

Logistics

Study component catalogue year 1 & 2 Logistics Engineering / Logistics Management

Year 2022-2023



DISCOVER YOUR WORLD



Breda
University
OF APPLIED SCIENCES

Introduction

This study component catalogue contains the programme content of your bachelor degree. The following elements can be found in it:

- A description per study component with, among other things, learning outcomes, content and forms of assessment
- An overview of the entire study period (4 academic years) with the study load per study component
- An overview of competencies underlying your study programme
- A matrix with the link between all competencies and study components
- A link to the year schedule containing lecture weeks, resit opportunities, holidays, etc.
- A link to the assessment programme containing an overview of all exams and assignments

Type of study component

You will come across the following types of study components in years 1 and 2:

- In **labs** (BE) / **projects** (LG), you will work on a professional product in a small group with fellow students. You will develop knowledge, skills and the right attitude within the professional context. The focus will lie on project skills and collaboration. You will be guided by a lab or project supervisor and lecturers of various backgrounds and disciplines will direct you as regards content;
- In **modules** (BE) / **cases** (LG), you will acquire knowledge and skills relevant to the profession by attending lectures and actively working on assignments. The lecturer teaches and guides you as an expert.
- For the study component **Personal & Professional Development (PPD)**, you will attend a programme with workshops supporting you in your personal and professional development. To that purpose, you will work on various kinds of assignments and a portfolio, and reflect on your development and the choices you make (e.g. regarding an internship in year 3). During the PPD track, you will be personally guided by your study coach, who will also discuss your study progress;
- During **Connection to Industry and Research** (LG) you will carry out research and/or do an assignment commissioned by a company or organisation.

Years 1 and 2

Year 1, also called propaedeutic phase, consists of two semesters of 18 weeks. In the first year, you will mainly acquire the necessary basic knowledge and skills you will need for the rest of your studies and professional practice. Each semester comprises a lab/project and several modules/cases. Additionally, you will continuously work - under the guidance of your coach - on building up your portfolio in the context of your personal and professional development.

Year 2 is a continuation of year 1, and also consists of two semesters of 18 weeks. Year 2 consists of modules/cases and labs/projects again offering more possibilities for specialisation. The focus within PPD will lie on preparing the internship.

TER

All rules can be found in the 2022-2023 Teaching and Examination Regulations (TER). Wherever ABEL uses the term 'study unit' or 'study component', the term 'course' is used in the TER. Wherever ABEL uses various types of assessment, such as 'written exam', 'assignment' and 'portfolio assessment', the term 'examination' is used in the TER.

For your information: you can earn 60 ECTS credits (EC) in every academic year, where 1 ECTS credit (1 EC) is equivalent to a study load of 28 hours.

We wish you an enjoyable and a successful academic year.

On behalf of the management team of Built Environment and Logistics,

Debbie Dermout – Director of Built Environment and Logistics

This study component manual is part of the Teaching and Examination Regulations of Built Environment and Logistics.

International Logistics 2022 - 2023: year 1

Semester 1

| Name | Osiris-code | ECTS | Page |
|---|-----------------|-----------|------|
| Getting started | BLGE1.GETST-01 | 5 | 5 |
| Basics of supply chain management | BLGE1.BOSCM-01 | 5 | 7 |
| Experience supply chain management (blokko 2.0) | BLGE1.ESCM-01 | 10 | 9 |
| Modelling and planning | BLGE1.MODPL-01 | 5 | 11 |
| Personal & Professional Development 1 | BLGE1.PPD1-01 | 5 | 13 |
| | Subtotal | 30 | |

Semester 2

| Name | Osiris-code | ECTS | Page |
|---|-----------------|-----------|------|
| Material Logistics – Basics | BLGE1.MLB-01 | 5 | 15 |
| Material Logistics – Improvement & Innovation | BLGE1.MLII-01 | 10 | 17 |
| Service Logistics – Basics & Innovation | BLGE1.SLBI-02 | 5 | 19 |
| Connection to Industry & Research 1 | BLGE1.CIR1-01 | 5 | 21 |
| Personal & Professional Development 2 | BLGE1.PPD2-01 | 5 | 22 |
| | Subtotal | 30 | |

Total **60**

International Logistics 2022 - 2023: year 2

Semester 1

| Name | Osiris-code | ECTS | Page |
|---|-----------------|-----------|------|
| Introduction to Operations Management | BLGE2.INTOM-01 | 5 | 24 |
| Operations Management in a Production Environment | BLGE2.OMPE-01P | 10 | 26 |
| Connection to Industry & Research 2 | BLGE2.CIR2-01 | 5 | 28 |
| Cross Border Supply Chains | BLGE2.CBSC-01 | 5 | 29 |
| Personal & Professional Development 3 | BLGE2.PPD3-01 | 5 | 31 |
| | Subtotal | 30 | |

Semester 2

| Name | Osiris-code | ECTS | Page |
|---------------------------------------|-----------------|-----------|------|
| Running Sustainable Businesses | BLGE2.RSTB-01 | 5 | 33 |
| Supply Chain re-design | BLGE2.SCRD-01 | 10 | 35 |
| Entrepreneurship | BLGE2.ENT-01 | 5 | 38 |
| Connection to Industry & Research 3 | BLGE2.CIR3-01 | 5 | 40 |
| Personal & Professional Development 4 | BLGE2.PPD4-01 | 5 | 41 |
| | Subtotal | 30 | |

Total **60**

Logistics Engineering / Logistics Management

Year 1

Semester 1

OSIRIS-code: BLGE1.GETST-01

Name study component: Getting started

Study load: 5 EC (=140 hours)

Coordinator: Raechel Torner

Lecturer(s): Jan-Willem Boskaljon, Jan van Elderen, Bas Groot, Rosa Hagenaaars, Karolien Kampstra, Peter Kole, Justin van de Pas, Jaap Smink, Arna van Strien, Rutger Thielen, Raechel Torner

Learning objective(s): Upon completion of this study component you are able to:

- describe all basic elements of supply chain management;
- explain the essence of supply chain management, linking it to a practical example company or product;
- understand how supply chain management works in practice;
- use the basic functions of Office 365 solutions;
- use the basic functions of Presentation software;
- use the basic functions of Project tools;
- use the basic functions of MS Teams;
- explain the customer and their expectations;
- describe the basic elements of an organization and its environment related to the project;
- identify various ways of developing intercultural competence;
- recognise aspects of your own culture that shape the way you view the world and interact with others;
- write a short, well-structured report that includes relevant visuals;
- present to a specified target group in an inspiring and appealing way;
- recall the basic outlines of a Project Plan;
- recognize the importance of a step-by step project based approach;
- reflect on personal development in written form.

Content description: In this study component, the following content is covered:

This study component serves as an introduction to the field of logistics and the various possibilities open to students and professionals in the industry. The key elements of a logistics supply chain will be described and the supply chains of several different kinds of organisations will be analyzed. You will also be given the opportunity to reflect upon your own ambitions and goals as young professional in the logistics industry, and you will be asked to articulate these ideas and relate them to your next four years in the study programme.

Language: EN

Type of study component: Case

Teaching activity: Project with coaching, Workshop, Fieldtrip

Examination: Individual assignment 100%

Mark: P, F, MO

Required literature: B. Groenendijk. Getting More Out of Excel 2019: Essential Topics for the Professional. Boom Uitgevers Amsterdam (ISBN 9789024402281),

H. Visser, A. van Goor. Logistics: Principles and Practice: a demand and supply chain management approach. Hessel Visser BV (ISBN 9789081649117)

Required other materials: Reader, e-book, Chapters translated from 'Werken met Supply Chain Management', Via Teams;
Other, Global Mind Monitor, Via Teams;
Other, Project tools, online resources, Reader composed from different books, Via Teams.

OSIRIS-code: BLGE1.BOSCM-01

Name study component: Basics of supply chain management

Study load: 5 EC (=140 hours)

Coordinator: Jan van Elderen

Lecturer(s): Jan van Elderen, Sijbren Hogewerf, Simone Jacobs, Peter Kole, Vacature Logistiek, Thato Motloung, Jaap Smink, Arna van Strien, Raechel Torner

Learning objective(s): Upon completion of this study component you are able to:

- recognize all basic elements of Supply Chain Management;
- recognize the different type of chains (e.g. Care Logistics, Event Logistics, Service Logistics, Human Logistics);
- explain the concept of circularity in supply chains;
- recognize the relation between the different flows within Supply Chain Management and Logistics;
- recall the different parts, functions and roles within a logistic supply chain, in a way that gives a visual representation of the supply chain;
- recall and relate the different possible 'values' of Data;
- apply the basic functions of Spreadsheet software (Excel e.g.) in a practical situation;
- distinguish between costs and expenditures on the one hand and revenues and receiving's on the other;
- identify the various financial flows within a company and recognize the link between these flows and the other flows (physical, information);
- apply financial statements as part of the financial component of the business plan, for budgeted as well as realized results:
 - * Investment plan;
 - * Financing plan;
 - * Income statement;
 - * Cash flow statement;
 - * Balance sheets (opening and closing);
- process the impact of various taxes on financial statements. E.g. VAT (calculation with percentages);
- write a clear, detailed text in English related to the field of logistics synthesizing and evaluating information and arguments from a number of sources.

Content description: In this study component, the following content is covered:

In this study component you learn the different elements of entire End-to-End Supply Chains (SC). Starting with the customer and his or her demand, all activities in the Supply Chain are illuminated. The way in which a company can design the SC: Procurement and supply, warehousing, production, distribution, e-commerce & reverse logistics are topics that are dealt with. In addition, attention is given to the elaboration of the financial flows within the company, expressed in relevant financial statements such as the income statement and cash flow statement. Each topic will be introduced by a lecture and you will then elaborate a case related to that topic. Next to that, you are able to elaborate an individual case that will be the central theme during the whole study component.

Language: EN

Type of study component: Case

Teaching activity: Lecture, Workshop, Fieldtrip

Examination: Written exam 50%
Written exam 50%

Mark: Marks, F, MO

Required literature: H. Visser, A. van Goor. Logistics: Principles and Practice: a demand and supply chain management approach. Hessel Visser BV (ISBN 9789081649117),
B. Groenendijk. Getting More Out of Excel 2019: Essential Topics for the Professional. Boom Uitgevers Amsterdam (ISBN 9789024402281)

Required other materials: Reader, e-book, Edubook Finance & Control year 1 (Purchase via buas.myedumundo.com);
Reader, e-book, Supply chain management, Via Teams.

OSIRIS-code: BLGE1.ESCM-01

Name study component: Experience supply chain management (blokko 2.0)

Study load: 10 EC (=280 hours)

Coordinator: Jan van Elderen

Lecturer(s): Jan van Elderen, Rosa Hagenaaars, Sijbren Hogewerf, Azadeh Irajifar, Peter Kole, Luuk Koopman, Thato Motlounge, Justin van de Pas, Paul Schuurmans, Arna van Strien, Rutger Thielen, Raechel Torner

- Learning objective(s): Upon completion of this study component you are able to:
- deploy the basic elements of supply chain management;
 - translate text- and other practice based information sources into a visualisation of a Process, by means of the most commonly used language of Process Modelling;
 - recall and use the basic functions of software on Spreadsheet /Data management (Excel e.g.) and Visualisation software (Visio, Bizagi e.g.) in the context of the project;
 - recall and reproduce the basics of descriptive statistics/data analysis;
 - interpret results with different types of (KPI) dashboards and explain how to use/apply these in practice;
 - recognize the potential impact of Blockchain on a supply chain;
 - create financial statements as part of the financial component of the business plan, for budgeted as well as realized results (e.g. in Excel):
 - * Investment plan;
 - * Financing plan;
 - * Income statement;
 - * Cash flow statement;
 - * Balance sheets (opening and closing);
 - give insight into the relation between operational activities and profitability of a company (e.g. by means of tools like DuPont chart);
 - translate the basic legal aspects of a company to a decision on the legal form of this company;
 - identify the position/role of Sales and Marketing in the supply chain and apply a marketing/sales strategy in the project context;
 - set-up a functional organization and create a strategy for dealing with the organisation's environment;
 - recognise collaboration and inter-relations between the different departments within a (virtual) company and define the position of each department within the Supply Chain;
 - deploy the basic elements of procurement;
 - respect the existence of ethical dilemma's within HRM;
 - apply appropriate tools to perform more effectively within intercultural groups;
 - present a structured, goal- and target group-oriented business plan;
 - write a structured goal and target group oriented business plan which makes appropriate use of visuals;
 - participate in a target oriented meeting;
 - write a well-structured, target-group oriented improvement plan;
 - explain the essence of theory in a project and application of content oriented theory;
 - create a project plan and project charter in which you recall all steps and elements of a project based work approach;

- recognise (the importance of) data gathering and analyses within Project based working and apply this in the context of the project;
- recognize the (value of) breaking down a project in a systematic step-wise project approach and apply this in the context of the project;
- use written tools to structure a meeting or project.

Content description: In this study component, the following content is covered:

In this 'Serious Gaming' project, your group will start a new production company to experience all the elements of Logistics & Supply Chain in practice. You will be overloaded with different sources of (unstructured) information. From customer, strategy, sales, procurement, production, transport and distribution of the final products. You have to create your own structure. Your company will be faced with (the complexity of) Physical, Financial and Information Flows, and you will learn how to work in a multi person organisation. This also includes the setup, control and execution of all activities within- and outside of your company. Your goal is to work together, with all different roles and responsibilities, and to make sure that - even though sometimes there are conflicting interests - you build up a smooth organisation to serve the customer(s). Finally, your company must be able to determine and present their profits and/or losses. In the final weeks of this project, this will all come together in two reallife simulation games.

Language: EN

Type of study component: Case

Teaching activity: Project with coaching, Lecture, Workshop

Examination: Group assignment 50%
Individual assignment 50%
Process (obligatory)

Mark: Marks, P, F, MO

Required literature: B. Groenendijk. Getting More Out of Excel 2019: Essential Topics for the Professional. Boom Uitgevers Amsterdam (ISBN 9789024402281),
H. Visser, A. van Goor. Logistics: Principles and Practice: a demand and supply chain management approach. Hessel Visser BV (ISBN 9789081649117)

Required other materials: Reader, e-book, Website Blokko, Via Teams;
Reader, e-book, Reader composed of different sources, Via Teams;
Reader, e-book, Foundations of Finance & Control (Year 1 & 2) (Purchase via buas.myedumundo.com).

OSIRIS-code: BLGE1.MODPL-01

Name study component: Modelling and planning

Study load: 5 EC (=140 hours)

Coordinator: Jan-Willem Boskaljon

Lecturer(s): Jan-Willem Boskaljon, Imad Boulakhrif, Jan van Elderen, André Gijsberts, Sijbren Hogewerf, Peter Kole, Semi Torun

- Learning objective(s): Upon completion of this study component you are able to:
- map processes in practice in a simple organization;
 - recognize supply and demand concepts;
 - recognize the concept of chain-integration;
 - apply different ways to model supply chains;
 - state the most commonly used function(s) of automation of information and processes;
 - outline the possible functions and capabilities of an ERP-system;
 - recognize the different main concepts and context of (Sales and Operations) Planning;
 - recognize and compare the different possible (manual and automated) interfaces, and give practical examples;
 - explain the function and aspects of Requirement management, and give practical examples;
 - summarise the basic structure and processes within S&OP and relate them to a forecasting and inventory plan;
 - translate text- and other practice based information sources into a visualisation of a Process, by means of the most commonly used language of Process Modelling;
 - recognize the information flows in the supplychain / end-to-end processes by means of different forms/documents (invoices, packingslip e.g.);
 - recognize the different hardware and software possibilities for an automated system (On Premise, Cloud e.g.);
 - recognize the importance of business communication in gaining understanding of a manager and business partners;
 - deliver a professional advice for MRP and S&OP calculations intended for a responsible manager;
 - calculate the cost per unit (product or service) based on fixed and variable costs (simple setting):
 - * Break-even analysis;
 - * Absorption costing;
 - * Direct cost;
 - link financial flows to information flows and physical flows within the information system (e.g. financial accounting within an ERP-solution).

Content description: In this study component, the following content is covered:

This study component is part of the first semester and is linked to the Blokk project. During this course you will learn to distinguish between the different levels in planning and the information needs of these processes. You will learn that business decisions are supported with process mapping, cost calculations and integrated information systems. This module takes place simultaneously with Experiencing SCM in the first semester. The relevant theory of this course is applied in both study components. The module consists of four sub-areas:

- Business Process Modelling – what is a business process and how can you, for example, design a warehouse process? In this part of the course, you will learn techniques to visualize processes and make them understandable;
- Production Planning – how do you ensure that required materials and capacities such as labor and machines are available in a factory in a timely manner? In these lessons you will learn what, among other things, MRP1 and MRPII systems do, how supply and demand are matched (S&OP);
- Cost Accounting – how do you provide insight into the costs associated with the manufacture of goods and the provision of services? In this part of the course you will learn how to value products in the different stages of production in accounting.
- ICT & ERP – What exactly is ICT and which digital developments are important for the development of the logistics field. During these lessons you will become acquainted with various programs and systems that logistics organizations work with and you will gain insight into what an Enterprise Resource Planning system is and what you can do with it.

Language: EN

Type of study component: Case

Teaching activity: Lecture, Workshop

Examination: Individual assignment 50%
Written exam 50%

Mark: Marks, P, F, MO

Required literature: B. Groenendijk. Getting More Out of Excel 2019: Essential Topics for the Professional. Boom Uitgevers Amsterdam (ISBN 9789024402281),
H. Visser, A. van Goor. Logistics: Principles and Practice: a demand and supply chain management approach. Hessel Visser BV (ISBN 9789081649117)

Required other materials: Reader, e-book, Proces modelling, Via Teams;
Reader, e-book, ERP- MRP, Via Teams;
Reader, e-book, Foundations of Finance & Control (Year 1 & 2) (Purchase via buas.myedumundo.com).

OSIRIS-code: BLGE1.PPD1-01

Name study component: Personal & Professional Development 1

Study load: 5 EC (=140 hours)

Coordinator: Bas Groot

Lecturer(s): Bas Groot, Karolien Kampstra, Arna van Strien, Raechel Torner

Learning objective(s): Upon completion of this study component you are able to:

- discover the way in the online and offline Buas study environment;
- identify the study approach that works best and to apply it;
- recognize and identify the logistics competencies in the first semester of the curriculum;
- identify your role in (project) teams and state how to add valuable contributions to project teams;
- recognise the importance of teambuilding;
- reflect on your personal development and on your development regarding the logistics competences.

Content description: In this study component, the following content is covered:

Topics that will be addressed include finding your way on the BUas campus and the online study environment, study skills, personal development, and understanding the relevance of the various logistics competencies. This study component aids you with the transition from your previous education to our Logistics programme and entrance to the industry.

Language: EN

Type of study component: PPD

Teaching activity: Study coaching, Workshop

Examination: Portfolio assessment 100%

Mark: Marks, F, MO

Required literature: --

Required other materials: Licence, Edubook Logistics Personal Development (purchase licence via buas.myedumundo.com);
Other, Additional materials depending on chosen electives and deficiency trainings, Via Teams.

Logistics Engineering / Logistics Management

Year 1

Semester 2

OSIRIS-code: BLGE1.MLB-01

Name study component: Material Logistics – Basics

Study load: 5 EC (=140 hours)

Coordinator: Paul Schuurmans

Lecturer(s): Robin Audenaerdt, Imad Boulakhrif, Emmi Bravo Palacios, Rosa Hagenaaars, Azadeh Irajifar, Simone Jacobs, Luuk Koopman, Paul Schuurmans, Jaap Smink, Rutger Thielen, Raechel Torner, Semi Torun

Learning objective(s): Upon completion of this study component you are able to:

- compare different modes of transport;
- explain the basics of intermodal/multimodal networks;
- explain the basics of transport, warehousing & distribution;
- explain the basics of hub and spoke network in relation to e.g. warehousing, shipping, airlines;
- explain the basics of warehousing & inventory management, including theory, methods and models;
- describe the basic aspects of Transport Management Systems (TMS);
- describe the basic aspects of Warehouse Management Systems (WMS);
- recognize the forms of AUTO ID (Barcoding, SSCP, RFID, scanning e.g.) for an automated process in a company;
- recognize the basics of forecasting and the impact on warehousing & distribution;
- apply basic calculation and analysis tools in different (transportation and distribution) contexts;
- write a well-structured and target group oriented article using relevant visuals;
- apply guidelines and correct grammar in the Dutch or English language;
- use relevant sources and apply source referencing according APA;
- identify the importance of Legislation and Regulations within Transport, Distribution and Warehousing;
- describe the concept of Trends & Innovation within transport and warehousing;
- apply the basics of descriptive statistics;
- recognize connection between mathematics, statistics and the formula's which are used in inventory management.

Content description: In this study component, the following content is covered:

You will explore the basics of physical flows, including transport, warehousing, distribution and inventory management. You will write an article about a trend in logistics.

Language: EN

Type of study component: Case

Teaching activity: Lecture, Workshop, Fieldtrip

Examination: Written exam 70%
Individual assignment 30%

Mark: Marks, F, MO

Required literature: H. Visser, A. van Goor. Logistics: Principles and Practice: a demand and supply chain management approach. Hessel Visser BV (ISBN 9789081649117),
Rudd, Jerry. A Practical Guide to Logistics. Kogan Page (ISBN 9780749486310)

Required other materials: Reader, e-book, additional study material, Via Teams;
Reader, e-book, Foundations of Finance & Control (Year 1 & 2) (Purchase via buas.myedumundo.com).

OSIRIS-code: BLGE1.MLII-01

Name study component: Material Logistics – Improvement & Innovation

Study load: 10 EC (=280 hours)

Coordinator: Luuk Koopman

Lecturer(s): Robin Audenaerdt, Imad Boulakhrif, Claartje Eggermont, Azadeh Irajifar, Simone Jacobs, Luuk Koopman, Rocco Reukema, Paul Schuurmans, Jaap Smink, Rutger Thielen, Semi Torun

Learning objective(s): Upon completion of this study component you are able to:

- explain the concepts of multi-modal transport in a given business case setting;
- analyze the characteristics of warehousing- and inventory concepts;
- explain the impact of a given warehouse location choice on transportation- and distribution opportunities;
- determine the best possible location for a new warehouse based on a given business case with underlying dataset;
- explain the different types of warehousing strategies, design and functions;
- explain the basic principles of material handling
- design a warehouse (storage and handling systems and areas);
- determine most optimal flow of goods through the warehouse;
- match the form of AUTO ID (Barcoding, SSCP, RFID e.g.) for an automated process in a company;
- apply the concept and functioning of a Warehouse Management System (WMS);
- apply the basics of functional designing for an innovative solution in a warehousing environment;
- apply basic statistical- and data analysis tools (descriptive) in a simple business case;
- experience automated warehouse solutions;
- calculate the cost per unit/logistical activities (product or service) based on direct and indirect costs (more complex settings) and distinguish process steps and activities- surcharge method; cost centre method;
- distinguish between open and closed book information regarding costs of warehousing operations;
- determine expected financial results of activities/projects and the financial impact of logistical improvements by means of a forecast calculation (part of a budget);
- differentiate costs into operating expenses (OPEX) and capital expenditures (CAPEX) that are related to investments;
- process the impact of various taxes on financial statements. E.g. VAT (calculation with percentages) in a simulation game;
- analyze the financial performance of a company (on strategic level) by means of Ratio analysis;
- be aware of differences in stock valuation (e.g. Fifo, Lifo);
- advise how to identify the best supplier for specific services and measure their performance within the agreed conditions;
- write an advisory report for a company decision, in a well-structured, convincing and substantiated manner;
- present a company decision orally, target- and target group-oriented, convincing and substantiated;
- locate macro economic data and translate this to logistical decisions;

- create a Service Level Agreement for a new customer and an new supplier;
- give a clear, detailed presentation in a convincing manner, supporting ideas with relevant examples;
- manage basics of law and legislation related to transport, warehousing and distribution (x-border transport law, liability etc.);
- explain the impact of sustainability and it's impact on (re)design of warehouses and operations;
- apply knowledge about different leadership styles, management- and decision tools in a safe business case/project environment;
- apply data gathering by making use of questioning (Interviewing) within Project based working;
- apply data gathering and analysis tools from Excel, math and statistics and apply learnings in decision-taking;
- create a project plan and project charter in which you recall all steps and elements of a project based work approach (risk & control & implementation);
- recall the importance of communication (create support in team), collaboration and leadership skills and styles during project execution.

Content description: In this study component, the following content is covered:

Based on an external analysis you will define the most applicable warehouse location. Subsequently you are assigned to design a new or adjusted layout for the chosen location, based on provided data which will be analysed and applied (warehouse design, material management and inventory management). Relevant logistical unit costs are calculated. Future quantities and volumes will be calculated and forecasted and based on this expected financial results are determined. The eventual content covers physical, information and financial flows. Followed up by an extended project, in which you continue with applying the learned matter to create innovative logistics solutions.

Language: EN

Type of study component: Case

Teaching activity: Project with coaching, Workshop, Lecture

Examination: Group assignment 70%
Individual assignment 30%
Process (obligatory)

Mark: Marks, P, F, MO

Required literature: H. Visser, A. van Goor. Logistics: Principles and Practice: a demand and supply chain management approach. Hessel Visser BV (ISBN 9789081649117),
Rudd, Jerry. A Practical Guide to Logistics. Kogan Page (ISBN 9780749486310)

Required other materials: Reader, e-book, Readers/articles provided, Via Teams;
Reader, e-book, Foundations of Finance & Control (Year 1 & 2) (Purchase via buas.myedumundo.com).

OSIRIS-code: BLGE1.SLBI-02

Name study component: Service Logistics – Basics & Innovation

Study load: 5 EC (=140 hours)

Coordinator: Justin van de Pas

Lecturer(s): Piet Berkers, Emelie Bral, Bas Groot, Rosa Hagenaaars, Sijbren Hogewerf, Karolien Kampstra, Justin van de Pas, Arna van Strien, Rutger Thielen, Raechel Torner, Semi Torun

Learning objective(s): Upon completion of this study component you are able to:

- recognize the concepts of service logistics in relation to transport & warehousing;
- recall logistics principles of the service industry;
- analyze and improve logistics processes within the service industry;
- analyze and improve people movements before/during/after a transformation process;
- explain the importance of mobility in a service environment;
- apply logic of material logistics in a service business environment;
- deploy a company analysis in the service industry on their organisation and process capabilities;
- define the importance of the optimization of supply and demand in the service sector and recognize opportunities to apply capacity; management;
- apply the basics of functional designing (blueprint) for a possible (innovative) solution in a service environment;
- develop a simulation of human flows in a service logistics environment, using available data and different scenarios;
- recognise the relationship between all stakeholders;
- present the progress and findings in a creative and convincing way;
- describe specific trends within the scope of service logistics;
- identify the customer journey within service logistics;
- develop an active listening attitude and using an open conversation method;
- explore your purpose based on a personal analysis in a logistic context;
- develop a critical/reflective attitude towards one's own personality and that of fellow students.

Content description: In this study component, the following content is covered:

This study component gives you an introduction in service logistics, with emphasis on people logistics, healthcare logistics and event logistics. You will work with a group of students on a case within the healthcare or event logistics context. You will present the case outcomes, using a square meter. After that, you will work out a future view on a specific trend in the context of service logistics and use storytelling to present your outcomes.

Language: EN

Type of study component: Case

Teaching activity: Lecture, Workshop

Examination: Group assignment 60%
Individual assignment 40%

Mark: Marks, F, MO

(Required) literature: Reference book - Walstra, J. Operations management in the service sector.
Pearson education (ISBN 9789043037129)

Required other materials: --

OSIRIS-code: BLGE1.CIR1-01

Name study component: Connection to Industry & Research 1

Study load: 5 EC (=140 hours)

Coordinator: Sannie van Boxtel

Lecturer(s): Sannie van Boxtel, Bas Groot, Letty Zhu

Learning objective(s): Upon completion of this study component you are able to:

- gain experience within the industry or a (research) project;
- describe personal role within company or project, as part of the overarching organisation;
- reflect on gained experiences;
- demonstrate a professional way to find an assignment;
- describe individual development goals;
- proof the realisation of defined individual development goals.

Content description: In this study component, the following content is covered:

You will work within organisations or projects that are either linked to the supply chain and logistics industry, or work within organisations in a logistic process. You make your own choices in which (sub) segment of the industry you want to gain experience and insights. You will transfer the knowledge and experience from projects, courses and trainings into 'real life' situations. By making choices and experiencing you will broaden your horizon regarding the (career) possibilities within the industry.

Language: EN

Type of study component: Practice

Teaching activity: Placement supervision, Workshop,

Examination: Individual assignment 100%

Mark: Marks, F, MO

Required literature: --

Required other materials: Licence, Edubook Logistics Personal Development (Purchase licence via buas.myedumundo.com).

OSIRIS-code: BLGE1.PPD2-01

Name study component: Personal & Professional Development 2

Study load: 5 EC (=140 hours)

Coordinator: Bas Groot

Lecturer(s): Bas Groot, Rosa Hagenars, Azadeh Irajifar, Karolien Kampstra, Jaap Smink, Arna van Strien, Raechel Torner, Letty Zhu

Learning objective(s): Upon completion of this study component you are able to:

- identify the logistics domains you are interested in;
- make conscious choices to develop knowledge and experiences in the different domains;
- develop chosen personal qualities and developments points;
- describe the impact of (international) cultures and variety of perspectives on (your) collaboration;
- reflect on your personal development and on your development regarding the logistics competences;
- recognise aspects of your own culture that shape the way you view the world and interact with others;
- identify various ways of developing intercultural competence.

Content description: In this study component, the following content is covered:

Topics that will be addressed include your personal qualities and points for development, insights in different cultures, understanding the relevance of the various logistics competencies and making choices regarding your own ambition and development. This study component aids you with making choices in which industry segments you would like to develop yourself.

Language: EN

Type of study component: PPD

Teaching activity: Study coaching, Workshop

Examination: Portfolio assessment 100%

Mark: Marks, F, MO

Required literature: --

Required other materials: Reader, e-book, Edubook Logistics Personal Development (Purchase licence via buas.myedumundo.com); Other, Additional materials depending on chosen electives and deficiency trainings, Via Teams.

Logistics Engineering / Logistics Management

Year 2

Semester 3

OSIRIS-code: BLGE2.INTOM-01

Name study component: Introduction to Operations Management

Study load: 5 EC (=140 hours)

Coordinator: André Gijsberts

Lecturer(s): Piet Berkers, Imad Boulakhrif, Claartje Eggermont, André Gijsberts

Learning objective(s): Upon completion of this study component you are able to:

- recognise the complexity of a (production) planning issue with the use of specific tools (MRP-I & MRP-2);
- outline the different roles of inventory in a (production) planning issue;
- explain and make use of different Algorithm Logic Techniques and Linear Programming Techniques;
- identify quality concepts (control, management, measurements/tools) in operations;
- make use of data and formulas to analyse material management processes;
- optimise one or more processes with the use of specific tools and techniques (e.g. lean);
- summarise the roles of physical flows elements (TDWI) within Material Management in a single- and multi location environment;
- recognise the various functions impacted when a production planning is changed (in single/multi-location environment);
- identify capability- and capacity requirements within a multi-location (network) production environment;
- recognise the strategic value of procurement (incl. S&OP);
- define implications of sales-/procurement-/logistics-/production choices on other departments and their respective operations in an organisation.

Content description: In this study component, the following content is covered:

Operations Management is the systematic design, direction, and control of processes that transform inputs into services and products for internal, as well as external, customers. In this Case you will learn how to use operations to create value by looking at process and product design, layout choices, concepts as TOC, MRP and Lean supported by techniques as line balancing, linear programming and network analysis.

Language: EN

Type of study component: Case

Teaching activity: Lecture, Workshop, Training

Examination: Written exam 70%
Individual assignment 15%
Individual assignment 15%

Mark: Marks, F, MO

Required literature: Krajewski, L.J., Malhotra, M.K.. Operations Management: Processes and Supply Chains. Pearson (ISBN 9781292409863)

Required other materials: Handouts, articles, magazines, Sheets of lectures, Excel files and assignments,
Via Teams.

OSIRIS-code: BLGE2.OMPE-01P

Name study component: Operations Management in a Production Environment

Study load: 10 EC (=280 hours)

Coordinator: Irene Meeuwesen

Lecturer(s): Imad Boulakhrif, André Gijsberts, Simone Jacobs, Irene Meeuwesen, Paul Schuurmans, Arna van Strien, Rutger Thielen, Semi Torun, Letty Zhu

- Learning objective(s): Upon completion of this study component you are able to:
- develop purchasing strategies that support organisational strategies;
 - apply basic concepts of Contract- and Labour law;
 - interpret complex financial statements to perform a ratio analysis and understand the financial impact of logistical operations (e.g. on assets, equity and liabilities). (Linked with financial analysis and information flows (e.g. BI/KPI's));
 - calculate the consequences of logistical decisions by using a cost-benefit analysis and advise on decisions (e.g. 'make or buy' and insourcing or outsourcing decisions);
 - analyse variances based on service or production activities (variance analysis);
 - create an investment selection by using the most appropriate tools, based on (link with strategic procurement):
 - * Cash flows without time preference (e.g. payback period and average accounting return);
 - * Cash flows with time preference (e.g. net present value and internal rate of return).
 - select the most appropriate way to calculate the cost per unit (product or service) in a complex setting e.g. by means of Activity-Based Costing and calculate the cost per unit;
 - solve a complex (production) planning issue with the use of specific tools (MRP-I & MRP-2);
 - demonstrate the capability to plan total material requirements, from procurement (sourcing) to delivery to the customer (Material Management);
 - discuss the potential capabilities of an automated Production Systems and the basic functions needed for a specific company/case;
 - apply different Algorithm Logic Techniques and Linear Programming Techniques;
 - recognise the different innovative concepts within the field of Production (factory planning systems e.g.);
 - analyse the (physical-flows) elements of Material Management in a given medium-complex business case;
 - explain the connection between, and impact of physical flows elements on production management in practice (Definition of PM);
 - execute a supplier evaluation as part of an organisation's procurement strategy;
 - resolve (potential) issues with material availability on single/multiple physical locations when a (production) plan changes (inventory, transport, network);
 - demonstrate capability- and capacity requirements (from a physical flows perspective) in a multi-location production environment;
 - analyse the different aspects within Quality management and Continuous improvement.

Content description: In this study component, the following content is covered:

This project focuses on various aspects of Operations Management based on a business situation. You will develop three recommendations in the field of purchasing, process design and automation for a company. You will create a decision model for purchasing contract management of flow meters in which you decide which purchase strategy will be chosen for each item. You will make a material handling plan and a machine configuration and layout for the production of hospital beds. You will make a production configuration and an operating system for the wrapping of personal medical devices.

In the analyses, you will use layouts and datasets. These relate to products and the (current and future) consumption, technical properties of machines and products. In addition, you use financial data, so that you can make choices that lead to a combination of good delivery performance and a healthy financial situation. Your results highlight physical, information and financial flows that enable the company to innovate and grow. You learn to have an eye for quality management.

You learn to work in ERP. The engineering student delves into product development and planning. The management student will focus on outsourcing.

Language: EN

Type of study component: Project

Teaching activity: Project with coaching, Lecture, Workshop

Examination: Group assignment 40%
Individual assignment 20%
Individual assignment 20%
Written exam 20%
Proces

Mark: Marks, F, MO

Required literature: Krajewski, L.J., Malhotra, M.K.. Operations Management: Processes and Supply Chains. Pearson (ISBN 9781292409863)

Required other materials: Handouts, articles, magazines, Datasets and hand-outs provided, Via Teams; Reader, e-book, Edubook Finance & Control Year 2 (Purchase licence via buas.myedumundo.com).

OSIRIS-code: BLGE2.CIR2-01

Name study component: Connection to Industry & Research 2

Study load: 5 EC (=140 hours)

Coordinator: Sannie van Boxtel

Lecturer(s): Sannie van Boxtel, Bas Groot, Letty Zhu

Learning objective(s): Upon completion of this study component you are able to:

- present to a specified target group in an inspiring and appealing way;
- gain experience within the industry or a (research)project;
- map the core processes of an organisation or research project;
- describe the internal and external environment of an organisation.

Content description: In this study component, the following content is covered:

You will make an analysis of an organisation or project. By mapping the core processes and analysing the internal/external environment, you will gain understanding of the activities within the industry and research field. You make your own choices in which (sub) segment of the industry or research you want to gain experience and insights. You will transfer the knowledge and experience from projects, cases and trainings into the analysis of the organisation or project. By making choices and through experience you will broaden your horizon regarding the (career) possibilities within the (logistics) industry.

Language: EN

Type of study component: Case

Teaching activity: Placement supervision, Workshop

Examination: Individual assignment 100%

Mark: Marks, F, MO

Required literature: --

Required other materials: --

OSIRIS-code: BLGE2.CBSC-01

Name study component: Cross Border Supply Chains

Study load: 5 EC (=140 hours)

Coordinator: Peter Kole

Lecturer(s): Jan-Willem Boskaljon, Erik van Duffelen, Sijbren Hogewerf, Eric Hopstaken, Peter Kole, Paul Schuurmans, Raechel Torner, Semi Torun, Ron van der Wegen, Letty Zhu

Learning objective(s): Upon completion of this study component you are able to:

- identify and analyse the core concepts and techniques of import and export operations on strategic, tactical and operational level;
- identify possibilities for intermodal-/multimodal-/synchromodal transport within a European distribution network;
- advise on impact of change in INCO-terms for an importing organisation (both from a logistics-, financial and legal point of view) - incl. bonded warehousing;
- apply basic concepts of trade compliance related to port logistics;
- recognise intercultural differences and the influence on communication and behaviour;
- develop skills to bridge intercultural differences;
- develop skills and strategies to keep improving English skills;
- advise on the working capital of a company: Stock management, Debtor management (incl. international payments) and cash management (link with INCO terms, law and import/export regulations);
- translate the impact of operational choices on the working capital (e.g. currencies);
- recognise the impact of taxes in an international environment;
- explain the basics of Supply Chain Finance.

Content description: In this study component, the following content is covered:

You will investigate international flow of goods, supply chain networks, advise on strategic and operational level about improvement opportunities (including aspects like physical flows, legal, finance, etc.) and present to the board of investors in your role as a supply chain manager.

Language: EN

Type of study component: Case

Teaching activity: Lecture, Workshop, Project with coaching

Examination: Group assignment 40%
Written exam 60%

Mark: Marks, F, MO

Required literature: Hans Veldman. Export Management: A European Perspective. Noordhoff Uitgevers (ISBN 9789001700324)

Required other materials: Reader, e-book, Readers/articles provided, Via Teams;
Licence, Edubook Finance & Control Year 2 (Purchase licence via
buas.myedumundo.com).

OSIRIS-code: BLGE2.PPD3-01

Name study component: Personal & Professional Development 3

Study load: 5 EC (=140 hours)

Coordinator: Bas Groot

Lecturer(s): Bas Groot, Rosa Hagedaars, Ilse Hens, Sijbren Hogewerf, Karolien Kampstra, Luuk Koopman, Irene Meeuwesen, Raechel Torner

Learning objective(s): Upon completion of this study component you are able to:

- develop a professional network to acquire an internship / job / assignment in an active way;
- develop professional means and skills to apply successfully for a work placement or job;
- analyse the similarities and differences between logistics and supply chain industries in different countries (int. fieldtrip);
- show appropriate intercultural behaviour (international field trip).

Content description: In this study component, the following content is covered:

In this study component you will make the necessary preparations to successfully start searching for an internship. You will investigate your qualities and development points and investigate the kind of organisations in which you would like to do your internship(s). The assignments you will complete for this study component aid in the search and application process and encourage you to undertake activities to develop your professional network. In addition, you will join an international fieldtrip and reflect on your development on the LPL competencies.

Language: EN

Type of study component: PPD

Teaching activity: Study coaching, Workshop

Examination: Portfolio assessment 100%

Mark: Marks, F, MO

Required literature: --

Required other materials: Licence, Edubook Logistics Personal Development (Purchase licence via buas.myedumundo.com);
Other, Additional materials depending on chosen electives and deficiency trainings, Via Teams.

Logistics Engineering / Logistics Management

Year 2

Semester 4

OSIRIS-code: BLGE2.RSTB-01

Name study component: Running Sustainable Businesses

Study load: 5 EC (=140 hours)

Coordinator: Erik van Duffelen

Lecturer(s): Sannie van Boxtel, Erik van Duffelen, Sijbren Hogewerf, Peter Kole, Luuk Koopman, Justin van de Pas, Paul Schuurmans, Raechel Torner

Learning objective(s): Upon completion of this study component you are able to:

- describe the basics of organisational structures, systems, culture and organisational behaviour;
- recognise the importance of leadership skills and differences in leadership styles;
- explain the basic concepts of human resources;
- recognise the importance of ethics and integrity in doing business;
- recognise the legal aspects of a company;
- analyse organisations' marketing and sales strategies;
- explain the theories and models about change (management);
- explain how to create understanding and support for changes among employees, management and customers;
- explain the relevance of CSR & sustainability in business;
- analyse a business on CSR & sustainability;
- explain the coherence between sales-/marketing-/import-/export-/business plan for a sustainable business;
- identify the playing field between DMU and PSU;
- make a well-founded price calculation to compile a profound quotation/value proposition;
- explain the dynamics of sales conversation(s);
- recognise the basics of entrepreneurial and sustainable finance.

Content description: In this study component, the following content is covered:

We are in the middle of the transition to a different sustainable and more circular society. For companies and organizations this means that they must organize themselves sustainably. This requires a change in their business and revenue models. So we need to move towards business models that have a positive impact on people, society and the environment. In this study component you will therefore analyze how companies and organizations could make a transition from all business facets such as HR, Legal, Sales & Marketing, Ethics, Leadership styles, Change methods and Procurement to a sustainable or circular business proposition in which in the Entrepreneurship follow-up study component, we will apply the acquired knowledge in practice.

Language: EN

Type of study component: Case

Teaching activity: Lecture, Workshop

Examination: Group assignment 40%
Written exam 60%

Mark: Marks, F, MO

Required literature: --

Required other materials: Reader, e-book, Organizing for sustainability (Jonker, J. Faber, N. et al) = free e-book: <https://link.springer.com/book/10.1007/978-3-030-78157-6>.

OSIRIS-code: BLGE2.SCRD-01P

Name study component: Supply Chain re-design

Study load: 10 EC (=280 hours)

Coordinator: Jan van Elderen

Lecturer(s): Jan-Willem Boskaljon, Claartje Eggermont, Jan van Elderen, Sijbren Hogewerf, Simone Jacobs, Alinda Kokkinou, Justin van de Pas, Paul Schuurmans, Ron van der Wegen

Learning objective(s): Upon completion of this study component you are able to:

- apply the basics of a Supply design process;
- describe the desirability, feasibility, and viability of an innovation;
- develop written, oral, and visual communication skills related to a (research) report;
- translate and present the results in a management report and a professional presentation;
- communicate about costs of (logistics) processes with internal and external users of information;
- use a (Financial) Business case as support in a supply chain (re-)design;
- create a strategic forecasting model and inventory control system for an end-to-end supply chain;
- analyse impact of change in transportation mode on physical flows in the chain (transport, warehousing, distribution, inventory);
- apply sustainability elements in the supply chain (re-)design;
- benchmark recycling opportunities (incl. return logistics) in a specific service-, production- or events-related business case;
- analyse gathered data and draw conclusions with use of statistical principles by using appropriate tools;
- create a research model based on an integrated approach for the situation; create simple scenarios and scenario planning;
- explain the theory with regard to validity and reliability and apply this theory when designing a research proposal;
- gather relevant data and literature based on self selected research questions
- identify risks and advise on possible measures (risk management);
- select and apply data collection methods in order to gather data for answering research questions;
- select the appropriate data sources and collection techniques to operationalise specific subjects and theory used within the research;
- use data collection techniques for questioning (surveys, interviews and conversations)
- recognise the impact of Supply Chain Strategy and how this is translated to the design on strategic, tactical and operational level;
- describe the various forms of collaboration and integration, upstreams and downstreams, within the Supply Chain.

Logistics Management:

- analyse an organisation and formulate a strategy;
- analyse the customer journey of a logistics organisation;
- explain basic principles of contract management;
- map and analyse an organisation's internal and external environment (macro-/meso-/micro-analysis);
- deploy the basic elements of Supply Chain Finance;

- use BI tools to retrieve and visualise financial data on the Supply Chain.

Logistics Engineering:

- apply the basic functions of BI-software (e.g. Power BI);
- apply the basic functions of programming software (Python e.g.) to solve an complex problem
- build and make use of relational databases, and translate these to the reliability of the data;
- construct a design of a KPI dashboard for a specific supply chain choosing from different methods of Data visualisation;
- explain basic principles of a vendor selection process in various contexts (IT, materials, services, people, etc.);
- interpret and use the aspects of Data Quality (DAMA-DMBOK) to improve the quality outcome of (end-to-end) processes;
- recognise the possible advantages and risks when working with 'Big Data' and Select the right Data sources (3 V's) as input for the (re)design;
- select the right type of interfaces and network needed to connect specific different systems together, and select the right infrastructure (On premise vs Cloud e.g.);
- use visualisation languages for making modelling decision made in a (digital) process (Rule Management).

Content description: In this study component, the following content is covered:

This project is divided into two parts. In the first part, you will have the chance to gain experience in practical research, supported by indepth supply chain management theory. You will be guided through all the different steps of research (literature, qualitative and quantitative), including reporting skills. This is the perfect preparation for your first internship.

In the second part, the focus will be on Business Intelligence, including the tool 'PowerBi', where you will work, as a group, on a '(re)design' of a specific supply chain topic.

The Logistics Engineers will focus on Big Data/ Quality/Architecture, and the Management students will have the focus on different Legal and Supply Chain Finance aspect of the Supply Chain.

At the end of this project an individual defence will take place, where you can prove that you have gained the knowlegde to be ready for the next step: Into to 'real' world for a research internship!

Language: EN

Type of study component: Project

Teaching activity: Project with coaching, Lecture, Workshop

Examination: Individual assignment 20%
Group assignment 30%
Group assignment 50%
Proces

Mark: Marks, F, MO

Required literature: Krajewski, L.J., Malhotra, M.K.. Operations Management: Processes and Supply Chains. Pearson (ISBN 9781292409863)

Required other materials: Handouts, articles, magazines, Different articles and sources handed out, Via Teams.
Licence, Edubook Finance & Control (Purchase licence via buas.myedumundo.com);
Other, Graspale E-learning, Via Teams.

OSIRIS-code: BLGE2.ENT-01

Name study component Entrepreneurship

Study load: 5 EC (=140 hours)

Coordinator: Erik van Duffelen

Lecturer(s): Erik van Duffelen, Jan van Elderen, Peter Kole, Semi Torun

- Learning objective(s): Upon completion of this study component you are able to:
- discover co-creation innovation processes;
 - explain the need for business model innovation;
 - recognise key drivers of innovation;
 - set up a business model, from the perspective of new concepts related to the Logistics industry and/or your own field of interest;
 - discover and identify key elements when starting a business;
 - apply theory in the areas of management & organisation, marketing, logistics and accounting in relation to entrepreneurship;
 - model and implement strategies for significant procurement;
 - align system processes and functions within your organisation;
 - develop written and visual communication skills related to a business plan;
 - develop business model options based on generated insights;
 - validate the business model options and elaborate one of them into a business case;
 - execute a business presentation to get a message across in a convincing way;
 - make a business plan (incl. sales/marketing/procurement/production/finances/operations/logistics) for delivering a product or service to the market;
 - recognise the importance of business communication in gaining understanding of a manager and business partners;
 - analyse financial flows and cash needs of (logistics) start-ups;
 - discover and develop personal intra/entrepreneurial skills.

Content description: In this study component, the following content is covered:

The logistics industry is confronted by immense changes; new technologies, new market entrants, new customer expectations and new business models. Like all changes, this brings both risks and opportunities. There are many ways the sector could develop to meet these challenges, some evolutionary, others more revolutionary. One thing is for sure: development is necessary. The frontrunners are the companies that are able to anticipate on the trends, developments and opportunities, also called 'entrepreneurship'. Entrepreneurship is also the engine to boost employment in the sector. So, it is crucial that companies have to adopt a more entrepreneurial approach and professionals have an entrepreneurial or intrapreneurial attitude. In addition to knowledge and skills, your success depends also on the extent to which you are able to demonstrate flexibility and an entrepreneurial mind-set. In this study component you will learn why an entrepreneurial mind-set is important, what are the characteristics of an entrepreneur and an intrapreneurial professional and you are developing and setting up a business model for a new (innovative) logistic concept.

Language: EN

Type of study component: Case

Teaching activity: Lecture, Workshop, Training

Examination: Group assignment 50%
Individual/group assignment 20%
Individual assignment 30%

Mark: Marks, F, MO

Required literature: --

Required other materials: --

OSIRIS-code: BLGE2.CIR3-01

Name study component: Connection to Industry & Research 3

Study load: 5 EC (=140 hours)

Coordinator: Sannie van Boxtel

Lecturer(s): Piet Berkers, Jan-Willem Boskaljon, Sannie van Boxtel, Justin van de Pas, Jaap Smink

Learning objective(s): Upon completion of this study component you are able to:

- analyse the structure, systems, culture and organisational behaviour of a logistics organisation;
- show professional and effective behaviour in relation to the assigned project;
- give a clear, detailed presentation in a convincing manner, supporting ideas with relevant examples;
- map the potential bottlenecks within an organisation;
- describe your contribution to data gathering in a (research)project;
- give an improvement advise report based on the bottlenecks within an organisation;
- demonstrate (improved) competence in communication skills in intercultural communication contexts.

Content description: In this study component, the following content is covered:

The project starts by choosing one of the themes in Logistics (Event Logistics, Healthcare Logistics, Material Logistics or Production Logistics). The aim of the project is to give an improvement advise to an organisation or (research) project. By analysing the core processes or participating in a (research) project you will be able to find possible bottlenecks and trends, which form the bases of possible improvement ideas. You will transfer the knowledge and experience from projects, courses and trainings into the analysis of the organisation or project. By making choices and experiencing you will broaden your horizon regarding the (career) possibilities within the industry. You will be working with both Dutch and international students to develop cross cultural understanding and communication skills.

Language: EN

Type of study component: Case

Teaching activity: Project with coaching, Workshop, Lecture

Examination: Group assignment 70%
Group assignment 30%

Mark: Marks, F, MO

Required literature: --

Required other materials: --

OSIRIS-code: BLGE2.PPD4-01

Name study component: Personal & Professional Development 4

Study load: 5 EC (=140 hours)

Coordinator: Bas Groot

Lecturer(s): Bas Groot, Rosa Hagenaaars, Ilse Hens, Sijbren Hogewerf, Karolien Kampstra, Luuk Koopman, Irene Meeuwesen, Raechel Torner

Learning objective(s): Upon completion of this study component you are able to:

- identify your role in (project) teams and state how to add valuable contributions to industry project teams;
- use an active search process to find an internship / job that matches your development needs
- reflect on your personal development and on your development regarding the logistics competences of year 2;
- take responsibility for personal or professional development by executing self-chosen development activities (free electives);
- state what your personal qualities and development points are, how to use these qualities and how to improve the development points during internships.

Content description: In this study component, the following content is covered:

In this semester you will go more in depth describing your personal qualities and your development goals for year 3 & 4. This is relevant for finding a company for your internship that is in line with your interests and ambitions. You will also have the opportunity to personalize your curriculum by studying a (logistics) subject and/or performing activities that contribute to your personal and/or professional development (free electives).

Language: EN

Type of study component: PPD

Teaching activity: Study coaching, Workshop

Examination: Portfolio assessment 50%
Individual assignment 50%

Mark: Marks, F, MO

Required literature: --

Required other materials: Other, Additional materials depending on chosen electives and deficiency trainings, Via Teams;
Licence, Edubook Logistics Personal Development (Purchase licence via buas.myedumundo.com).

Appendices

[Overview of curriculum](#)

[Overview of competencies](#)

[Matrix of competencies](#)

[Link to year schedule and assessment programme](#)

Curriculum overview

Semester 1 (year 1)

| Semester week | | | | | | | | | | | | | | | | | |
|---|---|---|--|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| Project - Getting Started (5 ECTS) | | | | | | Project - Experience Supply Chain Management (10 ECTS) | | | | | | | | | | | |
| | | | Case - Basics of Supply Chain Management (5 ECTS) | | | | | | Case - Modelling and Planning (5 ECTS) | | | | | | | | |
| Personal & Professional Development 1 (5 ECTS) | | | | | | | | | | | | | | | | | |

Semester 2 (year 1)

| Semester week | | | | | | | | | | | | | | | | | |
|---|---|---|---|--|---|---|---|---|----|----|----|--|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| Case - Material Logistics - Basics (5 ECTS) | | | | Project - Material Logistics - Improvement & Innovation (10 ECTS) | | | | | | | | Case - Service Logistics - Basics & Innovation (5 ECTS) | | | | | |
| Connection to Industry & Research 1 (5 ECTS) | | | | | | | | | | | | | | | | | |
| Personal & Professional Development 2 (5 ECTS) | | | | | | | | | | | | | | | | | |

Semester 3 (year 2)

| Semester week | | | | | | | | | | | | | | | | | |
|--|---|---|---|--|---|---|---|---|----|----|----|----|----|---|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| Case - Introduction to Operations Management (5 ECTS) | | | | Project - Operations Management in a Production Environment (10 ECTS) | | | | | | | | | | Case - Cross Border Supply Chains (5 ECTS) | | | |
| Connection to Industry & Research 2 (5 ECTS) | | | | | | | | | | | | | | | | | |
| Personal & Professional Development 3 (5 ECTS) | | | | | | | | | | | | | | | | | |

Semester 4 (year 2)

| Semester week | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|---|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| Case - Sustainable Businesses (5 ECTS) | | | | Project - Supply chain re-design (10 ECTS) | | | | | | Supply chain re-design for Log Management | | | | | | | |
| | | | | | | | | | | Supply chain re-design for Log Engineering | | | | | | | |
| | | | | Case - Entrepreneurship (5 ECTS) | | | | | | | | | | | | | |
| | | | | | | | | | | Connection to Industry & Research 3 (5 ECTS) | | | | | | | |
| Personal & Professional Development 4 (5 ECTS) | | | | | | | | | | | | | | | | | |

Year 3

| | |
|-----------------------------|---------------------------------|
| 18 Weeks | 18 Weeks |
| Internship (30 ECTS) | Specialisation (30 ECTS) |

Year 4

| | |
|------------------------|-----------------------------|
| 18 Weeks | 18 Weeks |
| Minor (30 ECTS) | Graduation (30 ECTS) |

Overview core competency & sub competencies

| Core competency: Developing, managing and executing logistics processes in a professional manner. | | | |
|--|---|--|-----------------|
| Complexity | A-competencies Developing policy (Strategic level) | A1. Analyses internal and external developments and translates these to the context of the organisation and its stakeholders, in order to contribute to the company's strategy (including logistics strategy). A2. Investigates an economic or technical logistics problem using carefully chosen, justified methods and techniques to improve / renew the logistics process, product and/or service. A3. Designs a logistics process, product and/or service using carefully chosen, justified methodologies that complies with the client's wishes and with the other parts of the supply chain. A4. Creates support for substantiated advice about designing, improving or applying the logistics process, product and/or service. A5. Draws up an implementation plan for the new/improved logistics process, product and/or service, taking the logistic objectives into consideration. | Autonomy |
| | B-competencies Directing (Tactical level) | B1. Effectively manages a logistics process and/or project. B2. Contributes to a change process that allows the logistics objectives of an organisation or organisational unit to be achieved, while considering consequences for and support base within the organisation. B3. Directs and regulates one's own development in the field of professionally relevant knowledge and skills (soft skills and hard skills), thus demonstrating personal leadership. | |
| | C-competencies Implementing (Operational level) | C1. Puts solutions in place to address bottlenecks in logistics operations. C2. Plans logistics operations and takes care of implementing these, while demonstrating a professional and entrepreneurial attitude. C3. Collaborates in a professional logistics environment, takes cultural differences into account and acts ethically and responsibly. C4. Communicates effectively and professionally in the common corporate language at all levels. | |

As a student you are being prepared for the following *career progression* competencies belonging to the B-competencies:

| | |
|--|---|
| B-competencies Directing (Tactical level) | B4. Is able to control national and international logistics processes from an interdisciplinary perspective, taking into account the dynamics of the business environment and cultural differences. B5. Is able to provide direction and guidance to logistics processes (including logistics change processes) and the staff involved, with the aim of achieving the goals of the organisational unit or the project that is being led and taking into account any consequences for the organisation. |
|--|---|

Level of sub competencies

The sub competencies are described at final level of the study degree programme. This means that we expect you to possess these sub competencies when you start as a logistics specialist on the labour market. During your study programme you will work on the development of these sub competencies and we monitor how far you are in your development and level. For this we use level indications that relate to the degree of complexity:

| Level | Assignment characteristics | Context characteristics | Degree of autonomy |
|-------|--|---|---|
| I | <ul style="list-style-type: none"> - Simple - Structured - Applies well-known methods | <ul style="list-style-type: none"> - Familiar - Simple - Monodisciplinary | <ul style="list-style-type: none"> - Guidance based on providing direction |
| II | <ul style="list-style-type: none"> - Complex - Structured - Uses well-known methods in varying situations | <ul style="list-style-type: none"> - Familiar - Complex - Monodisciplinary practice-based | <ul style="list-style-type: none"> - Guidance based on coaching |
| III | <ul style="list-style-type: none"> - Complex - Unstructured - Uses methods in new situations | <ul style="list-style-type: none"> - Unfamiliar - Complex - Multidisciplinary practice-based | <ul style="list-style-type: none"> - Independent / autonomous - Guidance / coaching if needed |

A number of sub competencies must be achieved at level 2 upon completion of the study programme and a number of sub competencies at level 3. An overview of the sub competencies and associated levels per study phase can be found in the competency matrix.

Competency matrix Logistics Management and Logistics Engineering

| Sub competencies | | A1 | A2 | A3 | A4 | A5 | B1 | B2 | B3 | B4 | B5 | C1 | C2 | C3 | C4 |
|--|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Semester 1 | Case - Getting Started | | | | | | | | | | | | | | |
| | Case - Basics of SCM | | | | | | | | | | | | | | |
| | Project - Experience SCM | | | | | | | | | | | | | | |
| | Case - Modelling & Planning | | | | | | | | | | | | | | |
| | PPD - Personal & Professional Development 1 | | | | | | | | | | | | | | |
| Semester 2 | Case - Material logistics - Basics | | | | | | | | | | | | | | |
| | Project - Material logistics - Improvement & Innovation | | | | | | | | | | | | | | |
| | Case - Service logistics - Basics & innovation | | | | | | | | | | | | | | |
| | CIR - Connection to Industry & Research 1 | | | | | | | | | | | | | | |
| | PPD - Personal & Professional Development 2 | | | | | | | | | | | | | | |
| End level sub competencies Propaedeutic phase | | 1 | 1 | 1 | | | | | 1 | | | 1 | 1 | 1 | 1 |
| Semester 3 | Case - Intro Operations Management | | | | | | | | | | | | | | |
| | Project - Operations Management in a production env. | | | | | | | | | | | | | | |
| | Case - Cross Border Supply chains | | | | | | | | | | | | | | |
| | CIR - Connection to Industry & Research 2 | | | | | | | | | | | | | | |
| | PPD - Personal & Professional Development 3 | | | | | | | | | | | | | | |
| Semester 4 | Case - Sustainable Businesses | | | | | | | | | | | | | | |
| | Project - Supply chain redesign | | | | | | | | | | | | | | |
| | Case - Entrepreneurship | | | | | | | | | | | | | | |
| | CIR - Connection to Industry & Research 3 | | | | | | | | | | | | | | |
| | PPD - Personal & Professional Development 4 | | | | | | | | | | | | | | |
| End level sub competencies Year 2 | | | | 2 | 1 | 1 | 1 | | 2 | 1 | | 2 | 2 | 2 | 2 |
| Year 3 | Internship | 2 | 2 | | 2 | | 2 | | | 2 | | | | | |
| | Specialisation | | | | 3 | | | 2 | 3 | 2 | 1 | | | | |
| End level sub competencies Year 3 | | 2 | 2 | | 3 | | 2 | 2 | 3 | 2 | 1 | | | | |
| Year 4 | Minor | | | | | | | | | | | | | | |
| | Graduation | 3 | 3 | 3 | | 2 | 3 | | | | 2 | 3 | | 3 | |
| End level Bachelor Logistics Management and Logistics Engineering | | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | 2 | 3 | 2 |

Link to year schedule:

<https://edubuas.sharepoint.com/sites/studentabel/SitePages/Timetables&Groups.aspx>

Link to assessment programme:

<https://edubuas.sharepoint.com/sites/studentabel/SitePages/Exam-information.aspx>



Games



Media



Hotel



Facility



Built Environment



Logistics



Tourism



Leisure & Events



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