

Capstone Course

Course Overview

The Prominent course is divided into two parts: the Basic Module and the Case Study (see Fig. 1).

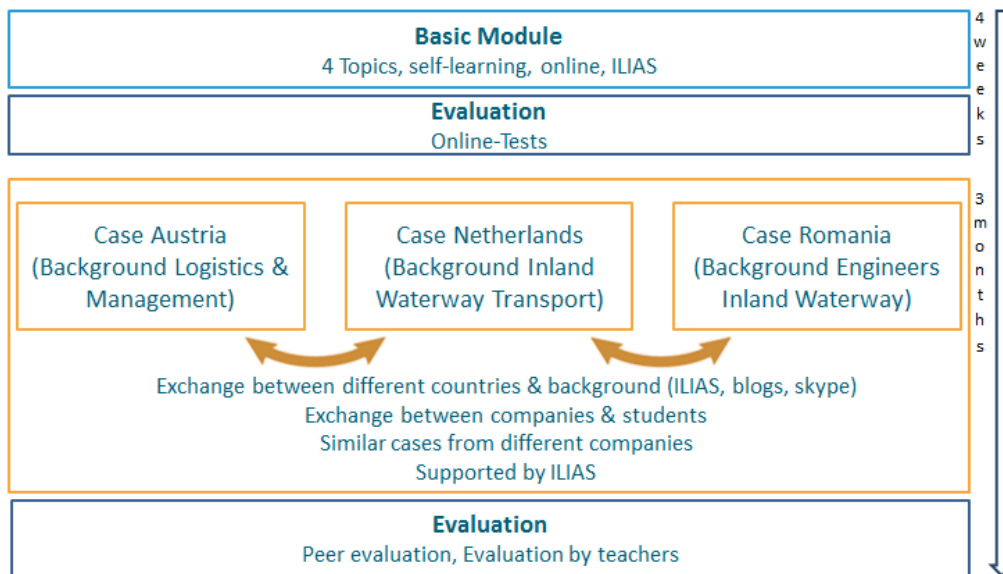


Figure 1 - Capstone Course Overview

There are **four learning modules within the Basic Module** on the following topics:

- Use & comparison of transport modes
- Economic geography and infrastructure of waterways
- Multimodal Transport
- Innovative transport concepts and green logistics

At first students have 4 weeks to work on the Basic Module - 1 week per learning module. Each learning module is finished by taking the test. Afterwards, students work on one of the provided Case Studies. Each case has a similar task for students but they were elaborated with different companies. A blog is provided on the ILIAS-platform to enable an exchange between students and the industry during working on the Case Study. Students have 3 months to work on the Case Studies. At the end, students will present their results by holding a 20 minutes-presentation. The case study is evaluated by teachers. In addition, student evaluate their group members using a Peer-evaluation form. The final grade consists of the results in the Basic Module, the Case Study and the Peer-evaluation.

Provided Material

Each learning module consists of 4 sections which should be worked through chronologically:

1. **Worksheet** - the worksheet includes information about the learning aims of the module as well as an overview of the relevant learning materials for the test.
2. **Learning Material** - In this section, the mandatory learning materials for the test are provided.
3. **Test** - Each module is finished by taking a test consisting of 15 questions, which are divided into easy, average and difficult questions. Students get one attempt and have 15 minutes to finish the test. Participants have to reach 60 % or more to pass the test.

In addition, a section including other useful links for each module is provided.

Three case studies are provided on different topics including a teaching note, the Peer-evaluation form and other documents including relevant information for the Case Studie (e.g. Data-Sheets for a specific Case Study). The topics, tasks and evaluation of the case studies are described in teaching note.

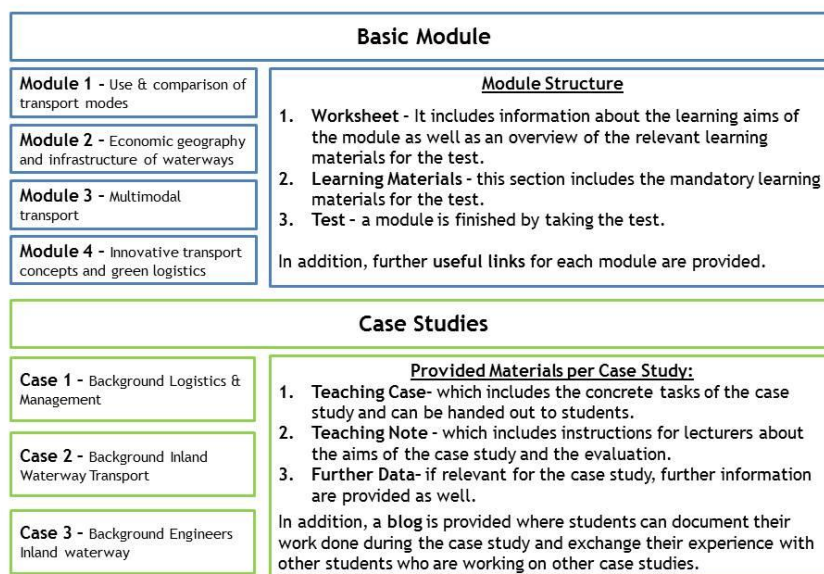


Figure 2 - Provided Materials

Grading

The grading for the capstone course is divided into three parts:

1. Basic Module - 15 % of final grade

Grading per Test:

Percentage	Points	Note
90-100%	81-90 points	Very good
80-90%	72- 81 points	Good
70-80%	63 - 72 points	Satisfactory
60-70%	54 - 63 points	Sufficient
0-60 %	0-54 points	Not sufficient

2. Case Study - 70 % of final grade

The grading of the Case Study is described in the teaching note!

Percentage	Points	Note
90-100%	35 - 42 points	Very good
80-90%	28- 35 points	Good
70-80%	21 - 28 points	Satisfactory
60-70%	14 - 21 points	Sufficient
0-60 %	0-14 points	Not sufficient

3. Peer Evaluation - 15% of final grade

The peer evaluation grading is described in the peer-evaluation-form which is provided within the case study section!

Final points per student:

$$\frac{\text{total number of points distributed to one student}}{(\text{number of students per group}) - 1}$$

Point-range per student: 7 - 15 points

Grading scale for final grade:

(Points Test Module 1 +...+ Points Test Module 4) x 0,15 + Points Case Study x 0,7 + Points Peer Evaluation x 0,15 = Total points for capstone course

Percentage	Points	Note
90-100%	77 - 86 points	Very good
80-90%	68 - 77 points	Good
70-80%	59 - 68 points	Satisfactory
60-70%	51 - 59 points	Sufficient
0-60 %	0 - 51 points	Not sufficient

Example:

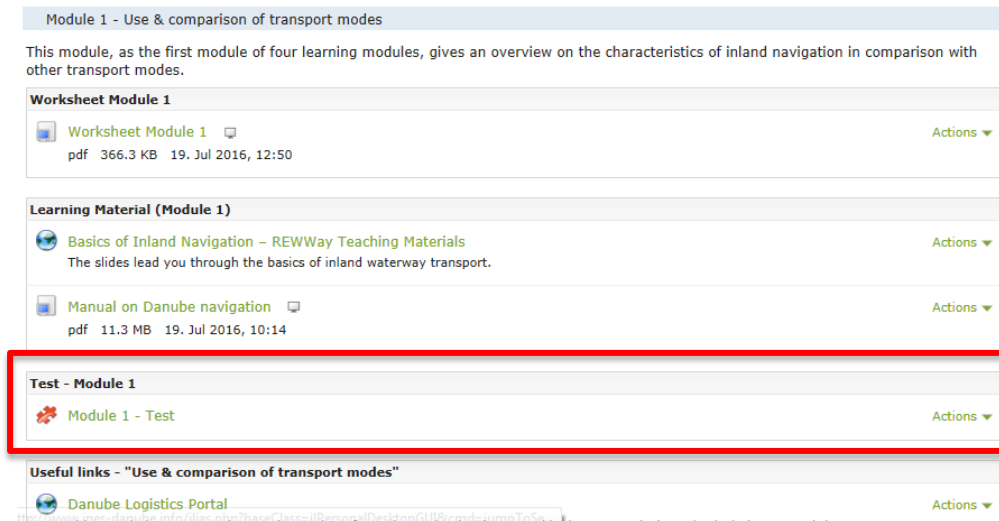
	Points	Points per part	Weighting	Score per part
Test Module 1	72	288	15 %	43.2
Test Module 2	63			
Test Module 3	90			
Test Module 4	63			
Case Study	36	36	70 %	25.2
Peer Evaluation	10	10	15 %	1.5
TOTAL SCORE				69.9 ~70 points
Grade				Good

Platform Description

Tests

The tests are integrated at each Module, after the learning materials (see Figure 6).

In addition a Blog is provided where students can document their work done during the case study and exchange their experience with other students who are working on the case study.

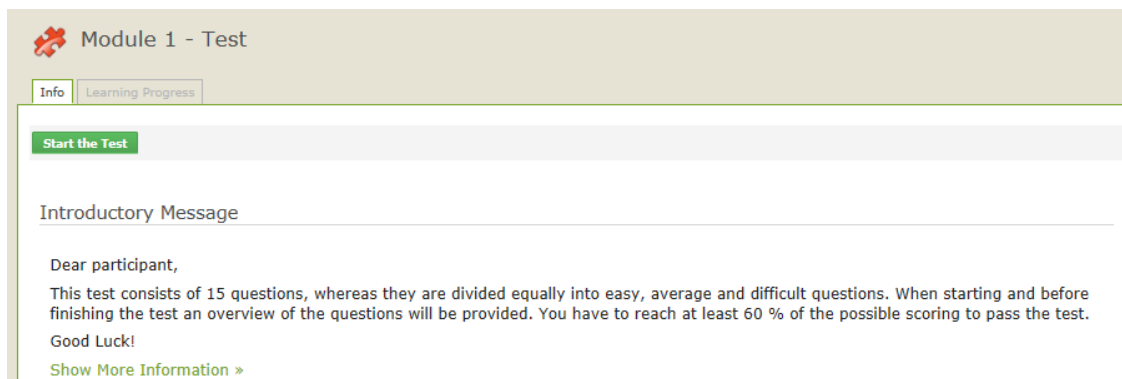


The screenshot shows a course page for 'Module 1 - Use & comparison of transport modes'. It includes a description of the module, a 'Worksheet Module 1' section with a PDF file, a 'Learning Material (Module 1)' section with two PDF files, and a 'Test - Module 1' section highlighted with a red box. Below the test section is a 'Useful links' section with a link to the 'Danube Logistics Portal'.

Figure 3 - Where to find the test

Take the test

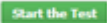
To start the test, click on “Module 1 - Test”. An introductory message is provided.



The screenshot shows the 'Module 1 - Test' page. It has a header with a gear icon and the title 'Module 1 - Test'. Below the header is a navigation bar with 'Info' and 'Learning Progress' tabs. A green button labeled 'Start the Test' is visible. The main content area is titled 'Introductory Message' and contains the following text:

Dear participant,
This test consists of 15 questions, whereas they are divided equally into easy, average and difficult questions. When starting and before finishing the test an overview of the questions will be provided. You have to reach at least 60 % of the possible scoring to pass the test.
Good Luck!
[Show More Information >](#)

Figure 4 - Introductory Message

When clicking on the button  (“Start the test”) on the left side you start the test (currently there is no time limit so you can take your time doing the test). The list of questions included in your test is provided. In addition the maximum points per question are provided in this overview (see Figure 8).

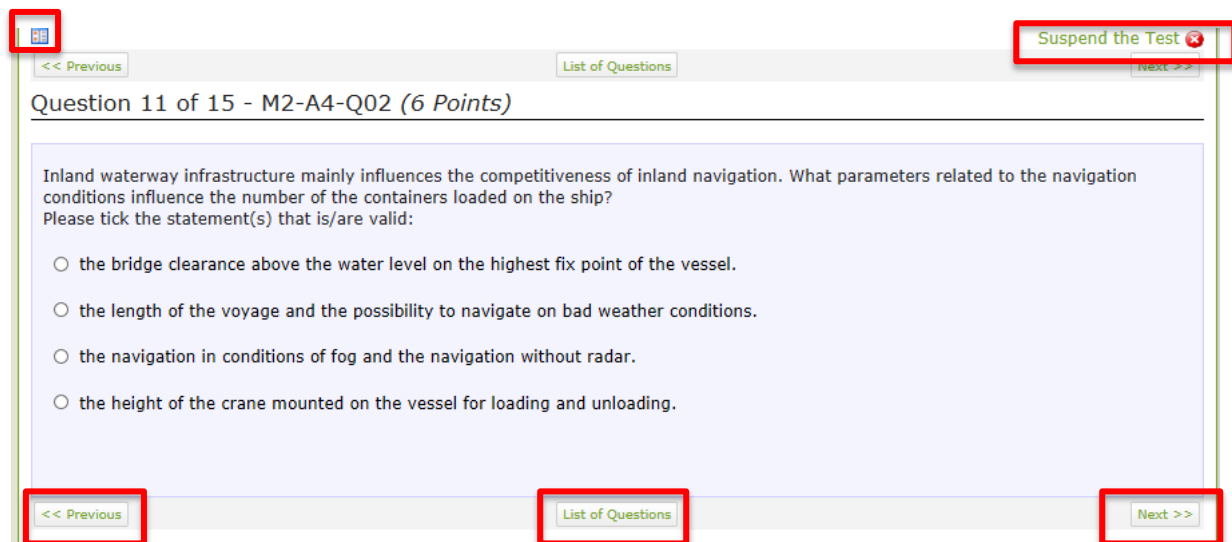
List of Questions

(1 - 15 of 15)

Order	Title	Obligatory	Maximum Points	Answered
1	M2-A1-Q06		4 Pt.	
2	M2-A1-Q03		6 Pt.	
3	M1-A4-Q03		8 Pt.	
4	M2-A2-Q08		4 Pt.	
5	M2-A2-Q05		6 Pt.	
6	M2-A2-Q07		8 Pt.	
7	M2-A3-Q05		4 Pt.	
8	M2-A3-Q03		6 Pt.	
9	M2-A3-Q04		8 Pt.	
10	M2-A4-Q06		4 Pt.	
11	M2-A4-Q02		6 Pt.	
12	M2-A4-Q04		8 Pt.	
13	M2-A5-Q02		4 Pt.	
14	M2-A5-Q04		6 Pt.	
15	M2-A5-Q01		8 Pt.	

Figure 5 - List of questions

By clicking on the title of a question you attain the concerning question. For example, clicking on “M2-A4-Q02” - you can now answer the question (Figure 9).





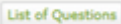


The screenshot shows a question interface for "Question 11 of 15 - M2-A4-Q02 (6 Points)". The question text is: "Inland waterway infrastructure mainly influences the competitiveness of inland navigation. What parameters related to the navigation conditions influence the number of the containers loaded on the ship? Please tick the statement(s) that is/are valid:". Below the text are four radio button options:

- the bridge clearance above the water level on the highest fix point of the vessel.
- the length of the voyage and the possibility to navigate on bad weather conditions.
- the navigation in conditions of fog and the navigation without radar.
- the height of the crane mounted on the vessel for loading and unloading.

 The interface includes several menu items highlighted with red boxes: a list icon in the top left, "Suspend the Test" with a red 'x' icon in the top right, "<< Previous" in the bottom left, "List of Questions" in the bottom center, and "Next >>" in the bottom right.

Figure 6 - Question and menu items

As shown in Figure 12, there are different menu items provided:

- By clicking  you can go to the previous question
- By clicking  you can go to the next question
- By clicking  you can go back to the overview (see Figure 8)
- By clicking  you end the test
- By clicking  you can show the list of questions aside the questions (see Figure 10)

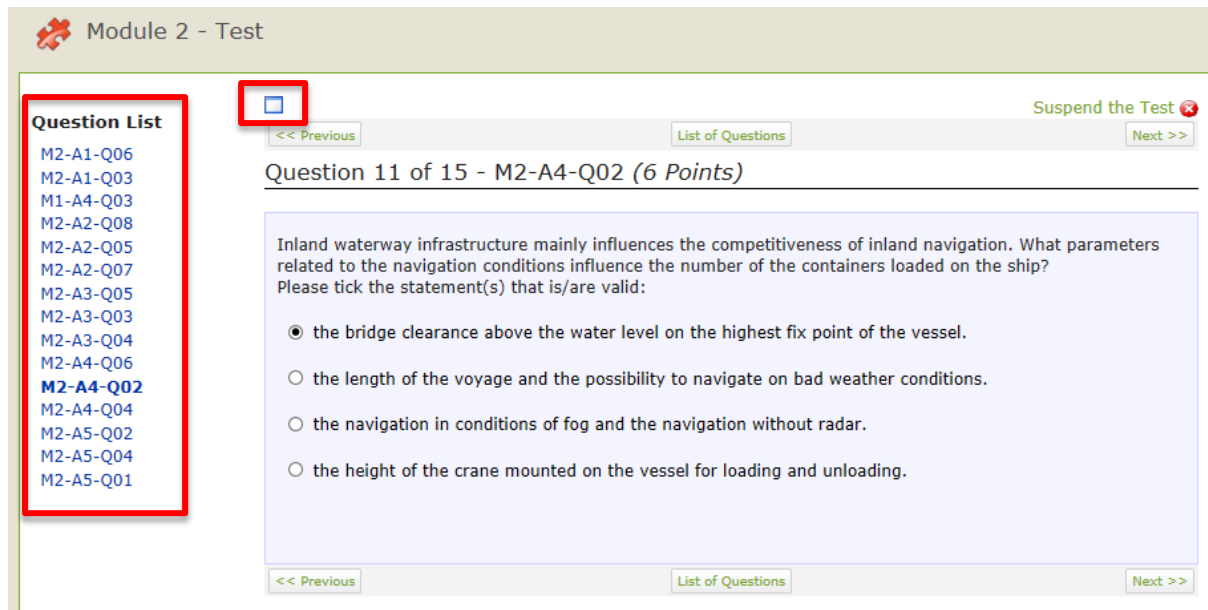


Figure 7 - Show question list aside

By clicking on the symbol again (symbol) you can hide the question list again and you will again just see the question (see Figure 9).

If you have already answered the questions but you are not sure if you have missed some, you can go to “List of questions” ([List of Questions](#)). On the right side you have a column (“Answered”) where you can see whether you have already answered all questions or not.

List of Questions

(1 - 15 of 15)

Order	Title	Obligatory	Maximum Points	Answered
1	M2-A1-Q06		4 Pt.	
2	M2-A1-Q03		6 Pt.	
3	M1-A4-Q03		8 Pt.	Yes
4	M2-A2-Q08		4 Pt.	
5	M2-A2-Q05		6 Pt.	
6	M2-A2-Q07		8 Pt.	
7	M2-A3-Q05		4 Pt.	
8	M2-A3-Q03		6 Pt.	
9	M2-A3-Q04		8 Pt.	
10	M2-A4-Q06		4 Pt.	
11	M2-A4-Q02		6 Pt.	Yes
12	M2-A4-Q04		8 Pt.	
13	M2-A5-Q02		4 Pt.	
14	M2-A5-Q04		6 Pt.	
15	M2-A5-Q01		8 Pt.	

Figure 8 - Answered/not answered questions in list of questions

When you have answered all questions and you want to finish the test, you have to click on “Finish the Test” at the bottom right corner (see Figure 12).

List of Questions

(1 - 15 of 15)

Back Finish the Test

Order	Title	Obligatory	Maximum Points	Answered
1	M2-A1-Q06		4 Pt.	Yes
2	M2-A1-Q03		6 Pt.	
3	M1-A4-Q03		8 Pt.	Yes
4	M2-A2-Q08		4 Pt.	
5	M2-A2-Q05		6 Pt.	
6	M2-A2-Q07		8 Pt.	
7	M2-A3-Q05		4 Pt.	
8	M2-A3-Q03		6 Pt.	
9	M2-A3-Q04		8 Pt.	
10	M2-A4-Q06		4 Pt.	
11	M2-A4-Q02		6 Pt.	Yes
12	M2-A4-Q04		8 Pt.	
13	M2-A5-Q02		4 Pt.	
14	M2-A5-Q04		6 Pt.	
15	M2-A5-Q01		8 Pt.	

Back Finish the Test

Figure 9 - Finish the Test

Test results

When you have finished the test, your test results are provided (see Figure 13). You can then see the main information about your test results - if you have failed or not.

Back to Introductory Message Print PDF Export

Test Results for Test FHOO

Name: Test FHOO
Exam Id: I4747_T4533_A1037_P1
 Date of Test: 31. Jul 2016, 17:41

Pass Overview of the Test Results

(1 - 1 of 1)

Scored	Pass	Date	Answered Questions	Reached Points	Percent Solved	Actions
●	1	31. Jul 2016, 17:41	3 of 15	18 of 90	20.00%	Actions ▼

(1 - 1 of 1)

Sorry, you failed the test.
 Your resulting mark is: "failed"

Figure 10 - Test results

You can download this information by clicking on the button  at the top.

By clicking on "Actions" on the right side, at the end of the pass overview of the Test Results - and clicking "pass details" (see Figure 14) - you have an overview of e.g. the reached points per question and the percent solved per question (see Figure 15).

[Back to Introductory Message](#)
[Print](#)
[PDF Export](#)

Test Results for Test FHOO
Name: Test FHOO
Exam Id: I4747_T4533_A1037_P1
Date of Test: 31. Jul 2016, 17:41

Pass Overview of the Test Results
 (1 - 1 of 1)

Scored	Pass	Date	Answered Questions	Reached Points	Percent Solved	Actions
0	1	31. Jul 2016, 17:41	3 of 15	18 of 90	20.00%	Pass Details

(1 - 1 of 1)
 Sorry, you failed the test.
 Your resulting mark is: "failed"

Figure 11 - Details about Test Results 1

Scored	Pass	Date	Answered Questions	Reached Points	Percent Solved	Actions
0	1	31. Jul 2016, 17:41	3 of 15	18 of 90	20.00%	Actions

(1 - 1 of 1)
 Sorry, you failed the test.
 Your resulting mark is: "failed"

Order	Question ID	Title	Maximum Points	Reached Points	Percent Solved
1	2488	M2-A1-Q06	4	4	100.00 %
2	2492	M2-A1-Q03	6	0	0.00 %
3	2497	M1-A4-Q03	8	8	100.00 %
4	2498	M2-A2-Q08	4	0	0.00 %
5	2500	M2-A2-Q05	6	0	0.00 %
6	2502	M2-A2-Q07	8	0	0.00 %
7	2504	M2-A3-Q05	4	0	0.00 %
8	2509	M2-A3-Q03	6	0	0.00 %
9	2512	M2-A3-Q04	8	0	0.00 %
10	2515	M2-A4-Q06	4	0	0.00 %
11	2516	M2-A4-Q02	6	6	100.00 %
12	2519	M2-A4-Q04	8	0	0.00 %
13	2520	M2-A5-Q02	4	0	0.00 %
14	2522	M2-A5-Q04	6	0	0.00 %
15	2526	M2-A5-Q01	8	0	0.00 %
Total			90	18	20.00 %

Figure 12 - Details about Test Results 2

When clicking on a question shown in Figure 15, you can compare your answers with the correct answers for the questions (see Figure 16).

M2-A1-Q03 (6 Points)

Your answer was:

There are different classes of inland waterways in Europe because some are relevant for international transport and some are only relevant for national transport. Which waterways in Europe are considered important from an economic point of view? Please tick the statement(s) that is/are valid:

class IV or higher. ✘
 only class IV. ✘
 class I to III. ✘
 class I to VII. ✘

The best solution is:

class IV or higher.
 only class IV.
 class I to III.
 class I to VII.

Figure 13 - Comparison: your answer & right answer