SEMESTER SYLLABUS

SEMESTER 7

Semester theme:
Elective component and Bachelor’s project

Bachelor’s Degree Programme in Architectural Technology and Construction Management
VIA University College
Revised February 2019
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Welcome to Semester 7!

To conclude the Bachelor’s Degree Programme in Architectural Technology and Construction Management, you are now about to start your elective programme component and your Bachelor’s project. Together, these two projects will demonstrate that you have met the overall learning objectives of the programme. The elective and the Bachelor’s project will be marked separately.

In the elective programme component, you must demonstrate your ability to investigate and process a given structural engineering problem on a relevant theoretical and analytical basis and to communicate this in report format.

You can choose a topic/problem connected with your placement host company and the tasks you worked on there, and/or one connected with your Bachelor’s project.

In the Bachelor’s project, you must demonstrate your ability independently, guided by your principal and assistant semester supervisors, to organize and plan the design and execution of a specific construction and engineering project. We encourage you to carry out the Bachelor’s project - and perhaps the elective - in dialogue with an external construction client, for example, or a commercial company, perhaps your placement venue.

The way Semester 7 is organized requires you to join a study group of four students – partly so that you can support and inspire each other, and partly so that you can act as opponent for each other’s Bachelor’s projects at the two compulsory project evaluations during the semester.

Recommended reading
As guidance to you and others on the different semesters of the programme, a syllabus like this one has been prepared for each semester. Each semester syllabus consists of two main sections:

1. The Semester, which is introduced with a description of the overall structure of the semester, followed by a brief description of the prerequisites we need you to have in place in order to start the semester. The content of the semester is then described in more detail. This section concludes with a description of how your attainment of the learning objectives will be assessed in the examinations and evaluations, and of the criteria on which assessment will be based.

2. The Teaching which is the semester team’s timetable.

1. THE SEMESTER

The semester consists of two parts: the elective programme component (10 ECTS credits) and the Bachelor’s project (20 ECTS credits).
1.1 Admission requirements

In order to be enrolled on Semester 7, the student must have passed Semesters 1-6 (the national subject components and local subject components) or otherwise attained approved credit. You must have passed the Semester 7 elective component before you can sit the Bachelor’s project examination.

1.2 Study activity / attendance

The teaching and working formats used in this semester are shown in the Study Activity Model for the semester.

The Study Activity Model indicates that we expect you, the student, to spend approximately 825 hours studying in each semester, and also that there are a variety of teaching and working formats, indicating that not all learning is initiated by the teaching staff and/or has a teacher present. This means that you, the student, also bear considerable responsibility for your own learning.

Thus, the Study Activity Model also shows what we expect of you as a student and what you can expect of us as regards your attainment of the learning objectives.

Figure 1: The semester’s Study Activity Model

As in previous semesters, you are expected to be in active study. This means that we expect you to:
- apply yourself seriously to your elective programme component and Bachelor’s project;
- contribute to knowledge sharing in class by taking an active part in dialogue in the compulsory study groups and project evaluations during the semester;
- be pro-active about supervision;
- obtain the literature/materials you need for the elective and the bachelor project;
- submit the elective and the Bachelor’s project on time;
- be prepared and motivated when taking part in programme-related meetings and discussions (status meetings, design meetings, evaluations etc.);
- reflect on your studies and evaluate them.

The way to ensure the best conditions for learning in this semester is to be in a scholarly learning environment. This is best achieved through attendance at the College, where you are close to the supervisors and your fellow students.

NB! Supervisors have a duty to inform the College of any inadequate study activity or poor attendance. You must be able to show evidence of your study activity through participation in your study group, supervision sessions and project evaluations, and by means of minutes, logbook entries, email correspondence etc.

1.3 Quality assurance and quality development of the programme

1.3.1 Your participation

You and your fellow students play a vital role in the quality assurance and quality development of the programme. It is important for management and teaching staff to receive your feedback so that, together, we can both ensure that you and your fellow students obtain a high level of educational benefit, and create the conditions for a satisfactory teaching and learning environment.

The table below shows how you as students will be involved in the evaluation of teaching activities at VIA and outside, who will be the main users of your feedback, and when the evaluation will be carried out.

<table>
<thead>
<tr>
<th>Element</th>
<th>Method</th>
<th>Main users</th>
<th>When held</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expectation adjustment at the start of a new course of instruction at the institution</td>
<td>Dialogue, based on the semester syllabus, at the introductory session of the semester</td>
<td>Teachers and students</td>
<td>At the start of each semester</td>
</tr>
<tr>
<td>Halfway evaluation of course of instruction at the institution</td>
<td>Method chosen by teaching team</td>
<td>Teaching team</td>
<td>Approx. halfway through semester, as shown in indicative timetable</td>
</tr>
<tr>
<td>Final evaluation of course of instruction at the institution</td>
<td>Online questionnaire</td>
<td>Programme management and teaching team</td>
<td>Each semester to undergo final evaluation once in every three times it is taught. If due to be held, will be shown in indicative timetable.</td>
</tr>
<tr>
<td>Ongoing dialogue</td>
<td>Dialogue between teachers, students and programme managers, e.g. day-to-day or via email</td>
<td>Teachers and students</td>
<td>Ongoing</td>
</tr>
</tbody>
</table>
1.3.2 Local student council

At VIA, there is one combined Student Council per campus with class representatives from all study programmes, but the individual programmes also have local student councils.

The VIA Built Environment management teams at Horsens, Aarhus and Holstebro continually involve the local student council in discussions about the quality assurance and quality development of the programme, including:

- employer involvement,
- graduate involvement,
- final evaluation of teaching,
- final evaluation of placements in Denmark and abroad,
- final evaluation of study visits abroad,
- student satisfaction survey,
- dropout analysis,
- the Quality Report.

1.4 Elective programme component

1.4.1 Choice of topic

All choices regarding the elective programme component must be discussed with your supervisor and approved by him/her in advance, during Semester 6.
There is a free choice within the professional fields of the programme. As in previous semesters, you may opt to concentrate on structural design or on construction management. With certain provisos, it is possible for you to combine the elective with the Bachelor’s project, but you may also opt to tackle two completely separate topics.

You may find inspiration for the topic on the UC-Viden student portal, where previous years’ elective components are uploaded.

When choosing the topic, you must ensure that, in tackling the topic, you:
- can demonstrate your competence to prepare an industry-relevant elective report;
- can show your ability to investigate and process a given problem on a relevant theoretical and analytical basis and to communicate this in report format.

It is crucial to your choice of topic that the programme has available, or can find, a supervisor with expertise in the relevant field.

### 1.4.2 Supervisors

You will be allocated your own supervisor for the elective programme component.

### 1.4.3 Format

The elective programme component takes the form of independent investigations involving study of relevant specialist literature such as books, journals, articles, experiment reports etc. Recording of practical examples may also be involved, as may practical trials where feasible.

The elective is to be submitted in the form of a written report or similar, with no oral presentation or defence.

The elective paper is required to be based on science-theory principles, whether in the form of the methodology you have learnt to apply by using the Report Guide on Studienet, or in analytical form if that makes more sense. It may be in the form of a construction brief for a specific project, including comprehensive feasibility studies, analyses and descriptions of the building to be designed or put out to tender. It could also be a visualized and described analysis of methods, examples and lessons learnt in carrying out a major project, presented in a form showing your proficiency in analysing and applying your knowledge and conveying it to others in a professional and accessible format.

### 1.4.4 Submission and logging of work

Note that the elective paper must be uploaded in two places, in the following order:

1. On UC-Viden
2. On WISEflow
1. Approximately 1 month prior to examination of the elective programme component, the elective paper (complete text in a PDF file) is to be uploaded/logged on UC-Viden.

2. The elective is subsequently to be uploaded to WISEflow. Please see the guidance on Studienet.

When the examination is over, the report will be approved by the secretary in Student Administration. Only projects that pass will be made visible on UC-Viden.

1.4.5 Language

The elective paper may be written in Danish or English. Should you wish to write the elective in another foreign language (e.g. Norwegian), this is possible provided the allocated supervisor and examiner know and will accept the desired language.

1.5 The Bachelor’s project

The Bachelor’s project is carried out independently, but is organized in a way that requires you to join a study group of four students. The group will be set up at the beginning of the semester by students, principal supervisor and assistant supervisor in collaboration.

Group and personal plans are also devised at the beginning of the semester, including a final supervision and evaluation plan for the Bachelor’s project. The plan is to be approved by the principal supervisor. In principle, the study group has one weekly supervision session with the principal supervisor. The assistant supervisor gives guidance by arrangement and according to the approved plan.

We have chosen this arrangement partly to provide you with a forum for dialogue where you can give each other daily support and inspiration in your project work, partly because you will have to act as opponents for each other’s Bachelor’s projects in two compulsory project evaluations during the semester.

1.5.1 Choice of topic

The choice of Bachelor’s project topic is to be discussed with and approved by the principal supervisor, and assistant supervisor if appropriate, at the beginning of Semester 7.

There is a free choice within the professional fields of the programme. As in previous semesters, you may opt to concentrate on structural design or on construction management.

You must formulate your own problem statement, which must be key to the programme and to the profession. This may be done in collaboration with an external construction client or a commercial company, perhaps your placement venue.

The problem must concern a new build or a renovation project (holistic in nature) and must be based on structural engineering and/or construction technology problems. In addition, the problem must be of an appropriate level of difficulty.

When devising the problem, you must ensure that, in tackling the project, you:

- can demonstrate your understanding of practice in the profession and your ability to reflect on it;

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¹ See the Activity Plan on Studienet for this semester’s submission deadline.
- can demonstrate your application of theory and method to a practice-oriented problem;
- can demonstrate your ability independently, guided by your principal and assistant supervisors, to organize and plan the design and execution of a specific construction and engineering project;
- will be dealing with at least 2-3 of the traditional building project phases (corresponding to a representative subset of the programme objectives);
- can demonstrate the full range of competencies of the Bachelor in Architectural Technology and Construction Management.

1.5.2 Principal and assistant supervisors
You will be allocated your own principal and assistant supervisor for the Bachelor’s project.

1.5.3 Format
No precise requirements are set regarding a particular quantitative content, procedure, structure or presentation. However, it is recommended that the format should be similar to that of previous semester projects.

In previous semesters, particular attention was paid to analysis and process (the way you tackled the problem). In the Bachelor’s project, it is assumed that your decisions will be based on feasibility studies, analysis and theory, and more attention is therefore paid to your attainment of a professionally produced and well-founded result/product (the actual solution to the problem).

You can use your Portfolio to document your decisions.

1.5.4 Submission and logging of work
The Bachelor’s project (both an abstract and the complete project as a zipfile) must be submitted/uploaded to WISEflow prior to the examination.

1.6 Examinations and evaluations
During Semester 7 there is one examination, at which you present your Bachelor’s project and are examined on it, but two independent marks are awarded, one for the elective programme component and one for the Bachelor’s project.

It is possible to carry out the Bachelor’s project and sit the final examination individually. However, it is also possible to carry out the Bachelor’s project as a piece of groupwork (in a group of no more than three), but in such a way that significant parts are presented and assessed individually. The final examination will thus be marked on both group and individual contributions, with one independent mark per student.

In the case of groupwork, it must be clearly apparent who in the group has done what, and it is also a requirement that you must be able to answer questions on your group members’ contributions where this has a bearing on your chosen part of the project.
Table 2 is an overview showing the various study components and whether they are assessed before or during the final examination.

Table 2: Study components and their assessment

<table>
<thead>
<tr>
<th>Study component</th>
<th>Assessed before final examination</th>
<th>Assessed at final examination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examination 9: Elective programme component</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Bachelor’s project</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Source: prepared at VIA Built Environment

General information on examinations is available on Studienet (Horsens), (Aarhus) and (Holstebro).

1.6.1 Guidelines

You will be entered for the examination by default at the start of the semester if all previous semesters have been completed in accordance with College regulations, but you must show evidence of your study activity by means of study group attendance and contact with your supervisors. If the supervisors are in doubt about your study activity on the basis of the two compulsory project evaluations or because of poor study group participation, you may be summoned to a meeting at which you must present your project.

It is important for all concerned that the examination runs as smoothly as possible. Attention is therefore drawn to the following points:

1. What is the consequence of non-participation in the examination by reason of documented sickness or maternity?
   - You have not used up your first attempt.
   - You will automatically be enrolled on a resit/replacement exam based on the same project.

2. What is the consequence of non-attendance at the examination?
   - You have used up one attempt.
   - You will automatically be entered for a second attempt (resit) based on the same project.

3. What is the consequence of being excluded from an examination?
   - You have used up one attempt.
   - You do not have the option of a second attempt (resit) based on the same project, and for reasons of time it is therefore not realistic to carry out a new project for a resit/replacement examination.

4. You have used up one attempt.
   - You will automatically be entered for a second attempt (resit) based on the same project.
   - In accordance with Section 18 of the Executive Order on Examinations, you, the student, can take the same test/examination no more than three times. In exceptional cases, however, the College can permit a fourth examination attempt where special circumstances apply.

If you have failed your examination or your project has not been approved, you have several options and/or obligations:

- If you do not understand the basis on which your mark was awarded, you may apply for a meeting with the supervisors. This must be done as soon as the supervisors have finished examining the class.
- Should you wish to make a formal complaint, you must direct it to the programme management team. See also the Executive Order on Examinations for information on complaints about examinations.
Special considerations applying to submission of the elective programme component:
If you fall ill or are otherwise prevented from submitting the elective programme component on time through no fault of your own, you must contact your supervisor. The supervisor and programme management will then decide whether the elective can be submitted at a later date or whether a replacement examination may be an option. The sickness must be documented by means of a doctor’s note.

1.6.2 Assessment of the elective

The elective programme component is assessed by the supervisor and an examiner appointed by the College. You yourself do not take part in the assessment.

A mark is awarded on the following basis:
- the relevance of the collected material, quotations, references, records and literature citations.
- your treatment, comments, conclusion and independent judgements in relation to the objectives set. These personal observations are assessed according to their professional value in the given context.
- your ability to communicate in writing and graphically.

One mark is awarded specifically for the elective programme component. Neither the Bachelor’s project nor individual parts thereof may therefore be taken into account in the marking of the elective. The minimum passmark for the elective programme component is 02.

1.6.3 Assessment of the Bachelor’s project

The Bachelor’s project, significant parts of which must be presented digitally, is assessed by the principal and assistant supervisors (examiners) and either one or two external examiners on the basis of your exposition and presentation of the project. The Bachelor’s project will be assessed on the 7-point scale.

Examination dates and guidance will be set out in the examination plan, which will be published approximately 4 weeks ahead of the examination.

2 Teaching

2.1 Indicative timetable

The indicative timetable will be handed out/published by your class tutor.