff. Groningen/Houten, Elfde druk, ISBN: 97891839116. - Brouwers, R., Koetzier, W., Leppink, O., Basisboek Bedrijfseconomie, Studentenuitwerkingen, Wolters-Noordhoff. Groningen/Houten, Negende druk. ISBN 9789183913 ENG: - Koetzier, W. en Brouwers, M.P. (2 15). Basics of Financial Management, Noordhoff. Groningen/Houten, Fourth edition, ISBN: 978-90-01-88921-0 - Koetzier, W. en Brouwers, M.P. (2 15). Basics of Financial Management, Exercises, Wolters-Noordhoff. Groningen/Houten, Third edition, ISBN: 978-90-01-88923-4 - Brouwers, R., Koetzier, W., Leppink, O., Basics of Financial Management, Answers and Solutions, Wolters-Noordhoff. Groningen/Houten, Second edition. ISBN 978-90-01-88925-8															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Written knowledge assessment	90 minutes	A1.1, A3.3, A5.1*	100%	2.5	5.5	S1.7	S1.9	S1.10	S1.12

* See annex 1

Year 1 - Block 2

Block 2 / Semester 1															
CU70111V2 CU70112V2		Title: De DC-engineer The DC Engineer				Number of ECs: 5		Number of contact hours: 70		Mandatory: Yes			Language: NL ENG		
Conditions for course participation: none															
Conditions for assessment participation: A complete and timely submitted portfolio for which the specific criteria are shared in the digital learning environment, LEARN, at the commencement of the course.															
Brief description of the course content: The logistical position of DC engineer is the focus of this first block. This is an employee that can (re)design, maintain and improve the logistical processes in a distribution centre. The other courses of the block are a bit more theoretical in nature and provide the necessary basic knowledge and skills for the position. The course "The DC engineer" runs parallel to this. You directly apply that which you have learned to a relatively large, integral assignment derived from professional practice. This partly takes place in small groups and partly individually. When you successfully complete the integral assignment, you show that you have mastered the competencies for the position of DC engineer at the "beginner level" (level 1) of the programme.															
Mandatory literature: none															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)	X				X	Criterion-oriented interview	8 hours (all groups)	A2.3, A2.4, A3.1, A3.2, A3.3, C1.1, C1.2, C2.4*	100%	5.0	5.5	S1.17	S1.18	S1.20	S2.2

* See annex 1

Block 2 / Semester 1															
CU70113V2 CU70114V2		Title: Magazijnen en DCs Warehouses and DCs				Number of ECs: 2.5		Number of contact hours: 24		Mandatory: Yes			Language: NL ENG		
Conditions for course participation: none															
Conditions for assessment participation: N/A															
Brief description of the course content: Warehouses and DCs are intended for storage, transshipment, (de)consolidation and Value Added Logistics. Which methods and resources can be used to effectively manage and execute these processes? Design issues include the different types of racking and handling equipment, the methods of order picking, the reception processes and the shipping procedures. Additionally, attention is paid to topics such as safety, ergonomics, layout, warehouse management systems, capacity calculations, etc.															
Mandatory literature: NL: - Esmeijer, G.W. (2010). Handboek operationele interne logistiek (2e druk). Assen: Koninklijke Van Gorkum BV - Visser, H.M. & Van Goor, A.R. (2019). Werken met logistiek (8e druk). Groningen/Houten: Noordhoff Uitgevers bv ENG: - Berg, J.P. van den (2021), Highly competitive warehouse management (3rd edition), Buren: Management Outlook Publications - Visser, H.M. & Goor, A.R. van (2011), Logistics: principles and practice (2nd edition), 's-Gravendeel: Hessel Visser B.V.															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Written knowledge assessment	90 minutes	A3.1, A3.2, A3.3, C1.2*	100%	2.5	5.5	S1.18	S1.19	S1.20	S2.2

* See annex 1

Block 2 / Semester 1															
CU70115V2 CU70116V2		Title: Business & Information Systems NL Business & Information Systems INT			Number of ECs: 2.5		Number of contact hours: 24		Mandatory: Yes			Language: NL ENG			
Conditions for course participation: none															
Conditions for assessment participation: N/A															
Brief description of the course content: Information technology has taken over the world. Computers have become relatively easy to use, but beneath the surface, there is complex world of technology which is the domain of IT specialists. At the same time, companies, organisations and individuals have become entirely dependent on IT. As such, the computer has come to dominate existing business operations. In this course, we will first discuss how a business process can be analysed and improved. We then examine how information systems can play a role in this. Finally, we will delve deeper into the types of logistics information systems and their characteristics.															
Mandatory literature: most recent edition of the book 'Business Process Mapping' by J. Mike Jacka and Paulette J. Keller, Publisher: John Wiley & Sons, Inc.															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Written knowledge assessment	90 minutes	A2.4, A4.2, B2.1, B5.1, C3.1*	100%	2.5	5.5	S1.18	S1.19	S1.20	S2.2

* See annex 1

Block 2 / Semester 1															
CU70117V2 CU70118V2		Title: Logistiek financieel management 2 Logistics Financial Management 2				Number of ECs: 2.5		Number of contact hours: 24		Mandatory: Yes			Language: NL ENG		
Conditions for course participation: none															
Conditions for assessment participation: N/A															
Brief description of the course content: As a follow-up to Logistics financial management 1, we will discuss investment issues in more depth. A fast-growing logistics service provider can experience a shortage of warehouse capacity. Is it a good idea to invest in a new, company-owned warehouse? Or is it a better idea to rent it? And what is the effect of this on the profit and loss account? Additionally, various funding ratios are discussed.															
Mandatory literature: NL: - Koetzier, W. en Brouwers, M.P. (2 15). Basisboek Bedrijfseconomie, Noordhoff. Groningen/Houten, Elfde druk, ISBN: 97891829544. - Koetzier, W. en Brouwers, M.P. (2 15). Basisboek Bedrijfseconomie, Opgaven, Wolters-Noordhoff. Groningen/Houten, Elfde druk, ISBN: 97891839116. - Brouwers, R., Koetzier, W., Leppink, O., Basisboek Bedrijfseconomie, Studentenuitwerkingen, Wolters-Noordhoff. Groningen/Houten, Negende druk. ISBN 9789183913 ENG: - Koetzier, W. en Brouwers, M.P. (2 15). Basics of Financial Management, Noordhoff. Groningen/Houten, Fourth edition, ISBN: 978-90-01-88921-0 - Koetzier, W. en Brouwers, M.P. (2 15). Basics of Financial Management, Exercises, Wolters-Noordhoff. Groningen/Houten, Third edition, ISBN: 978-90-01-88923-4 - Brouwers, R., Koetzier, W., Leppink, O., Basics of Financial Management, Answers and Solutions, Wolters-Noordhoff. Groningen/Houten, Second edition. ISBN 978-90-01-88925-8															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Written knowledge assessment	90 minutes	A2.4, A3.3, A5.1*	100%	2.5	5.5	S1.18	S1.19	S1.20	S2.2

* See annex 1

Year 1 – Entire semester 1

Block 2 / Semester 1															
CU70121V3 CU70122V3		Title: Persoonlijke vorming voor studie en beroep LE 1 Personal development for education and work LE 1				Number of ECs: 1.25		Number of contact hours: 16		Mandatory: Yes		Language: NL ENG			
Conditions for course participation: none															
Conditions for assessment participation: You will be expected to attend the meetings with your personal coach.															
Brief description of the course content: As a first-year student, it is still not entirely clear to you what the knowledge you are learning will allow you to do in the future. This exploratory course gives you a glimpse of the course of your studies and especially the logistical professions you will be able to practice after graduation. Alumni and other professionals will tell you about their job, we will visit various companies and look over the shoulder of students who are already doing their internship. In this course, tests and performance reviews help you discover where your specific interests and talents in the field of logistics lie and how you can deploy these for your own personal and professional development. The lesson time will furthermore be used for conversations and meetings with your study career coach and/or your personal coach. In addition, you will work on your portfolio.															
Mandatory literature: none															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Assignment		A4.1, B3.1, B3.2, C2.5*	100%	1.25	5.5	S1.18	S1.19	S1.20	S2.2

* See annex 1

Block 2 / Semester 1															
CU70123V3 CU70124V3		Title: Practicum Toegepaste wiskunde voor Logistiek Workshop Applied mathematics for Logistics				Number of ECs: 2.5		Number of contact hours: 24		Mandatory: Yes		Language: NL ENG			
Conditions for course participation: none															
Conditions for assessment participation: none															
Brief description of the course content: Evaluating manipulations with quantitative data. Being able to work with and edit formulas. Graphical representation of quantitative data. Interpretation of graphic data. Applying mathematics in the logistics profession.															
Mandatory literature: NL: - Erven, R. van, et al (2016). Basisboek wiskunde in business (2e druk). Amsterdam: Boom Uitgevers - Visser, H.M. & Goor, A.R. van (2015). Werken met logistiek (7e druk). Groningen: Noordhoff Uitgevers b.v. ENG: - Croft, A. & Davison, R. (2016). Foundation Math (6th edition), Harlow (U.K.): Pearson - Visser, H.M. & Goor, A.R. van (2011). Logistics: principles and practice (2nd edition), 's-Gravendeel: Hessel Visser B.V.															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Written knowledge assessment	90 minutes	A2.2, A2.3, A3.3*	100%	2.5	5.5	S1.18	S1.19	S1.20	S2.2

* See annex 1

Block 2 / Semester 1															
CU70125V2		Title: Logistics English 1				Number of ECs: 1.25		Number of contact hours: 16		Mandatory: Yes			Language: ENG		
Conditions for course participation: none															
Conditions for assessment participation: N/A															
Brief description of the course content: This course will address: 1. Reading and understanding general and programme-related texts and documents. 2. Maintaining of grammatical knowledge. 3. Hosting a simple presentation about a topic that is connected to the professional field. 4. Acquiring a relevant vocabulary.															
Mandatory literature: none															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Written knowledge assessment	90 minutes	C4.1, C4.2*	100%	1.25	5.5	S1.18	S1.19	S1.20	S2.2

* See annex 1

Year 1 - Block 3

Block 3 / Semester 2															
CU70131V2 CU70132V2		Title: De Evenementenorganisator The Event Organiser				Number of ECs: 5		Number of contact hours: 70		Mandatory: Yes		Language: NL ENG			
Conditions for course participation: none															
Conditions for assessment participation: A complete and timely submitted portfolio for which the specific criteria are shared in the digital learning environment, LEARN, at the commencement of the course.															
Brief description of the course content: The focus of this third block is the position of Event Organiser. You directly apply that which you have learned in other courses to a relatively large, integral assignment derived from professional practice. During this integral assignment, the organisation of an event is analysed in depth. The cooperation between the various stakeholders (including the municipality, the safety region and event agency) will also be further developed. These stakeholders often have different organisational structures which will be compared. Finally, a statistical substantiation of the processes will also be discussed, for example the spread of wait times at event.															
Mandatory literature: none															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)	X				X	Criterion-oriented interview	8 hours (all groups)	A2.3, A2.4, A3.1, A3.2, A3.3, C1.1, C1.2, C2.4*	100%	5.0	5.5	S2.7	S2.8	S2.10	S2.10

* See annex 1

Block 3 / Semester 2															
CU70133V2 CU70134V2		Title: Human logistics 1 – Evenementenlogistiek Human Logistics 1 – Event Logistics			Number of ECs: 2.5		Number of contact hours: 24		Mandatory: Yes			Language: NL ENG			
Conditions for course participation: none															
Conditions for assessment participation: N/A															
Brief description of the course content: Human logistics concerns the logistical processes of flows of people instead of flows of goods. Examples are hospitals, pop festivals, disasters or sports events. Many principles of “regular” logistics are also very important in Human Logistics, and are easily translated to situations in which flows of people have to be managed. Other aspects are more specific, for example anticipating security problems in the form of an evacuation plan. In this first course about Human Logistics, events in particular are discussed.															
Mandatory literature: most recent edition of the book “Evenementlogistiek” by Maarten van Rijn. And for the English language course, the translation thereof; ‘Event Logistics’.															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Written knowledge assessment	90 minutes	A2.4, A3.3, A5.1*	100%	2.5	5.5	S2.8	S2.19	S2.10	S2.12

* See annex 1

Block 3 / Semester 2															
CU70135V3 CU70136V3		Title: Practicum Toegepaste statistiek voor Logistiek Workshop Applied Statistics for Logistics				Number of ECs: 2.5		Number of contact hours: 24		Mandatory: Yes			Language: NL ENG		
Conditions for course participation: none															
Conditions for assessment participation: none															
Brief description of the course content: Descriptive statistics, probability distributions, estimating reliably, tests, representing research results. Create graphs such as histograms, bar charts, pie charts etc. Applications of statistics in the logistic profession.															
Mandatory literature: none															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Written knowledge assessment	90 minutes	A2.2, A2.3*	100%	2.5	5.5	S2.8	S2.19	S2.10	S2.12

* See annex 1

Block 3 / Semester 2															
CU70137V2 CU70138V2	Title: Organisatie & management LE 1 Organisation & Management LE 1		Number of ECs: 2.5	Number of contact hours: 24	Mandatory: Yes	Language: NL ENG									
Conditions for course participation: none															
Conditions for assessment participation: N/A															
Brief description of the course content: Organisations are studied from various perspectives. There are different ways to structure an organisation. Whether it is a large international logistical service provider, customs or a consultancy firm. How does the decision-making process work within an organisation and how do organisations cooperate to achieve a common goal? Additionally, our society is changing very rapidly, so it is important for an organisation to stay in motion. As such, we also pay attention to the question of how an organisation remains optimally attuned to its environment.															
Mandatory literature: the most recent edition of the book 'Organisatie & Management' by J. Marcus and N. van Dam, published by Noordhoff with associated workbook. And for the English language course the translation of the same book 'Organisation and Management' and associated workbook.															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Written knowledge assessment	90 minutes	A1.1, A1.3, B1.3, B5.1*	100%	2.5	5.5	S2.8	S2.19	S2.10	S2.12

* See annex 1

Year 1 - Block 4

Block 4 / Semester 2															
CU70141V2 CU70142V2	Title: De Inkoop- en Operations manager The Purchasing and Operations Manager		Number of ECs: 2.5	Number of contact hours: 32	Mandatory: Yes			Language: NL ENG							
Conditions for course participation: none															
Conditions for assessment participation: A complete and timely submitted portfolio for which the specific criteria are shared in the digital learning environment, LEARN, at the commencement of the course.															
Brief description of the course content: The focus of this last block of the foundation phase is on two related positions: the Purchasing Manager and the Operations Manager. Both also have an important logistical component, but in addition also cover other tasks. The other courses of the block are a bit more theoretical in nature and provide the necessary basic knowledge and skills for the two positions. The “Purchasing and Operations Manager” course runs parallel to this. You will directly apply what you have learned to a complex logistics game. You will make all kinds of decisions in various roles which are also very important in a real company. This is done in small groups in which the manner of collaboration is essential. When you successfully complete the game and can also undertake a thorough analysis of the results, you show that you master the competencies for the two positions at the “beginner level” (level 1) of the programme.															
Mandatory literature: none															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)	X				X	Criterion-oriented interview	8 hours (all groups)	B1.2, B1.3, C2.1, C2.2, C3.1*	100%	2.5	5.5	S2.17	S2.18	S2.20	S2.22

* See annex 1

Block 4 / Semester 2															
CU70143V2 CU70144V2		Title: Inkoopmanagement Purchasing management 1				Number of ECs: 2.5		Number of contact hours: 24		Mandatory: Yes			Language: NL ENG		
Conditions for course participation: none															
Conditions for assessment participation: N/A															
Brief description of the course content: Purchasing management is about managing incoming flows of goods. This concerns the raw materials, materials, parts, semi-finished goods etc. which a company buys from suppliers. Services like catering, security or logistics can also be purchased. Both the operational purchasing processes and the tactical and strategic processes are discussed.															
Mandatory literature: the most recent edition of the book 'Inkoop in strategisch perspectief' by Van Weele & van Berkel-Schoonen, publisher: Kluwer.															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Written knowledge assessment	90 minutes	A3.3, A5.1, B4.1, B5.2, C3.2*	100%	2.5	5.5	S2.18	S2.19	S2.20	S2.22

* See annex 1

Block 4 / Semester 2															
CU70145V3 CU70146V3		Title: Practicum Operations management NL Workshop Operations management INT				Number of ECs: 2.5		Number of contact hours: 24		Mandatory: Yes			Language: NL ENG		
Conditions for course participation: none															
Conditions for assessment participation: none															
Brief description of the course content: Operations management is about the way in which organisations produce products and service. In addition to Market and Product Development, this is one of the core functions of an organisation. It has a lot of overlap and intersections with Logistics. This course provides an overview of the field and explores topics like production technology, factory layout, function design, maintenance management, quality control and waiting-time theory in more detail.															
Mandatory literature: NL/ENG: Arnold, J.R.T. et al. (2017). Introduction to Materials Management (8th ed.). Harlow: Pearson Education Ltd. & Slack, N. et al (2010). Operations Management (6th ed.). Harlow: Financial Times Prentice Hall															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Written knowledge assessment	90 minutes	A2.4, A3.1, A3.3, C2.2, C2.4*	100%	2.5	5.5	S2.18	S2.19	S2.20	S2.22

* See annex 1

Block 4 / Semester 2															
CU70147V3 CU70148V3		Title: Workshops Excel & Simulatie Workshops Excel & Simulation				Number of ECs: 2.5		Number of contact hours: 24		Mandatory: Yes			Language: NL ENG		
Conditions for course participation: none															
Conditions for assessment participation: N/A															
Brief description of the course content: This course will prepare you for quantitative research. You will learn to generate, read and interpret Excel overviews by making use of large dataset files. You will learn to make use of pivot tables and graphs; data validation, as well as the processing and reading of statistical data. Moreover, you will learn to simulate relatively complex logistical practical situations using the Enterprise Dynamics (ED) package.															
Mandatory literature: none															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Written knowledge assessment - Excel -	90 minutes	A2.3*	50%	1.25	5.5	S2.18	S2.19	S2.20	S2.22
ASSESSMENT02 (FT)		X			X	Assignment - Simulation in ED -		A2.4*	50%	1.25	5.5	S2.18	S2.19	S2.20	S2.22

* See annex 1

Block 4 / Semester 2															
CU70149V2 CU70150V2		Title: Organisatie & management LE 2 Organisation & Management LE 2				Number of ECs: 2.5		Number of contact hours: 24		Mandatory: Yes			Language: NL ENG		
Conditions for course participation: none															
Conditions for assessment participation: N/A															
Brief description of the course content: As follow-up to Organisation & Management LE1, we will zoom in further on how organisations relate to their environment. Which strategy will be most successful? How is the competition doing? You will then examine the role of employees and what motivates them. And what is the role of management in this? You will finally study the various ways in which an organisation can be managed.															
Mandatory literature: the most recent edition of the book 'Organisatie & Management' by J. Marcus and N. van Dam, published by Noordhoff. And for the English language course the translation of the same book 'Organisation and Management'.															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Written knowledge assessment	90 minutes	A1.1, A1.3, B1.2, B1.3*	100%	2.5	5.5	S2.18	S2.19	S2.20	S2.22

* See annex 1

Year 1 – Entire semester 2

Block 3 + 4 / Semester 2															
CU70151V3 CU70152V3		Title: Persoonlijke vorming voor studie en beroep LE 2 Personal development for study and profession LE 2				Number of ECs: 1.25		Number of contact hours: 16		Mandatory: Yes		Language: NL ENG			
Conditions for course participation: none															
Conditions for assessment participation: N/A															
Brief description of the course content: As a first-year student, it is still not entirely clear to you what the knowledge you are learning will allow you to do in the future. This exploratory course gives you a glimpse of the course of your studies and especially the logistical professions you will be able to practice after graduation. Alumni and other professionals will tell you about their job, we will visit various companies and look over the shoulder of students who are already doing their internship. As part of this course you will focus on your planning skills and your personal learning styles and how you can apply these for your own personal and professional development. The lesson time will furthermore be used for conversations and meetings with your study career coach and/or your personal coach. You will also work on STARRT forms at level 1.															
Mandatory literature: none															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Assignment		B1.1, B3.1, B3.2, C2.5*	100%	1.25	5.5	S2.18	S2.19	S2.20	S2.22

* See annex 1

Block 3 + 4 / Semester 2															
CU70153V3 CU70154V3	Title: Onderzoek van logistieke processen Research of logistical processes					Number of ECs: 2.5		Number of contact hours: 16		Mandatory: Yes		Language: NL ENG			
Conditions for course participation: none															
Conditions for assessment participation: none															
Brief description of the course content: One of the competencies of Logistics Engineering is (re)designing logistical processes. Research skills are very important here. During graduation you will show that you have mastered the design competency at the final level of the programme. This course will make a first step towards that level because it familiarises you with the principles of logistical research. There are various methods and techniques to describe, quantify, analyse, evaluate and improve processes. You will learn both general research methods and specific techniques used in logistics (Learn six sigma, Theory of constraints).															
Mandatory literature: NL: Dit is onderzoek, Ben Baarda, 2019, 3e druk, ISBN 978-90-01-89544-0, Noordhoff Uitgevers ENG: Research, this is it, Ben Baarda, 2020, 3rd edition, ISBN 978-90-01-89546-4, Noordhoff Uitgevers															
Assessment code	Assessment method <i>Oral/Written/Other / Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing		Minimum Mark	Assessment planned in week	Inspection week	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	stp					
ASSESSMENT01 (FT)			x		x	Assignment		A1.2, A2.1, A2.2, A2.3, A2.4*	100%	2.5	5.5	S2.17	S2.20	S2.20	S2.22

* See annex 1

Block 4 / Semester 2															
CU70155V2	Title: Logistics English 2					Number of ECs: 1.25	Number of contact hours: 16	Mandatory: Yes		Language: ENG					
Conditions for course participation: none															
Conditions for assessment participation: A complete 'job description' for which the specific criteria are shared in the digital learning environment, LEARN, at the commencement of the course.															
Brief description of the course content: This course will address: 1. Reading and understanding job vacancies in the field. 2. Written elaboration of a suitable professional profile. 3. Participate in professionally-oriented conversations with consideration for basic social customs. 4. Acquiring a relevant vocabulary.															
Mandatory literature: none															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)	X				X	Oral assessment		C4.1, C4.2*	100%	1.25	5.5	S2.18	S2.19	S2.20	S2.22

* See annex 1

2.2.5 Courses main phase (article 3.6, 3.11A CER HZ Ba vt)

Year 2 – Block 5

Block 5 / Semester 3

CU70201V3 CU70202V3	Title: Practicum Productieplanning & voorraadbesturing Workshop Production planning & stock control	Number of ECs: 5	Number of contact hours: 48	Mandatory: Yes	Language: NL ENG
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Conditions for course participation: none

Conditions for assessment participation: none

Brief description of the course content: The Production planning & stock control course discusses a number of important logistical questions. It discusses the various systems and methods which you can use to answer these questions. How much production capacity is needed? How many products do you make or order in an optimal series? What is the required safety stock to be able to absorb unexpectedly high demand and achieve a certain service level? At which utilisation rate are machines cost-effective without making the lead time of products too long? In which order do you go through customer orders? How does a method like Material Requirements Planning work, and how does it differ from the Just-in-Time approach? You will get answers to these kinds of questions. In addition, we will delve deeper into performing simulations with Enterprise Dynamics.

Mandatory literature:

NL/ENG: Arnold, J.R.T. et al (2017). Introduction to Materials Management (8th edition). Harlow: Pearson Education Ltd.

Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Written knowledge assessment	90 minutes	A3.3, C2.2, C2.3, C2.4*	80%	4.0	5.5	S1.8	S1.9	S1.10	S1.12
ASSESSMENT02 (FT)		X			X	Assignment -Simulation assignment-		A3.3*	20%	1.0	5.5	S1.8	S1.9	S1.10	S1.12

* See annex 1

Block 5 / Semester 3															
CU70203V3 CU70204V3		Title: Maritime Logistics and Law Maritime Logistics and Law				Number of ECs: 2.5		Number of contact hours: 24		Mandatory: Yes		Language: NL ENG			
Conditions for course participation: none															
Conditions for assessment participation: none															
<p>Brief description of the course content: These courses will address three port-related topics, namely; Ship Broker (Cargadoor), Know the Ship and Transport Law.</p> <p>The ship broker is the intermediary between the shipping agent and the carrier (shipping company). It is mainly a logistical position, which uses planning and coordination to ensure that goods get on the ship on time and that it can leave on time. In addition to the shipper and the shipping company, the ship broker also communicates with parties such as transport companies, customs, stevedores and governments. The Know the Ship component introduces logistics students to the nautical and (to a lesser degree) technical aspects of the ship. This is important to every logistics student, because the principles can also be translated into other transport modalities. Those who want to specialise in maritime logistics in semester 7 acquire essential basic knowledge. You learn how a ship is prepared to set sail and how a ship works.</p> <p>The Transport Law component looks at international trade and transportation from the perspective of the port. International transport law is discussed, but also transport over inland waterways, road transport, combined transport and especially maritime transport.</p>															
Mandatory literature: none															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X			X	Assignment - Ship broker / Transport law -		A1.1, A1.2, A4.1, C1.1*	100%	2.5	5.5	S1.8	S1.9	S1.10	S1.12

* See annex 1

Block 5 / Semester 3															
CU22627V4		Title: Logistics English 3 – Describing trends					Number of ECs: 1.25		Number of contact hours: 11		Mandatory: Yes		Language: ENG		
Conditions for course participation: none															
Conditions for assessment participation: N/A															
<p>Brief description of the course content: In this B1 course students learn how to describe graphs and change. Special attention will be paid to describing trends language, specific verbs or -in case of neutral verbs- in combination with adjectives and/or adverbs, prepositions and linking words. The digital portfolio includes (language) tasks that will expand vocabulary. In the end you will be able to write a formal line-graph description. The digital portfolio helps you prepare for your final task, a graph description.</p> <p>At the end of the course the student:</p> <ul style="list-style-type: none"> Shows a relatively high degree of grammatical control. Does not make mistakes which lead to misunderstanding Shows good control of elementary vocabulary but major errors still occur when expressing more complex thoughts or handling unfamiliar topics and situations. Can use a limited number of cohesive devices to link their utterances into clear, coherent discourse, though there may be some "jumpiness" in a long contribution Can link a series of shorter, discrete simple elements into a connected, linear sequence of points. Can explain the main points in an idea or problem with reasonable precision. 															
Mandatory literature: none															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing Factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Written knowledge assessment	60 minutes	C3.1, C4.1, C4.2*	100%	1.25	5.5	S1.9	S1.9	S1.10	S1.10

* See annex 1

Year 2 - Block 6

Block 6 / Semester 3															
CU70205V2 CU70206V2		Title: Fysieke distributie Physical Distribution				Number of ECs: 5		Number of contact hours: 48		Mandatory: Yes		Language: NL ENG			
Conditions for course participation: none															
Conditions for assessment participation: N/A															
<p>Brief description of the course content: Physical distribution is the part of logistics with which you often come into direct contact. How are products moved to and from shops, your front door, or abroad? If this is not properly organised, the items will not be in good condition or unaffordable. Flows of goods are also increasingly returned for a “second life”. In more professional phrasing, the definition of physical distribution is: analysing, planning, executing and controlling decisions regarding flows of goods between producers and buyers in such a way that the products arrive at the final destination at the right time, in the right place and in the right amounts.</p>															
<p>Mandatory literature: the most recent edition of the book ‘Distributielogistiek’ by Van Goor & Ploos van Amstel, published by Noordhoff. And for the English language course there is no mandatory literature.</p>															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Written knowledge assessment	120 minutes	A1.1, A1.3, C1.1, C2.2*	50%	2.5	5.0 #	S1.18	S1.19	S1.20	S2.2
ASSESSMENT02 (FT)		X			X	Assignment		C2.1, C2.2, C2.3*	30%	1.5	5.0 #	S1.18	S1.19	S1.20	S2.2
ASSESSMENT03 (FT)	X				X	Presentation	8 hours (all groups)	C2.1, C2.2, C2.3*	20%	1.0	5.0 #	S1.17	S1.17	S1.20	S2.2

* See annex 1

The course as a whole must be completed with a final mark of 5.5 or higher.

Block 6 / Semester 3															
CU70207V3 CU70208V3	Title: Marketing en exportmanagement Marketing and Export Management				Number of ECs: 2.5	Number of contact hours: 24	Mandatory: Yes	Language: NL ENG							
Conditions for course participation: none															
Conditions for assessment participation: N/A															
Brief description of the course content: Marketing knowledge is essential for logistics students. There is a lot of overlap with physical distribution. In the course, you will lay a theoretical foundation on the basis of the so-called four Ps: price, product, promotion and place. Through completing assignments, you will go through the marketing and export process step by step. To ultimately arrive at an export marketing plan. Topics like situation analysis, SWOT analysis, market and geographical segmentation, positioning and export strategies are discussed. These should provide a detailed picture of the success that an import/export product market concept can have.															
Mandatory literature: the most recent edition of the book 'Grondslagen van de marketing' by Bronis Verhage. And for the English language course, the translation thereof; 'Marketing Fundamentals'.															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Written knowledge assessment	90 minutes	A1.1, A1.3, A4.1, B1.3*	100%	2.5	5.5	S1.18	S1.19	S1.20	S2.2

* See annex 1

Block 6 / Semester 3															
CU22628V3		Title: Logistics English 4 – Listening and presentation skills				Number of ECs: 1.25		Number of contact hours: 11		Mandatory: Yes		Language: ENG			
Conditions for course participation: none															
Conditions for assessment participation: N/A															
<p>Brief description of the course content: This B1 course aims to improve listening skills and presentation skills. The digital portfolio helps you to expand your vocabulary and helps you to improve your listening skills. The portfolio includes a listening test on a B2 level.</p> <p>The digital portfolio prepares for a (digital) listening test and for the final presentation. The listening test is a B2 level test. The final presentation will be a presentation on a certain company, in which students show their ability to provide information on a company, talk about future plans and aim for a specific goal.</p> <p>At the end of this course the student can:</p> <ul style="list-style-type: none"> • Can understand recordings in standard dialect likely to be encountered in social, professional or academic life and identify speaker viewpoints and attitudes as well as the information content. • Can understand most radio documentaries and most other recorded or broadcast audio material delivered in standard dialect and can identify the speaker's mood, tone etc. • Can understand announcements and messages on concrete and abstract topics spoken in standard dialect at normal speed. • Can understand the main ideas of propositionally and linguistically complex speech on both concrete and abstract topics delivered in a standard dialect, including technical discussions in their field of specialisation. Can follow extended speech and complex lines of argument provided the topic is reasonably familiar, and the direction of the talk is sign-posted by explicit markers. 															
Mandatory literature: none															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)			X	X		Written knowledge assessment # - Listening exam -	45 minutes	C3.1, C4.1, C4.2*	50%	0.625	5.5	S1.18	S1.19	S1.20	S1.20
ASSESSMENT02 (FT)	X					Presentation		C3.1, C4.1, C4.2*	50%	0.625	5.5	S1.18	S1.19	S1.20	S1.20

* See annex 1

Assessment 01 Listening exam: The exam takes place online. No test paper will be handed in to administration.

Year 2 – Entire semester 3

Block 5 & 6 / Semester 3															
CU70209V4		Title: Two day internship S3 (Tweedaagse stage)				Number of ECs: 10		Number of contact hours: 10		Mandatory: No #		Language: NL/ENG			
Requirements for course participation: at least 45 EC achieved in propaedeutic phase.															
Conditions for assessment participation: Hourly account of 32 completed internship days (256 hours) plus 24 hours for reporting, as described in the Course Internship Manual.															
Brief description of the course content: As part of the two-day internship, you will work in a logistics environment to gain some first-hand knowledge of the professional field as soon as possible. This will allow you to better experience the usefulness of theory and will also allow you to link it directly to practical applications.															
Mandatory literature: none															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Portfolio		A2.2, A2.3, A3.3, B3.2, B4.1, C1.2, C2.3, C2.5, C3.1*	90%	9.0	5.5	S1.19	S2.1	S2.2	S2.4
ASSESSMENT02 (FT)			X	X		Assignment - Video recording -		C4.2*	10%	1.0	5.5	S1.19	S2.1	S2.2	S2.4

* See annex 1

If you complete this course, you do not have to complete Logistics advice to an enterprise (CU70210/CU70211).

Block 5 & 6 / Semester 3															
CU70210V4 CU70211V4		Title: Logistics advice to a company S3 (Logistiek advies aan een onderneming S3)				Number of ECs: 10		Number of contact hours: 16		Mandatory: No #		Language: NL ENG			
Requirements for course participation: at least 45 EC achieved in propaedeutic phase.															
Conditions for assessment participation: Hourly account of 32 completed internship days (256 hours) plus 24 hours for reporting, as described in the Course Internship Manual.															
<p>Brief description of the course content: Our future graduates work in an environment in which the borders between subjects and professional fields are increasingly blurred. They must as such be able to function in the area of specialisation of others, and be able to tackle complex questions and problems in an increasingly integral and multidisciplinary way. In order to operate successfully in this work environment, the HBO student must have a broad range of skills (21st century skills), be willing to get out of their comfort zone, be prepared for professional practice in which a problem is examined from multiple perspectives and be aware of the fact that his ideas can only lead to real innovations if he works together with others from various disciplines.</p> <p>As an alternative to the “Two-day Internship S3”, this course offers students the opportunity to acquire knowledge about professional practice by working on and delivering a professional product (for example an analysis, a design, a recommendation, a product). The practical problems posed to students are derived from real life, in other words: are current issues in professional practice and are in any case multidisciplinary, but if possible interdisciplinary in nature and meant to solve the client’s problem.</p>															
Mandatory literature: none															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Portfolio		A2.2, A2.3, A3.3 B3.2, B4.1, C1.2, C2.3, C2.5, C3.1*	90%	9.0	5.5	S1.19	S2.1	S2.2	S2.4
ASSESSMENT02 (FT)			X	X		Assignment - Video recording -		C4.2*	10%	1.0	5.5	S1.19	S2.1	S2.2	S2.4

* See annex 1

If you complete in this course, you do not have to complete the Two-day Internship S3 (CU70209).

Block 5 & 6 / Semester 3															
VCCU70285V1 VCCU70286V1	Title: HZ Personality LE 1 HZ Personality LE 2				Number of ECs: 1.25 1.25	Number of contact hours: N/A		Mandatory: Yes #	Language: NL ENG						
Conditions for course participation: none															
Conditions for assessment participation: N/A															
Brief description of the course content: HZ Personality LE 1 and LE 2 are two courses of 1,25 EC each. These fill the free composition space in semester 3 which amounts to 2,5 EC in total. Combine the two courses (2.5 EC) is possible. Via the HZ Personality learning pathway, HZ gives students space to personalise their own development during their studies, increases the possibilities for domain-transcending exploration and stimulates broad social engagement. In this way, the learning pathway contributes to the mission of HZ, to educate students into entrepreneurial, innovative and value-adding professionals for a sustainable and globalising society. Students within the learning pathway HZ Personality work on this mission in three areas, namely; yourself (personal development), the other (community development), the world (sustainable development goals).															
Mandatory literature: none															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Portfolio		N/A	100%	2.5	5.5	N/A	N/A	N/A	N/A

The obligation is that over the 2 years, a total of 5 EC is filled with the courses HZ Personality LE 1 through LE 4. However, students do have freedom of choice.

Year 2 – Block 7

Block 7 / Semester 4															
CU70212V3 CU70213V3		Title: De Logistieke project- & verandermanager The Logistics Project & Change Manager				Number of ECs: 5		Number of contact hours: 48		Mandatory: Yes			Language: NL ENG		
Conditions for course participation: none															
Conditions for assessment participation: none															
Brief description of the course content: The course consists of setting up a project organisation and learning to perform project management. Existing organisations often change because of projects meaning that organisational change management is an important skill in order to successfully implement the modifications.															
Mandatory literature: none															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X			X	Portfolio <i>Project Management</i>		A4.2, A5.1, B1.1, B1.2, B1.3, B2.1, B5.1*	50%	2.5	5.5	S2.7	S2.7	S2.10	S2.10
ASSESSMENT02 (FT)	X				X	Criterion-oriented interview <i>Project Management</i>	8 hours (all groups)	A4.2, A5.1, B1.1, B1.2, B1.3, B2.1, B5.1*	50%	2.5	5.5	S2.7	S2.7	S2.10	S2.10

* See annex 1

Block 7 / Semester 4															
CU70214V4 CU70215V4		Title: Project- & verandermanagement Project & Change Management				Number of ECs: 2.5		Number of contact hours: 24		Mandatory: Yes		Language: NL ENG			
Conditions for course participation: none															
Conditions for assessment participation: N/A															
Brief description of the course content: The course consists of setting up a project organisation and learning to perform project management. Existing organisations often change because of projects meaning that organisational change management is an important skill in order to successfully implement the modifications.															
Mandatory literature: Harvey Maylor, Project Management, Fourth Edition - ISBN 9 78 273 7 4324															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Written knowledge assessment	90 minutes	A1.1, B1.1, B1.2, B1.3, B2.1, B5.1*	100%	2.5	5.5	S2.8	S2.19	S2.10	S2.12

* See annex 1

Block 7 / Semester 4															
CU70216V4 CU70217V4		Title: Training managementvaardigheden Management Skills Training				Number of ECs: 2.5		Number of contact hours: 24		Mandatory: Yes		Language: NL ENG			
Conditions for course participation: none															
Conditions for assessment participation: none															
<p>Brief description of the course content: Training students in management skills. Good communication is very important within organisations. This applies to all employees. Communication allows people to share information. Communication allows people to be up-to-date on developments, know what is expected of them and allows for coordination between parties. However, communication is not always easy for people and people often struggle to formulate topics clearly and concretely. People are often insufficiently aware of their style of communication and therefore find it difficult to adjust their communication when situations require this. The course offers students insight into personal patterns of behaviour and personal key qualities and teaches management skills to communicate and influence effectively.</p>															
Mandatory literature: none															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X	X		X	Portfolio		B1.2, B3.1, B5.2*	100%	2.5	5.5	S2.7	S2.9	S2.10	S2.12

* See annex

Block 7 / Semester 4															
CU70218V4 CU70219V4	Title: De maritieme cold supply chain The maritime cold supply chain					Number of ECs: 2.5	Number of contact hours: 24	Mandatory: Yes	Language: NL ENG						
Conditions for course participation: none															
Conditions for assessment participation: none															
Brief description of the course content: Training students in management skills. Good communication is very important within organisations. This applies to all employees. Communication allows people to share information. Communication allows people to be up-to-date on developments, know what is expected of them and allows for coordination between parties. However, communication is not always easy for people and people often struggle to formulate topics clearly and concretely. People are often insufficiently aware of their style of communication and therefore find it difficult to adjust their communication when situations require this. The course offers students insight into personal patterns of behaviour and personal key qualities and teaches management skills to communicate and influence effectively.															
Mandatory literature: none															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X			X	Assignment - <i>Transport of perishable cargo -</i>		A3.1, C2.1, C2.2*	100%	2.5	5.5	S2.7	S2.9	S2.10	S2.12

* See annex 1

Year 2 - Block 8

Block 8 / Semester 4															
CU70220V3 CU70221V3		Title: De Supply Chain Manager The Supply Chain Manager				Number of ECs: 2.5		Number of contact hours: 32		Mandatory: Yes			Language: NL ENG		
Conditions for course participation: none															
Conditions for assessment participation: A complete and timely submitted portfolio for which the specific criteria are shared in the digital learning environment, LEARN, at the commencement of the course.															
Brief description of the course content: Supply chain management (SCM) is “managing the chain that connects independent customers and suppliers to as it were create a single entity with the goal of creating value and reducing wastage through the voluntary coordination of goals and activities of all organisations in the chain.” More than in “regular” logistics, cooperation between organisations is sought across the borders of organisations, in the own chain or beyond. Due to this all-encompassing chain perspective, the course is also the conclusion of the first two years of study, by reviewing the discussed logistical subareas in the light of the control of goods flows at the chain level. A logistics game (which is provided by the course programme) and associated assignments are part of this course.															
Mandatory literature: none															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)	X				X	Criterion-oriented Interview	8 hours (all groups)	A1.2, A1.3, A2.2, A2.3, A3.1, A4.1, B4.1, C2.3*	100%	2.5	5.5	S2.17	S2.17	S2.20	S2.20

* See annex 1

Block 8 / Semester 4															
CU70222V3 CU70223V3		Title: Supply Chain Management NL Supply Chain Management INT				Number of ECs: 2.5		Number of contact hours: 24		Mandatory: Yes		Language: NL ENG			
Conditions for course participation: none															
Conditions for assessment participation: N/A															
Brief description of the course content: Supply chain management (SCM) is “managing the chain that connects independent customers and suppliers to as it were create a single entity with the goal of creating value and reducing wastage through the voluntary coordination of goals and activities of all organisations in the chain.” More than in “regular” logistics, cooperation between organisations is sought across the borders of organisations, in the own chain or beyond. Due to this all-encompassing chain perspective, the course is also the conclusion of the first two years of study, by reviewing the discussed logistical subareas in the light of the control of goods flows at the chain level.															
Mandatory literature: NL: Van der Meer & Van Goor, Werken met supply chain management 2 16, 2e druk ISBN: 9 789 1 831646 ENG: Frazelle, Edward H., Supply Chain Strategy 2nd edition (subject to change) - ISBN: 9 787 1 84288															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Written knowledge assessment	90 minutes	A1.1, A1.2, A1.3, A3.1, A3.2, A3.3, A4.1, C2.2*	100%	2.5	5.5	S2.18	S2.19	S2.20	S2.22

* See annex 1

Block 8 / Semester 4															
CU70224V4 CU70225V4		Title: Lean six sigma voor logistiek Lean Six Sigma for Logistics					Number of ECs: 2.5		Number of contact hours: 24		Mandatory: Yes		Language: NL ENG		
Conditions for course participation: none															
Conditions for assessment participation: A fully worked out assignment from a company for which the specific criteria are shared in the digital learning environment, LEARN, at the commencement of the 24 hour case.															
Brief description of the course content: "Lean" refers to eliminating wastage such as excess stock, waiting times and transport. It strives towards maximum added value for the client, by charting and then streamlining the entire chain. The research methods are relatively simple, but very useful in practice. "Six sigma" means that processes are so well controlled that undesired variations (for example in delivery times) are eliminated. A roadmap (DMAIC) using statistical models intelligently allows the researcher to perform the study in a very structured way. The combination of the two methods – lean six sigma – allows companies to deliver high quality at low cost. This is what the course is about. The research methods of the Theory of Constraints are also examined. At the end of the course, during a 24-hour corporate mission, this knowledge is put into practice.															
Mandatory literature: the most recent edition of the book 'Lean Green Belt' by Ton van Kollenburg. And for the English language course, the translation thereof, with the same title. And the most recent edition of the book 'Lean en Six Sigma voor het Hoger Onderwijs' by W. Salentijn.															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)	X				X	(Workplace) Assessment	N (is on location)	A2.2, A2.3, A2.4, A3.1, A3.2, A3.3*	100%	2.5	5.5	S2.18	S2.19	S2.20	S2.22

* See annex 1

Block 8 / Semester 4															
CU70226V3 CU70227V3		Title: Smart Logistics & Big Data NL Smart Logistics & Big Data INT				Number of ECs: 2.5		Number of contact hours: 24		Mandatory: Yes		Language: NL ENG			
Conditions for course participation: none															
Conditions for assessment participation: N/A															
<p>Brief description of the course content: The world of logistics is one where efficiency and dynamics are essential. Due to the huge amount of big data we have at our disposal nowadays, we can quickly achieve significant process improvements. Logistics companies who undertake a lot of innovation and continuously update the supply chain have a great competitive advantage compared to companies who trail behind.</p> <p>Big data has therefore become a key factor in the digitisation of logistics and production processes. Demand planning, order management and price management can profit significantly from big data initiatives. Big data ensures that a digitised supply chain can more effectively combine transactional data with real time process data to make new forms of connectivity and production possible. Leaders in this field will be able to discover and interpret signals in supply chains and to forward them to the right people in the organisation.</p> <p>As part of this course, practical assignments are used to teach how big data tools can be utilised to perform smart logistics analyses, which allows for insight into the organisation and/or entire supply chain to be obtained and for optimisations to be calculated.</p>															
Mandatory literature: none															
Assessment code	Assessment method <i>Oral/Written/Other/Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Assignment		A2.2, A2.3, C1.1, C2.3*	100%	2.5	5.5	S2.18	S2.19	S2.20	S2.22

* See annex 1

Block 8 / Semester 4															
CU70228V3 CU70229V3		Title: Human logistics 2 – Zorglogistiek Human Logistics 2 – Care Logistics				Number of ECs: 2.5		Number of contact hours: 24		Mandatory: Yes		Language: NL ENG			
Conditions for course participation: none															
Conditions for assessment participation: N/A															
Brief description of the course content: Human logistics concerns the logistical processes of flows of people instead of flows of goods. Examples are hospitals, pop festivals, disasters or sports events. Many principles of “regular” logistics are also very important in Human Logistics, and are easily translated to situations in which flows of people have to be managed. Other aspects are more specific, for example anticipating security problems in the form of an evacuation plan. This second course on Human Logistics discusses logistics in hospitals and other care institutions specifically. Care logistics is part of the Human Logistics field, because it is largely about the management of flows of patients.															
Mandatory literature: none															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X			X	Assignment		A3.1, A3.2, A3.3, C3.1, C3.2 *	70%	1.75	5.5	S2.17	S2.18	S2.20	S2.20
ASSESSMENT02 (FT)	X				X	Presentation	8 hours (all groups)	A3.1, A3.2, A3.3, C3.1, C3.2 *	30%	0.75	5.5	S2.17	S2.18	S2.20	S2.20

* See annex 1

Year 2 – Entire semester 4

Block 7 & 8 / Semester 4

CU70230V3	Title: Logistics English 5	Number of ECs: 2.5	Number of contact hours: 24	Mandatory: Yes	Language: ENG
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Conditions for course participation: none

Conditions for assessment participation: Completion of course assignments and quizzes for which the specific criteria are shared on the digital learning environment LEARN at the start of the course.

Brief description of the course content: This course is at a B2+ level and prepares the student to write a professional, convincing argumentative essay and prepare and give a persuasive presentation.

- In part one of this course, the students will review the target audience, purpose, and structure for a scientific argumentative essay.
- Students are expected to research topics, paraphrase findings and use APA referencing correctly.
- In part two of the course, the students will participate in a professional persuasive loop presentation. Here the students will use the loop presentation style of delivery, and create double sided arguments to support their reasoning.

ASSESSMENT01 (Essay – Learning goals)

- Draft an arguable thesis statement
- Use reasonable tone that - establishes common ground - avoids personal attacks
- Recognise emotional appeal and logical fallacies
- Sustain progressive, focused, and logical argument that supports thesis
- Acknowledge, accommodate, and refute counterarguments logically and ethically
- Choose and engage target audience that includes sceptical readers
- Avoid stereotyping and oversimplification
- Use reliable and varied evidence to support claims
- Employ recognised research methods

ASSESSMENT02 (Presentation – Learning goals)

- Use a loop presentation model
- Create two-sided arguments
- Take the role of the opposition
- Apply the argument to the target
- Understand language style and register
- Use visual support skills
- Use back and forward referencing
- Use information logically
- Structure the argument through language and order of information

Mandatory literature: none

Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Assignment	No	C4.1*	50%	1.25	5.5	S2.8	S2.9	S2.10	S2.10
ASSESSMENT02 (FT)	X				X	Presentation	No	C4.1, C4.2*	50%	1.25	5.5	S2.18	S2.18	S2.20	S2.20

* See annex 1

Block 7 & 8 / Semester 4															
VCCU70287V1 VCCU70288V1	Title: HZ Personality LE 3 HZ Personality LE 4				Number of ECs: 1.25 1.25	Number of contact hours: N/A		Mandatory: Yes #	Language: NL ENG						
Conditions for course participation: none															
Conditions for assessment participation: N/A															
<p>Brief description of the course content: HZ Personality LE 3 and LE 4 are two courses of 1,25 EC each. These fill the free composition space in semester 4, amounting to 2.5 EC in total. Combine the two courses (2.5 EC) is possible. Via the HZ Personality learning pathway, HZ gives students space to personalise their own development during their studies, increases the possibilities for domain-transcending exploration and stimulates broad social engagement. In this way, the learning pathway contributes to the mission of HZ, to educate students into entrepreneurial, innovative and value-adding professionals for a sustainable and globalising society. Students within the learning pathway HZ Personality work on this mission in three areas, namely; yourself (personal development), the other (community development), the world (sustainable development goals).</p>															
Mandatory literature: none															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Portfolio		N/A	100%	2.5	5.5	N/A	N/A	N/A	N/A

The obligation is that over the 2 years, a total of 5 EC is filled with the courses HZ Personality LE 1 through LE 4. However, students do have freedom of choice.

Year 3 – Semester 5

Block 9 & 10 / Semester 5															
CU11112V13		Title: Oriënterende stage Internship for professional orientation				Number of ECs: 30		Number of contact hours: 10		Mandatory: Yes		Language: NL ENG			
Conditions for course participation:															
1. Internship document in OnStage, containing the basis, the main question and the sub-questions for the study, as well as the selected competencies and SMART learning objectives, meets the course programme requirements.															
2. Sufficient EC obtained (see 2.2.8)															
Conditions for assessment participation: Timesheet showing 840 hours (105 days), of which at least 760 hours (95 days) at the internship company.															
Brief description of the course content: During the working internship you will work on acquiring competencies for the logistics profession in a company. You will do this by helping with the daily logistics business processes. In addition, you will perform research. You could think, for example, of an internship at a transportation company, a warehouse, a web shop, an organisation active in Human Logistics and many other kinds of companies.															
Mandatory literature: none															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Portfolio <i>-professional competencies-</i>		A1.1, A2.4, A3.2, A3.3, B2.1, B3.1, B3.2, C2.5, C3.1, C3.2, C4.2*	70%	9.0	5.5	S1.18	S1.19	S1.20	S2.2
ASSESSMENT02 (FT)		X		X		(Workplace) Assessment - <i>research competencies-</i>		A2.1, A2.2, A2.3, A2.4*	30%	21.0	5.5	S1.18	S1.19	S1.20	S2.2

* See annex 1

Year 3 – Semester 6

Free Minor. Please refer to the HZ minor catalogue.

Year 4 – Semester 7

Block 13 & 14 / Semester 7

CU05970V10	Title: Logistics Information Systems					Number of ECs: 5	Number of contact hours: 48	Mandatory: Yes	Language: ENG					
Conditions for course participation: none														
Conditions for assessment participation: N/A														
Brief description of the course content: Logistics and ICT are inseparably linked. Without fast and reliable information, it is impossible to make the right decisions about the flow of goods. This course examines the information and communication systems used in this, such as Enterprise Resource Planning, Warehouse Management Systems, Transport Management Systems and Advanced Planning Systems. In addition, you will be looking at how a good selection of the right software systems for an organisation might be achieved. The course is part of all specialisations.														
Mandatory literature: none														
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G			%	ECs					
ASSESSMENT01 (FT)	X				X	Assignment - functional specifications and package selection report -		50%	2.5	5.0 #	S1.9	S1.13	S1.20	S2.3
ASSESSMENT02 (FT)	X			X		Assignment - Information management and logistics -		50%	2.5	5.0 #	S1.19	S2.2	S2.4	S2.7

* See annex 1

The course as a whole must be completed with a final mark of 5.5 or higher.

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Block 13 & 14 / Semester 7															
CU15377V4	Title: Voorbereiding afstuderen Logistiek Preparation Graduation Logistics					Number of ECs: 2.5	Number of contact hours: 24		Mandatory: Yes	Language: ENG					
Conditions for participation: semester 1 through 5 have been completed in full.															
Conditions for assessment participation: N/A															
Brief description of the course content: According to the current criteria of the HZ University of Applied Sciences, a graduation thesis must be based on a sound research proposal including theoretical framework. In this course you will develop your research proposal before starting your internship graduation and the actual research. For support in this, you will take classes on doing (literature) research, choosing and justifying the right (logistical) research methods and writing a research proposal. The internship company and the research assignment must be officially approved before you can conclude this course. This course is common to all specialisations. Completing this course is a condition for being able to begin CU11113 Graduation. The planning weeks below are based on the three fixed starting moments per year for graduation (see 2.2.11).															
Mandatory literature: NL: Dit is onderzoek, Ben Baarda, 2019, 3e druk, ISBN 978-90-01-89544-0, Noordhoff Uitgevers ENG: Research, this is it, Ben Baarda, 2020, 3rd edition, ISBN 978-90-01-89546-4, Noordhoff Uitgevers															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Assignment - <i>research proposal</i> – -> <i>start graduation 30/1/23</i> -> <i>start graduation 1/5/23</i> -> <i>start graduation 4/9/23</i>		A2.1, A5.1, B3.1, B3.2, B5.1*	100%	2.5	5.5	S1.16 S2.7 S2.20	S1.18 S2.9 S2.22	S1.19 S2.10 S1.0	S1.20 S2.11 S1.0

* See annex 1

Block 13 & 14 / Semester 7															
CU15379V5		Title: Management Development Training				Number of ECs: 5		Number of contact hours: 48		Mandatory: Yes		Language: ENG			
Conditions for course participation: none															
Conditions for assessment participation: Timely submit complete portfolio.216															
Brief description of the course content: This course fits within the management learning line of the programme. It offers you the possibility of discovering and developing your strong sides as a (potential) manager and to work on your weaker sides. The course is based on theoretical insights as a substantiation of practically-oriented skill trainings. You will reflect on your behaviour in the role of manager. The course is part of all specialisations.															
Mandatory literature: none															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)	X				X	Criterion-oriented interview	8 hours (all groups)	A4.1, B1.3*	50%	2.5	5.5	S1.16	S1.18	S1.19	S1.20
ASSESSMENT02 (FT)	X			X		Presentation		B1.2, C4.1, C4.2* B1.1, B5.2, C2.1*	50%	2.5	5.5	S1.4	S1.4	S1.6	S1.6

* See annex 1

Block 13 & 14 / Semester 7															
CU70401V1		Title: Sustainable Supply Chains				Number of ECs: 2.5		Number of contact hours: 24		Mandatory: Yes		Language: ENG			
Conditions for course participation: none															
Conditions for assessment participation: N/A															
Brief description of the course content: It is becoming increasingly clear that modern companies must change the way they work. Transferring from long-established, linear models with high resource usage and a lot of waste towards a lean, smarter, more circular approach. This course addresses the principles and implementation of sustainable logistics operations and responsible business operations of the chain as a whole. Besides important themes such as closed loop supply chains, product life extension and recycling, you will work on best practices and mini cases.															
Mandatory literature: the most recent edition of the book 'Sustainable Logistics and Supply Chain Management' by Grant, Trautrim and Wong, published by Kogan Page.															
Assessment code	Assessment method <i>Oral/Written/Other/Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X		X		Assignment		A1.3, A4.2, B2.1, B4.1, C3.2*	100%	2.5	5.5	S1.18	S1.20	S2.2	S2.4

* See annex 1

Block 13 & 14 / Semester 7															
CU17009V4		Title: Specialisation Supply chain management				Number of ECs: 15		Number of contact hours: 100		Mandatory: Yes #		Language: ENG			
Conditions for course participation: none															
Conditions for assessment participation: N/A															
Brief description of the course content: This course forms the specific component of the Supply Chain Management specialisation. Under supervision, you will research how good SCM is currently carried out in various industries. The course includes a number of in-depth workshops on relevant topics. You will make a portfolio of the various products you deliver and will conclude the course with an assessment. You can only take part in this assessment if your portfolio has received a passing mark. Part of the assignments is related to the game The Cool Connection. Because the Logistics Engineering programme is billed for the game, every student is asked for a financial contribution.															
Mandatory literature: Supply Chain Innovation Wilbers, Mauk 9789039528099 Boom publishers Amsterdam, edition 2															
Assessment code	Assessment method <i>Oral/Written/Other/Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)	X			X		(Workplace) assessment		C4.2*	10%	1.5	5.5	S1.19	S1.19	S1.20	S1.20
ASSESSMENT02 (FT)		X		X	X	Portfolio		A1.1, A1.2, A1.3, A2.2, A2.4, A3.1, A3.2, A4.1, C1.1, C2.1, C2.2, C2.3*	90%	13.5	5.5	S1.16	S1.18	S1.19	S1.20

* See annex 1

The course is only mandatory for the students of the Supply Chain Management specialisation.

Block 13 & 14 / Semester 7															
CU17010V4		Title: Specialisation Human logistics				Number of ECs: 15		Number of contact hours: 100		Mandatory: Yes #		Language: ENG			
Conditions for course participation: none															
Conditions for assessment participation: N/A															
Brief description of the course content: This course forms the specific component of the Human Logistics specialisation. Under supervision, you will research in which way good human logistics is currently carried out across various industries. This includes areas such as defence, humanitarian aid, tourism, etc. Both theory and practice are assessed. The course includes a number of in-depth workshops on relevant topics. You will make a portfolio of the various products you deliver and will conclude the course with a professionally-oriented assessment. Beforehand, you can indicate whether the focus will be on an executive, advisory or managerial role.															
Mandatory literature: Supply Chain Innovation Wilbers, Mauk 9789039528099 Boom publishers Amsterdam, edition 2															
Assessment code	Assessment method <i>Oral/Written/Other/Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)	X			X		(Workplace) assessment		C4.2*	10%	1.5	5.5	S1.19	S1.19	S1.20	S1.20
ASSESSMENT02 (FT)		X			X	Portfolio		A1.1, A1.2, A1.3, A2.2, A2.4, A3.1, A3.2, A4.1, C1.1, C2.1, C2.2, C2.3 *	90%	13.5	5.5	S1.16	S1.18	S1.19	S1.20

* See annex 1

The course is only mandatory for the students of the Supply Chain Management specialisation.

Block 13 & 14 / Semester 7															
CU17011V6		Title: Specialisation Maritime logistics				Number of ECs: 15		Number of contact hours: 100		Mandatory: Yes #		Language: ENG			
Conditions for course participation: none															
Conditions for assessment participation: N/A															
Brief description of the course content: This course forms the specific component of the Maritime Logistics specialisation. Under supervision, you will research in which way good maritime logistics is currently carried out in various industries. Think of the ship broker, the stevedore, the shipping company, etc. Both theory and practice are assessed. The course includes a number of in-depth workshops on relevant topics. You will make a portfolio of the various products you deliver and will conclude the course with a professionally-oriented assessment. Beforehand, you can indicate whether the focus will be on an executive, advisory or managerial role.															
Mandatory literature: Maritime Logistics: A Guide to Contemporary Shipping and Port Management Song, Dong-Wook, Panayides, Photis 9780749472689 Bertram Books 1															
Assessment code	Assessment method <i>Oral/Written/Other/Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X			X	Assignment <i>-Shipping logistics-</i>		A1.1, A1.2, A1.3, A3.1, A3.2*	30%	4.5	5.5	S1.9	S1.11	S1.15	S1.18
ASSESSMENT02 (FT)		X			X	Assignment <i>-Ports & Terminals-</i>		A3.1, A4.1, C2.3*	30%	4.5	5.5	S1.9	S1.11	S1.15	S1.18
ASSESSMENT03 (FT)		X			X	Assignment <i>-Freight & Forwarding-</i>		A2.2, A2.4, C1.1, C2.1, C2.2*	30%	4.5	5.5	S1.9	S1.11	S1.15	S1.18
ASSESSMENT04 (FT)	X				X	Presentation <i>-Ports & Terminals-</i>	60 minutes	C4.2*	5%	0.75	5.5	S1.17	S1.17	S1.20	S1.20
ASSESSMENT05 (FT)	X				X	Presentation <i>-Freight & Forwarding-</i>	60 minutes	C4.2*	5%	0.75	5.5	S1.17	S1.17	S1.20	S1.20

* See annex 1

The course is only mandatory for the students of the *Maritime Logistics* specialisation.

Year 4 – Semester 8

Block 15 & 16 / Semester 8															
CU11113V13		Title: Afstuderen / Graduation				Number of ECs: 30		Number of contact hours: 16		Mandatory: Yes		Language: NL/ENG			
<p>Conditions for course participation:</p> <ul style="list-style-type: none"> The student has completed semesters 1 through 4 in full The student obtained at least 52.5 EC in semesters 5 through 7 The graduation internship company and assignment have been approved The student successfully completed the course CU15377 Preparation Graduation Logistics, which also means that their research proposal was approved. 															
<p>Conditions for assessment participation: Timesheet showing 840 hours (105 days), of which at least 760 hours (95 days) at the internship company and an assessment form "Functioning" signed by the company supervisor.</p>															
<p>Brief description of the course content: Completing a logistics graduation thesis: a complex logistical practical assignment at the final level of independent research and in doing so choosing relevant methodologies. Note: the planning below assumes a regular start of the graduation thesis on 30 January 2023.</p>															
<p>Mandatory literature: none</p>															
Assessment code	Assessment method <i>Oral/Written/Other/ Individual/Group</i>					Assessment type	Schedule <i>If yes, state assessment duration</i>	Contents <i>Link to competencies</i>	Weighing factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)	X	X		X		(Workplace) Assessment - <i>professional competencies-</i>	0.5 hours (per student)	B1.1, B1.2, B1.3, B2.1, B3.1, B3.2, B4.1, B5.2, C2.5, C3.1, C3.2*	30%	9.0	5.5	S2.18 S2.19	S2.18 S2.19	S1.4 (w41/42)	S1.4 (w41/42)
ASSESSMENT02 (FT)	X	X		X		(Workplace) Assessment - <i>research competencies-</i>	1.5 hours (per student)	A1.1, A1.2, A1.3, A2.1, A2.2, A2.3, A2.4, A3.1, A3.2, A3.3, A4.1, A4.2, A5.1, B2.1, B3.1, B5.1, C1.1, C1.2, C2.5, C3.1, C3.2, C4.1, C4.2*	70%	21.0	5.5	S2.18 S2.19	S2.18 S2.19	S1.4 (w41/42)	S1.4 (w41/42)

* See annex 1

2.2.6 **HZ Personality** (article 3.12 CER HZ Ba vt)

The curriculum reserves 10 EC for HZ Personality. HZ Personality is spread over the curriculum as much as possible. With this learning pathway, HZ gives students space to personalise their own development during their studies, increases the possibilities for domain-transcending exploration and stimulates broad social engagement.

For the cohorts who started the Logistics Engineering course programme in or after the 2017-2018 academic year, the free composition space (HZ Personality) in the programme comprises 5 EC. Free composition courses are mandatory for these students.

Positioning free composition space

The educational programme of Logistics Engineering does not have any free composition space in years 1, 3 and year 4. In year 2, there is free composition space in the amount of 5 EC in total, marked as the four courses HZ Personality LE 1 through 4, worth 1.25 EC each.

In addition, during the propaedeutic phase of Logistics Engineering, 2.5 EC are filled with the two mandatory courses CU70121/70122 and CU70151/70152 (see 2.2.4). These specifically focus on the personal development of the students and thus align with the objectives of HZ Personality.

International obligation

The student must fulfil an international obligation during the Logistics Engineering programme. This can be fulfilled through participation in the English language education programme or through an internship for professional orientation, the free minor or by graduating abroad. The student can however also fulfil the international obligation by using the free composition space:

- In total obtain 2.5 EC of a second foreign language (in addition to the mandatory English courses) or
- In total obtain 2.5 EC with free composition courses like teaching assistant abroad or
- In total obtain 2.5 EC with free composition courses as a study coach of an international Logistics Engineering student.

The final option is for the student to find an equivalent alternative for international development themselves, and submit this to the Examination Sub-Committee for approval.

2.2.7 **Specialisations** (article 3.10 CER HZ Ba vt)

Three specialisations are offered in semester 7: Supply chain management, Human logistics and Maritime logistics. These specialisations have four courses in common: CU05970V10, CU15377V4, CU15379V4 and CU70401V1.

In addition to this common component of 15 EC, each specialisation has a specific course of 15 EC: respectively CU17009V4, CU17010V4 and CU17011V4. For details, please refer to 2.2.5 Year 4 – Semester 7.

For admission to the specialisations, all courses in semesters 1 through 5 must have been successfully completed. The desired specialisation must have been chosen by the latest before midnight at the end of Sunday 4 June 2022.

2.2.8 **Internship** (article 3.9 CER HZ Ba vt)

The student cannot begin the CU11112V13 Internship for professional orientation until after they have fulfilled the following conditions: the student obtained the foundation diploma and at least 37.5 EC in semester 3 and 4.

The student looks for a suitable internship company and an adequate assignment himself/herself. The Internship for professional orientation CU11112V13 consists of at least 95 workdays at the internship company (out of a total of at least 105 internship days = 840 hours), which are mainly spent on performing logistics activities at a third-year HBO level, as well as performing problem-oriented research (advice). The student reports on the results both in writing and orally. The internship results, performance, portfolio and reports are evaluated.

Assessment code	Assessment method <i>Oral/Written/Other/Individual/Group</i>					Assessment type	Schedule if yes, state assessment duration	Contents <i>Link to competencies</i>	Weighing Factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)		X			X	(Workplace) Assessment - <i>professional competencies-</i>		A1.1, A2.4, A3.2, A3.3, B2.1, B3.1, B3.2, C2.5, C3.1, C3.2, C4.2*	70%	9.0	5.5	S1.18	S1.19	S1.20	S2.2
ASSESSMENT02 (FT)		X			X	(Workplace) Assessment - <i>research competencies-</i>		A2.1, A2.2, A2.3, A2.4*	30%	21.0	5.5	S1.18	S1.19	S1.20	S2.2

* See annex 1

2.2.9 **Minor** (article 3.8 CER HZ Ba vt)

The Logistics Engineering programme does not have any additional admission requirements for taking a HZ minor. Specific conditions per minor are set out in the Minor Guide.

The following additional conditions apply to participation in a 'Tailored Choice' (Kies op maat) minor:

- The propaedeutic diploma has been obtained
- At least 45 EC were obtained in semesters 3 and 4
- The Internship for professional orientation CU11112V13 was completed successfully, or an exemption was granted by the Examination Sub-Committee.

For international minors, please refer to 2.2.10.

2.2.10 **Participation in international exchange programme** (article 4.5 CER HZ Ba vt)

For the Logistics Engineering course programme, participation in an international exchange programme is subject to the following additional conditions.

- The propaedeutic diploma has been obtained
- At least 45 EC were obtained in semesters 3 and 4
- The courses English CU22627V2 and CU22628V2 in semester 3 were successfully completed
- The Internship for professional orientation CU11112V13 was completed successfully, or an exemption was granted by the Examination Sub-Committee
- The courses to be taken abroad were approved by the Examination Sub-Committee.

If the international exchange programme takes place in an English-speaking country, the successful completion of course CU70230V1 (or an equivalent English course at B2 level) is required.

2.2.11 **Graduation** (article 3.9 CER HZ Ba vt)

The student cannot begin CU11113V12 Graduation until they have:

- successfully completed semesters 1 through 5
- obtained at least 52.5 EC in semester 6 and 7
- obtained approval for their internship company and assignment
- successfully completed the course CU15377V4 Preparation Graduation Logistics.

Students must find a suitable graduation company and adequate assignment themselves. These must align with the specialisation chosen in semester 7. The graduation assignment must therefore be a suitable application of the knowledge and skills acquired as part of the specialisation. If a student attends the international programme, the research proposal, the final report, the portfolio and the final presentation/defence shall be completed in English.

During the 2022-2023 academic year, there are three official starting times for the graduation internship, these are 5 September 2022, 30 February 2023 and 1 May 2023. The next starting time thereafter is 4 September 2023. The graduation internship consists of at least 95 workdays at the internship company (out of a total of at least 105 graduation days = 840 hours), which are primarily spent on performing research at HBO final level. The student reports on the results both in writing and orally. The results, performance and portfolio are assessed.

The final presentation cannot be given until such time as the total of 210 EC for semesters 1 through 7 have been obtained. If the final report and/or the portfolio do(es) not receive a passing mark, the student shall not be permitted to give the final presentation and they shall be referred to the (one) retake for the final report and portfolio. If the final presentation does not receive a passing mark, this too may be retaken once.

After the official starting date of the graduation internship, the student has 1 full year to complete every aspect of course CU11113V12. If this is not possible, the student must choose a new graduation assignment and furthermore submit a new research proposal for this, which must both be approved before the official starting time of the new graduation internship.

Assessment code	Assessment method Oral/Written/Other/ Individual/Group					Assessment type	Schedule if yes, state assessment duration	Contents Link to competencies	Weighing Factor		Minimum Mark	Assessment planned in week	Inspection of work (<10 Working days after receiving mark)	Assessment resit planned in week	Resit inspection in week
	V	S	A	I	G				%	ECs					
ASSESSMENT01 (FT)	X	X		X		(Workplace) Assessment - professional competencies-	0.5 hours (per student)	Bl.1, Bl.2, Bl.3, B2.1, B3.1, B3.2, B4.1, B5.2, C2.5, C3.1, C3.2*	30%	9.0	5.5	S2.18 S2.19	S2.18 S2.19	S1.0	S1.0
ASSESSMENT02 (FT)	X	X		X		(Workplace) Assessment - research competencies-	1.5 hours (per student)	Al.1, Al.2, Al.3, A2.1, A2.2, A2.3, A2.4, A3.1, A3.2, A3.3, A4.1, A4.2, A5.1, B2.1, B3.1, B5.1, Cl.1, Cl.2, C2.5, C3.1, C3.2, C4.1, C4.2*	70%	21.0	5.5	S2.18 S2.19	S2.18 S2.19	S1.0	S1.0

* See annex 1

2.2.13 **National knowledge exam PABO (teacher training)**

N/A

2.2.14 **Transition scheme** (art. 6.2 section 11 CER HZ Ba vt)

In the special circumstance where, due to changes in the curriculum, a student is not able to complete all required courses for an enrolling cohort, the programme will formulate an equivalent alternative to substitute courses in their study plan and submit this to the Examination Sub-Committee for approval.

2.3 Study advice

2.3.1. **Elaboration of conditions for registration for programme following NBSA**

(article 8.1, section 9 CER HZ Ba vt)

The student may not register again for the Bachelor Logistics Engineering course programme at the HZ University of Applied Sciences within three years after receiving a negative study advise (NBSA). There are no other programmes which the student would be prohibited from registering for following a NBSA for Logistics Engineering.

2.4 Experiment article (article 9.4 CER HZ Ba vt)

2.4.1 This year, the course programme is participating in an experiment as part of the pilot project group Flexibilisation. The course programme would like to understand the results of participation in this project. Students will not be adversely affected by this. For more information, please see the course programme page on HZ Learn.

CHAPTER 3 ENACTMENT

- 3.1.1 These implementation regulations shall have the same duration as the HZ Education and Examination Regulations 2022-2023.
- 3.1.2 These Implementation Regulations were enacted by the Executive Board on 26/06/2022.

ANNEX 1 Elaboration of the national sub-competencies

A. Development of policy

A1. Analyses internal and external developments, translates these towards the organisation and its stakeholders in order to, based on that context, contribute to the (logistics) strategy of the company.

A1.1. You can analyse the internal and external developments in terms of (logistical) opportunities and threats for the involved parties in and around the organisation.

A1.2. You can analyse the strong and weak logistical characteristics of the organisation.

A1.3. Based on the prepared SWOT analysis, you can contribute to the (logistical) strategy of the organisation.

A2. With the help of responsibly selected methods and techniques, research a (technical) logistical question for the improvement / innovation of the logistics process, product, and/or service.

A2.1. You are able to formulate problem definitions, perform source analysis, setup a (technical logistical) study and record it in a research proposal.

A2.2. You are able to collect the required data and process it in a suitable manner, monitoring the progress and quality of the processing, and to make adjustments where needed.

A2.3. You are able to interpret the collected and processed data, and to report on the (technical logistical) research.

A2.4. Using suitable logistics concepts, models, improvement methods, techniques and simulation tools, you are able to record, assess and analyse a logistics process, product or service.

A3. Based on responsibly selected methods, designs a logistics process, product, and/or service that aligns with the wishes of the client and other links in the supply chain.

A3.1. In the design of a logistics process, product or services you are able to select and apply sample models from scientific literature and best practices ("transfer").

A3.2. You can determine the integral logistics concept (logistical objectives, basic form, management and information system, organisation and performance indicators) for the client, for a new or modified logistics process, product or service which fits in the supply chain.

A3.3. You can systematically work out the details of a logistics process, product or service, such as the control, ICT support, technical resources, working methods, layout, routing, capacities, investments, costs and returns.

A4. Generates support for a substantiated recommendation about the designing, improving, or applying of the logistics process, product, and/or service.

A4.1. You can substantiate, write and present advice and recommendations for (the application of) a new or improved logistics process, product or service.

A4.2. During the design, decision-making, application and improvement phases, you are able to obtain the support of involved parties in and around the organisation.

A5. Prepares an implementation plan for the new/improved logistics process, product, and/or service which takes into consideration the logistical objectives.

A5.1. You can develop an implementation plan, so that a new/improved logistics process, product or service can fulfil the logistical objectives.

B. Managing the activities

B1. Effectively manages a logistics process and/or project.

B1.1. In the role of team leader or project manager, within small (logistics) teams, you are able to take operational decisions and follow up on and make adjustments to those decisions.

B1.2. You can lead small (logistics) teams and project groups by instructing, motivating, coaching and assessing its members.

B1.3. You can organise the internal activities and external alignment of a small (logistics) team or project group, among others with regard to division of labour, work procedures, planning and scheduling, meeting structures and formal agreements.

B2. Contributes to a change process which enables the logistics objectives of an organisation or part of an organisation to be realised and which takes into consideration any consequences for and support within the organisation.

B2.1. In a change process, based on the needs and possibilities of the organisation, you can contribute to the realisation of logistical objectives and the generating of support.

B3. Steers and regulates their own development in terms of knowledge and skills (soft and hard skills) relevant to the profession and demonstrates personal leadership with this.

B3.1. You can reflect on your own knowledge, soft skills and hard skills, in relation to the stated requirements for various logistical function levels.

B3.2. You can guide your own development to a requested logistical function level, which is to say; initiating the process, planning/adjusting course and implementation.

B4. Can manage (international) logistics processes from an interdisciplinary perspective, with consideration for the dynamics of the business environment and cultural differences.

B4.1. In a dynamic environment, you are able to manage (international) logistics processes, while coordinating with people of different backgrounds.

B5. Can give direction and guidance to logistics (change) processes and the associated employees, for the purpose of realising the objectives of the part of the organisation or project that is being managed and with consideration for the consequences thereof for the organisation.

B5.1. You can steer logistical (change) processes in the desired direction, so that the objectives are achieved, and the organisational consequences are considered.

B5.2. You are able to coach and effect targeted changes to the behaviour of employees within a small (logistics) team or project group.

C. Performing the activities

C1. Realises solutions for bottlenecks in the logistics operations.

C1.1. You can identify bottlenecks in the logistics operations, analyse the causes and find solutions for them.

C1.2. You can implement measures to counteract bottlenecks in the logistics operations in a controlled manner, or delegate that responsibility.

C2. Plans, manages, and takes responsibility for the implementation of logistics operations and does this with a professional and entrepreneurial attitude.

C2.1. You are able to manage the streams of goods, persons, information and money in a controlled manner that is consistent with applicable law.

C2.2. You can prepare schedules for activities such as procurement, transport, production and supply, both for the longer and shorter term, and adjust these in accordance with the PDCA cycle.

C2.3. You can collect and analyse data about the realisation of logistics operations and convert it into logistical performance indicators (and other information), and prepare management reports.

C2.4. For logistical processes, you are able to manage and properly maintain the necessary systems, resources and ICT tools, or delegate that responsibility.

C2.5. In your logistics profession, you can show a professional and entrepreneurial attitude.

C3. Works together in a professional logistics environment, shows consideration for cultural differences and acts ethically and responsibly.

C3.1. You can collaborate professionally with colleagues, customers, suppliers, consultants and other involved parties from different backgrounds.

C3.2. In the performance of your profession, you can be considerate of any moral aspects of your actions and the consequences for people, the environment and society.

C4. Communicates effectively and professionally in the common business language, at all levels.

C4.1. You are able to express yourself clearly and correctly in a professional environment, both verbally and in writing, in both your own language and in English, in line with applicable business standards.

C4.2. You are able to adapt your business communication methods (in conversations, meetings, presentations, reports, etc.) to the level of your audience or conversation partner(s).