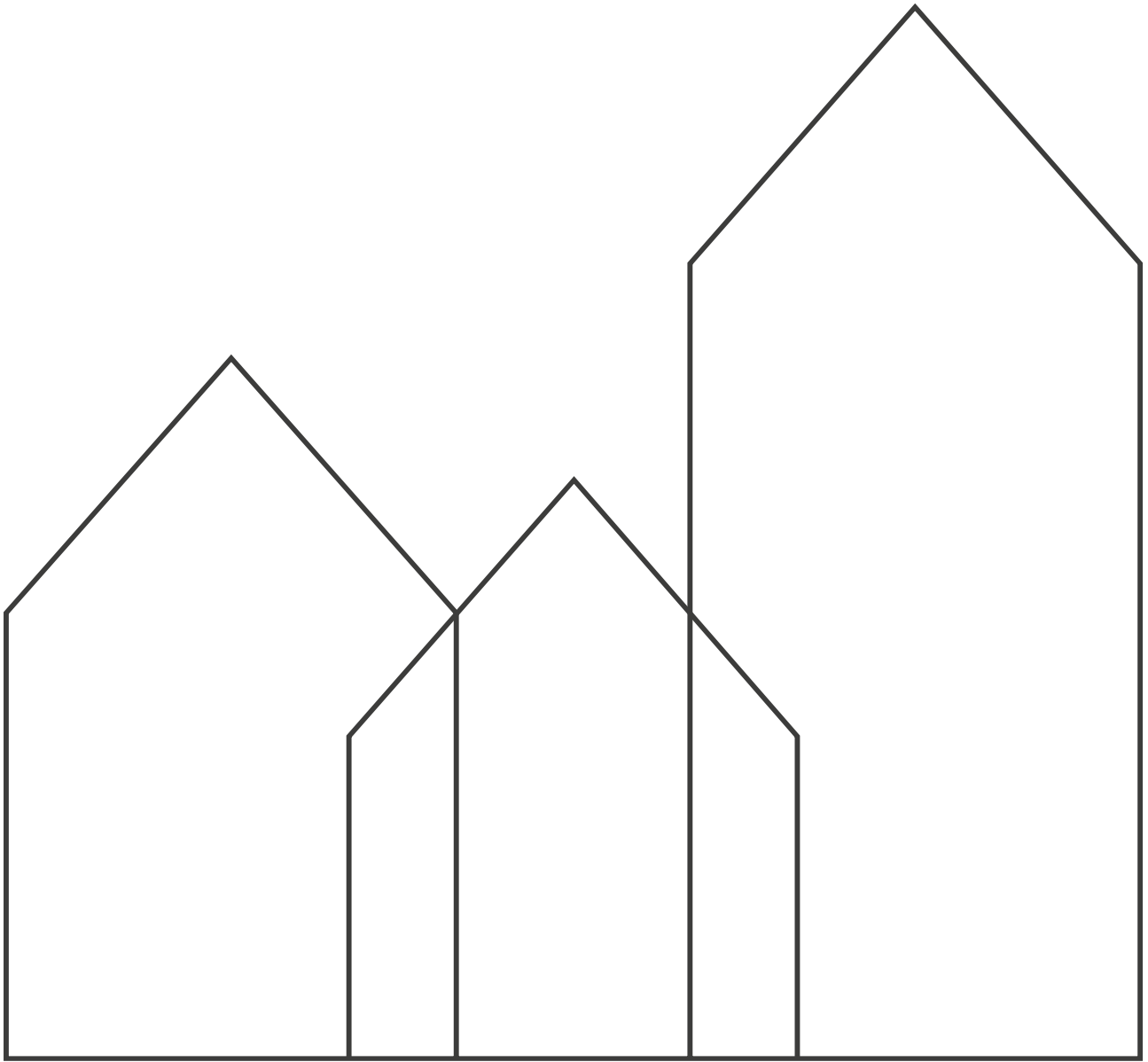


# CURRICULUM

Bachelor's Degree Programme in Architectural Technology and Construction Management



Valid from 01.09.2024



## Reading Guide

A curriculum formally describes the academic content of an educational program. The curriculum for the bachelor's degree in architectural technology and construction management, consists of a national part, developed by the offering institutions the Danish 'Bygningskonstruktøruddannelse,' and an institutional part developed by VIA University College.

The curriculum is a detailed description of the various educational and course elements as well as the requirements necessary for you as a student to work with in order to achieve the qualifications that certify you as an Architectural Technologist and Construction Manager (i.e. Bygningskonstruktør).

Therefore, the curriculum can be read as a complete document from beginning to end or as sections that are "pieced" together according to the semester you are in.

The curriculum is also crucial to ensure that you receive the necessary guidance and clarity regarding your educational journey. Therefore, in some places, you will encounter grey text boxes (see below) that is addressed directly to you as a student, while generally, the curriculum text will address the student in a more formal manner



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# 1 Introduction

This curriculum applies to the Bachelor's Degree Programme in Architectural Technology and Construction Management. It describes the overall organization of the programme, and thus constitutes a planning tool for the institution and a programme guide for the student.

The purpose of the curriculum is to:

- translate the overarching legislation into a common curriculum describing the general conditions governing the programmes.
- ensure uniformity across programmes.
- ensure that students can move between different educational institutions with full credit transfer.
- ensure that the curricula bear a common stamp as regards both form and content.

The curriculum is divided into a national part and an institutional part.

The *national* part describes the subject elements common to the Architectural Technology and Construction Management programme wherever in Denmark it is offered. The purpose here is to give the profession a national professional identity.

The *institutional* part contains the descriptors specific to the institution. The institutional part also sets out the regulations applicable only to you as a student on the Architectural Technology and Construction Management programme at VIA University College.



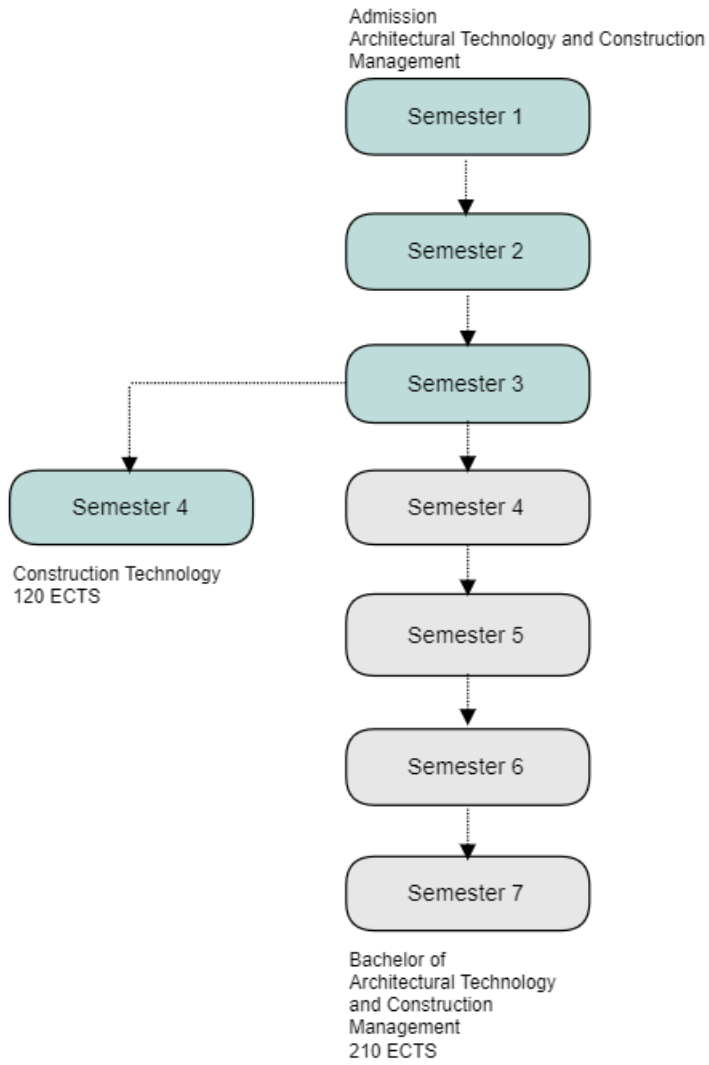
## **2 Programme structure**

The Architectural Technology and Construction Management programme is of 3½ years' duration and is structured around seven semesters totalling 210 ECTS credits made up of several national subject elements and elective local programme elements, including the internship and the Bachelor's project.

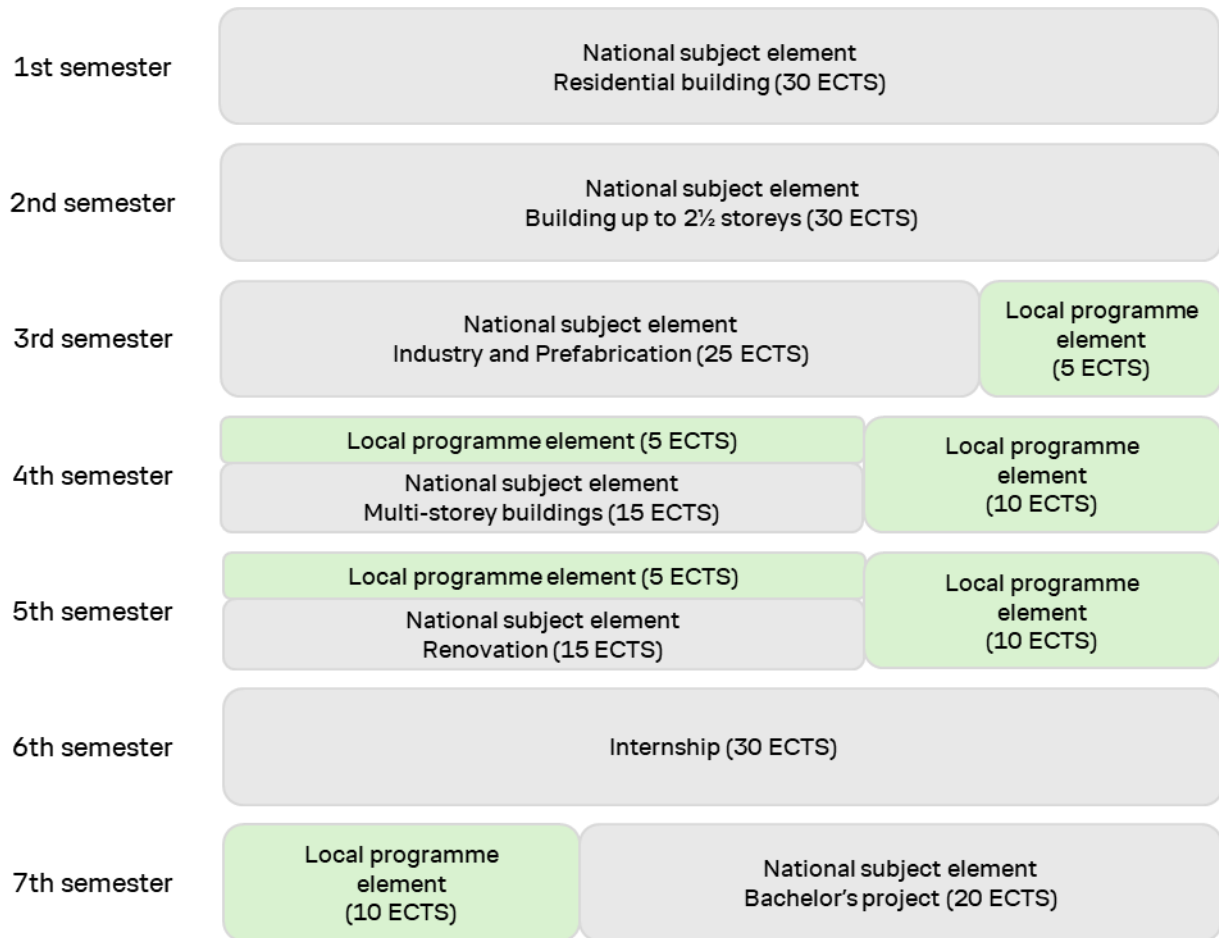
The national subject elements are common to all providing institutions in Denmark, while the elective local programme elements have been defined by the individual institution itself. Further details of these are set out in the national and institutional parts of the curriculum, respectively.

The programme is also offered in English, the English title being Bachelor of Architectural Technology and Construction Management.

In accordance with the regulations governing the programme (see the Executive Order on Technical and Commercial Academy Profession Degree Programmes and Professional Bachelor's Degree Programmes, and its programme annexe 'Bachelor of Architectural Technology and Construction Management'), the structure of the programme is set out in Figure 1. The Academy Profession Degree Programme in Construction Technology and the option of transferring to it are described in a separate programme annex and curriculum.



**FIGURE 1: PROGRAMME STRUCTURE**



**FIGURE 2: NATIONAL SUBJECT ELEMENTS AND LOCAL PROGRAMME ELEMENTS**

As Figure 2 shows, the national subject elements are scheduled from 1<sup>st</sup> to 7<sup>th</sup> semester, while the local programme elements are introduced from 3<sup>rd</sup> semester onwards. These are detailed and described in the institutional part of this curriculum.

The national subject elements in the first five semesters are discrete courses which, together with the local programme elements, draw on the learning objectives associated with the subject areas of the programme.

The distribution among subject areas and subject elements, and the expected student workload, can be seen and read off from table 1 (see below).





**TABLE 1: ECTS RATING OF NATIONAL AND LOCAL PROGRAMME ELEMENTS BROKEN DOWN BY SUBJECT AREA**

Semester	National and local elements	Programme elements arranged within the subject areas of the programme				Internship	Bachelor's project	ECTS credits
		Organization and business understanding	Communication and collaboration	Production	Structural design			
1	Residential building		10	5	15			30
2	Building up to 2½ storeys	5	5	10	10			30
3	Industry and Prefabrication	5	5	10	5			25
3	Innovation and entrepreneurship	1		2	2			5
4	Multi-storey building		5	5	5			15
4	Specialization element			2	3			5
4	Problem-based research design and the theory of science	2		4	4			10
5	Renovation			5	10			15
5	Specialization element			2	3			5
5	Architectural Technology OR Construction Management	2		5	3			10
6	Internship					30		30
7	Research			5	5			10
7	Bachelor's project						20	20
	<b>ECTS</b>	<b>15</b>	<b>25</b>	<b>55</b>	<b>65</b>	<b>30</b>	<b>20</b>	<b>210</b>
Ratio	National subject element	2	5	7	9			
	Local programme element	1		4	4			
	NSE and LPE combined	3	5	11	13	6	4	42

The national subject elements in the first five semesters are discrete courses. The local programme elements draw on the learning objectives of, and carry ECTS credits from, the programme subject areas (160 credits), as shown in Table 1. In addition, learning objectives and ECTS credits are set for the programme's internship (30 credits) and Bachelor's project (20 credits).



### **3 National part of the curriculum**

This, the national part of the curriculum for the Bachelor's Degree Programme in Architectural Technology and Construction Management, is issued pursuant to Section 18, Article 1 of the Executive Order on Technical and Commercial Academy Profession Degree Programmes and Professional Bachelor's Degree Programmes. This curriculum is complemented by the institutional part of the curriculum, which is set by the individual institution offering the programme.

The curriculum has been prepared by the programme network for the Bachelor's Degree Programme in Architectural Technology and Construction Management and for the Academy Profession Degree programmes in Construction Technology, and approved by each provider's Board – or by its Rector acting on authority – after taking advice from the programme committee and chief examiner for the programme at the institutions.



## 4 Learning outcome objectives

### 4.1 Knowledge

The graduate possesses:

- development-based knowledge and understanding of the principles, theories and methods applied in the profession in the management, design, planning, execution and the operation and maintenance of complex construction and civil engineering tasks.
- development-based knowledge of professionally relevant concepts and methods of scientific theory, and of communication theories and methods of conveying construction industry problems, including the use in the profession of digital media and tools.
- development-based knowledge of the industry's principles and models for business start-up, operation, and organization, and of the social and technological factors affecting the construction process, including issues relating to energy, working environment and sustainability in a local and global perspective.
- development-based knowledge of management, social, linguistic, cultural, and ethical aspects of the design of construction tasks and collaboration on them.

### 4.2 Skills

The graduate can:

- evaluate and apply the methods of management, design, planning and execution of complex construction and civil engineering tasks relevant to the profession, including relevant digital tools, standards, and systems.
- apply relevant research knowledge and methods to the solution of complex construction industry problems.
- evaluate technological, organizational, and societal factors in connection with building design, including aspects relating to energy, working environment and sustainability, and to substantiate and select relevant potential solutions.
- communicate practice-oriented and professional knowledge based on construction industry research and development.

### 4.3 Competencies

The graduate can:

- manage the planning, design, management and execution of complex construction and/or civil engineering tasks, independently and in collaboration with other professionals.



- manage communication between the construction industry parties regarding the design, procurement and execution of complex construction and civil engineering tasks.
- manage sustainability, social, cultural, and ethical factors in the design and refinement of construction projects and engage in management and collaborative settings with others of different educational, linguistic and cultural background.
- independently engage in professional and interdisciplinary collaborations and assume responsibility within the domain of the profession.
- identify their own learning needs and develop their own knowledge, skills in competencies relating to the profession.



## 5 The national subject elements

### 5.1 Residential Building (1<sup>st</sup> semester)

The national subject element takes the form of an interdisciplinary project with a specific small residential building as its theme.

The subject element carries 30 ECTS credits and includes the following subject areas:

- Communication and Collaboration (10 ECTS credits)
- Production (5 ECTS credits)
- Structural Design (15 ECTS credits)

Learning objectives for Residential Building:

#### **Knowledge**

In respect of the *Residential Building* national subject element, the student shall:

- be able to understand the profession's fundamental construction technology disciplines and associated relevant documentation.
- be able to understand common structural design and execution methods, including properties of materials, structural principles, and social, environmental, and economic aspects.
- possess knowledge of common communication methods and of analogue and digital tools and standards
- possess knowledge of the industry's parties and professional fields, and insight into the construction process
- possess knowledge of fundamental, applied principles of mathematics and building physics, including building services and statics.
- possess knowledge of information searching methods in connection with structural design tasks
- possess knowledge of principles and tools used in surveying, staking out and recording in relation to construction and civil engineering.

#### **Skills**

In respect of the *Residential Building* national subject element, the student shall be able to:

- use data collection and analysis methods and tools to a basic standard.
- use structural design methods and tools and use methods relating to the organization of the building process.



- use methods and tools for surveying and staking out.
- use methods and tools to organize and plan professional collaboration.
- communicate practice-oriented and professional issues to relevant partners.
- evaluate practice-oriented and theoretical issues and substantiate and select relevant potential solutions.

### **Competencies**

In respect of the *Residential Building* national subject element, the student shall be competent to:

- manage structural solutions and documentation to a basic standard.
- manage the relationship between various construction technology issues.
- engage in professional and interdisciplinary collaboration in study settings.
- identify their own learning needs in a structured setting.

### **ECTS rating**

The *Residential Building* national subject element carries 30 ECTS credits.

### **Examinations**

The national subject element concludes with: [Examination 1: Residential Building and Buildings up to 2½ storeys \(2nd semester\)](#).



## 5.2 Building up to 2½ Storeys (2<sup>nd</sup> semester)

The national subject element takes the form of an interdisciplinary project working on a specific building of up to 2½ storeys.

The subject element comprises 30 ECTS credits and includes the following subject areas:

- Organization and Business Understanding (5 ECTS credits)
- Communication and Collaboration (5 ECTS credits)
- Production (10 ECTS credits)
- Structural Design (10 ECTS credits)

Learning objectives for Building up to 2½ Storeys:

### **Knowledge**

In respect of the *Building up to 2½ Storeys* national subject element, the student shall:

- be able to understand and reflect on common structures and principles of building physics, including statics, and building services.
- possess knowledge of common communication methods and of analogue and digital tools and standards
- possess knowledge of building information modelling in relation to structural design and production
- possess knowledge of theories, methods, and tools for fiscal management of the works in the design phase
- be able to understand and reflect on common planning, design, and execution methods and on work methodology in the building process.
- possess knowledge of fundamental social, environmental, and economic aspects of structural design and production
- possess knowledge of legislation, principles and methods in business, entrepreneurship, statutory rules, and contractual relations.

### **Skills**

In respect of the *Building up to 2½ Storeys* national subject element, the student shall be able to:

- use data collection and analysis methods and tools.
- use quality assurance and fiscal management methods and tools in structural design and production.
- use methods, tools, and standards, including the use of digital building information models.



- evaluate theoretical and practice-oriented issues in the structural design and production of small buildings, and substantiate the actions and solutions selected.
- evaluate and select award procedures, types of contract and organizational forms to a basic standard.
- communicate practice-orientated and professional issues and solutions to partners and users.

### **Competencies**

In respect of the *Building up to 2½ Storeys* national subject element, the student shall be competent to:

- manage the analysis of issues relevant to the construction industry and associated solutions.
- manage structural design and account for the principles used in execution.
- independently engage in collaboration with others on digital structural design
- identify their own learning needs, proceeding from the knowledge, skills and competencies acquired in the semester.

### **ECTS rating**

The *Building up to 2½ Storeys* national subject element carries 30 ECTS credits.

### **Examinations**

The national subject element concludes with: [Examination 1: Residential Building and Buildings up to 2½ storeys \(2nd semester\)](#)





## 5.3 Industry and Prefabrication (3<sup>rd</sup> semester)

The national subject element takes the form of an interdisciplinary project working on the structural design of industrialized elements used in a specific building.

The subject element comprises 25 ECTS credits and includes the following subject areas:

- Organization and Business Understanding (5 ECTS credits)
- Communication and Collaboration (5 ECTS credits)
- Production (10 ECTS credits)
- Structural Design (5 ECTS credits)

Learning objectives for Industry and Prefabrication

### **Knowledge**

In respect of the *Industry and Prefabrication* national subject element, the student shall:

- be able to understand and reflect on common structures and principles of building physics, including statics, and building services.
- be able to understand and reflect on prefabricated production and execution methods in the building process, including knowledge of planning and management tools.
- be able to understand and reflect on forms of organization, collaboration, and management in relation to structural design and production.
- possess knowledge of social, environmental, economic, and technological aspects of structural design and the production process
- possess knowledge of fundamental principles, theories and methods for the establishment and operation of a business.

### **Skills**

In respect of the *Industry and Prefabrication* national subject element, the student shall be able to:

- use data collection and analysis methods and tools.
- apply professional structural design and production methods to the construction process for prefabricated building works.
- use digital building information models and transfer and extract data between different digital platforms and information systems.
- evaluate and analyse theoretical and practice-orientated issues in prefabricated construction, and substantiate the actions and solutions selected.



- evaluate contractual bases, contract forms, and organize types of contracts and award procedure.
- communicate practice-oriented, professional issues and solutions to Danish-speaking and English-speaking partners and users.

### **Competencies**

In respect of the *Industry and Prefabrication* national subject element, the student shall be competent to:

- manage documented analysis of issues relevant to the construction industry.
- manage structural solutions to optimize production, taking social, environmental, and economic aspects into account.
- manage the handover of digital project material and documentation as the basis of digital procurement.
- independently engage in professional and interdisciplinary collaboration on the preparation of project documentation
- participate in collaboration on the management of construction and civil engineering tasks.
- identify their own learning needs and acquire knowledge, skills, and competencies.

### **ECTS rating**

The *Industry and Prefabrication* national subject element carries 25 ECTS credits.

### **Examinations**

The national subject element concludes with: [Examination 2: Industry and Prefabrication \(3rd semester\)](#)



## 5.4 Multi-Storey Residential Building over 3 Storeys (4<sup>th</sup> semester)

The national subject element takes the form of an interdisciplinary project working on a specific multi-storey residential building over 3 storeys.

The subject element comprises 15 ECTS credits and includes the following subject areas:

- Communication and Collaboration (5 ECTS credits)
- Production (5 ECTS credits)
- Structural Design (5 ECTS credits)

Learning objectives for Multi-Storey Residential Building over 3 Storeys

### **Knowledge**

In respect of the *Multi-Storey Residential Building over 3 Storeys* national subject element, the student shall:

- be able to understand and reflect on complex structures and principles of building physics, including statics, and building services.
- possess knowledge of common communication methods, tools and standards relating to digital structural design, and be able to reflect on the use in the profession of digital systems and methods
- be able to understand and reflect on complex production and execution methods.
- possess knowledge of principles and methods of science theory in relation to practice in the profession
- possess knowledge of relevant social, environmental, economic, and technological aspects of the structural design and production process.

### **Skills**

In respect of the *Multi-Storey Residential Building over 3 Storeys* national subject element, the student shall be able to:

- use and show proficiency in methods and tools for data collection, analysis, and processing.
- use methods to plan, coordinate and design a digital interdisciplinary process, including considerations relating to execution and to operation and maintenance.
- show proficiency in the skills associated with planning and management of the execution phase.
- use digital building information models and transfer and extract data between different digital platforms and information systems.
- communicate digital project material and documentation as the basis for digital construction management.



- communicate and evaluate practice-oriented and professional issues, select solutions, and substantiate them to partners and users.

### **Competencies**

In respect of the *Multi-Storey Residential Building over 3 Storeys* national subject element, the student shall be competent to:

- manage documented analysis of complex issues relevant to the construction industry.
- manage complex digital structural design and production, taking social, environmental, and economic aspects into account.
- manage the structural design and execution process, taking societal and technological factors into account.
- independently engage in interdisciplinary collaboration on the planning, structural design and production of construction and civil engineering tasks
- identify their own learning needs and develop their own knowledge, skills, and competencies.

### **ECTS rating**

The *Multi-Storey Residential Building over 3 Storeys* national subject element carries 15 ECTS credits.

### **Examinations**

The national subject element concludes with: [Examination 4: Multi-storey Residential Building over 3 Storeys and Specialization element \(4th semester\)](#)



## 5.5 Renovation (5<sup>th</sup> semester)

The national subject element takes the form of an interdisciplinary project working on the planning and design of a specific renovation.

The subject element comprises 15 ECTS credits and includes the following subject areas:

- Production (5 ECTS credits)
- Structural Design (10 ECTS credits)

Learning objectives for Renovation

### **Knowledge**

In respect of the *Renovation* national subject element, the student shall:

- possess development-based knowledge of the recording and assessment of existing conditions.
- be able to reflect on structures and principles of building physics, including statics, and building services.
- be able to understand complex design and execution methods.
- be able to reflect on different energy-efficient renovation and conversion concepts, taking social, environmental, and economic aspects into account.

### **Skills**

In respect of the *Renovation* national subject element, the student shall be able to:

- use and show proficiency in data collection, analysis and processing methods and tools.
- use and show proficiency in structural design methods and methods of planning and managing the execution of the renovation works, taking social, environmental, and economic aspects into account.
- use digital building information models and transfer and extract data between different digital platforms and information systems.
- evaluate problems and aspects of building physics and make substantiated choices.
- communicate practice-oriented and professional issues and solutions to partners and users.

### **Competencies**

In respect of the *Renovation* national subject element, the student shall be competent to:

- manage complex construction technology solutions based on a documented analysis.
- manage a digital design and production process.



- manage complex renovation projects, taking social, environmental, and economic aspects into account.
- independently engage in interdisciplinary collaboration on the planning, design, quality assurance and production of complex renovation projects
- identify their own learning needs and develop their own knowledge, skills, and competencies.

### ***ECTS rating***

The *Renovation* national subject element carries 15 ECTS credits.

### ***Examinations***

The national subject element concludes with: [Examination 6: Renovation and Specialization element \(5th semester\)](#)



## 6 Internship (6<sup>th</sup> semester)

Learning objectives for the internship

### **Knowledge**

The student shall possess:

- development-based knowledge of, and the ability to reflect on, the practical work that the profession entails, in the company.
- development-based knowledge of, and the ability to reflect on, the organizational, economic, administrative, societal, and labour conditions obtaining in the company.

### **Skills**

The student shall be able to:

- use and show proficiency in the architectural technologist's methods and tools as they relate to the profession.
- evaluate theoretical and practice-oriented issues in the internship and substantiate and select relevant potential solutions.
- communicate practice-oriented issues and solutions to the host company and stakeholders.

### **Competencies**

The student shall be competent to:

- manage complex development-oriented issues in work settings and translate them into practice-oriented solutions in the company.
- identify their own learning needs and develop their own knowledge, skills and competencies relating to the profession.
- manage complex development-oriented situations in work settings.
- independently engage in professional and interdisciplinary collaboration and assume responsibility within a professional ethical framework.
- work on complex technical issues within the ambit of the profession in the company.
- work independently or in collaboration with others on the solution of theoretical and practical tasks in the company.

### **ECTS rating**

The internship carries 30 ECTS credits.



***Examinations***

The internship concludes with: [Examination 8: Internship \(6th semester\)](#).





## **7 Bachelor's project (7<sup>th</sup> semester)**

The learning objectives for the Bachelor's project are identical to the final learning objectives of the programme as set out above in section 4: [Learning outcome objectives](#).

The bachelor's project must demonstrate the student's understanding of, and ability to reflect on, practice in the profession and its application of theory and method in relation to a practice-oriented problem. The problem, which must be key to the programme and to the profession, is to be formulated by the student, in collaboration with a private- or public-sector company if appropriate. The problem must be approved by the institution.

### ***ECTS rating***

The Bachelor's project carries 20 ECTS credits.

### ***Examinations***

The Bachelor's project concludes the programme in the final semester when all preceding examinations have been passed.

For more details regarding the final examination: [Examination 10: Bachelor's Project \(7th semester\)](#)



## **8 Institutional part of the curriculum**

The institutional part comprises the regulations applicable specifically to the Bachelor's Degree Programme in Architectural Technology and Construction Management at VIA University College. These regulations are laid down by VIA University College.

When transferring to or from the Bachelor's Degree Programme in Architectural Technology and Construction Management at VIA University College, it must be anticipated that the institutions are subject to different regulations as set out in the institutional parts of their respective curricula.

Any provision of the programme at VIA University College shall be subject to the regulations in this curriculum.



## 9 Local programme elements

The local programme elements (LPEs) are organized by the institution in the light of local and regional needs.

At VIA University College, the local programme elements are organized to support the program's subjects while also giving students the opportunity to influence the professional content of the programme. Local programme elements are organized in the 3rd, 4th, 5th, and 7th semesters.

Some of the local programme elements are designed as independent course elements, while in the 4th and 5th semesters, there are also local programme elements that are assessed in connection with and in relation to the national subject element.

For an overview, consult [Figure 2: National subject elements and local programme elements](#)

*How you use the local program elements to tailor or specialize your education is an individual choice that you make continuously while identifying your own learning needs. These elements also offer opportunities to engage with companies and/or research and development.*

Formally, 5 ECTS of the local programme elements must be offered and organized as elective courses. Therefore, in the 3<sup>rd</sup> semester, it is possible to choose the VIA interprofessional elective course (Det tværprofessionelle element – DTE).

*During the national program element "Renovation" (5th semester), the programme may offer the option to specialize your education either in architectural technology or construction management.*

### 9.1 Innovation and Entrepreneurship (3rd semester)

In this elective, the student will work partly within their own programme and partly with students from other programmes.

By taking part in creative, innovative, and entrepreneurial processes, the student must find a solution to a specific interprofessional challenge formulated by the programme team in collaboration with one or more external parties. The student will be presented with the challenges and choose from among them. Students will be divided into groups according to their chosen challenge.

The work must culminate in a set of project documentation and a learning reflection one standard page in length.

The learning objectives for Innovation and entrepreneurship:

#### **Knowledge**

The student shall possess knowledge of, and be able to understand:

- selected areas of the duties, expertise, and responsibilities of the student's own and other professions in Danish and international context
- key elements of interprofessional expertise



- key concepts in creativity, innovation, and entrepreneurship.

### ***Skills***

The student shall be able to:

- apply their professional knowledge in innovative processes.
- evaluate special challenges and options in interprofessional collaboration, including both local and global cultural differences.
- communicate innovative processes in interprofessional settings.

### ***Competencies***

The student shall be competent to:

- identify, analyse, and manage a specific topic in an interprofessional assignment, in collaboration with others, including others with different linguistic and cultural backgrounds.
- identify their own learning needs.

### ***ECTS rating***

The local programme element constitutes 5 ECTS credits.

### ***Examinations***

The element concludes with: [Examination 3: Innovation and Entrepreneurship \(3rd semester\)](#)

### ***Optional***

This programme element is elective and can be substituted for VIA's interprofessional elective course (Det tværfaglige element – DTE-modul).

## **9.2 Problem-based Research Design and Introduction to the Theory of Science for the Construction Industry (4th semester)**

This local programme element consists of a theoretical introduction to the theory of science and methods for the construction industry, combined with a practical independent investigation with the preparation of a research design, which is compiled into a synopsis.

The student selects their own content, which must be relevant to the construction industry. The student is expected to approach the local programme element with the knowledge, skills, and competencies they have acquired, based on the semester's subjects.

This local programme element provides the student with the opportunity to delve deeper into the subject areas of the construction industry.

The learning objectives for Problem-based research design and introduction to the theory of science for the construction industry:



### **Knowledge**

The student shall possess knowledge of, and be able to understand:

- the role of structural surveys, both Danish and international, as a fundamental part of the way the building industry operates.
- the fundamental and relevant concepts in the theory of science

### **Skills**

The student shall be able to:

- show proficiency in data collection, including drawing on international research and/or international developmental trends, analyse and describe a specific construction industry topic so that it can serve as the basis of further technical elaboration.
- use scientifically generated data to illuminate a self-chosen construction industry topic or to tackle a specific construction industry task.
- evaluate and substantiate data collection methods.
- communicate on the content of scientific reports using comprehensible written and spoken language.

### **Competencies**

The student shall be competent to:

- manage a structural survey containing problem statement, empirical data collected, analyses and interpretations, argumentation, and conclusion together with possible specific solution proposals.
- identify, delimit, analyse, and discuss a construction industry topic relating to the national subject element.

### **ECTS rating**

The local programme element constitutes 10 ECTS credits.

### **Examinations**

The element concludes with one examination: Examination 5: Problem-Based Research Design and Introduction to the Theory of Science for the Construction Industry (4th semester)

## **9.3 Architectural Technology, Construction Management or the Interprofessional Course (5th semester)**

### **Content**

This local programme element builds upon the national subject element 'Renovation' and the specialization the student has chosen for the semester (architectural technology or construction management).



Alternatively, the student can engage in the interprofessional course based on the learning objectives for the programme element.

- *Architectural Technology*

The student is working with tender design on a renovation case.

- *Construction Management*

The student is working with a construction project on a renovation case.

- *Interprofessional course*

The student joins an interprofessional course, e.g. in relation to developmental work, national or international projects, where renovation is a key feature of the project.

The local programme element in the 5th semester is organized as individual studies.

However, there is an option to work as a study group. Should you choose to work as a group it is important to be transparent about each group member's contribution to the final product/project.

It is not always a possibility to participate in the interprofessional course.

Learning objectives for Architectural Technology, Construction Management OR Interprofessional course

### ***Knowledge***

The student shall possess knowledge of, and be able to understand:

- the relationship between the chosen topic and the semester's national subject element
- the relevant theory and method in Danish and international context

### ***Skills***

The student shall be able to:

- apply theoretical methods and tools to the solution of problems.
- substantiate, select, and prepare relevant proposed solutions, include draw upon relevant international developmental trends.
- communicate regarding technical issues.

### ***Competencies***

The student shall be competent to:

- manage complex construction technology topics relating to the semester's national subject element.



- manage intercultural and ethical issues in the design and handling of the chosen subject.
- identify their own learning needs in relation to the semester's national subject element and develop their own knowledge of the chosen topic.

### **ECTS rating**

The local programme element constitutes 10 ECTS credits.

### **Examinations**

The element concludes with one examination: [Examination 7: Architectural Technology, Construction Management OR The Interprofessional Course \(5th semester\)](#)

## 9.4 Research (7<sup>th</sup> semester)

The student must independently investigate a self-chosen topic that is related to the construction industry/profession.

The investigation should be presented in the form of a report according to the formal requirements in the examination section ([Requirements for Projects and Written Assignments](#)), which, together with an oral defence, forms the basis for the assessment of the programme element.

The local programme element may be combined with the bachelor project and thus serve as preliminary work for the final project.

Learning objectives for Research:

### **Knowledge**

The student shall possess knowledge of, and be able to understand:

- professionally relevant concepts of theory of science and methods for communicating construction industry problems
- the value of the particular investigation in Danish and international context, and how to apply this in practice.

### **Skills**

The graduate can:

- apply collected data according to a scientifically based method to illuminate a self-chosen construction technology topic or to tackle a specific construction technology task.
- draw upon relevant international research and/or international developmental trends related to the chosen topic or construction technical task.
- evaluate practice-oriented and theoretical issues and substantiate and select relevant potential solutions.
- substantiate, select, and evaluate data collection methods.



- communicate practice-oriented and professional issues and solutions to partners and users.

### **Competencies**

The graduate can:

- manage complex development-oriented construction technology problems.
- manage the selection, delimitation, analysis, and elucidation of a construction technology topic, independently and in a manner recognized as appropriate to the task and to the profession.

### **ECTS rating**

The elective carries 10 ECTS credits.

### **Examinations**

The elective concludes with one examination: [Examination 9: Research \(7th semester\)](#)

## 9.5 Specialization element supporting the national subject element on 4<sup>th</sup> and 5<sup>th</sup> semester

To maintain your focus on your professional development and its distinct identity, the local programme elements in 4<sup>th</sup> and 5<sup>th</sup> semester are specifically designed to strengthen the connection between the theory you encounter in the education and the practice that continuously develops your profession.

The learning objectives for the local programme element are assessed together with the national subject element and a combined grade is given. Both components must be passed.

The specialization elements in the 4<sup>th</sup> and 5<sup>th</sup> semester are the student's opportunity to concentrate on and specialize in a topic relevant to the construction industry and/or the profession.

The student must independently prepare a project based on the chosen topic and be able to connect the project to the semester's national subject element; multi-storey buildings (4<sup>th</sup> semester) or Renovation (5<sup>th</sup> semester). The basis for the project is a research design.

The student's chosen topic cannot be the same in both 4<sup>th</sup> and 5<sup>th</sup> semester.

Learning objectives for specializations elements in 4<sup>th</sup> and 5<sup>th</sup> semester:

### **Knowledge**

The student shall possess knowledge of, and be able to understand:

- research design
- how to work with research designs
- legislation and any special client requests





- political objectives for the development of sectors of the construction industry in Denmark and internationally
- the way the chosen topic integrates with the national subject element project.

### ***Skills***

The student shall be able to:

- use data collection and analysis methods and tools seen in relation to their own investigation design.
- use methods and tools to demonstrate and document the investigation work.
- evaluate and implement statutory requirements and client requests.
- communicate practice-oriented and professional issues and solutions relating to his/her own investigation design.

### ***Competencies***

The student shall be competent to:

- incorporate the knowledge and skills acquired into the national subject element.
- identify their own learning needs and develop their own knowledge of the chosen topic.

### ***ECTS rating***

The local programme element constitutes 5 ECTS credits.

### ***Examination***

The programme element will be examined in combination with the national subject element on 4<sup>th</sup> and 5<sup>th</sup> semester respectively:

4<sup>th</sup> semester: [Examination 4: Multi-storey Residential Building over 3 Storeys and Specialization element \(4th semester\)](#)

5<sup>th</sup> semester: [Examination 6: Renovation and Specialization element \(5th semester\)](#)

## **9.6 Credit transfer for local programme elements**

Successfully completed programme elements are equivalent to the corresponding programme elements at another educational institution offering the programme in Denmark.

The duty of disclosure and the regulations on automatic application for credit for programme elements completed and/or passed at least the same level (compulsory credit transfer), as laid down in the Executive Order on Admission and the Executive Order on Academy Profession and Professional Bachelor's Degree Programmes, apply accordingly to local programme elements on the Bachelor's Degree Programme in Architectural Technology and Construction Management.



Credit will be awarded for local programme elements following a professional assessment as to whether the programme attended is comparable in terms of content and level with one or more local programme elements.

The credit transfer application must be submitted to the student advisor for the programme no later than one month prior to the beginning of the programme element.

The application must state the following:

- Full name of applicant.
- applicant's CPR (social security) number.
- the programme element for which credit is applied for.
- evidence that the applicant has demonstrated knowledge, skills, and competencies equivalent to the content of the programme element.



## 10 Internship

Based on learning objectives of the learning objectives of the semester ([Internship](#) (6th semester)), the internship student formulate their own learning objectives and clarifies them in collaboration with the internship venue and the educational institution.

### 10.1 The role of the student

The internship student is responsible for:

- establishing contact with the host company and concluding an internship agreement well in advance of the internship period (this includes formulating specific learning objectives)
- drawing up an internship learning plan in collaboration with the host company
- keeping a logbook of their internship
- preparing three internship reports

The Architectural Technology and Construction Management programme team may assist the student in setting up the internship.

Attendance is compulsory throughout the internship.

It is a pre-requisite for final assessment of the internship that it reflects a workload equivalent to 30 ECTS credits distributed over a 20-week session.

### 10.2 The role of the host company

It is the responsibility of the host company to ensure that the requisite conditions are met to enable an internship student to meet the learning objectives described in the internship contract.

The host company is expected to:

- be familiar with the programme and the duties of an architectural technologist and construction manager.
- be an environment relevant to construction industry.
- offer the trainee the requisite coaching, guidance, and feedback.
- have owner and/or personnel with professionally relevant competencies (e.g. architectural technologists, architects, or engineers).
- conclude with the student a written internship agreement describing the learning objectives.
- draw up a learning plan in collaboration with the trainee.



- ensure that the trainee is subject to the same working environment, insurance and health and safety conditions as apply to the company's other employees.
- appoint a person to be the trainee's internship supervisor, who will take part in the written evaluation of the internship for programme quality assurance and quality development purposes.

The host company must ensure that an internship student works to fulfil the internship goals in an appropriate manner. The host company may, in collaboration with a member of the programme teaching staff at the University College, contact an internship student who in the opinion of the host company will be unable to meet the internship goals or is not working appropriately to meet those goals, with a view to providing guidance to the student.

It is not the job of the internship host company to assess whether a trainee will be suited to working as an architectural technologist after graduation.

The host company undertakes not to terminate a student's internship at the institution without first approaching the Architectural Technology and Construction Management programme team at VIA University College to resolve a conflict or an issue arising between the student and the internship host.



# 11 Examinations

Examinations on the Architectural Technology and Construction Management programme are conducted in English or other foreign language than Danish. In the Bachelor's project, the student's spelling and powers of expression will be considered as a minor part of the marking.

## 11.1 Timetable of programme elements and internship, including examinations

The bachelor's degree Programme in Architectural Technology and Construction Management is organized as a full-time higher education programme. For students completing the programme without an individually arranged pathway, the programme, including examinations, will progress as shown in the figure below.

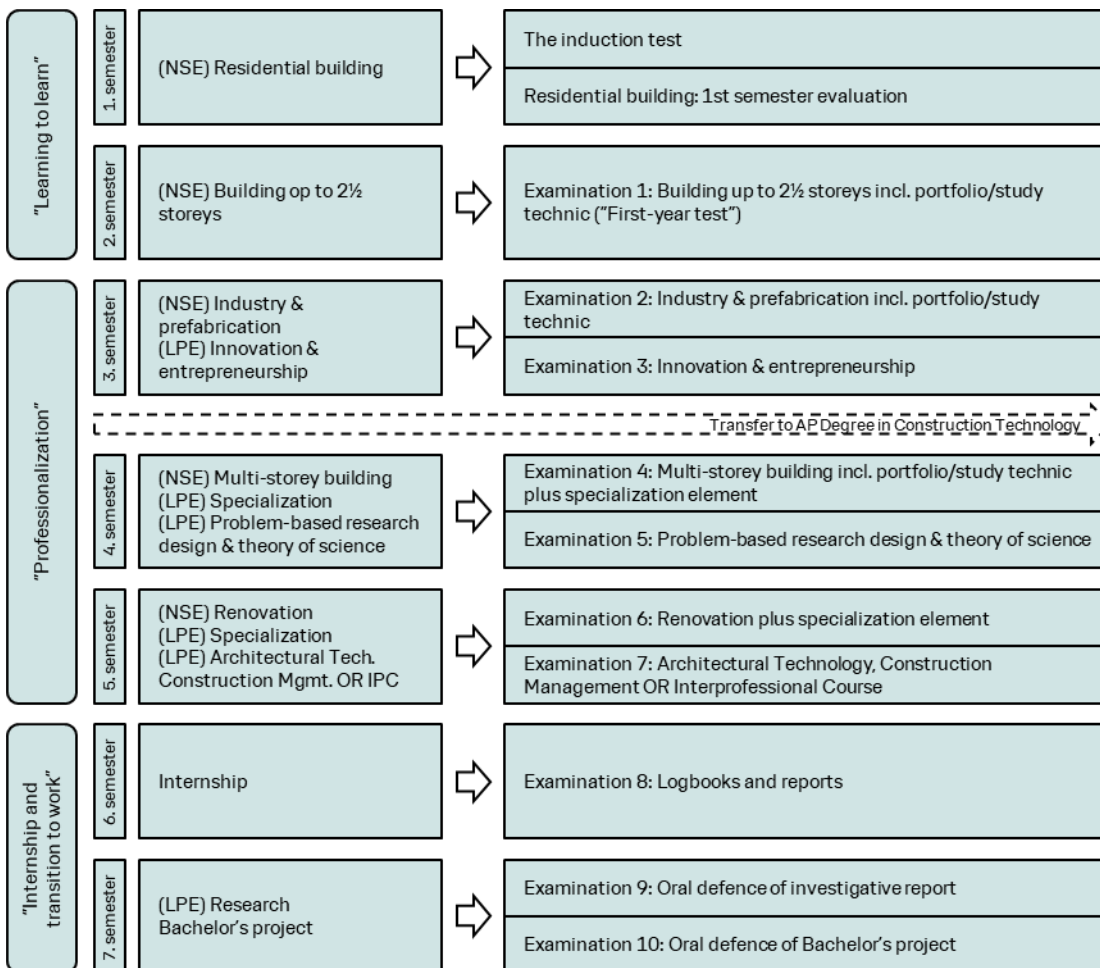


FIGURE 3: ATCM OVERVIEW INCLUDING PROGRAMME ELEMENTS AND EXAMS

The focus in the early semesters is on the student's learning to study in a higher education setting while also acquiring professional knowledge. This part of the programme concludes with the '1<sup>st</sup> year test' (examination 1). This exam needs to be passed prior to the second year of study.



In the following three semesters, the student works in increasingly complex contexts on honing his/her professional profile, while the final two semesters revolve around the internship and the transition to work.

## 11.2 Enrolment for exams

Examinations on the Architectural Technology and Construction Management programme are linked to the learning objectives for one or more programme elements. The element(s) associated with the examinations are set out in [Figure 3: ATCM overview including programme elements and exams](#).

Embarking on a programme element associated with one or more examinations also constitutes automatic enrolment on the associated examination(s). Enrolment (including automatic enrolment) on an examination also consumes one examination attempt. In accordance with the Executive Order on Examinations, it is not possible to disenroll from an examination in cases other than those covered by Section 7 of the Executive Order ([eksamensbekendtgørelsen](#)).

## 11.3 The induction test (studiestartsprøven)

The Architectural Technology and Construction Management programme includes an induction test held within two months of commencement of study.

The induction test takes the form of a written examination on the academic content of the initial study period and an oral examination focusing on motivation and study activity. The oral test is based on the student's reflections on their own study activity (e. g. attendance, level of activity on the learning platform, overall participation in study activities and assignments). The assessment is based on the performance in both the written and the oral part of the induction test, and the student will be awarded a pass/fail mark. Both the written and the oral test must individually be deemed a 'pass' for the student to pass the induction test.

The purpose of the test is to demonstrate whether the student have truly embarked on the programme and to ensure that newly enrolled students get off to a good start in their studies.

Resits are held as per the original test after a brief interval. Resits take place within three months of commencement of studies.

If a student fails to pass the induction test after two attempts (test and resit), they will be disenrolled from the programme.

Rules - including exemptions and appeal option - regarding the induction test is regulated in relevant ministerial orders regarding Admission ([adgangsbekendtgørelsen](#)) and Exams ([eksamensbekendtgørelsen](#))

## 11.4 1<sup>st</sup> semester evaluation

An internal evaluation is conducted at the end of the 1<sup>st</sup> semester. At the evaluation, groups of students must give a digital/oral presentation of the key parts of their work on the semester project. The presentation will subsequently be evaluated by the teaching staff, who will also give feedback to the students regarding their future studies and exams. No mark is awarded in the evaluation.



## 11.5 Examination 1: Residential Building and Buildings up to 2½ storeys (2nd semester)

### **Examination Basis**

The basis for the exam is the project work regarding Residential Building and Buildings up to 2½ storeys as well as the portfolio.

It is a prerequisite for participation in the exam that the examination basis is submitted within the specified deadline. Applicable formatting requirements are described here: [Requirements for Projects and Written Assignments](#).

It is also a prerequisite for participation in the exam that the requirements for study activity and any attendance obligations are met. See section [Study activity](#) for more details.

### **Assessment Basis**

The assessment basis consists of central parts of the examination basis, which the student(s) choose to present digitally and orally in connection with the examination disposition, their oral presentation, and the subsequent examination, which collectively document the fulfilment of the national programme element's learning objectives from the 1<sup>st</sup> and 2<sup>nd</sup> semesters. During the examination, the examiners may inquire into all parts of the examination basis.

### **Assessment Criteria**

The exam is conducted as an oral group exam for 3 to 5 students. The exam is assessed individually, based on the following criteria:

- Method and work process
- Technical solutions and documentation
- Oral presentation and defence

External exam, assessed according to the 7-point grading scale with the participation of an external examiner.

The resit exam is conducted individually, but otherwise follows the same format as the original exam. The resit exam takes place after a brief period in which the student has had the opportunity to improve the examination basis.

## 11.6 Examination 2: Industry and Prefabrication (3<sup>rd</sup> semester)

### **Examination Basis**

The basis for the exam is the project work regarding Industry and Prefabrication as well as the Portfolio.

It is a prerequisite for participation in the exam that the examination basis is submitted within the specified deadline. Applicable formatting requirements are described here: [Requirements for Projects and Written Assignments](#).

It is also a prerequisite for participation in the exam that the requirements for study activity and any attendance obligations are met. See section [Study activity](#) for more details.



### **Assessment Basis**

The assessment basis consists of central parts of the examination basis, which the student(s) choose to present digitally and orally in connection with the examination disposition, their oral presentation, and the subsequent examination, which collectively document the fulfilment of the national programme element's learning objectives from the 3<sup>rd</sup> semester. During the exam, all parts of the examination basis may be addressed.

### **Assessment Criteria**

The exam is conducted as an oral group exam for 3 to 5 students. The exam is assessed individually, considering the student's contributions to the group work as well as the student's independent contribution to the project. The following assessment criteria are used:

- Method and work process
- Technical solutions and documentation
- Oral presentation and defence

Internal exam, assessed according to the 7-point grading scale.

Following the assessment, there will be oral feedback from the instructors.

The resit exam is conducted individually, but otherwise follows the same format as the original exam. The resit exam takes place after a brief period in which the student has had the opportunity to improve the examination basis.

## **11.7 Examination 3: Innovation and Entrepreneurship (3<sup>rd</sup> semester)**

### **Examination Basis**

The examination basis is participation in, development of, documentation of, and presentation of an interdisciplinary project work as well as a one-page learning reflection.

It is a prerequisite for participation in the exam that the examination basis is submitted within the specified deadline. Applicable formatting requirements are described here: [Requirements for Projects and Written Assignments](#).

It is also a prerequisite for participation in the exam that the requirements for study activity and any attendance obligations are met. See section [Study activity](#) for more details.

### **Assessment Basis**

The assessment basis is the student's presentation (pitch) of the interdisciplinary project (oral) and the learning reflection (written), which together document the fulfilment of the learning objectives for the local programme element in *Innovation and Entrepreneurship*.

### **Assessment Criteria**

The exam is conducted as an oral group exam for 3-7 students (subtest 1) and a written individual exam (subtest 2). The exam is assessed individually.

The following assessment criteria are used:





Subtest 1 – 50 pct.

- Understanding of concepts, methods, and processes
- Documentation and communication
- Observability of interprofessional themes

Subtest 2 – 50 pct.

- Documentation and communication regarding interprofessional cooperation.
- Identification of own learning needs

Internal exam, assessed according to the 7-point grading scale.

The resit exam is conducted individually, but otherwise follows the same format as the original exam, after a brief period in which the student has had the opportunity to improve the examination basis.

## 11.8 Examination 4: Multi-storey Residential Building over 3 Storeys and Specialization element (4<sup>th</sup> semester)

### ***Examination Basis***

The basis for the exam is the student's project work regarding the national subject element Multi-Storey Residential Building over 3 Storeys and the project work regarding the local programme element, the Specialization element, including the formulated research design and the individual portfolio.

It is a prerequisite for participation in the exam that the examination basis is submitted within the specified deadline. Applicable formatting requirements are described here: [Requirements for Projects and Written Assignments](#).

It is also a prerequisite for participation in the exam that the requirements for study activity and any attendance obligations are met. See section [Study activity](#) for more details.

### ***Assessment Basis***

The assessment basis consists of central parts of the examination basis, which the student chooses to present digitally and orally in connection with the exam disposition, the subsequent examination, and which collectively document the fulfilment of the learning objectives for the national subject element Multi-Storey Residential Building over 3 Storeys and, in connection with this, the learning objectives for the local programme element Specialization. During the exam, all parts of the examination basis may be addressed.

### ***Assessment Criteria***

The exam is conducted as an oral group exam for 3 to 5 students. The exam is assessed individually, considering the student's contributions to the group work as well as the student's independent contribution to the project.

The following assessment criteria apply to both programme elements:

- Method and work process



- Technical solutions and documentation
- Oral presentation and defence

Great emphasis is placed on independence in problem-solving, including the ability to work methodically, analytically, and professionally in obtaining relevant knowledge.

The exam is conducted as a weighted exam, where the course elements have the following weight in the overall grade for the exam:

- Learning objectives for the national programme element Multi-Storey Residential Building over 3 Storeys: 75 pct.
- Learning objectives for the Specialization element: 25 pct.

Internal exam, assessed according to the 7-point grading scale. It is a prerequisite for passing the exam that both course elements are passed individually.

Following the assessment, there will be oral evaluation and feedback from the instructors.

The resit exam is conducted individually, but otherwise follows the same format as the original exam, after a brief period in which the student has had the opportunity to improve the examination basis.

## 11.9 Examination 5: Problem-Based Research Design and Introduction to the Theory of Science for the Construction Industry (4th semester)

### ***Examination Basis***

The basis for the exam is the preparation of a report (12 - 15 standard pages). The report must describe and present elements typical of a scientific investigation. These elements are:

- Formulated problem statement
- Description and explanation of the chosen method, including theory and empirical data.
- Analysis
- Conclusion
- Reflection and perspectives

It is a prerequisite for participation in the exam that the examination basis is submitted within the specified deadline. Applicable formatting requirements are described here: [Requirements for Projects and Written Assignments](#).

It is also a prerequisite for participation in the exam that the requirements for study activity and any attendance obligations are met. See section [Study activity](#) for more details.



### ***Assessment Basis***

The assessment basis is the oral examination, where the student, through the presentation of central parts of the examination basis and the subsequent examination, documents the fulfilment of the learning objectives for the local programme element Problem-Based Research Design and Introduction to the Theory of Science for the Construction Industry. During the exam, all parts of the examination basis may be addressed.

### ***Assessment Criteria***

The exam is conducted as an individual oral exam. The exam is assessed individually, based on the following equally weighted criteria:

- Relevance and usability of the problem statement
- Choice and application of method
- Academic theoretical argumentation
- Conclusion
- Formalities, including language, style, order, clarity, and adherence to formal requirements.

Internal exam, assessed according to the 7-point grading scale with the participation of the supervisor and co-examiner (internal or external).

The resit exam is conducted in the same manner as the original exam, after a brief period in which the student has had the opportunity to improve the examination basis.

## **11.10 Examination 6: Renovation and Specialization element (5<sup>th</sup> semester)**

### ***Examination Basis***

The basis for the exam is the student's project work regarding the national subject element Renovation and the project work regarding the local programme element, the Specialization element, including the formulated research design.

It is a prerequisite for participation in the exam that the examination basis is submitted within the specified deadline. Applicable formatting requirements are described here: [Requirements for Projects and Written Assignments](#).

It is also a prerequisite for participation in the exam that the requirements for study activity and any attendance obligations are met. See section [Study activity](#) for more details.

### ***Assessment Basis***

The assessment basis consists of central parts of the examination basis, which the student chooses to present digitally and orally in connection with the exam disposition, the subsequent examination, and which collectively document the fulfilment of the learning objectives for the national subject element Renovation and, in connection with this, the learning objectives for the local programme element, the Specialization element. During the exam, all parts of the examination basis may be addressed.



### ***Assessment Criteria***

The exam is conducted as an oral group exam for 3 to 5 students. The exam is assessed individually, considering the student's contributions to the group work as well as the student's independent contribution to the project.

The following assessment criteria apply to both course elements:

- Method and work process
- Technical solutions and documentation
- Oral presentation and defence

Being the last exam before the internship in companies, great emphasis is placed on independence in problem-solving, including the ability to work methodically, analytically, and professionally in obtaining relevant knowledge.

The exam is conducted as a weighted exam, where the programme elements have the following weight in the overall grade for the exam:

- Learning objectives for the national course element Renovation: 75 pct.
- Learning objectives for the specialization element: 25 pct.

Internal exam, assessed according to the 7-point grading scale.

It is a prerequisite for passing the exam that both course elements are passed. Following the assessment, there will be oral evaluation and feedback from the instructors.

The resit exam is conducted individually, but otherwise follows the same format as the original exam, after a brief period in which the student has had the opportunity to improve the examination basis.

## **11.11 Examination 7: Architectural Technology, Construction Management OR The Interprofessional Course (5th semester)**

### ***Examination Basis***

The basis for the exam is the student's project work based on the chosen local programme element.

It is a prerequisite for participation in the exam that the examination basis is submitted within the specified deadline. Applicable formatting requirements are described here: [Requirements for Projects and Written Assignments](#).

It is also a prerequisite for participation in the exam that the requirements for study activity and any attendance obligations are met. See section [Study activity](#) for more details.

### ***Assessment Basis***

The assessment basis is the oral examination, where the student presents all or central parts of the examination basis and the subsequent examination, which documents the fulfilment of the learning objectives for the local programme element Architectural Technology, Construction Management, or the Interprofessional Course. During the exam, all parts of the examination basis may be addressed.



### ***Assessment Criteria***

The following assessment criteria apply:

- Method and work process
- Technical solutions and documentation
- Oral examination

Internal exam, assessed according to the 7-point grading scale.

The resit exam is conducted individually, but otherwise follows the same format as the original exam, after a brief period in which the student has had the opportunity to improve the examination basis.

## 11.12 Examination 8: Internship (6<sup>th</sup> semester)

### ***Examination Basis***

The basis for the exam is the student's production of a logbook as well as three individual reports, which are prepared based on the completion of the internship.

### ***Assessment Basis***

The assessment basis is the same as the examination basis. It is a prerequisite for assessment that the entire examination basis is submitted within the specified deadline.

The exam components have the following weighting in the overall grade for the exam:

- Logbook: 40 pct.
- Report 1: 20 pct.
- Report 2: 20 pct.
- Report 3: 20 pct.

It is also a prerequisite for participation in the exam that attendance requirements are met. See the section [Internships](#) and [Study activity](#) for more details.

If the student does not meet the prerequisites for participation in the exam, these will be attempted to be remedied before the regular exam. The remedy will be equivalent to the original exam prerequisites.

### ***Assessment Criteria***

The following assessment criteria apply:

- Application of theoretical knowledge in practice
- Reflection on own experience and learning in relation to the company.
- Clear and effective communication



Internal written exam, assessed individually according to the 7-point grading scale.

The resit exam is conducted in the same manner as the original exam, after a brief period in which the student has had the opportunity to improve the examination basis.

## 11.13 Examination 9: Research (7<sup>th</sup> semester)

### ***Examination Basis***

The basis for the exam is the preparation of a report (20-30 standard pages).

It is a prerequisite for participation in the exam that the examination basis is submitted within the specified deadline. Applicable formatting requirements are described here: [Requirements for Projects and Written Assignments](#).

It is also a prerequisite for participation in the exam that the requirements for study activity and any attendance obligations are met. See section [Study activity](#) for more details.

### ***Assessment Basis***

The exam is conducted as an oral exam, and the assessment basis is the prepared report and the oral defence. Both parts are weighted equally in the assessment.

### ***Assessment Criteria***

The following assessment criteria apply:

- The relevance of the collected material, quotes, references, records, literature references
- The student's processing, comments, conclusions, and independent assessments in relation to the set goals. These personal statements are assessed regarding their professional value in the given context.
- The student's ability to communicate in writing, orally, and graphically.

Internal exam, assessed according to the 7-point grading scale. The exam is assessed individually by the student's supervisor and an additional assessor appointed by the educational institution.

The resit exam is conducted in the same manner as the original exam, after a brief period in which the student has had the opportunity to improve the examination basis.

## 11.14 Examination 10: Bachelor's Project (7<sup>th</sup> semester)

The bachelor's project, together with the program's other exams, must document the satisfactory achievement of the overall learning objectives of the ATCM programme: [Learning outcome objectives](#).

The bachelor's project and associated exam can be complete both as an individual and as a group for up to three students. In the latter case, significant parts of the project must be presented individually, and the final assessment will be individual as well.



It is a prerequisite for participation in the exam that the examination basis is submitted within the specified deadline. Applicable formatting requirements are described here: [Requirements for Projects and Written Assignments](#).

It is also a prerequisite for participation in the exam that the requirements for study activity and any attendance obligations are met. See section [Study activity](#) for more details.

### ***Examination basis***

The basis for the exam is the completed project.

If the project is completed by a group of students, it must be clearly indicated what elements have been produced individually and what has been produced jointly. While the examination basis is common for the group, the assessment basis must be distinct for each student.

### ***Assessment basis***

The assessment basis is the oral examination, where the student presents all or central parts of the examination basis and the subsequent examination, which collectively document the fulfilment of the program's final learning objectives.

In the case of group work, the assessment basis must be distinct for each student.

Significant parts of the assessment basis stemming from the examination basis must be presented digitally. During the exam, questions may be asked about the entire examination basis.

### ***Assessment criteria***

The assessment criteria are the same as the learning objectives for the program.

In the bachelor's project, the student's spelling and formulation skills are included in the assessment as a minor part.

External exam, assessed individually according to the 7-point grading scale and with the participation of an external examiner.

The resit exam is conducted in the same manner as the original exam, after a brief period, if possible, in the same exam period, where the student has had the opportunity to improve the examination basis.

## **11.15 Requirements for Projects and Written Assignments**

### ***Formal requirements for projects***

- The student's name and student number must be clearly indicated on all submitted examination materials.
- Project work includes drawings, descriptions, and reports created as digital material in a readable digital format.
- All digital material must be printable and representative of the examination basis. It should be clear from the drawings which format is representative of the examination basis and which is representative of a fixed measurable drawing if there is a difference.



### **Formal requirements for written assignments**

- The structure and references of written assignments must follow the current report guide of the education. If another structure is chosen, the choice must be justified.
- For written assignments, 2400 characters including spaces constitute a standard page.
- The total number of pages is calculated from the introduction to the conclusion.

The front page must contain the following information:

- Title
- Name and student number.
- Submission date
- Supervisor
- Education program
- Campus
- Total number of characters

## **11.16 Guidelines regarding exam attempts, absence from exams, failed exams**

By default, the student is registered for exams at the start of the semester.

For the final exam, the student is registered if all previous semesters have been completed according to the curriculum. Additionally, for the final exam, the student must document their study activity through attendance in study groups and contact with advisors. If advisors, based on the two mandatory project evaluations or due to lack of participation in study groups, have doubts about the student's study activity, the student may be summoned to a meeting where they must present their project.

According to the exam regulations ([eksamensbekendtgørelsen](#)), the student has 3 attempts to pass an exam. The educational institution can, however, grant an additional exam attempt if justified by exceptional circumstances.

The followings cover different situations where the exam is not passed:

### **What are the consequences of not participating in the exam due to documented illness or maternity leave?**

The student does not use an exam attempt and is automatically registered for the resit exam/sick exam on the same project.

### **What are the consequences of being absent from the exam?**

The student uses an exam attempt and is automatically registered for a new exam attempt (resit exam) on the same project.





### **What are the consequences of being expelled from an exam?**

The student uses an exam attempt.

Additionally, the student does not have the opportunity to take a new exam attempt (retake exam) on the same project, and it is therefore not feasible to complete a new project in time for the retake/sick exam.

### **If the student does not pass**

The student uses an exam attempt and is automatically registered for a new attempt (retake exam) on the same project.

*If the student does not pass their exam or their project is not approved, they have several options and/or obligations:*

If the student is uncertain regarding the reasons for their grade, they can request a meeting with the advisors. This must be done no later than 14 days after the student has received their grade.

If the student wishes to formally appeal the decision regarding the grade or lodge a complaint regarding the examination, they must contact the associate dean of the program. See also the exam regulations ([eksamensbekendtgørelsen](#)) for information regarding appeals in case of exams.

## **11.17 First-Year test**

Examination 1 must be passed by the end of the student's second year of study. If the exam is passed during a resit within 2 years, it is considered passed on time, and the student can continue their education according to the progression outlined in section 2: [Programme structure](#).

The rule in the exam regulations, ([eksamensbekendtgørelsen, § 6, stk. 3](#)), cannot be waived in reference to the requirement that a student must pass the first-year exam by the end of their second year of study.

Examination 1 must be passed before a student can apply for a transfer, change of study, or leave of absence for reasons other than illness, maternity, adoption, or military service.

## **11.18 Sick and resit exams**

### ***Sick exams***

For students excused from participating in the regular exam due to documented illness or other similar circumstances as per the exam regulations, ([eksamensbekendtgørelsen, § 7](#)), a new exam will be held as soon as possible after the regular exam. Documentation of illness in the form of a medical certificate must be submitted to the study administration no later than 5 working days after the regular exam.

Students are automatically registered for the new exam.

In exceptional cases, the sick exam will be scheduled during the next regular exam for the programme element. However, this does not apply to sick exams related to the final exam (bachelor's project), which are scheduled in the same exam period.

Students are obligated to inform themselves about the time and place of the sick exam as soon as possible after the regular exam via VIA's platforms.



### **Resit exams**

For students who have not passed an exam, a resit exam will be held as soon as possible. If a sick exam is held, this counts as the next attempt for students who did not pass the regular exam.

Students are automatically registered for the new exam.

In exceptional cases, the retake exam will be scheduled during the next regular exam for the course element. However, this does not apply to retake exams related to the final exam, which are scheduled in the same exam period.

Students are obligated to inform themselves about the time and place of the retake exam as soon as possible after the regular exam via VIA's platforms.

## 11.19 Cheating, plagiarism, and disruptive behaviour during exams

### **Cheating**

Exam cheating as per the exam regulations ([eksamensbekendtgørelsen, § 34](#)) includes, among other things, when the student:

- Plagiarizes, including reuses their own text (self-plagiarism) without citation and quotation marks,
- Forges,
- Conceals or misleads about their own efforts or results,
- Engages in unauthorized collaboration,
- Receives or attempts to receive help during an exam or test, or helps others when it is not a group exam,
- Uses unauthorized aids,
- Wrongfully gains prior knowledge of the exam task,
- Provides false attendance information, or
- Attempts to bypass, deactivate, or otherwise hinder the intent of the educational institution's use of electronic surveillance programs.

Exam cheating results in the student's performance not being assessed, and they will be marked as having used an exam attempt.

The student may also receive a written warning.

Under aggravating circumstances or in cases of repetition, the VIA University College may decide to expel the student temporarily or permanently from the program.

### **Disruptive behaviour**

During exams and tests, the student must behave considerately, including following the instructions given by the exam supervision, examiner, and censor.



Failure to comply may result in expulsion from the exam, and the student will be marked as having used an exam attempt.

## 11.20 Special examination conditions

Where students have a need for special examination conditions for reasons of health, language difficulties or similar, the Architectural Technology and Construction Management programme will offer these conditions to ensure equality between these students and those who do not need special examination conditions.

Special examination conditions will be offered to each student individually on application and based on a specific assessment as to whether, and to what extent, the special conditions are needed. Special examination conditions must ensure only that the students concerned have the same opportunity to complete the examination satisfactorily as those without a need for special conditions. The provision of special examination conditions must not affect the examination standard or attainment requirements.

Applications for special examination conditions must be submitted to the student advisor for the programme no later than one month prior to the examination.

The application must state:

- the applicant's full name
- the applicant's student number
- the examination at which special conditions are being requested and the nature of those conditions.
- why special examination conditions are required.

## 11.21 Complaints regarding examinations

### ***Complaints regarding examinations***

The student has the right to continue their education program while a complaint or appeal is being processed by the Architectural Technology and Construction Management program in cases of examination complaints submitted in accordance with the exam Regulation ([eksamensbekendtgørelsen, § 40 or § 43](#)).

A complaint about a continuous assessment can only be made as part of a complaint about an exam in the relevant subject element.

A student can file a written complaint with the ATCM programme regarding legal and academic matters, including the exam process, for an exam in a subject element or partial exam (subtest). The complaint must be filed within 2 weeks after the grade has been communicated. The deadline is calculated from the earliest point when the ATCM programme has informed that the grade will be communicated.

If the complaint involves academic matters, the ATCM-programme will immediately request a statement from the examiners. The examiners must provide their statement within 2 weeks, not including July. The examiners will address the academic points raised in the complaint. The complainant will then have at least 1 week to comment on the examiners' statements.



The ATCM-program, represented by the associate dean, will decide based on the complaint, the examiners' academic statements, and any comments from the complainant. The decision may result in:

- An offer of re-assessment (for written assignments)
- An offer of a re-exam
- The complaint being rejected
- A combination of the above if the exam includes both a written assignment and an oral defence.

### ***Appeals board for exam complaints***

Academic issues in the institution's decision can be brought before an appeals board. Legal issues can be appealed to the Ministry of Higher Education and Science. The student must file their written appeal to the institution within two weeks after receiving the decision from the ATCM-programme.

The appeals board is set up on a case-by-case basis and consists of 2 appointed examiners, 1 qualified teacher, and 1 student from the ATCM-programme. The board will decide based on the material used in the original decision and the student's complaint. The decision must be communicated to the ATCM-programme and the complainant within 2 months, not including July.

The board's decision may include:

- An offer of re-assessment (only for written exams).
- An offer of a re-exam.
- The complaint being rejected.
- A combination of the above if the exam includes both a written assignment and an oral defence.

*Academic Decisions* by the appeals board cannot be appealed to another administrative authority.

*Legal Decisions* by the appeals board can be appealed to the ATCM-programme. This appeal must be filed within 2 weeks after receiving the decision from the appeals board. The program's decision can then be appealed to the Ministry of Higher Education and Science as per examination regulations ([eksamensbekendtgørelsen, § 48](#)).

### ***Re-Assessment or Re-Exam***

An offer for re-assessment or re-exam must state that it may result in a lower grade. The offer must be accepted within 2 weeks after the decision is communicated. The re-assessment or re-exam should occur as soon as possible. The ATCM-programme must withdraw any previously issued exam certificates. New assessors will be appointed for both re-assessment and re-exam. The re-assessment must be based on the original assignment text and response. The new assessment must include a written justification.

Academic issues in the re-assessment or re-exam cannot be appealed again to the ATCM-programme or any other administrative authority.



Legal issues can be appealed to the ATCM-programme, which will decide. This decision can then be appealed to the Ministry of Higher Education and Science as per examination regulations ([eksamensbekendtgørelsen, § 48](#)).

### ***Complaints to the Ministry of Higher Education and Science***

Final decisions by the ATCM-programme can be appealed to the Ministry of Higher Education and Science regarding legal issues. The complaint must be filed within 2 weeks from the day the decision is communicated to the complainant. The complaint is filed with the ATCM-programme, which will prepare a statement that the complainant will have the opportunity to comment on within at least 1 week. The program then forwards the entire case for review by the ministry.

## **12 Internationalization**

The following sections outline the opportunities for completing parts of the programme abroad.

Architectural Technology and Construction Management is one of the few remaining English-taught programs in the University College sector in Denmark, and it is the only English-taught program left of its kind in Denmark.

The prospects of the ATCM-program at VIA, including its continued existence, are closely tied to the success of graduates in finding employment in the Danish job market.

As an international student, you have already demonstrated international outlook and mobility. Although the opportunities described in this section equally apply to you, we encourage you to consider participating in international activities with a focus on supporting a future in the Danish labour market.

### **12.1 Exchange**

Subject to an approved application, the following semesters may be completed at a foreign institute of higher education:

- 4th semester
- 5th Semester

Applications to attend programme elements abroad must be lodged through VIA's online registration system, MoveOn with deadlines twice a year in March and September. More information is available on MyVIA.

By default, the student must have attained a mark of at least 7 in the preceding semester to be eligible for an exchange visit. Should a student wish to go on exchange for more than one semester, this must be approved by the associate dean of the programme based on an individual application.

### **12.2 Other international opportunities**

Subject to an approved application, the following semesters may be completed abroad:

- 3rd semester: The interprofessional course (5 ECTS credits)



- 6th semester: Internship (30 ECTS credits)
- 7th semester: Research (10 ECTS credits)

### ***The Interprofessional Course (det tværprofessionelle element - DTE)***

The interprofessional course is a three-week activity during the 3<sup>rd</sup> semester that involves cooperation with students from other educational programmes on a communal problem.

Applications to attend programme elements abroad must be lodged through VIA's online registration system, MoveOn. More information is available on MyVIA.

### ***Internship***

The student can complete their internship at a relevant company abroad.

The internship contract needs to be lodged and approved on the platform, [Praktikportalen](#), during the semester preceding the internship.

If the student is eligible and wishes to apply for Erasmus+ stipend then the application needs to be lodged through VIA's online registration system, MoveOn. More information is available on MyVIA.

### ***Research***

The student can apply to conduct their research abroad.

Application for this option should be submitted to the associate dean no later than one month before the end of the previous semester.

## **12.3 Double Degrees**

The ATCM-programme offers parallel programs as Double Degrees. A Double Degree program provides students with the opportunity to obtain both a VIA bachelor's degree in architectural technology and construction management, as well as a fully recognized diploma from a foreign institution.

The Building Constructor Education program at VIA continuously establishes cooperation agreements regarding Double Degrees with other foreign educational institutions. Consult MyVIA regarding the current agreements.

Applications for participation in a parallel program must be registered in VIA's online registration system in MoveOn.

For further information about the Double Degree, contact the study advisor and the International Office ('Global engagement').



## 13 Teaching and Learning Methods in the Program

The ATCM-programme is based on Problem-Based Learning (PBL). This means that the focal point in each of the national subject elements is the interdisciplinary semester project. In working with the project's challenges, the student develops and demonstrates acquired knowledge, skills, and competencies across the semester's subject areas. To prepare the student as best as possible for the profession, work is primarily done in groups.

Other teaching and working methods are organized in relation to the project work. The teaching of theory is primarily placed at the beginning of a subject element, as it is seen as general contributions within the semester's theme and the program's professional field. Furthermore, the student must independently and in collaboration with fellow students, as well as with the teachers as supervisors, extensively acquire and process the specific material that may be relevant for the completion of the project.

At the ATCM-programme, VIA University College, teaching is differentiated based on the students' prerequisites in the following ways:

- Project work as group work
- Individual supervision
- Teaching materials, including e-learning objects
- Special teaching offers
- Choice of professional orientation (architectural technology or construction management)
- Local programme elements (professional specialization)

### 13.1 Study activity

There is mandatory attendance during the internship.

Students are required to be active in their studies. A student in the ATCM-programme is considered active as long as they:

- Submit the assigned tasks
- Participate in educational-related meetings and conversations with supervisors, including scheduled teaching activities
- Participate in the program's exams

Since the program is project-organized with a significant amount of group work, it is important for the student's learning to participate in the learning environment at the educational institution.

The learning environment is defined by a number of parameters that can become the subject of dialogue with individual students about their study activity. The above frameworks can be seen as requirements, while the following can be seen as guidelines, but are just as strongly necessary for the pedagogical environment around the program to function for both students and supervisors.



- Well-prepared attendance at scheduled teaching activities
- Participation in and contribution to group work
- Keeping informed, including responding to student emails and content on the program's LMS (Learning Management Platform) ItsLearning

Overall, experience shows that the above parameters contribute to a constructive and motivating study environment.

Unsatisfactory study activity and extension of studies can affect whether a student is entitled to State Educational Grant (SU).

If a student has not passed at least one exam in the ATCM-programme within a continuous period of at least one year, the student will be expelled from the program according to the rules in the admission regulations ([adgangsbekendtgørelsen](#)). The student will be informed about the lack of study activity before expulsion.

A student can at any time inquire about their own study activity by contacting the teaching team.

## 13.2 Literature in foreign languages

The instruction in the ATCM-programme is conducted in English.

As part of the program, there may be texts in Danish due to the limited availability of specific sources. Understanding these texts may be required for fully achieving some of the learning objectives.





## 14 Changing Programs, Transfers, and leave of absence

### 14.1 Changing programmes within VIA University College

If a student from different educational programme wishes to transfer to the ATCM-programme at VIA University College, they must apply to the ATCM-programme. See the requirements for the application for credit: [Credit transfer for local programme elements](#).

Changing programs to the ATCM-programme requires eligibility for credit for at least one complete programme element. Additionally, changing programs requires that the student be enrolled in another higher education program at the same or a higher level than the ATCM-programme.

Changing programs to the ATCM-programme also requires that there be available spots at the semester to which the student will be enrolled.

### 14.2 Transfers from other ATCM-programmes

Transfer to the ATCM-programme at VIA University College from the same program at another Danish educational institution can occur only after the student has passed exams equivalent to the first year of study in the ATCM-programme.

Transfers require that there be available spots at the semester to which the student will be enrolled.

### 14.3 Application for changing programs and transfers

Applications for changing programs or transfers to the ATCM-programme at VIA University College must be submitted to the study administration no later than 14 days before the start of the programme element.

The application must include the following:

- The applicant's full name
- The applicant's CPR number (Danish personal identification number)
- Transcript of grades related to the Architectural Technology and Construction Management programme
- Basis for admission
- Information about the desired start date

### 14.4 Leave of absence

A leave of absence means that a student cannot participate in classes and exams during the leave period, but the student remains enrolled in the program. This means that the student cannot be enrolled in other full-time education programs during the leave period. After the leave period ends, the student will resume their studies, as far as possible, from the point in the program where the leave began.



If it is not possible to resume from the point where the leave began, the program will, as far as possible, help to create a study plan with other programme elements to avoid extending the student's education. This may involve periods without classes.

The student is required to participate in classes immediately after the leave ends and is not entitled to complete the program under the curriculum that was in effect when the leave began if a curriculum has been instituted in the meantime.

Leave of absence is granted upon application. Leave can be granted no earlier than after the student has passed the exams for the first year of study, unless the student has a "right to leave," or the program grants an exemption from the rule, which must be justified by exceptional circumstances.

Since a leave of absence is a period of inactivity from the program, a student on leave is not entitled to the state educational grant (SU). Periods with or without study activity where the student receives SU – including birth or mixed support – are considered maternity leave and are not covered by this provision.

If a student wishes to terminate a leave of absence, this can be done by applying to the program.

#### ***Right to leave of absence in special situations***

A student is entitled to a leave of absence regardless of the time in the program if it is justified by maternity, adoption, or conscription.

Leave due to maternity or adoption can be granted for up to 12 months, ending no later than 12 months after the birth or adoption. The reason for the leave must be documented with a birth certificate, maternity record, adoption certificate, or other relevant documentation.

Leave due to maternity, adoption, or conscription is deducted from the calculation of the maximum study period.

An application for leave justified by documented maternity, adoption, or conscription must be granted by the ATCM-programme. The end of the leave period should be planned to minimize periods without classes for the benefit of the student, including the student's right to state educational support (SU).

#### ***Additional leave of absence***

Leave without justification can be granted no earlier than after the student has passed the first year of study. Moreover, leave periods can only be granted for entire course elements and/or entire semesters.

If the student is granted leave without justification, the period is included in the calculation of the maximum study period.

#### ***Application for leave of absence***

An application for leave of absence must be written and justified. The ATCM-programme may require that the application be completed on a specific form, including digitally.

Applications for leave of absence cannot be submitted retroactively and must be submitted at least 14 days before the start of the leave period.



## 15 The legal basis for the curriculum

### 15.1 Exemptions from the curriculum

The ATCM-programme can grant exemptions from the rules in this curriculum national and institutional sections, which are established by the Building Constructor Education program, VIA University College, or nationally in cooperation with all providers of the ATCM-programme, when justified by exceptional circumstances.

### 15.2 Implementation and transition arrangements

According to the national section of the study program:

- The national part of the curriculum was last revised on January 1, 2020.
- The institutional part of the curriculum comes into effect on September 1, 2024.
- Simultaneously, the curriculum of August 2016 and the institutional part of September 1, 2023, are repealed.

As a transition arrangement, the following applies:

- All enrolled students from September 1st, 2024, are included and transitioned to this curriculum.
- Students who need to complete the second or third attempt of an exam as of September 1st, 2024, can do so until January 31st, 2025, according to the guidelines of the previous curriculum program. Thereafter, any outstanding exam attempts will follow the guidelines of this curriculum.

### 15.3 Legal basis

The present curriculum has been laid down based on:

- The Academy Profession Degrees and Professional Bachelor's Degrees Act (most recently promulgated in Statutory Order No. 790 of 10/12/2019)
- The Executive Order on Technical and Commercial Academy Profession Degree Programmes and Professional Bachelor's Degree Programmes (Executive Order No. 708 of 09/06/2023)
- The Executive Order on Admission to Academy Profession and Professional Bachelor's Degree Programmes (Executive Order No. 56 of 10/01/2024)
- The Executive Order on Examinations on Vocational Higher Education Programmes (Executive Order No. 863 of 14/06/2022)
- The Executive Order on Marking Schemes (Executive Order No. 1125 of 04/07/2022).