



# **Curriculum for** Bachelor in Value Chain Management

Valid from August 2021

## Indholdsfortegnelse

|                                                        |    |
|--------------------------------------------------------|----|
| <b>1 Program structure</b>                             | 6  |
| <b>2 Curriculum – common part</b>                      | 7  |
| 2.1.0 Core areas in the Value Chain Management program | 7  |
| 2.1.1 Market orientated Supply Chain                   | 7  |
| 2.1.2 Market demand and planning                       | 8  |
| 2.1.3 Flow management                                  | 8  |
| 2.1.4 Value Chain Optimisation                         | 9  |
| 2.1.5 Change Management                                | 9  |
| <b>2.2 Compulsory programme courses</b>                | 10 |
| 2.2.1 Marketing Management, MAMV1                      | 11 |
| 2.2.2 Business Economics, BUEV1                        | 12 |
| 2.2.3 Supply Chain Management SCMV1                    | 13 |
| 2.2.4 Tools for Quantitative Analysis, TQAV1           | 14 |
| 2.2.5 Applied Mathematics, MATV1                       | 15 |
| 2.2.6 Semester Project, SPV1                           | 16 |
| 2.2.7 Applied Statistics, STAV2                        | 17 |
| 2.2.8 Inventory- and Warehouse Management, INVV2       | 18 |
| 2.2.9 Business Forecasting, FCV2                       | 19 |
| 2.2.10 Planning, PLAV2                                 | 20 |
| 2.2.11 Purchasing and sourcing PUSV2                   | 21 |
| 2.2.12 Semester Project, SPV2                          | 22 |
| 2.2.13 Management Accounting MACV3                     | 23 |
| 2.2.14 Project Management, PRMV3                       | 24 |
| 2.2.15 Quality Management, QUMV3                       | 25 |
| 2.2.16 Flow Optimisation, FLOV3                        | 26 |
| 2.2.17 Simulation and Facility Layout, SFLV3           | 27 |

|            |                                                                    |           |
|------------|--------------------------------------------------------------------|-----------|
| 2.2.18     | Semester Project, SPV3.....                                        | 28        |
| 2.2.19     | Design of Value Chains, DVCV4 .....                                | 29        |
| 2.2.20     | Investment and Finance, INFV4 .....                                | 30        |
| 2.2.21     | Strategic Management, STMV4 .....                                  | 31        |
| 2.2.22     | Theory of Science, TSV4.....                                       | 32        |
| 2.2.23     | Semester Project, SPV4.....                                        | 33        |
| 2.2.24     | Change Management and Communication, CMCV6.....                    | 34        |
| 2.2.25     | Semester Project, SPV6.....                                        | 36        |
| 2.2.26     | Process Consultation and Relationship, PCRV7 .....                 | 37        |
| <b>2.3</b> | <b>Internship as part of the programme .....</b>                   | <b>38</b> |
| <b>2.4</b> | <b>Bachelor project, PROV7 .....</b>                               | <b>39</b> |
| <b>2.5</b> | <b>Credit transfer for compulsory courses and internships.....</b> | <b>40</b> |
| <b>3</b>   | <b>Curriculum – institution-specific part.....</b>                 | <b>41</b> |
| 3.1.0      | Elective courses .....                                             | 41        |
| 3.1.1      | Organisation and Continuous Improvement OCIV6 .....                | 42        |
| 3.1.2      | Negotiation, NEGV6.....                                            | 43        |
| 3.1.3      | Value Based Selling, VBSV6 .....                                   | 44        |
| 3.1.4      | Industry 4.0, INDV6 .....                                          | 46        |
| 3.1.5      | Product Development and Innovation, PDIV6 .....                    | 47        |
| 3.1.6      | Circular Economy, CIEV6.....                                       | 48        |
| 3.1.7      | Corporate Finance and Portfolio Management, FPMV6 .....            | 50        |
| 3.1.8      | Business Modelling, MODV7 .....                                    | 51        |
| 3.1.9      | International Business Marketing, IBMV7.....                       | 52        |
| 3.1.10     | Transport and Logistics, TRLV7 .....                               | 53        |
| <b>3.2</b> | <b>Credit transfer for elective courses .....</b>                  | <b>54</b> |
| <b>3.3</b> | <b>Parts of the programme which can be completed abroad .....</b>  | <b>55</b> |
| <b>3.4</b> | <b>Internship.....</b>                                             | <b>56</b> |
| 3.4.1      | Role of the internship company.....                                | 57        |
| <b>3.5</b> | <b>Exams in the Value Chain Management program .....</b>           | <b>58</b> |
| 3.5.1      | The exams .....                                                    | 58        |
| 3.5.2      | First-year exams.....                                              | 70        |
| 3.5.3      | Re-examination .....                                               | 70        |
| 3.5.4      | Cheating, plagiarism and disruptive behaviour.....                 | 71        |

|             |                                                                                        |           |
|-------------|----------------------------------------------------------------------------------------|-----------|
| 3.5.5       | Complaints about exams and appeals .....                                               | 73        |
| <b>3.6</b>  | <b>Formal standards for assignments and projects .....</b>                             | <b>76</b> |
| <b>3.7</b>  | <b>Talent initiatives.....</b>                                                         | <b>77</b> |
| 3.7.1       | Acknowledgement of extra-curricular activities .....                                   | 77        |
| <b>3.8</b>  | <b>Instruction and working methods in the Value Chain Management pro- gramme .....</b> | <b>78</b> |
| <b>3.9</b>  | <b>Differentiation of teaching .....</b>                                               | <b>80</b> |
| <b>3.10</b> | <b>Obligation to participate and study activity .....</b>                              | <b>81</b> |
| 3.10.1      | Obligation to participate.....                                                         | 81        |
| 3.10.2      | Study activity.....                                                                    | 81        |
| <b>3.11</b> | <b>Texts in foreign language.....</b>                                                  | <b>81</b> |
| <b>3.12</b> | <b>Changing academic major and transfers.....</b>                                      | <b>82</b> |
| 3.12.1      | Changing academic major .....                                                          | 82        |
| 3.12.2      | Transfers.....                                                                         | 82        |
| 3.12.3      | Applying for change of academic major or transfer .....                                | 82        |
| <b>3.13</b> | <b>Leave of absence .....</b>                                                          | <b>83</b> |
| 3.13.1      | Maternity/paternity leave, adoption and conscription .....                             | 83        |
| 3.13.2      | Application.....                                                                       | 83        |
| <b>3.14</b> | <b>Parallel programmes.....</b>                                                        | <b>84</b> |
| <b>3.15</b> | <b>Dispensations.....</b>                                                              | <b>85</b> |
| <b>3.16</b> | <b>Entry into force and transition rules.....</b>                                      | <b>86</b> |
| 3.16.1      | Entry into force.....                                                                  | 86        |
| 3.16.2      | Transition rules .....                                                                 | 86        |
| <b>3.17</b> | <b>Legal basis .....</b>                                                               | <b>87</b> |

# Foreword

The purpose of the Value Chain Management (VCM) program is to qualify the student to perform production planning, purchasing coordination and cross-disciplinary project coordination and leadership in global environments within logistic, value chain management and supply chain management sectors in private and public organizations.

VCM is a business management program that integrates technical, commercial and leadership subjects. The students will develop abilities to communicate across professional disciplines and national as well as organizational cultures.

All courses are connected to one semester theme and are described in section 2.2. and 3.2

With the VCM programme VIA is offering an educational program that:

- creates a framework for an innovative, practice-oriented, international study environment that supports professional as well as personal development of the students
- engages the students to be able in taking responsibility for their own learning and development
- promotes a high level of ambition where the graduates from the programme are attractive candidates for their future employers

The VCM program has focus on applying theories. Therefore, subject areas, project working, project management and implementation management have a high priority in the program. These will qualify the students to manage business functions where they will:

- use commercial, technical and logistics knowledge as well as new research results in the fields of supply chain management and process optimisation
- facilitate cooperation in order to produce or procure goods
- analyse and discuss financial and technical consequences of decisions
- analyse and discuss the influence of decisions on the overall value chain of the organization.

The teaching language at the Value Chain Management programme is English, and is used in all communication, activities, projects and exams.

# 1 Program structure

The program is structured in 7 semester themes as follow

| Semester themes                                                     | Course name                                           | Code  | ECTS |
|---------------------------------------------------------------------|-------------------------------------------------------|-------|------|
| <b>1 semester</b><br>Market oriented Supply chain                   | <a href="#">Marketing Management</a>                  | MAMV1 | 5    |
|                                                                     | <a href="#">Business Economics</a>                    | BUEV1 | 5    |
|                                                                     | <a href="#">Supply Chain Management</a>               | SCMV1 | 5    |
|                                                                     | <a href="#">Tools for Quantitative Analyses</a>       | TQAV1 | 5    |
|                                                                     | <a href="#">Applied Mathematics</a>                   | MATV1 | 5    |
|                                                                     | <a href="#">Semester Project 1</a>                    | SPV1  | 5    |
| <b>2 semester</b><br>Market demand and production                   | <a href="#">Applied Statistics</a>                    | STAV2 | 5    |
|                                                                     | <a href="#">Inventory- and Warehouse Management</a>   | INVV2 | 5    |
|                                                                     | <a href="#">Business Forecasting</a>                  | FCV2  | 5    |
|                                                                     | <a href="#">Planning</a>                              | PLAV2 | 5    |
|                                                                     | <a href="#">Purchasing and Sourcing</a>               | PUSV2 | 5    |
|                                                                     | <a href="#">Semester Project 2</a>                    | SPV2  | 5    |
| <b>3 semester</b><br>Flow management                                | <a href="#">Management Accounting</a>                 | MACV3 | 5    |
|                                                                     | <a href="#">Project Management</a>                    | PRMV3 | 5    |
|                                                                     | <a href="#">Quality Management</a>                    | QUMV3 | 5    |
|                                                                     | <a href="#">Flow Optimisation</a>                     | FLOV3 | 5    |
|                                                                     | <a href="#">Simulation and Facility Layout</a>        | SFLV3 | 5    |
|                                                                     | <a href="#">Semester Project 3</a>                    | SPV3  | 5    |
| <b>4 semester</b><br>Value chain optimisation                       | <a href="#">Design of Value Chains</a>                | DVCV4 | 5    |
|                                                                     | <a href="#">Investment and Finance</a>                | INNV4 | 5    |
|                                                                     | <a href="#">Strategic Management</a>                  | STMV4 | 5    |
|                                                                     | <a href="#">Theory of Science</a>                     | TSV4  | 5    |
|                                                                     | <a href="#">Semester Project 4</a>                    | SPV4  | 10   |
| <b>5 semester</b><br>Internship                                     | <a href="#">Internship</a>                            |       | 30   |
| <b>6 semester</b><br>Change Management and organizational behaviour | <a href="#">Change Management and Communication</a>   | CMCV6 | 5    |
|                                                                     | <a href="#">Elective</a>                              |       | 5    |
|                                                                     | <a href="#">Elective</a>                              |       | 5    |
|                                                                     | <a href="#">Elective</a>                              |       | 5    |
|                                                                     | <a href="#">Semester Project 6</a>                    | SPV6  | 10   |
| <b>7 semester</b><br>Bachelor                                       | <a href="#">Process Consultation and Relationship</a> | PCRV7 | 5    |
|                                                                     | <a href="#">Elective</a>                              |       | 5    |
|                                                                     | <a href="#">Bachelor Thesis</a>                       | PROV7 | 20   |

All courses end with an exam. The main rule is that there is an exam for each course. However, certain courses will have a joint exam. For exam specifications, see paragraph 3.5 in this curriculum.

## 2 Curriculum – common part

This curriculum consists of a common part and an institution-specific part. The common part is prepared jointly by the institutions, which have obtained approval for offering the programme. The rules found in the common part of the curriculum are thus applicable to all programmes in Denmark.

### 2.1.0 Core areas in the Value Chain Management program

The Value Chain Management programme consists of five core areas comprising the general fields of study the students will have to work with in order to obtain the necessary knowledge and skills to complete the programme.

The core areas of the Value Chain Management programme are based upon:

- Market orientated supply chain
- Market demand and planning
- Flow management
- Value Chain Optimisation
- Change Management

### 2.1.1 Market orientated Supply Chain

In this core area, the students work with topics that relates the supply chain to the market. The students learn to analyse the market and based on the results to form a supply chain for the company that meets the market expectations.

#### 2.1.1.1 Contents

The content in this core area is marketing, supply chain management, tools for quantitative analyses, business economics and math. The core area will be summarized in a semester project, which covers all core courses.

#### 2.1.1.2 Learning objectives

The objectives for knowledge and skills will be described for each course. The objectives for the competences in this core area are:

*The student will have the competences to briefly analyse the market situation and the supply chain and to decide the relevant data needed for the analysis. Based on the analysis will the students be able to suggest improvement actions for the company*

#### 2.1.1.2 ECTS points

The core area comprise 30 ECTS points out of the 210 total ECTS points for the programme.

## 2.1.2 Market demand and planning

In this area, the student will work with the planning hierarchy. The student will look into areas as forecasting, production planning, inventory management and purchasing and will be able to see these topics as a united system for the company which secure the necessary resources and material to meet the market expectations

### 2.1.2.1 Contents

The content in this core area is forecasting and forecasting tools, production planning, inventory management and purchasing. The core area will be summarized in a semester project, that covers all core courses.

### 2.1.2.2 Learning objectives

The objectives for knowledge and skills will be described for each course. The objectives for competences in this core area are:

*The students will have the competence to relate the different topics to each other and see them as a part of one system. Further, the student will have the competences to develop and implement a complete planning structure and a planning hierarchy in the company*

### 2.1.2.3 ECTS points

The core area comprise 30 ECTS points out of the 210 total ECTS points for the programme.

## 2.1.3 Flow management

In this area, the students will work with the physical layout in and with the flow of goods through the production. The student will use different Flow Optimisation methods and theories. The students will work with quality management as a part of the process optimisation and will work with cost and accounting principles in relation with production.

### 2.1.3.1 Contents

The content of this core area is Flow Optimisation and production philosophies, simulation and facility layout, quality management, cost theory and management accounting and. Innovation. The core area will be summarised in a semester project,that can cover all core courses.

### 2.1.3.2 Learning objectives

The objectives for knowledge and skills will be described for each course. The objectives for competences in this core area are:

*The students will have the competence to analyse an existing production layout and relate the different topics in the semester to each other and see them as a part of one system. Further, the student will have the competences to develop and implement optimised production layouts in the company*

### 2.1.3.3 ECTS points

The core area comprise 30 ECTS points out of the 210 total ECTS points for the program.



## 2.1.4 Value Chain Optimisation

In this area, the students will work with optimisation of the whole value chain. The students will work with the value chain in a strategic perspective and will work with the need for investment in the value chain and how to finance the investment need.

### 2.1.4.1 Contents

The content of this core area is design of value chains, strategic management, investment and finance.

### 2.1.4.2 Learning objectives

The objectives for knowledge and skills will be described for each course. The objectives for competences in this core area are:

*The students will, based on the decided strategy for company, have the competence to develop the optimal value chain and expose the need for investment and how to finance it.*

### 2.1.4.3 ECTS points

The core area comprise 30 ECTS points out of the 210 total ECTS points for the program.

## 2.1.5 Change Management

In this area will the students work with topics concerning organisational and employee issues. The area will focus upon communication and change management activities.

### 2.1.5.1 Contents

The content in this area will be Negotiation, Managing Production Facilities, Change Management and Communication and Process Consultation and relationship

### 2.1.5.2 Learning objectives

The objectives for knowledge and skills will be described for each course. The objectives for competences in this core area are:

*The students will, have the competence to develop the organisation in connection with change management issues and will be able to use process consultation and relationship management as active leadership and management tools in managing the organisation and improving organisational effectiveness and efficiency.*

### 2.1.5.3 ECTS points

The core area comprise 20 ECTS points out of the 210 total ECTS points for the program.

## 2.2 Compulsory programme courses

The structure of the programme and the distribution of activities can be seen in the below mentioned figure

| Semester | Compulsory courses | Elective courses | Internship | Projects | Total |
|----------|--------------------|------------------|------------|----------|-------|
| 1        | 25                 |                  |            | 5        | 30    |
| 2        | 25                 |                  |            | 5        | 30    |
| 3        | 25                 |                  |            | 5        | 30    |
| 4        | 20                 |                  |            | 10       | 30    |
| 5        |                    |                  | 30         |          | 30    |
| 6        | 5                  | 15               |            | 10       | 30    |
| 7        | 5                  | 5                |            | 20       | 30    |
| Total    | 105                | 20               | 30         | 55       | 210   |

These activities comprise the compulsory programme courses that students must pass in order to complete the Value Chain Management program. The courses are separate from each other and based on the contents and ECTS points of the core areas (see above). The projects gives the students the opportunity to work with the core area in each semester.

## 2.2.1 Marketing Management, MAMV1

This 1<sup>st</sup> semester course relates to the core area Market Orientated Supply Chain.

### 2.2.1.1 Contents

The contents of the course are theories on external analysis, marketing strategies and marketing mix/plan

### 2.2.1.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• models for environmental analysis their use and limitations</li><li>• structured environmental analysis</li><li>• how to develop a cohesive market strategy</li><li>• how to develop a marketing mix</li><li>• market segmentation and positioning</li><li>• strategic and tactic marketing planning</li></ul>                                                                                                                                                                                                                                                                                                                                 |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• perform a macro environmental analysis</li><li>• perform a market analysis regarding need, growth and size</li><li>• perform a competitor analysis regarding identification of competitors, their goals, strategies and marketing mix</li><li>• perform an industry analysis on attractiveness</li><li>• perform a customer analysis regarding needs, wants and buying behavior</li><li>• perform a segmentation of the market and choose an appropriate positioning strategy</li><li>• identify and chose amongst alternative growth strategies</li><li>• identify and develop a relevant marketing mix</li><li>• to generate a simple budget</li></ul> |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• identify, analyze and evaluate strength and weaknesses in a relevant external marketing environment</li><li>• apply course theory and concepts in analysis and evaluation of strategic marketing problems in relation to product positioning, competitive strategy and growth</li><li>• identify, discuss and recommend a marketing mix to a given strategic market situation</li></ul>                                                                                                                                                                                                                                                    |

## 2.2.2 Business Economics, BUEV1

This 1<sup>st</sup> semester course relates to the core area Market Orientated Supply Chain.

### 2.2.2.1 Contents

The course concentrates on microeconomic analysis that deals with models of economic behaviour of the consumer and the firm.

The course begins with an introduction to basic economic principles and the fundamental role of transactions and markets. Economic theories from the areas:

- Market forces: Demand and supply
- The right price and the concept of price elasticity
- The production process and costs
- Nature of industry

### 2.2.2.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• Demand and supply</li><li>• Market structures</li><li>• Efficiency of equilibrium and sources of market failure</li><li>• Firms and their production decisions</li><li>• Markets for goods and productive inputs</li><li>• Government intervention in markets</li></ul>                                                                                                                                                                                                                     |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• describe, interpret and formulate models of individual decision making and market economies</li><li>• relate the models of firms, consumers and markets to real world economic problems and name policy implications</li><li>• apply the tools from individual decision making and market economies to analyse economic problems and reflect on the ceteris paribus assumption and apply a comparative static analysis within the models of individual decision making and market economies</li></ul> |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• understand and apply common concepts and techniques used in describing economic consequences of decisions</li><li>• understand and apply common tools used in managerial decision-making and control.</li></ul>                                                                                                                                                                                                                                                                         |

## 2.2.3 Supply Chain Management SCMV1

This 1<sup>st</sup> semester course relates to the core area Market Orientated Supply Chain. The course puts Supply Chain Management in relation with the market demands and introduces the students to an integrated and holistic approach of process optimisation

### 2.2.3.1

#### Contents

- Supply chain strategies and design
- Business Processes
- Manufacturing Processes and -layout
- Logistics
- Developing Products and Services (research and development)
- Introduction production concepts

### 2.2.3.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• value and supply chains</li><li>• market oriented supply chain management</li><li>• optimisation of the value and supply chains</li><li>• process management</li><li>• process coordination in companies.</li></ul>                                                                                                                                                                                                                                                                                                                      |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• analyse how value is created through operations and supply chain</li><li>• understand and differentiate operations and supply chain strategies</li><li>• understand how to establish the operations environment</li><li>• analyse the choice and layout decisions in manufacturing and services companies</li><li>• describe business processes</li><li>• establish supply chain linkages</li><li>• understand methods of how to manage production across the supply chain</li><li>• understand how products are developed and serviced.</li></ul> |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• analyse and suggest improvements in a company's supply chain</li><li>• analyse and identify how a company can create value</li><li>• analyse a company's production and choose the right production strategy</li><li>• analyse the operations in a company and suggest improvements.</li></ul>                                                                                                                                                                                                                                       |

## 2.2.4 Tools for Quantitative Analysis, TQAV1

This 1<sup>st</sup> semester course relates to the core area Market Orientated Supply Chain. The purpose of the course is to secure that the students have the necessary competencies concerning collecting, analysing and utilizing data from the market and other sources.

### 2.2.4.1 Contents

The course contains the below mentioned topics

- MS Excel basic and advanced use
- Introduction to vital data within the supply Chain
- ERP systems and relational databases
- Data import
- Data analyses and validation
- Data structures

### 2.2.4.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                         |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• tools for handling data</li><li>• methods for analysing data</li><li>• why correct data is vital for optimising the supply chain</li><li>• the structure of an ERP system</li><li>• formulas, functions, and analysis tools in Excel</li><li>• methods of idea generation tools</li></ul> |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• use and making models in MS Excel</li><li>• use formulas in MS Excel</li><li>• use analysis tools in MS Excel</li><li>• use graphical presentation in MS Excel</li><li>• use and work with relations and links in MS Access</li><li>• link MS Office software</li></ul>                             |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• understand, analyse and present data</li><li>• use and work with MS Excel and create simple Databases</li><li>• validate data</li><li>• understand how different kind of data controls various processes in the supply chain.</li></ul>                                               |

## 2.2.5 Applied Mathematics, MATV1

### Applied Mathematics, MATV1

This 1<sup>st</sup> semester course relates to the core area Market Orientated Supply Chain but the knowledge skills and competences from the course will be used in other core areas.

#### 2.2.5.1 Contents

- Elementary Algebra
- Linear equations
- Non-linear equations
- Mathematics of finance
- Differentiation
- Partial Differentiation
- Integration
- Linear Programming

#### 2.2.5.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• basic mathematical modelling</li><li>• the role of quantitative analysis in business studies</li><li>• the relationship between mathematics and economic analysis</li></ul>                                                                                                                                                                                                                  |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• analyse and solve linear functions</li><li>• analyse and solve non-linear functions</li><li>• solve functions of several variables</li><li>• work with and solve supply and demand functions</li><li>• work with simple and compound interest</li><li>• calculate marginal functions and elasticity of supply and demand</li><li>• optimize economic functions</li><li>• integrate functions</li></ul> |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• understand the interaction in other subjects, e.g. Business Economics, Forecasting and Cost Theory &amp; Budgeting</li></ul>                                                                                                                                                                                                                                                             |

## 2.2.6 Semester Project, SPV1

This 1<sup>st</sup> semester project relates to the core area Market Orientated Supply Chain. The purpose of the project is to work with a holistic view and relate the topics from the different courses to each other.

### 2.2.6.1 Contents

Topics from the courses on first semester.

### 2.2.6.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• the requirements and guidelines for developing projects in VIA UC</li><li>• teamwork</li><li>• how to develop a problem based project</li></ul>                                                                                                                                                                                                                                             |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• work with simple problem based projects in teams</li><li>• perform a simple analysis of a defined case</li><li>• develop a problem formulation and delimitation</li><li>• make simple choices regarding methodology</li><li>• apply semester theory in a problem based project</li><li>• work independently and in teams</li></ul>                                                                    |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• practice teamwork</li><li>• identify and explain core issues from the semester theme and incorporate it into a project description</li><li>• describe and discuss problem areas in a project and make a simple analysis of the problem and come up with recommendations related to the problem formulation</li><li>• make a professional, written presentation of the project</li></ul> |



## 2.2.7 Applied Statistics, STAV2

This 2<sup>nd</sup> semester course relates to the core area Market Demand and Planning, but the knowledge skills and competences from the course will be used in other core areas, mainly in the core area Flow Management

### 2.2.7.1 Contents

The course is built up around 8 main topics, each containing several subtopics:

- Descriptive statistics
- Probability
- Random variables and probability distributions
- The normal distribution
- Confidence intervals
- Hypothesis testing
- Regression Analysis
- Chi-squared and contingency
- Two-Samples test

### 2.2.7.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• basic descriptive statistics</li><li>• key probability distributions</li><li>• quantitative methods and analysis</li><li>• use of Excel in statistics functions</li></ul>                                                                                                                                                      |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• do statistical analysis</li><li>• do hypothesis-testing</li><li>• do regression analysis</li><li>• describe, analyse and interpret data using Excel</li></ul>                                                                                                                                                                            |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• understand statistical methods in interaction with processing using statistical calculation software</li><li>• apply basic skill sets along with some intermediate to advanced functions to manage and audit numerical reports</li><li>• create and manipulate charts, and work with different types of graphics</li></ul> |

## 2.2.8 Inventory- and Warehouse Management, INV2

This 2<sup>nd</sup> semester course relates to the core area Market Demand and Planning. Managing inventories in the value chain is essential to the company. Inventories secure the right service level towards the customer, and are often a large part of the capital binding in the company. After this course, the student will be able to use theories for analysis and development of strategies and optimisation of inventories in a company.

### 2.2.8.1

#### Contents

The course contains

- the function of inventory and the costs related to inventory
- inventory management – order point, safety stock, service level, lead time
- inventory optimisation – ABC, double ABC, Product Life Cycle (PLC)
- inventory control – EOQ, Safety Stock (SS), Kanban, 2-bin systems
- inventory KPI's - delivery performance, stock turns, carrying cost, stock write down, dead stock
- warehouse management

### 2.2.8.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• inventory fundamentals - focus on inventory functions and cost</li><li>• inventory management – order point, safety stock, service level, lead time</li><li>• inventory optimisation – ABC, double ABC, Product Life Cycle (PLC)</li><li>• inventory control – EOQ, Safety Stock (SS), Kanban, 2-binsystem</li><li>• inventory KPI's - delivery performance, stock turns, carrying cost, stock write down, dead stock</li><li>• standard optimisation models from a practical point of view</li></ul> |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• demonstrate theories and models used in the inventory and warehouse management and forecasting, as well as the ability to assess these theories and the strengths and weaknesses of the models</li><li>• perform inventory analysis and suggest inventory policies based on the analysis</li><li>• design inventory control system based on inventory policies</li></ul>                                                                                                                                        |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• identify, analyse and evaluate the techniques for inventory management, optimisation and control given in the course</li><li>• based on data and system information offer a well-reasoned analysis of the inventory optimisation possibilities</li><li>• through a situation analysis, identify and address inventory-specific issues</li><li>• understand the consequences of supply and demand on inventory management</li></ul>                                                                |

## 2.2.9 Business Forecasting, FCV2

This 2<sup>nd</sup> semester course relates to the core area Market Demand and Planning.

### 2.2.9.1 Contents

The content of the course is:

- forecast as the core process in the supply chain
- understanding statistics and data patterns
- judgmental and statistical forecasts
- quantitative forecasts
- qualitative forecasts
- measuring forecasting accuracy performance
- managing the forecasting process, participants, tasks, and responsibilities
- from forecast to production plan
- forecast and integration in the supply chain

Study activity will consist of preparation, lectures, guest lecture, group exercises / presentations, exercises and casework.

### 2.2.9.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• the theory and most utilized models in the area of business forecasting</li><li>• managerial decisions that form the foundations of forecasting</li><li>• skills needed to understand and criticize given theoretical approaches and discuss and choose between alternative solution strategies for</li></ul>                                                                                    |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• demonstrate basic familiarity with theories and models used in forecasting management</li><li>• show the ability to assess strengths and weaknesses of forecasting theories and models in a given business situation</li><li>• offer a well-reasoned analysis of the forecasting optimisation possibilities available to management from a given body of information and a given set of theories</li></ul> |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• choose appropriate forecasting models and recommend how to measure forecasting accuracy</li><li>• identify, analyse and evaluate the different forecasting techniques given in the course models, theories and concepts</li><li>• design a forecasting system based on the business situation of the company</li></ul>                                                                       |

## 2.2.10 Planning, PLAV2

This 2<sup>nd</sup> semester course relates to the core area Market Demand and Planning. The purpose of the course is to give the students a wide knowledge on the planning hierarchy and the different planning levels in a company. The course enables the students to use the tools necessary for conducting the planning of production based on information from the market and based on the availability on capacity, resources and raw material. The course give the students possibility to work through all the elements in a planning hierarchy.

### 2.2.10.1 Contents

- Introduction to planning
- Sales and Operation Planning
- Master Production Schedule (MPS)
- Material Requirement Planning (MRP)
- Bill of Materials
- Capacity Management
- Production Activity Control
- Rough Cut Capacity Planning
- Scheduling
- Planning in ERP systems

### 2.2.10.2 Learning objectives

|           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge | Have knowledge about: <ul style="list-style-type: none"><li>• How Forecasting and demand planning affect the production planning process</li><li>• Sales and Operation Planning</li><li>• Master Production Schedule (MPS)</li><li>• Material Requirement Planning (MRP) and BOM</li><li>• Capacity Management</li><li>• Scheduling</li><li>• The relationship between the different planning hierarchies</li></ul>                                                                         |
| Skills    | Be able to: <ul style="list-style-type: none"><li>• demonstrate familiarity in performing a MPS</li><li>• able to use the MRP and a BOM tool to plan the required material</li><li>• demonstrate the ability to create the capacity plan by using appropriate planning tools</li><li>• work in the capacity management environment</li><li>• use Rough Cut Capacity Plan as MPS control tool</li><li>• To be able to use Productions Activity Control as control tool for the MRP</li></ul> |
|           | Have the competencies to: <ul style="list-style-type: none"><li>• build a planning system</li><li>• to implement the control hierarchy suited for the particular planning environment</li><li>• to analyse the S&amp;OP flow and recommend a suitable planning system</li></ul>                                                                                                                                                                                                             |

## 2.2.11 Purchasing and sourcing PUSV2

This 2<sup>nd</sup> semester course relates to the core area Market Demand and Planning. The course gives the student a wide knowledge on the role of purchasing in the value chain, purchasing management theories, and enable them to use the theories for analysing and developing purchasing strategies, implementing these strategies.

### 2.2.11.1 Contents

- the role of purchasing in the value chain,
- optimising the supplier relationships in the chain
- industrial buying behaviour and the purchasing management process
- models for analysing purchasing and business strategies
- corporate social responsibility
- total cost management
- in- and outsourcing
- the negotiation process and fundamental negotiation tools and techniques

### 2.2.11.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• the role of purchasing in the value chain, and how to optimise the relationships in the chain</li><li>• industrial buying behaviour and the purchasing management process</li><li>• models for analysing purchasing and business strategies</li><li>• corporate social responsibility</li><li>• total cost management</li><li>• in- and outsourcing</li><li>• the negotiation process and fundamental negotiation tools and techniques</li></ul> |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• understand the consequence of demands placed upon purchasing from business stakeholders</li><li>• understanding the increasing strategic nature of purchasing on an overall level</li><li>• demonstrate familiarity with approaches and models used, as well as ability to assess the strength and weaknesses of these approaches and models</li><li>• understand the negotiation process and use it in a business context.</li></ul>                      |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• use the theoretical and actual approaches, and also be able to define, discuss and choose between different strategies for purchasing</li><li>• understand and estimate which consequences the chosen sourcing strategy may have for the entire value chain of a company and the company's placement in the total value chain</li><li>• plan for and participate in a real negotiation in a business context.</li></ul>                      |

## 2.2.12 Semester Project, SPV2

This 2<sup>nd</sup> semester project relates to the core area Market Demand and Planning. The purpose of the project is to work with a holistic view and relate the topics from the different courses to each other.

### 2.2.12.1 Contents

The semester project will be an exercise in solving practice-oriented business problems within the core components of the semester, demonstrating the students' understanding of market demand and production plan.

The students have to include topics and theories from the subjects of the first and second semester of the Value Chain Management program.

### 2.2.12.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• how to include theories and knowledge from previous semester in a problem based project</li><li>• how to identify and obtain necessary information and data to analyse the problem area</li><li>• how to propose and create a well-defined project based upon a project analysis</li><li>• how to design a project report based project description, analysis and recommendation</li><li>• how to create recommendations to stated problems</li></ul> |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• demonstrate skills in critical selection and application of theories and models and show the ability to work professionally in a team and use formal academic methods and procedures according to guidelines</li><li>• define a project based on a problem area defined by the supervisor</li></ul>                                                                                                                                                             |
| Competencies | Have competencies to: <ul style="list-style-type: none"><li>• identify and explain core issues from the semester theme and incorporate it into a project description</li><li>• describe and discuss problem areas in a project and make a simple analysis of the problem and come up with recommendations related to the problem formulation</li><li>• make a professional oral and written presentation of the project</li></ul>                                                                                   |

## 2.2.13 Management Accounting MACV3

This 3<sup>rd</sup> semester course relates to the core area Flow Management.

### 2.2.13.1 Contents

The course concentrates on managerial accounting, which is concerned with ensuring that managers have the information they need to plan and control the direction of their organisation based on the economic situation. The course deals with problems of measuring and controlling performance at different levels of the organisation going from objects and profit centres to the entire organisation. Consideration of the use of non-financial measures in measuring performance is taken into account.

### 2.2.13.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• cost management and cost behaviour</li><li>• traditional cost management systems</li><li>• contribution model</li><li>• activity-based cost management systems</li><li>• management accounting information for activity and process decisions</li><li>• customer and product profitability</li><li>• break-even point analysis</li><li>• product/service costing and segmentation</li><li>• management accounting and control systems: assessing performance over the value chain</li><li>• financial statements, i.e. profit &amp; loss statement, cash flow, balance sheet</li><li>• the budgeting process covering; profit &amp; loss statement, cash flow, balance sheet</li><li>• performance evaluation of business units</li></ul> |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• use information, including the use of financial reporting, for planning, controlling and decision-making</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• discuss the issues to be considered when setting the financial aims and objectives of a business</li><li>• define and distinguish between different types of costs</li><li>• identify and quantify economic elements that are relevant to a particular decision-making</li><li>• select and employ appropriate tools of management for analytical purposes, for decision-making, and for measuring performance of different levels and divisions of an organisation, including market and product segments</li><li>• indicate the use of budgeting, its role and limitation, and construct various budgets from relevant data</li></ul>                                                                                               |

## 2.2.14 Project Management, PRMV3

This 3<sup>rd</sup> semester course relates to the core area Change Management. The knowledge, skills and competences acquired at the course will also be used in other core areas.

### 2.2.14.1 Contents

During the course the students will work with

- the nature of project working
- standards and norms for project management
- certifications in project management
- teamwork and roles
- the role of a project manager
- stakeholder analysis
- communications planning
- risk analysis
- time planning
- introduction to project management tools

### 2.2.14.2 Learning objectives

|              |                                                                                                                                                                                                                                              |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• planning process of a project</li><li>• how to manage and run a project</li></ul>                                                                                              |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• use the methodology and tools of planning and handling a project</li></ul>                                                                                                               |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• make a project plan</li><li>• suggest how to organize a project</li><li>• manage a project</li><li>• control a project</li><li>• use project management software</li></ul> |



## 2.2.15 Quality Management, QUMV3

This 3<sup>rd</sup> semester course relates to the core area Flow Management. The purpose of the course is to give the students broad knowledge, skills and competences about and within Quality Management. The course enables the students to use quality management theory for analysing and developing appropriate quality management systems during the production process.

### 2.2.15.1 Contents

Main contents of the course includes the following elements:

- The foundations of quality
- Customer Focus
- Workforce & Process Focus
- Statistical Methods in Quality Management
- Design for Quality and Product Excellence
- Measuring, Controlling and Process Improvement
- Performance mgmt. and Continuous Improvement

Organized in the following fashion:

- Defining quality
- Measuring Quality
- Analysing Quality
- Improving Quality
- Controlling Quality

### 2.2.15.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• how to define quality seen from different stakeholders perspective</li><li>• different models and techniques within quality management</li><li>• process variation and capability</li><li>• tools and techniques to support and improve quality assurance and control</li><li>• methods / means to include quality into product and system design</li></ul>                                        |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• apply the most appropriate quality techniques</li><li>• perform a statistical process control study and analysis</li><li>• perform a root cause analysis and implement well founded solutions</li><li>• design an optimal quality management system</li><li>• include quality into business decisions.</li></ul>                                                                                             |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• identify, analyse and evaluate the different techniques given in the course models, theories and concepts apply course theory and concepts in analysis and evaluation of quality problems in relation to quality management</li><li>• design and perform a process capability and control study</li><li>• identify, analyse, discuss and recommend relevant solutions to any quality</li></ul> |

## 2.2.16 Flow Optimisation, FLOV3

This 3<sup>rd</sup> semester course relates to the core area Flow Management. The purpose of the course is to give the students a deep knowledge within flow optimisation theories and enable them to use the theories for analysing, optimising and managing the process flow.

### 2.2.16.1

#### Contents

In order to develop a higher degree of supply chain responsiveness in a demand driven environment, it is necessary to change the manufacturing strategy from push to pull. This course includes a number of techniques and methods that support creating an optimal pull manufacturing operation. Elements covered in the course are:

- Techniques to improve manufacturing flow and processes
- Manufacturing Strategy and philosophies
- Flow optimisation theories

### 2.2.16.2 Learning objectives

|                     |                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Knowledge</b>    | Have knowledge about: <ul style="list-style-type: none"><li>• different models and strategies within flow optimisation</li><li>• flow dynamics and mapping techniques</li><li>• tools and techniques to support and improve manufacturing flow</li><li>• how to select the most appropriate technique to use from a broad range of techniques</li></ul>                  |
| <b>Skills</b>       | Be able to: <ul style="list-style-type: none"><li>• perform a selection of the most appropriate manufacturing strategy and develop the matching manufacturing capabilities</li><li>• Perform a flow analysis, suggest improvements and implement solutions, by using the most appropriate techniques</li><li>• design an optimal material and information flow</li></ul> |
| <b>Competencies</b> | Have the competencies to: <ul style="list-style-type: none"><li>• apply course theory and concepts in analysis and evaluation of strategic manufacturing problems in relation to flow optimisation</li><li>• identify, analyse, discuss and recommend the most appropriate solutions to any problems within manufacturing flow management</li></ul>                      |

## 2.2.17 Simulation and Facility Layout, SFLV3

This 3<sup>rd</sup> semester course relates to the core area Flow Management. The purpose of the course is to give the students a wide knowledge on simulation and physical factory layout theory. The course enables the students to use these theories for analysing and developing appropriate material handling and human resource allocations solutions during the production process. Effective facility and material flow planning enables reduction of material handling costs in the context of plant layout. In this way productivity increases. The course gives the students possibility to create simulation models for evaluation of the characteristics and performance of facility design alternatives.

### 2.2.17.1 Contents

The Content of the course is:

- flow theory
- material Handling
- resource allocation
- simulation
- transformation systems
- physical factory layout theory

### 2.2.17.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• material flow</li><li>• physical layout</li><li>• layout optimisation</li><li>• simulation</li><li>• requirements for development and use of simulation models</li><li>• simulation software (SIMUL8)</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• demonstrate basic familiarity with theories and models used in designing a facility layout</li><li>• perform a selection of the most appropriate facility layout to use</li><li>• demonstrate the ability to assess strengths and weaknesses of different facility layouts</li><li>• design an appropriate conceptual model for a simulation study</li><li>• develop a computer based model using simulation software Simul8</li><li>• experiment with the simulation</li><li>• verify and validate the simulation</li><li>• understand and criticize given theoretical approaches, discuss and choose between alternative solutions for flow management</li><li>• include facility layout and simulation into flow management &amp; business decisions</li></ul> |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• identify, analyse and evaluate the different techniques given in the course models, theories and concepts</li><li>• apply course theory and concepts in analysis and evaluation of flow management problems in relation to facility layout</li><li>• design and perform a simulation study</li><li>• identify, analyse, discuss and recommend relevant solutions to flow management and facility layout decisions</li></ul>                                                                                                                                                                                                                                                                                                                         |

## 2.2.18 Semester Project, SPV3

This 3<sup>rd</sup> semester project relates to the core area Flow Management. . The purpose of the project is to work with a holistic view and relate the topics from the different courses to each other. The semester project will be an exercise in solving practice-oriented business problems within the core components of the semester, demonstrating the students' understanding of flow optimisation.

### 2.2.18.1 Contents

The students must include topics and theories from the subjects of the first, second and third semester of the Value Chain Management program.

### 2.2.18.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• how to include theories and knowledge from previous semesters in a problem based project</li><li>• how to identify and obtain necessary information and data to analyse the problem area</li><li>• to propose and create a well-defined project based upon a project analysis</li><li>• how to design a project report based project description, introduction, analysis and recommendation</li><li>• how to search and apply relevant additional sources</li><li>• how to create recommendations to stated problems</li></ul> |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• demonstrate skills in critical selection and application of theories and models and show the ability to work professionally in a team and use formal academic methods and procedures according to guidelines</li><li>• define a project based on a problem area defined by the supervisor</li></ul>                                                                                                                                                                                                                                      |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• critically reflect upon the scope and content of the project and come up with well-argued recommendations to stated problems.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                    |

## 2.2.19 Design of Value Chains, DVCV4

This 4<sup>th</sup> semester course relates to the core area Value Chain Optimisation. Designing value chain or supply chain capabilities to strategically match the requirements from the customers will continue to be a key element of achieving a successful business in the future.

### 2.2.19.1 Contents

Designing the business processes in the value chain to support and achieve the strategic fit between requirements and capabilities is the core content of this course.

### 2.2.19.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• how the internal processes within any given company will interact with the external relationship to other members of the value chain</li><li>• how strategic and operational decisions will affect the supply chain design and the company's approach towards both market requirements and suppliers capabilities</li></ul> |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• critically and systematically determine the optimal supply chain strategy</li><li>• develop and design value chains and network structures including partnerships with external partners</li><li>• align processes to match market requirements and suppliers capabilities</li></ul>                                                  |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• apply course theory and concepts in analysis and evaluation of strategic supply chain problems in relation to value chain design</li><li>• identify, analyse, discuss and recommend the most appropriate solutions to any problems within supply chain management</li></ul>                                             |

## 2.2.20 Investment and Finance, INFV4

This 4<sup>th</sup> semester course relates to the core area Value Chain Optimisation. The emphasis is on providing insights into how investment analysis and finance decisions are made in real life and how to apply these concepts in a practical setting in order to give the best results.

### 2.2.20.1 Contents

- methods preparing capital requirements and cash flows as basis for making investment calculations
- investment evaluations (NPV, IRR, Pay Back etc.)
- financing (Equity, Debt, Effective cost of capital etc.)

### 2.2.20.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• methods preparing capital requirements and cash flows as basis for making investment calculations</li><li>• investment evaluations (NPV, IRR, Pay Back etc.)</li><li>• financing (Equity, Debt, Effective cost of capital etc.)</li></ul>                                                                                                                                                                           |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• assess the assumptions and making calculations as the basis for investment decisions</li><li>• find the optimal economic lifespan and optimal replacement decisions</li><li>• include the strategic and dynamic perspective in the investment calculation by calculation models for real options</li><li>• compare different funding concepts</li><li>• evaluate the match between business risk and financial risk</li></ul> |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• evaluate on both present and future investment and financial offers</li><li>• to play a role as a constructive sparring partner for the company's employees who are responsible for the strategic corporate investments and financing</li><li>• make calculations of the return of an investment and be able to account for the choice of funding concept.</li></ul>                                            |

## 2.2.21 Strategic Management, STMV4

This 4<sup>th</sup> semester course relates to the core area Value Chain Optimisation. The course works with theories on strategic analysis, strategy development and strategic implementation at business and corporate level, as well as external analysis, marketing strategies and marketing mix/plan.

### 2.2.21.1 Contents

Topics in the course are:

- models for environmental analysis and their application and limitations
- models for resource analysis and their application and limitations
- how to deal with company purpose and strategy dynamics
- specific corporate and business strategy development
- strategy evaluation and implementation
- how to manage strategic change and building cohesive strategy

### 2.2.21.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• models for environmental analysis and their application and limitations</li><li>• models for resource analysis and their application and limitations</li><li>• how to deal with company purpose and strategy dynamics</li><li>• specific corporate and business strategy development</li><li>• strategy evaluation and implementation</li><li>• how to manage strategic change and building cohesive strategy</li></ul> |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• deal with emergent and prescriptive strategic processes</li><li>• perform an environmental analysis</li><li>• perform a company resource analysis</li><li>• develop purpose and deal with strategy dynamics</li><li>• develop appropriate corporate and business strategy</li><li>• develop appropriate implementation strategies</li></ul>                                                                                       |
| Competencies | Have competencies to: <ul style="list-style-type: none"><li>• identify, analyse and evaluate relevant parts of the external environment</li><li>• identify, analyse and evaluate company resources</li><li>• apply course theory and concepts in analysis, development and evaluation of corporate and business strategic management</li><li>• design strategic implementation programs</li></ul>                                                                                     |

## 2.2.22 Theory of Science, TSV4

This 4<sup>th</sup> semester course relates to the core area Value Chain Optimisation. However, the topics in this course has to be used in all remaining projects in the program. The course have the below mentioned contents:

- the history of scientific reasoning
- the problem of demarcation
- scientific reasoning
- positivism and logical positivism
- falsificationism
- scientific progress and the concept of paradigms

### 2.2.22.1 Contents

The course has three main themes, which are all interlinked:

- general Philosophy of Science
- business Ethics
- methodology

The following matters within organisational/managerial and economic theory will be discussed:

- paradigms shifts
- paradigms in research
- business ethics

### 2.2.22.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have the knowledge about: <ul style="list-style-type: none"><li>• important theoretical problems and schools within a social-science perspective and within the core areas of organisation / management and economics</li><li>• central paradigm shifts within the areas mentioned above</li><li>• the application of methodology in project and report writing following the principles of academic work</li></ul>                                                                                        |
| Skills       | Be able to <ul style="list-style-type: none"><li>• collect, adapt and interpret quantitative and qualitative data</li><li>• relate critically to existing or new data material</li><li>• judge the relevance, topicality, validity, and reliability of data</li><li>• prepare academic reports and projects, including arranging research results and suggested solutions in a clear and easy-to-read report, which contains a clear formulation of the problem and methodological consideration</li></ul> |
| Competencies | Have the competencies to <ul style="list-style-type: none"><li>• use quantitative and qualitative methods</li><li>• develop problem formulations</li><li>• use the right methodology for a given problem</li><li>• apply quality assessment, i.e. reliability and validity</li></ul>                                                                                                                                                                                                                       |



## 2.2.23 Semester Project, SPV4

This 4<sup>th</sup> semester project relates to the core area Value Chain Optimisation. The purpose of the project is to work with a holistic view and relate the topics from the different courses to each other. The semester project will be an exercise in solving practice-oriented business problems within the core components of the semester, demonstrating the students' understanding of value chain optimisation.

### 2.2.23.1

#### Contents

The students have to include topics and theories from the courses from the fourth semester and from the three earlier semesters when necessary.

### 2.2.23.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• how to include theories and knowledge from previous semesters in a problem based project</li><li>• how to select a scientific paradigm and apply the paradigm in a problem based project</li><li>• how to create a well-defined project based upon data analysis and detailed recommendations</li><li>• how to design a project regarding knowledge, methods and theories to be included</li><li>• how to set criteria for discussing results of analysis performed</li><li>• how to create recommendations to stated problems.</li></ul> |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• demonstrate skills in critical selection and application of theories and models and show the ability to work professionally in a team and use formal academic methods and procedures according to guidelines</li><li>• define a project based on a purpose defined by the supervisor</li></ul>                                                                                                                                                                                                                                                      |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• critically reflect upon the scope, process and content of the project and come up with well-argued recommendations to stated problems</li><li>• create findings by in-depth analysis on both quantitative and qualitative data.</li><li>• develop detailed recommendations on how to fulfill the problem formulation</li></ul>                                                                                                                                                                                                        |

## 2.2.24 Change Management and Communication, CMCV6

This 6<sup>th</sup> semester course relates to the core area Change Management.

### 2.2.24.1 Contents

The course focuses on the below mentioned tools and methods

- organisational change
- theories of effective change implementation
- organisational redesign
- psychological contract
- assertive practice
- systemic communication and game mastery
- non-verbal communication
- active Listening
- cultural understanding and differences

The course teaches the students in the below mentioned practical applications of personal communication in

- presentations
- dialogues – feedback and feedforward
- running a meeting and conflict management
- job applications

### 2.2.24.2 Learning objectives

|           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge | Have knowledge about: <ul style="list-style-type: none"><li>• general models of change management and their application</li><li>• general communication models, their use and limitations</li><li>• knowledge of non-verbal communication and its effect in different cultural settings</li><li>• what characterises effective communication</li><li>• how to communicate clear and effectively</li><li>• how to apply active listening</li><li>• how to prepare and give presentations</li><li>• how to run a meeting</li><li>• how to apply communication in negotiation</li></ul> |
| Skills    | Be able to <ul style="list-style-type: none"><li>• analyse the communication process</li><li>• perform a transactional communication analysis</li><li>• choose the right communication form in a given situation</li><li>• act in an assertive way</li><li>• apply active listening</li><li>• plan and run a meeting</li><li>• plan for and give presentations</li><li>• participate in negotiations</li><li>• Plan and participate in an effective meeting</li></ul>                                                                                                                |

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Competencies | <p>Have the competencies to</p> <ul style="list-style-type: none"> <li>• evaluate own as well as others' competencies within communication and change management</li> <li>• understand the coherence between change management and communication</li> <li>• be aware of own personal strengths and weaknesses regarding personal communication</li> <li>• communicate clearly and effectively in different change management situations</li> <li>• interpret non-verbal communication</li> </ul> |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 2.2.25 Semester Project, SPV6

This 6<sup>th</sup> semester project relates to the core area Change Management. The purpose of the project is to work with a holistic view and to show how the change management activities are affected from topics in the other core areas, and how topics from the different courses relates to each other. The semester project will be an exercise in solving practice-oriented business problems within the core components of the semester, demonstrating the students' understanding of all core areas in the program. The students have to include topics and theories from the courses from the sixth semester and from the five earlier semesters when necessary.

### 2.2.25.1 Contents

Content is from the different courses from the 1<sup>st</sup> semester to the 6<sup>th</sup> semester

### 2.2.25.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• how to include theories and knowledge from previous semesters in a student defined problem based project</li><li>• how to propose and create a well-defined project based upon a project analysis</li><li>• how to design a project regarding knowledge, methods and theories to be included</li><li>• how to set criteria for discussing results of analysis performed</li><li>• how to create recommendations to stated problems</li></ul> |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• demonstrate skills in critical selection and application of theories and sources and show the ability to work professionally in a team and use formal academic methods and procedures according to guidelines</li><li>• define a project together with a company chosen by the student/students</li></ul>                                                                                                                                              |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• critically reflect upon the scope and the whole process and content of the project and come up with well-argued recommendations to stated problems</li></ul>                                                                                                                                                                                                                                                                             |

## 2.2.26 Process Consultation and Relationship, PCRv7

The purpose of the course is to teach the students how to work with theories on facilitation of cognitive processes and behavioural change in a change process.

### 2.2.26.1 Contents

The content of the course are theories on facilitation of cognitive processes and behavioural change in a change process.

### 2.2.26.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• process consultation</li><li>• process intervention</li><li>• active inquiry</li><li>• appreciative inquiry</li><li>• constructivism and systemic theory</li><li>• helping relationships</li><li>• interventive interviewing</li><li>• an understanding for and knowledge of the psychodynamics of helping relationships and active inquiry</li><li>• Tools to facilitate process interventions in groups and on an interpersonal level</li></ul>                                                                                                                                                                              |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• apply active inquiry and listening in process consultation</li><li>• apply questioning techniques</li><li>• analyse specific process consultation</li><li>• understand and apply the psychological contract in consultation</li><li>• plan for how to facilitate group processes and personal development</li><li>• understand the psychodynamics of effective helping relationships and active inquiry</li><li>• facilitate process interventions in groups and on an interpersonal level</li><li>• apply appreciative inquiry in process consultation</li><li>• apply feedback in accordance with the consultation situation</li></ul> |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• analyse, plan and implement intervention processes for sustainable individual and organisational changes</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

## 2.3 Internship as part of the programme

As part of the Value Chain Management program students must complete one period of internship. The period has to cover at least 20 weeks. The internship comprise work relevant to the Value Chain Management program with the purpose of preparing the students for the work as a bachelor in Value Chain Management. The students have passed courses covering 90 ECTS to get access to the internship

The purpose of the internship is for the student to gain insight into the practical work within logistics and supply chain management.

### 2.3.1.1 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | <ul style="list-style-type: none"><li>• The internship is a period where the student tests in practice the knowledge and skills gained on the first four semesters of the VCM programme in a function appropriate</li><li>• for a Value Chain Manager.</li></ul>                                                                                                                                                 |
| Skills       | <ul style="list-style-type: none"><li>• The student will enter into a job-like situation with a company to carry out a relevant job function for the profession in the company in question.</li><li>• The internship is comparable to a full time job – same working hours, effort, commitment and flexibility as the graduated bachelor will be expected to accept in his or her first full-time job.</li></ul> |
| Competencies | <p>After following the course, the student should have the competencies to:</p> <ul style="list-style-type: none"><li>• manage complex development-oriented situations in a work situation</li><li>• take part in professional and cross-professional cooperation.</li></ul>                                                                                                                                     |

### 2.3.1.2 ECTS points

This internship period comprise 30 ECTS points out of the 210 total ECTS points for the programme.

## 2.4 Bachelor project, PROV7

The programme ends with a bachelor project. This project comprise 20 ECTS points out of the 210 total ECTS points for the programme. The project is evaluated with an exam. The project can only be finished when the students have passed exams covering 190 ECTS points. The purpose of the bachelor project is to document how the student is capable of fulfilling the objectives of the Value Chain Management programme.

The project is prepared in cooperation with a company selected by the students. VIA assigns a supervisor to each project.

The students are encouraged to select the topic of the bachelor project on the 6th semester – preferably on the basis of an assignment given by one of the students internship company. The topic of the bachelor project is chosen by the students and has to be presented to the supervisor for approval.

In order to successfully complete the final project the following objectives has to be met:

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• how to, in a professional way, include theories and knowledge in a students defined problem based project</li><li>• how to propose and create a professional project based upon a project analysis</li><li>• how to professionally design a project regarding knowledge, methods and theories to be included</li><li>• how to set relevant criteria for discussing results of analysis performed</li><li>• how to, in a professional way, create recommendations to stated problems.</li></ul> |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• demonstrate professional skills in critical selection and application of theories and sources and show the ability to work professional in a team and use formal academic methods and procedures according to guidelines</li><li>• in a professional way, define a project together with a company chosen by the student.</li></ul>                                                                                                                                                                      |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• in a professional way, critically reflect upon the scope and the whole process and content of the project and come up with well-argued and professional recommendations to stated problems.</li><li>• present and discuss relevant problems and subjects within Value Chain Management.</li></ul>                                                                                                                                                                                          |

Practical standards for the project, including size etc., are described further under exams in below.

## 2.5 Credit transfer for compulsory courses and internships

The student is obliged to inform VIA about passed courses, educational courses from other institutions or other activities, which can be assumed to result in credit transfer.

Students who have studied at a university abroad and in accordance with an agreement with VIA will receive credits for passed courses on an individual basis. The student will give VIA full permission to obtain information in order to give credit transfer.

Students who have passed courses or other elements of a degree programme at a Danish institution of higher education may on the basis of an individual application get credits for such courses or elements that are relevant to the VCM programme at VIA.

Please refer to the Danish Ministerial Order on Academy Profession Programmes and Professional Bachelor Programmes as well as the Ministerial Order on admission to Academy Profession Programmes and Professional Bachelor Programmes for further information on the rules on credit transfer.

Applications for credit transfer which are not covered by the rules for compulsory credit transfer must be submitted to the programme no later than 1 month prior to the start of the course/internship for which credit is applied. For information on where to send an application for credit transfer, please see below regarding credit transfer in elective courses.



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## 3 Curriculum – institution-specific part

This curriculum consists of a common part and an institution-specific part. The institution-specific part consists of rules specific to the Value Chain Management program at VIA University College. These rules have been set by VIA University College.

Please note that similar or equivalent programmes at other institutions may apply other rules.

### 3.1.0 Elective courses

In order to complete the Value Chain Management program, a student must pass four elective courses corresponding to 20 ECTS points. Three of these elective courses have to be followed on the 6<sup>th</sup> semester and one course has to be followed on 7<sup>th</sup> semester. Each elective course awards the students 5 ECTS points.

If there less than 10 students are enrolled in an elective course, VIA can cancel the course. The students have then the possibility to choose a new one among the remaining courses.

The elective courses in the Value Chain Management program are as follows:

## 3.1.1 Organisation and Continuous Improvement OCIV6

This 6<sup>th</sup> semester elective course relates to the core area Change Management.

### 3.1.1.1 Contents

The course gives the students a fundamental knowledge about organisational theories, and the theories involved

organisational performance. The course enables the students to work with the dynamics in organisations theoretically and in practice.

### 3.1.1.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• human resources and organisational behaviour</li><li>• motivational theory</li><li>• structural organisation theory</li><li>• power and politics in organisations</li><li>• organisational culture</li><li>• management theory</li><li>• continuous improvement methods</li><li>• theories of external control and environments</li></ul>                                                       |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• understand the dynamics within organisations, organisational structures, organisational culture, and continuous improvement</li><li>• understand different motivational theories and how motivation affects the performance of organisations</li><li>• understand the demands which external environment put on organisations, and how to make the organisation able to adjust to these demands</li></ul> |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• analyze task performance and structure</li><li>• design for simple adjustments to the environment</li><li>• understand and apply motivational theory</li><li>• understand and apply management theory</li><li>• understand and apply basic project management skills</li><li>• understand the coherence between the above and continuous improvements</li></ul>                             |

## 3.1.2 Negotiation, NEGV6

This 6<sup>th</sup> semester elective course relates to the core area Change Management.

### 3.1.2.1 Contents

- defining negotiation personality
- conflict
- negotiation style
- key negotiation temper
- asserting yourself
- principles of persuasion
- rules of negotiation
- the negotiation process
- alternative styles strategies
- communication in negotiation.
- culture and gender
- interests and goals
- understanding perception
- effects of power in negotiation
- team neg.
- third party intervention
- using your personal negotiation power
- post negotiation evaluation

### 3.1.2.2 Learning objectives

|              |                                                                                                                                                                                                                                |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• the fundamental tools and techniques of negotiation and to achieve an understanding of the negotiation process in a business context</li></ul>                   |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• prepare for, enter and conduct a negotiation process in a business context</li></ul>                                                                                       |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• conduct a negotiation process</li><li>• use the fundamental tools and techniques</li><li>• use the theories when negotiating in a business context</li></ul> |

### 3.1.3 Value Based Selling, VBSV6

This 6<sup>th</sup> semester elective course relates to the core areas Market orientated supply chain and Change Management.

Interested in the future of sales?

Closer relationship with the customer and truly understanding the customer's business and needs will be imperative going forward as well as leading to higher profits and more satisfied customers at the same time! This course will give you an insight into how to reach this goal and become more Value Based Selling. Companies will need employees with exactly such skills in the future and this course provides students with a head start.

#### 3.1.3.1 Contents:

During the course, the students will work with:

- Value Based Selling understanding and definition
- Value Based Selling vs Transactional selling and other sales approaches
- Business Models
- Value Propositions
- Sales techniques
- Personal behavior/profile in relation to sales as well as your own behavioral profile
- Value co-creation
- Sales tools
- Incentives
- Managerial and organizational focus
- Culture and change management

#### 3.1.3.2 Learning objectives

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Knowledge</b>    | Have knowledge about: <ul style="list-style-type: none"><li>• The concept of Value Based Selling</li><li>• How Value Based Selling stands out from other sales approaches</li><li>• What help/stop organizations in becoming more Value Based Selling oriented</li><li>• How business models and value propositions provides an competitive advantage</li><li>• How sales techniques and personal behaviour/profiles can make a difference</li></ul>                              |
| <b>Skills</b>       | Be able to: <ul style="list-style-type: none"><li>• Assess and analyze sales approaches</li><li>• Use different methods and models to develop the organisation to become more Value Based Selling oriented</li><li>• Describe what help/stop you and organizations in becoming more Value Based Selling oriented</li><li>• Work more effectively with business models and value propositions</li><li>• Use sales techniques to become more Value Based Selling oriented</li></ul> |
| <b>Competencies</b> | Have the competencies to:                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"> <li>• Applying knowledge of business models, value propositions and sales techniques to give a competitive advantage over competitors</li> <li>• Identifying what help/stop you and organizations in becoming more Value Based Selling oriented</li> <li>• Apply course theory and concepts in analysis and evaluation of Value Based Selling advantages and disadvantages in relation to other sales approaches</li> </ul> |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 3.1.4 Industry 4.0, INDV6

This 6<sup>th</sup> semester elective course mainly relates to the core areas Market Demand and Planning, Flow Management and Value Chain Optimisation. The purpose with the course is to work with the latest production methods and to discuss how these affect the whole value chain for the company. Transportation costs associated with mandatory external activities must be covered by the students.

#### 3.1.4.1

##### Content

The content in the course is:

- Industry 4.0 models and content
- Digital tools and technologies
- Business Models
- Practical use of the above

#### 3.1.4.2 Learning objectives

|              |                                                                                                                                                                                                                                                    |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• the topics in the list of contents and how they affect business models</li></ul>                                                                                                     |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• connect the different technologies and tools into the different processes in a company</li><li>• Apply technologies to develop and innovate a company's business model</li></ul>               |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• to use elements from Industry 4.0 when designing or optimizing business models</li><li>• embrace and deduct new business models taking Industry 4.0 into consideration</li></ul> |

## 3.1.5 Product Development and Innovation, PDIV6

This 6<sup>th</sup> semester elective course mainly relates to all the core areas in the program. The purpose with the course is to work with product development and innovation as a management tool and relate it to the value chain in the company.

### 3.1.5.1 Contents

The content of course is:

- Innovation management
- Managing innovation within companies
- The role of innovation in business Strategy and Organisational knowledge
- Strategic alliances and networks
- Innovation and operations management
- Product strategy
- Product development
- The role of the market research in product development
- Managing the development team
- Management of R&D
- The role of technology transfer in innovation
- Managing intellectual property

### 3.1.5.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• the innovation management and the role it plays in developing a business strategy</li><li>• the role of alliances and networks in innovation</li><li>• the content of a product strategy</li><li>• what are the elements in a product development project</li><li>• what are the role of R&amp;D and how to manage it.</li></ul> |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• describe and plan a product development project.</li><li>• include the purchase-, planning- and operation- and marketing departments in the production development processes</li><li>• use different basic tools in addressing sustainability in a business</li></ul>                                                                      |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• take a leading role in innovation projects</li><li>• assist in the project management of product develop projects</li><li>• be the link between the development- and the operational departments.</li><li>• To include the production development and innovation as a natural component in the business processes</li></ul>  |

### 3.1.6 Circular Economy, CIEV6

This 6<sup>th</sup> semester course relates to the core areas Market Orientated Supply Chain Management, Value Chain Optimisation and Change Management. However, it is also relevant for topic as Forecasting, Planning and Flow optimisation.

Today's dominant linear economy of "take, make, use and dispose" is driving a rapid depletion of key natural resources and damaging our planet's ecological systems. It's time for a paradigm shift.

The course will focus upon.....

- how circular business models benefit people, planet and profit?
- how to identify circular opportunities in complex supply chains?
- how business, industry and society can move the circular economy forward?
- how companies embed circularity into business strategies and drive sustainable growth?

Circularity impacts almost every area of Value Chain Management. Not only supply chain management, product design and material collection (reverse logistics), but many diverse areas such as industrial layout, quality management and financing.

The course begins with the key concepts and benefits of the circular economy. Further on the course will explore how to develop a circular and sustainable mindset for identifying circular opportunities in existing business models. At last the course will study approaches for sustaining the highest possible value of materials and resources throughout the value chain by remanufacturing, extended product life, material reuse and other strategies.

Throughout the course there is a strong focus on real-world case studies of circular start-ups and businesses leading the transition to a circular business model. Students will be expected to demonstrate a firm understanding of how the circular economy will shape increasingly shape the world of tomorrow.

#### Contents

During the course, the students will work with:

- Concept of Cradle to Cradle, circularity in natural systems and regenerative systems
- How circularity benefits people planet and profit; how businesses benefit from circular models
- Case studies of circular start-ups and transitioning companies.
- Identifying circular opportunities and how to overcome barriers to circularity.
- Reporting and measuring sustainability performance with reference to UN SDG, Science based targets, EU Circular Economy Action Plan
- Stakeholder and network involvement and the role of social and governance considerations for circular businesses
- The role of innovation and design: designing out waste, designing for re-use and repair, alternative materials, packaging, etc.

#### Learning objectives

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Knowledge</b> | Have knowledge about: <ul style="list-style-type: none"><li>• The concept of sustainability in business: people, planet and profit</li><li>• Sustainability metrics, sustainability reporting and triple bottom line</li><li>• Circularity and regenerative systems in nature. Cradle-to-cradle concepts and Doughnut Economics</li><li>• Circularity in business context: Circular vs linear economy models</li><li>• Circular systems in value chains and maintaining maximum value by narrowing, slowing and closing of material loops</li></ul> |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                     | <ul style="list-style-type: none"> <li>• Reverse logistics management and take-back management</li> <li>• Life Cycle Assessments and materiality assessments</li> <li>• Understand how circular start-ups and circular transitions are financed</li> <li>• Circular strategies and the main types of circular business models</li> <li>• Designing for circularity: Product design strategies, Eco-Design Directive</li> <li>• Societal and governance considerations in circular business models.</li> </ul> |
| <b>Skills</b>       | <p>Be able to:</p> <ul style="list-style-type: none"> <li>• Think holistically with a circular mindset</li> <li>• Assess, analyse and design circular supply value chains</li> <li>• Evaluate business models for circular opportunities using tools such as the circular business model canvas and ReSOLVE framework</li> </ul>                                                                                                                                                                              |
| <b>Competencies</b> | <p>Have the competencies to:</p> <ul style="list-style-type: none"> <li>• Develop approaches for embedding circularity in organizations</li> <li>• Assist with circular economy initiatives and their implementation</li> <li>• Contribute to the operation and management of value chains based on circular concepts</li> </ul>                                                                                                                                                                              |

## 3.1.7 Corporate Finance and Portfolio Management, FPMV6

This 6<sup>th</sup> semester course relates to the core elements of corporate finance and the core areas Market demand and planning, Flow Management and Value Chain Optimisation. The emphasis is on providing insights into how companies deal with topics such as equity and debt valuation (stocks and bonds), capital structure and portfolio management.

### 3.1.7.1 Contents

- Methods to value stocks and bonds including the estimation of cost of capital
- Capital structure theory with the Modigliani-Miller theorem as a starting point (MMI and MMII)
- Portfolio management of financial assets and optimal portfolio choices

### 3.1.7.2 Learning Objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• Valuation methods and their respective advantages</li><li>• Cost of capital and its application in practice</li><li>• Capital structure theory and its relating challenges to companies</li><li>• Portfolio theory and the basics of optimal portfolio choices</li></ul>                                                                                                                                       |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• Value stocks and bonds through DCF-valuation methods</li><li>• Use the “law of one price” to value financial assets</li><li>• Estimate the cost of capital from stock returns against the market return</li><li>• Assess a company’s capital structure and the effects from changes in it</li><li>• Perform basic portfolio management calculations relating to optimal portfolio choices (risk-return-reward)</li></ul> |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• Take part in management discussion about the above-mentioned content</li><li>• Perform calculations that will support the financial department in making choices relating to the above-mentioned content</li></ul>                                                                                                                                                                                         |

### 3.1.8 Business Modelling, MODV7

This 7<sup>th</sup> semester elective course mainly relates to the core areas Market Demand and Planning, Flow Management and Value Chain Optimisation. As models for ensuring a complete interconnection and coherence between the overall strategy and the specific functions and activities, Balanced Scorecard and EFQM have achieved a wide acceptance as tools for facilitating this.

In connection with lean, the Hoshi Kanri approach has also been widely accepted. The student will therefore get an in depth knowledge around the models and the design and implementation of these. The student must therefore be able to develop a model for introduction of Balanced Scorecard, EFQM etc. in a specific company.

#### 3.1.8.1 Contents

The main themes to be covered will be:

- Balanced scorecard
- EFQM
- Hoshin Kanri / Hoshin Planning

#### 3.1.8.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• Demands and methods concerning the needs for modelling methods for implementing strategies and secure a focused follow up upon cause and effect, as well as methods for measuring results in businesses.</li><li>• The need to combine traditional economic reporting with more proactive models.</li><li>• Business structure with operational functions and supporting / staff units where there is a demand for ensuring a structure and a control that will secure a total optimisation supporting the long term strategy of the company.</li></ul> |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• Achieve skills around the design and implementation of models for strategy implementation, including the detailed structuring and follow up.</li><li>• Evaluate the benefits and consequences of any given solution, and be able to develop and design specific models at both a strategic and tactical level in a specific situation / a specific company.</li></ul>                                                                                                                                                                                             |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• Facilitate people and company processes to implement strategic objectives. Furthermore, the student will get wide competencies around designing strategy maps.</li></ul>                                                                                                                                                                                                                                                                                                                                                                            |

## 3.1.9 International Business Marketing, IBMV7

This 7<sup>th</sup> semester elective course mainly relates to the core area Marketing and Supply Chain Management

### 3.1.9.1 Contents

The contents of the course are theories on international and global marketing management, internationalisation strategies, organisation and implementation

### 3.1.9.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | Have knowledge about: <ul style="list-style-type: none"><li>• models and theories for internationalisation and globalisation</li><li>• drivers and motivation for internationalisation</li><li>• international competitiveness</li><li>• the global macro environment</li><li>• models for analysis of foreign market entry</li><li>• entry strategies</li><li>• global marketing programs</li><li>• implementation of global strategies</li></ul> |
| Skills       | Be able to: <ul style="list-style-type: none"><li>• identify and chose amongst alternative internationalisation strategies</li><li>• analyse and discuss international competitiveness in a global context</li><li>• identify, analyse and recommend market entry strategies</li><li>• design and implement global marketing programs</li></ul>                                                                                                    |
| Competencies | Have the competencies to: <ul style="list-style-type: none"><li>• identify, analyse and evaluate relevant parts of the international environment</li><li>• apply course theory and concepts in identifying, analysing, developing, evaluating and recommending internationalisation strategies</li></ul>                                                                                                                                           |

### 3.1.10 Transport and Logistics, TRLV7

This 7<sup>th</sup> semester elective course mainly relates to the core areas within Transport and Logistics and is designed to provide all the necessary qualifications to understand, analyses, and manage transportation and logistics systems. Transport and Logistics course will concentrates on the optimization of transport, flows of goods, and logistic networks. All of this is placed in the context of global trade.

#### 3.1.10.1 Contents

The contents of the course are theories within the area of Transport and Logistics.

#### 3.1.10.2 Learning objectives

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge    | <p>Have knowledge about:</p> <ul style="list-style-type: none"><li>• Transport and Logistics Management</li><li>• Transport and Logistics Strategy</li><li>• Modes of transport</li><li>• Intermodal transport</li><li>• Incoterms</li><li>• Methods of evaluating business performance with the focus on Transport and Logistics functions</li><li>• Current trends in Transport and Logistics</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Skills       | <p>Be able to:</p> <ul style="list-style-type: none"><li>• Understand, explain and discuss the relationship between Value Chain and Transport &amp; Logistics in the process of efficient and effective management of Supply Chain</li><li>• Assess various freight and transport logistics systems according to specified criteria in the process of taking decision making towards workable logistics strategy</li><li>• Use analysis models in connection with the company's competitive strategy and evaluate risks and opportunities associated with different transport and logistics set ups</li><li>• Evaluate the company's performance in relation to Transport and Logistics services and assess the ability of supporting the overall company business strategy</li><li>• Describe and relate the current trends within freight transport for the most important modes of transport their impact on organization and their supply chain</li></ul> |
| Competencies | <p>Have the competencies to</p> <ul style="list-style-type: none"><li>• Identify, analyse and evaluate relevant parts of the Transport and Logistics set up in an organization</li><li>• Apply course theory and concepts in identifying, analysing, developing, evaluating and recommending Transport and Logistics strategies</li><li>• Gain, in a systematic and structured way, new knowledge, skills and competences in relation to the industry</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

## 3.2 Credit transfer for elective courses

Passed educational courses, including internships, from other educational institutions in Denmark can equate the equivalent courses in the Value Chain Management program.

The rules for automatic, compulsory credit transfer, including the obligation to inform on passed educational courses from other institutions on the same level, which can be found in Ministerial Order on Academy Profession Programs and Professional Bachelor Programs and Ministerial Order on admission to Academy Profession Programs and Professional Bachelor Programs do not apply to elective courses on the Value Chain Management program.

Credit transfer for elective courses are awarded based on a professional evaluation of whether or not the passed courses or prior work experience match the level and contents of one or more courses in the Value Chain Management program.

Applications for credit transfer, which are not covered by the rules for compulsory credit transfer, must be submitted to the programme no later than 1 month prior to the start of the course/internship for which credit is applied. The application must be submitted to the head of the Value Chain Management program.

### 3.3 Parts of the programme which can be completed abroad

The internship and the sixth semester can be completed abroad. Application has to be the Value Chain Management program at VIA University College:

Application for completing the internship period must be submitted to the appointed internship supervisor Application for completing the 6<sup>th</sup> abroad must be submitted to the appointed coordinator for credit at the Value Chain Management program no later than 2 months before semester start. As a minimum, the application must contain:

- A completed Learning Agreement in accordance to VIA's regulations
- Relevant curricula and course descriptions to support the Learning Agreement. The curriculum and course description must in combination for each course mentioned in the Learning Agreement state students workload/ECTS-points, course content and university level.

In order to apply a student must have passed the first 4 semesters of the program

## 3.4 Internship

In order to complete a period of internship as part of the Value Chain Management program, the student must comply with the specific objectives for the internship. The Value Management program approves or dismisses the period of internship based on the assessment and an oral presentation by student. The assessment is a written journal and a report from the whole internship period including two agreed specific projects. A student's internship is assessed in an oral exam managed by the supervisor and an internal censor. The grading scale used is pass/no pass. If the grade is "no pass", the supervisor must give a written statement explaining what has to be improved in the students report to be able to pass.

The student is responsible for finding and applying for an internship in a company in Denmark or abroad. During the 4<sup>th</sup> semester, the internship advisor will arrange meetings in order to support the students during the application process. The students can find necessary information on Studynet.

The student has to participate in the normal work in the company on the same conditions and working hours as the other employees in the company. The supervisor in the company will assist and guide the Intern in the daily work. If problems arise between the intern and his supervisor, the supervisor from VCM will be involved.

During the internship, the student will work individually or in a group to carry out operational or project based assignments within area of value chain management. The internship must be organised in accordance with the overall internship guidelines for the program.

The internship supervisor has to approve internship contract between the student, the company and VIA must, and all documentation is saved in the VIA internship portal.

During the internship, it is the role of the supervisor to assist the student in case any problems occur between the student and the host company, which the student is not able to handle on his/her own. Before an internship period can be approved, a student must have participated in the whole period, not including periods of illness etc. If an internship period is terminated (by any party) before the student has done the 20 week period, the student have to complete the internship period at another company. The supervisor has to approve the new internship. If this is not possible at that particular point in time, the internship period is dismissed and the student must then be offered a new internship period at another time.

If internship period is not passed, and the examiner requires a new internship period, the student must do another internship. The student is responsible for finding a new internship.

A new internship period can be placed at another point in the program progression if it isn't administratively or practically possible at the particular point in time.



### 3.4.1 Role of the internship company

It is the internship company's responsibility to ensure that the necessary conditions for the students to fulfil the objectives of the internship are met.

The internship institution/company must ensure that the students work towards fulfilling the objectives of the internship in the appropriate and in a productive manner. The company is obliged to, assisted by the internship supervisor from the program; contact a student that the company believe cannot fulfil the objectives of the internship or who does not work towards fulfilling the objectives in a productive manner in order to counsel the student.

The internship institution/company is obliged to refrain from terminating the internship before the program, VIA University College has been consulted and the possibilities for an alternative solution have been discussed.

The internship company does not have the authority to a part in the final evaluation of the internship whether or not the student is "fit" to work as a Bachelor in Value Chain Management upon completing the programme. The final evaluation of a student's internship must only include an assessment of whether or not the objectives of the internship has been met and to what extent.

## 3.5 Exams in the Value Chain Management program

Exams in the Value Chain Management program are conducted in English. In the assessment of a student's performance in written exams as well as oral exams based on written material produced by the student, the student's skills in spelling and articulation will be taken into consideration when grading.

The Value Chain Management program offers special conditions for exams to students with special needs, e.g. health issues to ensure that these have the possibility to complete exams on equal footing with students without such needs. Special conditions for exams are offered to students on an individual basis based on an application. The head of the program assesses the merits of each application and decides if and to what extent special conditions are warranted. Special conditions can only ensure that students with special needs have the possibility to complete exams on equal footing with students without such needs. The level of the exam as well as the objectives and criteria for assessment of the performance on exams can never be altered by an offer for special conditions.

The Value Chain Management program usually offers special conditions in the form of extended preparation time/extended time of exams and/or access to special aid during an exam.

Generally for written exams the following aids are permitted: books and materials handed out in connection with lessons, own notes, additional materials, intranet, internet, usb key, or the like, with documents, unless otherwise explicitly specified in the exam assignment/guidelines.

The following aids may NOT be in the student's possession nor used during the exams: Bluetooth, mobile phones as well as other data communications equipment making it possible for the students to communicate with each other.

Students are not permitted to share aids in any way or form during the exam. Students are in no way or form allowed to communicate with each other during the exam period. If a student tries to contact another student or person other than VIA staff, or tries to make use of unauthorized aids during the exam, the student will immediately be expelled from the exam.

The use of the above-mentioned unauthorized equipment will lead to an immediate expulsion from the exam. An expulsion from the exam results in the cancellation of the exam paper, and the exam counts as an exam attempt.

### 3.5.1 The exams

Each exam in the Value Chain Management program is assessed on the basis of the learning objectives of one or more courses. Which courses' objectives are assessed is found below under each individual exam.

At the start of each course, the student is automatically registered for all exams in that particular course. By being registered for an exam, the student uses an exam attempt, no matter if the student participates in the exam or not.

It is a prerequisite for participating in the exams that any obligation to participate in the program according to the course description has been met.

The exams can be evaluated in two ways:

1. Internal evaluation: The exam is only evaluated by examiner/examiners from VIA.
2. External evaluation: The exam is evaluated by one examiner from VIA and one examiner outside VIA

#### **Commencement of studies exam**

In the Value Chain Management program, a commencement of studies exam is held within 1 month from study start. The commencement of studies exams is a combination of multiple choice and a written exam and is assessed passed/not passed. The commencement of studies exam is assessed internally without external examiner. The object of the exam is to show whether a student has started the program in earnest.

Re-examination is planned to be held 1 week after the first exam. The commencement of studies exam is not covered by the rules for complaints set in this curriculum and Ministerial Order on Examinations on Professionally Oriented Higher Education Programs.

A student who does not pass the commencement of studies exam in two attempts is terminated from the program in accordance with the rules in Ministerial Order on Admissions to Academy Profession Programs and Professional Bachelor Programs

#### **3.5.1.1 Marketing Management, MAMV1**

The students will sit for a 4 hours written exam and assignments will be available at the start of the exam. The exam is assessed individually. The exam is assessed according to the learning objectives in the Marketing Management course MAMV1. The students are not allowed to hand in more than 6 standard pages.

The students are allowed to participate in the exam outside VIA on an optional location.

The following aids are permitted during the exam: All

The exam is assessed with a mark according to the 7-step scale and assessed with internal evaluation.

The re-exam will be a 20 minutes oral exam with no time for preparation. The student pick randomly one assignment, from pre-prepared assignments by the teacher, and is examined within the subjects in this assignment

#### **3.5.1.2 Business Economics, BUEV1**

The students will sit for a 4 hours written exam at VIA University College and assignments will be available at the start of the exam. The exam is assessed individually. The exam is assessed according to the learning objectives in the Business Economic course BUEV1.

The following aids are permitted during the exam: AllThe exam is assessed with a mark according to the 7-step scale and assessed with internal evaluation

#### **3.5.1.3 Supply Chain Management, SCMV1**

The exam is an oral exam. The exam is assessed according to the learning objectives in the Supply Chain Management course, SCMV1.

The questions will be uploaded on Itslearning no later than 2 weeks before the exam for preparation. At the exam, the student will draw one question, representing subject SCMV1

The exam is a 20 minutes oral exam – 15 minutes examination and 5 minutes evaluation – the evaluation is assessed individually.

It is not permitted to use any aids during the exam.

The exam is an internally assessed exam with a mark according to the 7-step scale.

#### **3.5.1.4 Tools for Quantitative Analyses TQAV1**

The students will sit for a 4-hour written exam at VIA University College and assignments will be available at the

start of the exam. The exam is assessed individually. The exam is assessed according to the learning objectives in the Tools for Quantitative Analysis TQAV1.

The following aids are permitted during the exam: All

The exam is assessed with a mark according to the 7-step scale and assessed with internal evaluation.

#### **3.5.1.5 Applied Mathematics, MATV1**

The students will sit for a 3-hour written multiple-choice exam at VIA University College and assignments will be available at the start of the exam. The exam is assessed individually. The exam is assessed according to the learning objectives in the Applied Mathematics MATV1.

The following aids are permitted during the exam: All

The exam is assessed with a mark according to the 7-step scale and assessed with internal evaluation.

#### **3.5.1.6 Semester Project 1, SPV1**

The exam is an oral exam based upon the semester project report and the semester subjects. Group exam with individual assessment according to the learning objectives in the Semester Project, SPV1. Total exam time for the group is 30 minutes including the groups presentation of their findings, individual questioning, evaluation and notification of grading to students.

It is a prerequisite for participating in the exam that the report has been turned in before deadline and contains at least front-page, title page, executive summary, table of content/figures/tables, main report, list of sources, appendixes (relevant). The students will work in groups of 4-5 and each group will hand in a written project report. The main report will be 20 standard pages.

The exam is assessed individually. The oral examination consists of a critical presentation and reflection of the project report followed by further examination in problems raised in the report or the oral presentation.

Re-examination: The re-exam will be based on the original report, improvements of the report and an improved oral presentation

The following aids are permitted during the exam: The project report and the students' individual presentation

The exam is assessed with a mark according to the 7-step scale and assessed with internal evaluation. The project report counts for 60% of the total grade and the oral presentation counts for 40% of the total grade.

#### **3.5.1.7 Applied Statistics, STAV2**

The exam is a 4 hours written exam. The exam is assessed according to the learning objectives for the Applied Statistics course, STAV1.

You have to up-load your files in Wiseflow

The following aids are permitted during the exam: Calculator, notes and books.

The exam is assessed with a mark according to the 7-step scale and assessed with internal evaluation.

#### **3.5.1.8 Inventory and Warehouse Management, INV2**

The students will sit for a 4 hours written exam at Via University College and assignments will be available at the

start of the exam. The exam is assessed individually. The exam is assessed according to the learning objectives in the Inventory and Warehouse Management course, INV2.

The following aids are permitted during the exam: All

The exam is assessed with a mark according to the 7-step scale and assessed with internal evaluation

#### **3.5.1.9 Business Forecasting, FCV2**

The exam is based on the learning goals for the course FCV2.

The exam is a 3 hour written exam. The questions will be uploaded and made available in Wiseflow at the beginning of the exam.

All aids are permitted during the exam.

The exam is assessed with a mark according to the 7-step scale and assessed with internal evaluation.

#### **3.5.1.10 Production Planning, PLAV2**

The exam is based on the learning goals for the course PLAV2.

The exam is a 3 hour written exam. The questions will be uploaded and made available in Wiseflow at the beginning of the exam.

All aids are permitted during the exam.

The exam is assessed with a mark according to the 7-step scale and assessed with internal evaluation.

#### **3.5.1.11 Purchasing and Sourcing PUSV2**

The exam is an oral exam. The exam is assessed according to the learning objectives in the Purchasing and Sourcing course, PUSV2.

The exam is based on questions covering the curricular of the course. The questions will be uploaded to Itslearning no later than 2 weeks before the exam for preparation. At the exam, the student will draw one question, representing subject areas from PUSV2.

The exam is a 20 minutes oral exam – 15 minutes examination and 5 minutes evaluation – The evaluation is assessed individually.

It is not permitted to use any aids during the exam.

The grade will be based on an overall assessment of the students' ability to fulfil the learning objectives for each of the two courses.

The exam is assessed with a mark according to the 7-step scale and assessed with internal evaluation

#### **3.5.1.12 Semester Project 2, SPV2**

The exam is a 20 minutes oral exam. The exam is assessed according to the learning objectives in the Semester Project 2, SPV2.

The exam is based on a project report. It is a prerequisite for participating in the exam that the report has been turned in before the given deadline and shows elements and problems attached to the

understanding of the market demand and creating a production plan. Students are to demonstrate the ability to describe and analyse a given problem in a structured and reasoned way and to give a reasoned draft for proposed solutions or changes. Students must include courses and approaches known from the courses from 1<sup>st</sup> and 2<sup>nd</sup> semester.

The students will work in groups of 4-5 persons, and each group will hand in a written project report. The exam is assessed individually.

At the oral exam, the student will give a critical presentation and reflection on the project report, followed by further examination in issues raised in the report or the oral presentation.

Re-examination: The re-exam will be based on the original report, improvements of the report and an improved oral presentation.

The following aids are permitted during the exam: The project report and the student's individual presentation

The exam is assessed with a mark according to the 7-step scale and assessed with external evaluation. The project report counts for 65% of the total grade and the oral presentation counts for 35% of the total grade.

#### **3.5.1.13 Management Accounting MACV3**

The students will sit for a 4 hours written exam at Via University College and assignments will be available at the start of the exam. The exam is assessed individually. The exam is assessed according to the learning objectives in the Management Accounting course, MACV3.

The following aids are permitted during the exam: All

The exam is assessed with a mark according to the 7-step scale and assessed with external evaluation

#### **3.5.1.14 Project Management, PRMV3**

The exam is based on students handing in 2 compulsory assignments during the semester (portfolio). Each assignment weight of the final mark is 1/2. Each assignment consists of two parts: One part to be done in groups of 5 persons the other part to be done individually as a reflection per assignment.

For the assignments to count in the final mark the hand-ins have to be done before the announced deadlines.

The student is assessed individually based upon the compulsory parts. The exam is assessed with a mark according to the 7-step scale and is assessed with internal evaluation.

Reexam: The student will be given the opportunity to update and improve the group assignments individually as well as the to update and improve the 3 individual hand-in parts.

#### **3.5.1.15 Quality Management, QUMV3**

The exam is a 4 hours written exam conducted at campus. The students will be asked to solve a number (3-5) of essay style problems related to assigned curriculum. The test will contain a mixture of calculation problems and open essay problems. The exam is evaluated according to the learning objectives in the Quality Management course, QUMV3.

The exam is assessed individually.

The following aids are permitted during the exam: All

The exam is assessed with a mark according to the 7-step scale and assessed with external evaluation.

#### **3.5.1.16 Flow Optimisation, FLOV3**

The exam is assessed according to the learning objectives in the Flow Optimisation Course, FLOV3.

The exam is based on students handing-in 2 compulsory assignments during the semester. The first hand in is weighted 1/3 and the second is weighted 2/3. The hand in can be. The students are allowed to hand in in groups up to three student. Each hand in has Each student has to also to hand a personal reflection about the process. The personal reflections have to be considered as a part of the assignment.

For the assignment to count in the final mark the hand-in have to be done before the announced deadlines.

The student is assessed individually. The exam is assessed with a mark according to the 7-step scale and is assessed with internal evaluation.

For re-exam the student need to upload 3 improved hand-ins for evaluation

#### **3.5.1.17 Simulation and Facility Layout, SFLV3**

The exam is assessed according to the learning objectives in the Simulation and Facility Lay out course, SFLV3.

The exam is based on students working out 3 compulsory assignments during the semester which have to be handed in in January. Each assignment counts 1/3 in the course grade

The assignments can be done in groups up to five members, and all assignments have to be handed in together with an individual reflection over the process.

For the assignment to count in the final mark the hand-in have to be done before the announced deadline.

The student is assessed individually based upon the compulsory parts. The exam is assessed with a mark according to the 7-step scale and is assessed with internal evaluation.

For re-exam the student need to upload 3 improved hand-ins for evaluation

#### **3.5.1.18 Semester Project 3, SPV3**

The exam is a 20 minutes oral exam at VIA University College based upon the semester project report and the semester subjects. Individual exam with assessment according to the learning objectives in the Semester Project 3, SPV3.

It is a prerequisite for participating in the exam that the report has been turned in before deadline and contains at least frontpage, title page, executive summary, table of content/figures/tables, main report, list of sources, appendixes (relevant). The students will work in groups of 4-5 and each group will hand in a written project report. The main report will be 30-35 standard pages.

At the oral examination the student will give a presentation within a selected section of the report and reflection on the project report, followed by further examination in issues raised in the report or related to the report or the oral presentation.

Re-examination: The re-exam will be based on the original report, improvements of the report and an improved oral presentation.

The following aids are permitted during the exam: The project report and the student's individual presentation

The exam is assessed with a mark according to the 7-step scale and assessed with external evaluation. The project report counts for 70% of the total grade and the oral presentation counts for 30% of the total grade.

#### **3.5.1.19 Design of Value Chains, DVCV4**

The exam is an individual 20 minutes oral examination. The exam is assessed according to the learning objectives in the Design of Value Chain course, DVCV4.

The student randomly draw one exam question, and will have 4 minutes to present this particular question, app.

11 minutes examination and 5 minutes evaluation. The exam questions will be uploaded to Itslearning no later than the last lecture. The exam is assessed individually.

The following aids are permitted during the exam: None except the student presentation.

The exam is assessed with a mark according to the 7-step scale and assessed with external evaluation

#### **3.5.1.20 Investment and Finance, INFV4**

The students will sit for a 4 hours written exam at Via University College and assignments will be available at the

start of the exam. The exam is assessed individually. The exam is assessed according to the learning objectives in the Investment and Finance course, INFV4.

The following aids are permitted during the exam: All

The exam is assessed with a mark according to the 7-step scale and assessed with internal evaluation

#### **3.5.1.21 Strategic Management, STMV4**

The students will sit for a 4 hours written exam at VIA University College and assignments will be available at the start of the exam. The paper handed in may not exceed 8 normal pages (excl. front page, list of content, figures, tables and references). The exam is assessed individually. The exam is assessed according to the learning objectives in the Strategic Management course, STMV4.

The following aids are permitted during the exam: All

The exam is assessed with a mark according to the 7-step scale and assessed with external evaluation.

The re-exam will be a 20 minutes oral exam with no time for preparation. The student pick randomly one assignment, from pre-prepared assignments by the teacher, and is examined within the subjects in this assignment.

#### **3.5.1.22 Theory of Science, TSV4**

The exam is assessed according to the learning objectives for the Theory of Science course TSV4.



The exam is a 4 hours written exam. However, 24 hours prior to the exam, students are given access to relevant exam material. The student must choose one of three assignments and complete a five page written paper. The exam is assessed individually.

The following aids are permitted during the exam: All

The exam is assessed with a mark according to the 7-step scale and assessed with internal evaluation.

#### **3.5.1.23 Semester Project 4, SPV4**

The exam is a 20 minutes oral exam at VIA University College based upon the semester project report and the semester subjects. Individual exam with assessment according to the learning objectives in the Semester Project 4, SPV4.

It is a prerequisite for participating in the exam that the report has been turned in before deadline and contains at least frontpage, title page, executive summary, table of content/figures/tables, main report, list of sources, appendixes (relevant). The students will work in groups of 4-5 and each group will hand in a written project report. The main report will be 30-40 standard pages.

At the oral examination the student will give a presentation within a selected section of the report and reflection on the project report, followed by further examination in issues raised in the report or related to the report or the oral presentation.

Re-examination: The re-exam will be based on the original report, improvements of the report and an improved oral presentation.

The following aids are permitted during the exam: The project report and the student's individual presentation

The exam is assessed with a mark according to the 7-step scale and assessed with external evaluation. The project report counts for 75% of the total grade and the oral presentation counts for 25% of the total grade.

#### **3.5.1.24 Change Management and Communication, CMCV6**

The exam is assessed according to the learning objectives in the Change Management and Organisation course, CMCV6.

The exam is a written report. The report shall be prepared independently and without help from others. The exam is assessed individually. The report must build on an actual change management situation e.g. from the student's internship, and should include subjects from both change management and communication. The report must be 8 pages (+/- 10%) exclusive table of contents, list of figures, appendixes etc.

The following aids are permitted during the exam: All

The exam is assessed with a mark according to the 7-step scale and assessed with internal evaluation.

#### **3.5.1.25 Organisation and Continuous Improvement, OCIV6**

The exam is assessed according to the learning objectives in the Organisation and Continuous Improvement course.

The exam is a written report of 8 standard pages. It is a prerequisite for participating in the exam that the report has been turned in before deadline and contains at least front page, summary, table of content/figures/tables, main report, list of sources, appendixes (relevant). The report consist of a critical presentation and reflection of the approved problem formulation within OCIV6 and based upon literature defined in the syllabus and other literature found by the student. The exam is assessed individually.

The following aids are permitted during the exam: All

The exam is assessed with a mark according to the 7-step scale and assessed with internal evaluation.

#### **3.5.1.26 Negotiation, NEGV6**

The exam is assessed according to the learning objectives in the Negotiation course, NEGV6. The exam is a 4 hours written exam done at VIA. The exam is assessed individually.

The following aids are permitted during the exam: All

The exam is assessed with a mark according to the 7-step scale and assessed with internal evaluation

#### **3.5.1.27 Value Based Selling, VBSV6**

The exam is assessed according to the learning objectives in the Value Based Selling course, VBSV6.

The exam is based on following compulsory parts:

1. Students handing in 2 teacher defined assignments of 4 pages each and written peer reviews of those assignments throughout the semester.
2. Students enacting a sales meeting for 15 minutes and an oral peer review during the semester.

It is a prerequisite for participating in the exam that all turn ins have been turned in before announced deadlines/and contains at least a frontpage and answer to the announced assignments.

The student is assessed individually based upon the compulsory parts above (hands ins and enacting a sales meeting) as well as 2 written and 1 oral peer reviews. Each of the 3 hand ins have a weight of 25% and the 3 peer reviews has a total weight of 25%.

The following aids are permitted during the exam: All.

The exam is assessed with a mark according to the 7-step scale and is assessed with internal evaluation.

#### **Re-exam:**

As per the ordinary exam the student will hand in two written teacher defined assignments as well as enact a sales meeting.

#### **3.5.1.28 Industry 4.0, INDV6**

The exam is assessed according to the learning objectives in the Industry 4.0 course, INDV6. The exam is a 4 hours written exam. The exam is assessed individually.

The following aids are permitted during the exam: All

The exam is assessed with a mark according to the 7-step scale and assessed with internal evaluation

#### **3.5.1.29 Product Development and Innovation, PDIV6**

The exam is assessed according to the learning objectives in the Production and Development Course, PDIV6

The exam is an oral exam, based on a project report handed in at the last lesson. The project report is 10 standard pages and contain a proposal for a product development project. The report has to contain at least front page, summary, table of content/figures/tables, main report, list of sources, appendixes (relevant).

The oral exam is 30 minutes where 5 minutes is evaluation.

The following aids are permitted during the exam: The project report

The exam is assessed with a mark according to the 7-step scale and assessed with internal evaluation

#### **3.5.1.30 Circular Economy, CIEV6**

The course assessment is according to the learning objectives in the Circular Economy course and is based on the following compulsory parts:

An 20 min. oral exam based on an individual case which have been developed through the semester. The case must be 10 pages (+/- 10%) exclusive table of contents, list of figures, appendixes etc.

The exam is assessed individually with a mark according to the 7-step scale and assessed with internal evaluation. The case counts for 50% and the oral examination counts for 50%

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he report has to be uploaded in Wiseflow two to three weeks before the exam. The exact date will be made available in the examination plan

Re-examination is an oral exam, where the student will have the possibility to improve the case report.

The following aids are permitted during the oral exam: All.

#### **3.5.1.31 Corporate Finance and Portfolio Management, FPMV6**

The students will sit for a 4 hours written exam at Via University College and assignments will be available at the start of the exam.

The exam is assessed individually. The exam is assessed according to the learning objectives in the Investment and Finance course, INFV4.

The following aids are permitted during the exam: All

The exam is assessed with a mark according to the 7-step scale and assessed with internal evaluation

#### **3.5.1.32 Semester Project 6, SPV6**

The exam is assessed according to the learning objectives in the Semester Project, SPV6

The exam is based on a project report. It is a prerequisite for participating in the exam that the report has been turned in before deadline and contains at least front page, summary, table of content/figures/tables, main report, list of sources, appendixes (relevant). The main report will be 20

standard pages (+- 5%) Number of pages include figures and tables but exclude the cover page, table of contents, references and appendices.

The project report is prepared in cooperation with a company selected by the students. A supervisor will be assigned to each project.

The students will be organized in teams of 3-4 and each team will hand in a written project report.

The exam is a 45 minutes oral exam for each team. The students attend the exam as a group and the exam is planned in order to assess the students individually. At the oral examination, the students give a critical presentation and reflection on the project report. After the presentation the students are further examined in issues raised in the report or related to the report or the oral presentation.

The following aids are permitted during the exam: The project report and the students' presentation.

The grading is based on an overall assessment of the written report and the students' performance at the oral exam.

The exam is assessed with a mark according to the 7-step scale and assessed with external evaluation. If the total assessment gives a grade lower than 02, a new project with a new problem statement must be prepared.

The project report counts for 75% of the total grade and the oral presentation counts for 25% of the total grade.

#### **3.5.1.33 Process Consultation and Relationship, PCRV7**

The exam is assessed according to the learning objectives in the Process Consultation and Relationship.

The exam is based on a written report of 8 standard pages and a videotaped intervention. The report and the video is a prerequisite for the evaluation. The report must be handed in before deadline and contains at least front page, table of content, main report, list of sources, appendixes (including a transcription of the real life intervention performed by the student). The report consist of a critical presentation and reflection of the intervention performed by the student and based upon literature defined in the syllabus.

The exam is assessed with a mark according to the 7-step scale and assessed with internal evaluation.

#### **3.5.1.34 Business Modelling, MODV7**

The exam is assessed according to the learning objectives in the Business Modelling course MODV7.

The exam is based on a team-based report of 10-15 standard pages. It is a prerequisite for participating in the exam that the written assignment has been turned in before deadline. The students will work in groups and each group will hand in a written report.

The exam is a 20 minutes oral exam and it is assessed individually. The student will give a 10 minutes presentation based on a by the student chosen extract from the report followed by a 10 minutes examination in problems raised in the report or the presentation.

The following aids are permitted during the exam: Only the report

The exam is assessed with a mark according to the 7-step scale and assessed with internal evaluation.

#### **3.5.1.35 International Business Marketing, IBMV7**

The exam is assessed according to the learning objectives in the International Business Marketing course IBMV7.

The exam is based on students handing in 3 teacher defined assignments of 4 pages each and written peer reviews. It is a prerequisite for participating in the exam that all turn ins have been turned in before announced deadlines/and contains at least a frontpage and answer to the announced assignments.

The student is assessed individually based upon the compulsory 3 hand ins and 3 written peer reviews. Each of the 3 hand ins have a weight of 25% and the 3 peer reviews has a total weight of 25% .

The following aids are permitted during the exam: All

The exam is assessed with a mark according to the 7-step scale and is assessed with internal evaluation. The re-exam is hand in of a new set of 3 assignments and with self-review.

#### **3.5.1.36 Transport and Logistics, TRLV7**

The exam is assessed according to the learning objectives in the Transport and Logistics course TRLV7. It is a pre- requisite for participating in the exam that any obligation to participate in the program according to the course description has been met.

The exam is based on a team-based report of minimum 8 and maximum 10 standard pages. It is a prerequisite for participating in the exam that the written assignment has been turned in before deadline. The students will work in groups and each group will hand in a written report.

The exam is a 20 minutes oral exam and it is assessed individually. The student will give a 10 minutes presentation based on a chosen by student extract from the report followed by a 10 minutes examination in problems raised in the report or the presentation.

The following aids are permitted during the exam: Only the report

The exam is assessed with a mark according to the 7-step scale and assessed with internal evaluation.

#### **3.5.1.37 Bachelor project, PROV7**

The entirety of the programme's leaning objectives are assessed in this exam.

Based on the written report, the students present the report and findings in a group and then sit an individual oral exam The total duration is of 30 minutes including presentation, dialog and evaluation. Of this the presentation covers 10 minutes. The student's spelling and academic writing are included in the assessment of the written part, while the student's presentation and oral communication skills are included in the oral assessment. Lacking competencies within spelling and academic writing will a negative influence on the grade.

It is a prerequisite for participating in this exam that the bachelor project has been submitted within the deadline and that the project adheres to all standards and criteria as listen under section 2.4 above.

All other exams in the programme, including the exam in the programme's internship, must be passed before a student can participate in the final bachelor exam.

The purpose of the bachelor project is to document how the student is capable of fulfilling the objectives of the VCM study programme. The 20 ECTS bachelor project is completed on the 7th semester.

The bachelor project is prepared in groups of one, two or three students.

The BA project must not exceed:

For one or two students: 120,000 characters

For three students: 150,000 characters

Characters include spaces, figures and tables but exclude the cover page, table of contents, references and appendices.

The project is prepared in cooperation with a company selected by the students. A supervisor will be assigned to each project.

The students are encouraged to select the topic of the bachelor project on the 6th semester – preferably on the basis of an assignment given by the student's internship company. The topic of the bachelor project is chosen by the student and presented to the supervisor for approval.

Based on the written report, the students sit an oral exam. The students can choose if the exam is an individual exam or if the exam is a group exam. If the exam is an individual exam, the total duration is 30 minutes including presentation, dialog and evaluation. If the exam is a group exam with 2 people, the total duration is 45 minutes including presentation, dialog and evaluation. If the exam is a group exam with 3 people, the total duration is 60 minutes including presentation, dialog and evaluation. If the students choose a group exam, all members in the group have to participate. If there is disagreement in the group concerning the exam form, the exam will be individual.

The grading is assessed individually. The grading is based upon an overall assessment of the written report and the students' performance at the oral exam. The exam is assessed with a mark according to the 7-step scale and with participation of an external examiner. If the total assessment gives a grade lower than 02, the graduate must prepare a new project with a new problem statement..

The final exam is marked according to the 7-step scale and with the participation of an external examiner. The project report counts for 80% of the total grade and the oral presentation counts for 20% of the total grade.

#### **3.5.1.38 Diploma**

The assessment of all exams will appear on the final diploma. Where an exam covers two courses, both courses appear with the same grade.

## **3.5.2 First-year exams**

If the first year exams have been passed before the start of the third year, the exams are considered to have been passed within the deadline. A student who has not passed the first-year exams cannot continue the programme and will thus be terminated in accordance with the rules in the Ministerial Order on Admissions to Academy Profession Programmes and Bachelor Programmes.

The rules in Ministerial Order on Examinations on Professionally Oriented Higher Education Programmes section 6-(3) concerning the number of attempts cannot be derogated from due to the above requirement to pass the first-year exam within the deadline.]

A student cannot transfer to another institution or take a leave of absence before all the first-year exams have been passed. This rule does not apply to leave of absence on the basis of illness, maternity/paternity leave, adoption or conscription.

## **3.5.3 Re-examination**

Re-examination is possible for all exams. If it is not stated in the exam rules for each course in paragraph 3.5.1 the re-exam is the same as the original exam.

If there are 10 or less students to attend a re-examination, the Value Chain Management programme can choose to change the written exams to oral exams.

### **3.5.3.1 Illness**

If a student becomes ill on the day of the exam it must be informed to the Student Administration immediately. If a student becomes ill during an oral exam, the lecturer must be informed.

If a student becomes ill during a written exam, the invigilator must be contacted in order to note that the exam has been interrupted due to illness.

The student must consult a doctor – at the latest on the day of the exam – in order to provide documentation of the illness and send it to the study secretary no later than 4 weekdays after the exam. The student has to cover any expenses in this connection.

Students who are exempt from participating in a particular exam due to documented illness or other documented reason will be re-examined as soon as possible.

Students are automatically registered for the re-examination.

Under certain conditions a re-examination can be the next ordinary exam in the same course or project. This, however, does not apply to re-examinations of the bachelor project, which must be conducted within the same exam period.

Students are informed of the time and place of re-examinations as soon as possible.

### **3.5.3.2 Failed attempt**

Students who do not pass an exam will automatically be registered for re-examination as soon as possible. If re-examinations are planned due to students being exempt, students who have not passed the exam will be registered for that re-examination.

## **3.5.4 Cheating, plagiarism and disruptive behaviour**

### **3.5.4.1 Cheating**

Cheating is defined as obtaining or providing unlawful aid in answering any test, which is part of an exam.

If cheating is discovered during an exam, the involved student(s) will be ordered to leave the exam. If the cheating is confirmed the student(s) involved is/are considered to have used an attempt.

If an exam has been marked before, any plagiarism is confirmed, the mark will be revoked and the student is considered being expelled from the exam, if plagiarism is later confirmed.

Under certain exceptional circumstances, cheating can be overlooked if it has not or will not affect the assessment of the exam.

### **3.5.4.2 Plagiarism**

Plagiarism is defined as passing off the work of others as one's own or using one's own, previously assessed, work without stating a reference.

It is considered plagiarism when a student tries to give the impression of being the originator of an idea, a text, a layout etc. in a written assignment when the originator is another person. It is especially considered plagiarism if an assignment entirely or partially appears as being produced by the student/s itself/themselves, even if the assignment

1. includes identical or almost identical reproduction of others' formulations or work when the reproduced parts are not marked with quotation marks, written in italics, indented or with

another distinct indication of source references, including page numbers or the like (cribbing/copying).

2. includes substantial passages with a choice of words that are so close to another printed medium, that when compared it is obvious that the passages could not have been written by the student without using the other printed medium (to paraphrase etc.)
3. includes the use of words or ideas of others without making references or giving credit to the originators  
(other kind of plagiarism),
4. re-use text and/or central ideas from one's own work that has previously been through an assessment or  
earlier published works without taking the above-mentioned points into consideration.

If plagiarism is discovered during an exam, the student will be ordered to leave the exam. If the plagiarism is confirmed the student will be considered to have used an attempt.

If an exam has been marked before, any plagiarism is confirmed, the mark will be revoked and the student is considered being expelled from the exam, if plagiarism is later confirmed.

Under certain exceptional circumstances, plagiarism can be overlooked if it has not or will not affect the assessment of the exam.

#### **3.5.4.3 Disruptive behaviour**

If a student exhibits disruptive behaviour during an exam, the programme can order the student to leave the exam. In cases of minor disturbances, a warning is used first.

If a student is ordered to leave an exam due to disruptive behaviour, the student is considered to have used an exam attempt. The head of the programme will be notified

#### **3.5.4.4 Procedures for cheating in exams and disruptive behaviour**

Anyone<sup>1</sup> who has a suspicion of cheating is obligated to follow up on the suspicion and – if the suspicion is maintained – to report it to the Head of Department.

If the suspicion of cheating in an exam is reinforced, the internal examiner and/or the external examiner must report the incident in writing to the Head of Department of the study programme in question. At the same time, the internal examiner and/or the external examiner will inform the student that the incident has been reported to the Head of Department. If an assessment has not been made at the time of reporting, the school report will contain a 'not submitted' note and an assessment will not be made.

When the Head of Department receives a report on cheating in an exam, he or she must decide whether to dismiss or proceed with the case.

If the Head of Department decides to proceed with the case, he or she is responsible for gathering documentation that might be missing and also for inviting the student to a meeting where the student has the possibility to relate to the report.

The student must receive a copy of the report with the invitation, which must also contain information about the meeting that is about a presumed cheating in an exam and that the student is allowed to bring an assessor to the meeting. The assessor can counsel the student during the meeting, but cannot participate in the conversation. If it is not possible to organise a meeting, written communication must be used.



If the case is dismissed by the Head of Department, the assessment will take place in the usual manner if it has not already been made.

#### **3.5.4.5 Sanctions for cheating in exams and disruptive behaviour**

On the basis of the report and the meeting, the Head of Department will decide whether or not it is an incident of

cheating in exam and also decide what type of sanction or penalty should be used against the student. The Head of Department can only decide on sanctions or penalty if the incident, from his or her perspective, is beyond any doubt a case of cheating in exam.

The case is reported to the Director of School of Technology & Business if and only if – the incident is so serious that it ought to lead to suspension or expulsion from the educational institution. In all other cases, the Head of Department makes the decisions.

The student is informed of the final decision in writing. The person who reported the incident and the student counsellor will receive a copy – and a copy is added to the student's file.

Provided that cheating in exam is proved, one of the following penalties will be used:

- **Warning**
- **Suspension from written exam on the premises of the educational institution**, if a violation of the exam regulations has taken place. If that is the case, the student will be registered as 'absent' from that particular exam.
- **Cancellation of a written paper**  
The cancellation includes the written assignment where the cheating has been observed. The cancellation can happen even if an assessment has been made. It will be noted that the student has been unsuccessful in an exam attempt.  
A repeated exam attempt with undue help or non permitted aids will result in permanent expulsion from the study programme.
- **Expulsion or suspension from the study programme**  
If the incident is a case of serious or repeated cheating, the student will be expelled or suspended from the educational institution. The expulsion means that the student is excluded from participating in all activities at VIA, including all participation in classes and exams. The suspension will mean that the student is excluded from participating in all activities at VIA, including all participation in classes and exams in the suspension period.  
In the case of suspension, the student is registered as being on leave of absence during the period in question. After the suspension period, the student is automatically readmitted as a student at VIA at the study programme.

Apart from the above mentioned penalties, the incident may be reported to the police if it concerns civil law.

## **3.5.5 Complaints about exams and appeals**

### **3.5.5.1 Complaints about exams**

A student can complain about an exam. The complaint must be submitted in writing and include arguments supporting the merits of the complaint. It must be submitted to the Value Chain

Management programme no later than 2 weeks after the student has had the chance to learn the results of the exam.

A complaint about an exam can be any and all of the following:

- Complaint about the basis for the exam (written material, questions etc.)
- Complaint about events or actions during the exam (e.g. an examiner's behaviour)
- Complaint about the assessment of the exam (the mark, the criteria used for assessment etc.)

The Value Chain Management programme immediately sends any complaints to the examiners who have a deadline of 2 weeks to submit a statement to the case. The examiners must comment on the specific merits and arguments of the case. After receiving statements from the examiners, the Value Chain Management programme will forward these to the student who has 1 week to comment.

The Value Chain Management programme, as represented by the head of programme, will make a decision on the case. The decision must be written and include the reasons for the results as well as a deadline for an appeal. A decision on a case concerning a complaint about an exam can have one of the following outcomes:

- An offer of a new assessment (re-assessment) (only applicable to written exams)
- An offer of a new exam (re-examination)
- Dismissal

Only when the examiners agree can a complaint about an exam result in dismissal.

The Value Chain Management programme makes the result of the decision known to the student and the examiners. The student has a deadline of 2 weeks to accept an offer of re-assessment or re-examination. Re-assessment and re-examination must be planned as soon as possible.

Note that both re-assessment and re-examination can result in a lower mark than the original assessment. New examiners are appointed for both re-assessment and re-examination. The new examiners have access to all files and documents from the complaints case.

### **3.5.5.2 Appeals**

A student can appeal a decision on an exam complaint. The appeal will be decided upon by a board of appeals. Set up by the institution. An appeal must be submitted in writing stating the reasons for the appeal and received by the Value Chain Management programme no later than 2 weeks after the decision in the original complaint case.

The appeals board on the Value Chain Management programme set up as an ad hoc board. The board consists of 2 appointed external examiners, 1 teacher and 1 student from the same subject area as the Value Chain Management programme.

The appeals board decides the case based on the material on which the Value Chain Management programme made the original decision as well as the appeal. The appeals board decides one of the following:

- To offer a new assessment (re-assessment) (only applicable to written exams)
- To offer a new examination (re-examination)
- dismiss the case

The appeals board announces the decision as soon as possible. The Value Chain Management programme forwards the decision to the student.

The student has a deadline of 2 weeks to accept an offer of re-assessment or re-examination. Re-assessment and re-examination must be planned as soon as possible.

Note that both re-assessment and re-examination can result in a lower mark than the original assessment. New examiners are appointed for both re-assessment and re-examination. The new examiners have access to all files and documents from the complaints case.

The appeals board's decision is final and cannot be appealed further,

## 3.6 Formal standards for assignments and projects

### 3.6.1 Standards

All projects (study projects and bachelor project) will follow the 'Guidelines for projects' in VIA Business. Specific requirements for each assignment and project are described in section 2 and section 3.

All written assignments and projects must be uploaded to WISEflow. The bachelor project must furthermore be uploaded to the PURE database.

For all written assignments and projects, a standard page is defined as 2400 characters incl. spaces. Front page, table of contents, list of references and appendices do not count. Attachments are not included in the evaluation of the assignment.

### 3.6.2 References

The projects' written reports reference system must follow the Haward Anglia standards, <https://libweb.anglia.ac.uk/referencing/harvard.htm>.

Incorrect referencing, including omitted references, will be counted as an error and can become the subject of investigations into plagiarism.

## 3.7 Talent initiatives

The Value Chain Management programme offer talent initiatives to especially talented students. The initiative offered is acknowledgement of extracurricular activities as an appendix to the final diploma

### 3.7.1 Acknowledgement of extra-curricular activities

Acknowledgment of extra-curricular activities on the final diploma requires that the student has participated in documented activities related to the Value Chain Management programme. These extra-curricular activities must be said to strengthen the quality in the programme as well as the programme's relevance.

Extra-curricular activities can include participation in national or international conferences, publishing articles in international journals, participating in relevant competitions and courses, which are **not** a part of the programme, participating in research and development projects etc.

Application for acknowledgement of extra-curricular activities must be sent to the head of programme, who decides on whether or not the activity fulfils the criteria for acknowledgement. [It is not possible to apply for acknowledgement of an activity before the activity had been completed and documented.

Activities fit for acknowledgement must be completed within the prescribed period of study for the programme.

## 3.8 Instruction and working methods in the Value Chain Management programme

Teaching in the Value Chain Management programme is implemented through lectures, class teaching, dialogue, exercises, casework, presentations, seminars, guest lecturers, projects and internship.

National and international results from research and development within professional disciplines relating to the

VCM curriculum will be used in the lectures, as well as the practical experience from lecturers and guest lecturers.

**Problem-Based Learning (PBL)** in teams has a high priority throughout the VCM programme. The ability to manage projects and to work in project teams is a vital competence of a Value Chain Manager. The fundamental thinking in PBL is that future professionals develop better and more relevant skills by being confronted with problem situations from real companies and organisations in the complex context of reality instead of being confronted with textbook problems in well-prepared portions and sequences. By being “placed in the real problem situations”, the student is more actively involved and achieves a proactive way of thinking that leads to better learning results.

The planning of the programme is made so that each semester is planned to develop and maintain the progression in certain competencies. Each assignment, case study, study project, etc., is designed in accordance with the students’ level of development in terms of how much of the assignment is defined by the teacher and how much is free for the student to independently define (goal setting, problem definition, choice of content, solutions, the design and evaluation).

The students will be challenged with an increasing level of problem orientation and move to a high degree of self- management throughout the programme. Each semester on the VCM programme has a specific goal in terms of progression in project competencies. The students will be taught project methodology and practice their knowledge and skills in semester projects. The projects also have the purpose of integrating the themes in the VCM curriculum. During the VCM programme, the students advance from subject-oriented and teacher managed to a problem-oriented and studentmanaged project. See the figure below.

### **Cross-disciplinary projects**

The VCM programme is a cross-disciplinary programme as the students study several disciplines as shown above. The students develop detailed knowledge in several areas and learn to integrate this knowledge into new ways of reaching goals or solving problems. The students learn to practice cross-disciplinary thinking using multiple perspectives to create holistic solutions. In order to support the progression in these competencies, students complete a cross-disciplinary project each semester.

### **Project Methodology and its progression through the Value Chain Management programme**

The following matrix provides an overview of the methodological requirements for all semester projects on the VCM Program. The methodological requirements consists of both ‘formalities’ and some ‘methodological steps’, which is further explained in our *Guidelines for Preparing Project Reports*.

The steps are:

1. Objective(s)
2. Research paradigm
3. Approach
4. Choice of method
5. Strategy
6. Time Horizon
7. Theories and models
8. Data collection
9. Sources
10. Data analysis
11. Quality assessment

|                       | Formal requirements         | Methodological steps to incorporate in Project Descriptions | Methodological steps to incorporate in Project Reports |
|-----------------------|-----------------------------|-------------------------------------------------------------|--------------------------------------------------------|
| <b>1. Semester</b>    | All formalities must be met | 7,8,9                                                       | 7,8,9                                                  |
| <b>2. Semester</b>    | All formalities must be met | 7,8,9                                                       | 4,7,8,9,10,11                                          |
| <b>3. Semester</b>    | All formalities must be met | 7,8,9                                                       | 4,7,8,9,10,11                                          |
| <b>4.-7. Semester</b> | All formalities must be met | 1,2,7,8,9                                                   | 1,2,3,4,5,6,7,8,9,10,11                                |

### 3.9 Differentiation of teaching

Teaching in the Value Chain Management programme encourage all students to participate in all study activities. If there is requirement for participation in courses, these are described in section 2.2 and section 3.2 is implemented through lectures, class teaching, dialogue, exercises, casework, presentations, seminars, guest lecturers, projects and internship.

National and international results from research and development within professional disciplines relating to the VCM curriculum will be used in the lectures, as well as the practical experience from lecturers and guest lecturers



## 3.10 Obligation to participate and study activity

The VCM programme is a full time study programme. The student must plan to spend about 40 hours a week on average to participate in lectures, preparation, group work, assignments, project work, exam etc.

Lectures may have different focus, be lecturer - or - student led. The details for the individual courses will appear from the course syllabus on Studynet.

Study activities and plans are based on the students participating actively and being engaged in dialogue with the lecturers as well as other students. It is a prerequisite for an active dialogue that the students are familiar with the contents of this curriculum, read the information on Studynet frequently as well as the contents of the e-mails sent to their VIA e-mail address. Decisions such as, the right of the students to stay at the programme, changes to schedule and other administrative changes, are made and implemented on this basis and without further notice.

Students are encouraged to support each other and display good and active study activity. The students are also encouraged to form study groups and secure their professional and social development. This includes contact to the student advisor if they or some of their fellow students need support and advice to improve their study activity.

Study activities are planned throughout the semesters. That is during end of August – end of January for the fall semester and beginning of February – end of June for the spring semester. It is the responsibility of the students to plan travelling, holidays and other activities outside these periods. A study calendar will be maintained on Studynet with more details and specific dates.

### 3.10.1 Obligation to participate

The Value Chain Management program encourage all students to participate in all study activities. If there is requirement for participation in courses, these are described in section 2.2 and section 3.1. Fulfilling these requirements is a prerequisite for participating in exams for these courses.

### 3.10.2 Study activity

A student is actively studying as long as the exams are passed according to the regulations.

Failing to meet this obligation can affect a student's right to the Danish Grants and Loans Scheme (SU).

A student who has not passed at least 1 exam within a period of 1 year will be terminated from the programme in accordance with the rules in the Ministerial Order on Admissions to Academy Profession Programmes and Bachelor Programmes. A student will be notified in due time before the termination.

A student can at any time enquire as to the current status of his/her study activity by contacting the head of the programme.

## 3.11 Texts in foreign language

All teaching and instructions in the Value Chain Management programme are in English.

## 3.12 Changing academic major and transfers

### 3.12.1 Changing academic major

If a student with a different programme wishes to change his/her academic major to the Value Chain Management programme at VIA University College, an application must be sent to the head of the programme stating the reasons for the request.

Changing academic major to the Value Chain Management programme requires that the applicant states which courses he/she wants to be evaluated for credit. The head of program decides if the applicant can be accepted and to what degree the applicant will get credit. Changing academic major to the Value Chain Management programme further requires that the student is registered with a different academic programme at the same or higher level and that the first-year exams have been passed.

Changing academic major to the Value Chain Management programme is dependent on whether or not the programme has available study places.

### 3.12.2 Transfers

Transferring to the Value Chain Management programme at VIA University College from the same programme at another institution requires that the student has passed exams, which are equivalent to the first-year exam in the Value Chain Management programme at VIA University College.

Transferring to the Value Chain Management programme at VIA University College further requires that there are available study places.

### 3.12.3 Applying for change of academic major or transfer

Applications for changing an academic major or transferring to the Value Chain Management programme at VIA University College must be sent to the head of programme no later than the July 5<sup>th</sup> for starting in the autumn semester.

An application for a change in academic major must include:

- motivation for change
- ☐ the semester where the applicant want to enter
- ☐ list of courses or other study activities which shall be evaluated for credit
- ☐ documentation for passing the above mentioned courses or study activities.

An application for a transfer must include:

- ☐ motivation for change
- ☐ the semester where the applicant want to enter
- ☐ documentation for passed exams

### 3.13 Leave of absence

Taking a leave of absence means that a student cannot participate in classes, exams or any other activity as part of the Value Chain Management programme during the leave of absence. Upon conclusion of the leave of absence, the student resumes his/her studies at the point in the programme, from which the leave started.

If it is not possible to start at that point in the programme, the Value Chain Management programme will, if possible, provide other educational elements until the normal progression can be resumed, such that the students programme is not extended beyond the prescribed period of study. Only when this is not at all possible can the student in question have periods with no study related activities.

Leave of absence can only be granted for periods of complete semesters. This does not apply for maternity/paternity leave or leave on the basis of adoption and conscription.

A student cannot receive funds from the Student Grants and Loans Scheme (SU) during leave of absence except in cases of maternity/paternity leave.

#### 3.13.1 Maternity/paternity leave, adoption and conscription

The Value Chain Management programme cannot reject an application for leave of absence on the basis of documented maternity/paternity leave, adoption or conscription. The end of a leave of absence should, as far as possible, be planned to coincide with study start or the start of certain educational elements so as to ensure the fewest periods without study related activities as possible as well as the least amount of time where the student does not have access to the Student Grants and Loans Scheme (SU).

#### 3.13.2 Application

An application for a leave of absence must be in writing and stating the reasons for the leave of absence. The Value Chain Management programme can ask that the application is submitted on a special form, which can be digital.

Leave of absence for any other reason than maternity/paternity leave, adoption or conscription can only be applied for after the student has passed the first-year exam.

Leave of absence cannot take effect retroactively and application must be submitted at least 1 month prior to the start of the leave.

## 3.14 Parallel programmes

The Value Chain Management programme offers parallel programmes e.g. exchange programme and double degree in collaboration with Offenburg University of applied Sciences and HAMK, Finland.

### 3.14.1 Exchange programme

As a full time-student, at VIA University College, and enrolled in the program of Value Chain Management, there will be a possibility to do a semester abroad in a partner university. The student exchange can only be done after the 4<sup>th</sup> semester and having passed all the exams. The student must fill out a learning agreement describing the subjects chosen at the receiving university. The learning agreement must be signed by both the receiving and the host university. Having passed all exams mentioned in the learning agreement the student will be given a merit of 30 ECTS.

### 3.14.2 Double Degree programme

A VCM student having done 4<sup>th</sup> semester and having passed all exams can apply to get a double degree from

VIA and a partner institution and where there is a signed Double Degree contract.

The student must fill out a learning agreement for all semesters describing the subjects chosen at the receiving university. The learning agreement must be signed by both the receiving and the host university. Having passed all exams mentioned in the learning agreement the student will be given a merit of 90 ECTS. The bachelor thesis must be evaluated by VIA and the receiving university.

## 3.15 Dispensations

The Value Chain Management programme can make dispensations from any rule in both the common and institution-specific parts of this curriculum.

## 3.16 Entry into force and transition rules

### 3.16.1 Entry into force

This curriculum enters into force from the onset of the academic year 2017. Any prior curriculum for the Value Chain Management programme is repealed from this time forward.

### 3.16.2 Transition rules

Students from the present classes will transfer according to the below-mentioned rules

- Students who started who was enrolled in August 2017 or earlier will finish their program according to the curriculum from 2019 except 7. Semester how will follow the this present curriculum.
- Students who was enrolled in August 2018 will finish their 5th semester according to the curriculum from 2019 and thereafter follow this curriculum and thereafter follow this curriculum.
- Students who enrolled in august 2019 will finish their 2nd semester according to the curriculum from 2019 and thereafter follow this curriculum.

If the students have unfinished courses these courses will be finished in accordance with the present curriculum.

### 3.17 Legal basis

This curriculum is based on the following legal documents:

- Ministerial Order no. 1047 of June 30th 2016 on Academy profession degree programmes and Professional Bachelor programmes (Bekendtgørelse om Erhvervsakademiuddannelser og professionabacheloruddannelser)
- Ministerial Order no. 674 of June 10th 2013 on Professional bachelor of value chain management (Bekendtgørelse om uddannelsen til professionsbachelor i procesøkonomi og værdikædeledelse)
- Ministerial Order no. 1500 of December 2nd 2016 on tests and exams in professionally oriented programmes (Bekendtgørelse om prøver og eksamen i erhvervsrettede videregående uddannelser)
- Ministerial Order no. 114 of February 3rd 2015 on the Marking Scale and Other Forms of Assessment (Bekendtgørelse om karakterskala og anden bedømmelse).
- Ministerial Order no. 107 of January 27th 2017 on admission to professional bachelor programs (Bekendtgørelse om adgang til erhvervsakademiuddannelser og professionsbacheloruddannelser)
- Ministerial Order no. 597 of March 2015 8th of talent initiatives at higher educations (Bekendtgørelse om talentinitiativer på de videregående uddannelser på Uddannelses og Forskningsministeriets område (talentbekendtgørelsen))