

Water Management

Aquatic Ecotechnology

Delta Management

Spatial Planning & Design

Information for exchange student

2022-2023





Contents

| General information for exchange students in the programme Water Management | 3 |
|---|----|
| Courses offered within the Water Management programme – Aquatic Ecotechnology | 6 |
| Courses offered within Water Management programme – Delta Management | 21 |
| Courses offered within the Water Management programme – Spatial Planning & Design | 41 |





General information for exchange students in the programme Water Management

Exchange students can either choose to follow courses from our Water Management programme or work on a real project (30ECTS) related to our study programme.

Courses in English

The Bachelor study of Water Management is a four year, applied bachelor study programme. Exchange students choose from a number of courses from the study programme with a total study load of 30 ECTs per semester.

Semesters 3, 5 and 7 are from 1^{st} of September up to end of January (fall semester).

Semesters 2, 4 and 6 from 1st of February to end of June (spring semester).

Semester 3 and 4 are 2nd year courses; Semester 5 and 6 are 3rd year courses (minor project); Semester 7 is 4th year courses.

English courses offered in 3 specializations.

The Bachelor of Water Management is one study programme with three different specializations, Aquatic Ecotechnology, Delta Management and Spatial Planning & Design.

We advise to choose all courses from the same semester of one academic year and of one specialization, to prevent that courses overlap in the schedule. If you choose a mixture of two or even more semesters and specializations the lectures might be scheduled at the same time and also the level will be different per semester. It is most of the time not possible to attend all lectures. Therefore, if you choose a mix, we advise you to have extra courses in your Learning Agreement, which have been approved by your home institute, so that you have a 'back up' plan if courses do overlap in the schedule.

More detailed information on the study programme can also be found on the <u>website</u> and in our study programme <u>regulation</u>. More information about 'how to apply' can be found <u>here</u>.

| Semester | Modules | ECTS |
|----------|--------------------------------------|------|
| 3 | Ecological Water Quality | 15 |
| | Water Pollution & Treatment | 12.5 |
| 4 | Hydrology | 12.5 |
| | Ecological Engineering | 12.5 |
| 7 | Integrated Coastal Challenge (multi- | 10 |
| | disciplinary project) | |
| | Aquaculture | 10 |
| | Ecological Risk Assessment | 10 |
| | Advanced Water Technology | 10 |
| | Urban Water and Asset Management | 10 |

Course offer Specialization Aquatic Ecotechnology:

Detailed course descriptions as from page 6.





Course offer Specialization Delta Management:

| Semester | Modules | ECTS |
|----------|--|------|
| 3 | Vision development (applied in European | 15 |
| | Deltas) | 12,5 |
| | Adaptive Planning for Climate Change (applied | |
| | in European Deltas) | |
| 4 | Risk and Disaster Management (applied in | 12,5 |
| | Mississippi Delta) | 12,5 |
| | Strategic planning for resilient Deltas (applied | |
| | in Mississippi delta) | |
| 7 | System analysis & Planning for circularity | 20 |
| | (applied in Mekong Delta) | |
| | Coastal Challenge | 10 |

Detailed course descriptions as from page 21. The names of the blocks of Delta Management and Spatial Planning & Design are the same, but not all courses are the same.

Course offer Specialization Spatial Planning & Design:

| Semester | Modules | ECTS |
|----------|--|------|
| 3 | Vision development (applied in European | 15 |
| | Deltas) | 12,5 |
| | Adaptive Planning for Climate Change (applied | |
| | in European Deltas) | |
| 4 | Risk and Disaster Management (applied in | 12,5 |
| | Mississippi Delta) | 12,5 |
| | Strategic planning for resilient Deltas (applied | |
| | in Mississippi delta) | |
| 7 | System analysis & Planning for circularity | 20 |
| | (applied in Mekong Delta) | |
| | Coastal Challenge | 10 |

Detailed course descriptions as from page 41. The names of the blocks of Delta Management and Spatial Planning & Design are the same, but not all courses are the same.





Optional courses especially for international students

CU34638Dutch Culture & Languages2 ECTSThis course will be offered at the Vlissingen Campus.

VCC3842 Peer project 1.25 ECTS The Peer project is to improve contact between Dutch and foreign students at HZ. Dutch students help foreign students to settle in Vlissingen so that they have a good time in Holland and at HZ. Experiences and friendship gathered by this project will hopefully enable Dutch students to study in other countries as well.

Projects of 30 ECTS

You will work on and gain experience in a real project (30 ECTS). Stakeholders and experts from the work field are looking forward to collaborate with you and to find solutions to the challenges they currently encounter. Your contribution will be of direct use to them, and future minor participants will build on your results.

Topics related to our Water management programme are;

- Building with Nature
- Climate Adaption (formerly known as Water Safety & Spatial Planning)
- Water Technology
- Aquaculture

To work on a project an application must be handed in before May 1st (fall semester) or November 1st (spring semester); a limited number of places is available. Students have to submit a motivation letter and may be asked to do a Skype interview in order to be selected to join the Research minor.

More detailed information on these projects can be found <u>here</u> under "projects".





Courses offered within the Water Management programme – Aquatic Ecotechnology

SEMESTER 3 AET Block 5 Ecological Water Quality & Block 6 Water Treatment

| ck 5/ Semest | er 3 | | | | | | | | | | | | |
|---------------------------------|---|-------------------------------|-------------------------------|------------------------------|---------------------------|---|---|------------------------------|------------------------------|-----------------------|--|--|--|
| CU79103V2 | Title: | Princip | oles of | Data A | Analysis | | Number of study credits: | 2.5 Numbe | r of contact ho | urs: 24 Ma | ndatory | Feaching langua | ge: English |
| Conditions for | conditions for course participation: not applicable | | | | | | | | | | | | |
| Conditions for | test pa | rticipa | tion: no | ot appl | licable | | | | | | | | |
| Student will lestatistical sign | earn to nificano | prepa ce, to v e: Excel | are dat visualis 2007 c | ta sets se the or high | s for ar data in er | alysis (data manager n a clear and concise | nent), methods to sumr way, and to answer rese | narize and desearch question | scribe a data and based on d | set (descript ata. | ive analysis), | basic methods | to test for |
| Test code | Form | at | | | | Assessment type | Content | Weighting | Minimum | Dianning | | | 1 |
| | | | | | | | | Factor (%) | score | test in week | Inspection of work in week | Resit scheduled in week | Inspection of resit in week |
| | v | w | 0 | 1 | G | | | Factor (%) | score | test in week | Inspection of work in week | Resit scheduled in week | Inspection of resit in week |
| TEST01 (VT) | v | W x | 0 <i>x</i> | I x | G | Portfolio | 7.1.2 | Factor (%) | score | s1.8 | Inspection of work in week S1.9 | Resit scheduled in week S1.10 | Inspection of resit in week S1.12 |





| Block 5 / Semester 3 | | | | | | | | | | | | | |
|--------------------------|-----------|-----------|------------|---------|---------|------------------------|---------------------|-------------------------|-------------------|-----------------------------|----------------------------------|----------------------------|-----------------------------------|
| CU20590V1 | Title: | Concepts | of Ecol | ogical | Nater (| Quality Nu | umber of study | Numbe | er of contact | Mandat | ory | Teaching language: Er | nglish |
| | | | | | | cre | edits: 5,0 | hours: | 44 | | | | |
| Conditions for course p | participa | ation: no | t applica | able. | | | | | | | | | |
| Conditions for test par | ticipatio | on: not a | pplicable | e. | | | | | | | | | |
| Brief description of cou | urse con | tent: | | | | | | | | | | | |
| You will deal with an | import | ant wat | er issue | e: wate | er qual | ity. In this module yo | ou also learn how | to monitor, a | analyze causes a | nd effects c | of changes in v | water quality. And wha | at the |
| ecological principles (i | interact | ion betv | veen ch | emistr | y and b | iology) are behind it | and how these ar | e related to c | lifferent water s | ystems like | rivers, lakes, | estuaries and seas. In | this course |
| 'concepts' , you also le | earn wh | at policy | / tools, | like Eu | ropean | Water Framework D | irective , are usec | to access th | e quality of wat | er bodies ar | d the approp | riate measures to be t | aken. |
| Compulsory literature: | Ecology | ∕ of Aqua | itic Syste | ems, Do | bson 8 | Frid, second edition | | | | | | | |
| Test code | Forma | t | | | | Assessment type | Content | Weighting Factor (%) | Minimum score | Planning test in week | Inspection of work in week | Resit scheduled in week | Inspection of resit in week |
| | V | w | 0 | Ι | G | | | | | | | | |
| TEST 1 (VT) | | X | | x | | Written knowledge | 1.1 , 1.2, 2.1 | 100% | 5.5 | S1.8 | S1.9 | S1.10 | S1.11-13 |
| | | | | | | Test | (table 3) | | | | | | |





| Block 5 / Semester 3 | 3 | | | | | | | | | | | | |
|---|----------|------------|----------|-----------|------------|------------------------|-----------------------|-------------------|------------------|----------------|------------------|----------------------|-------------|
| CU20591V1 | Title: | Applied | Ecologi | cal Wa | ter Qua | ality I | Number of study | Numbe | er of contact | Mandat | ory | Teaching language: E | inglish |
| | | | | | | (| credits: 5,0 | hours: | 44 | | | | |
| Conditions for course participation: not applicable. | | | | | | | | | | | | | |
| Conditions for test participation: complete attendance to the field week. | | | | | | | | | | | | | |
| Brief description of co | urse coi | ntent: | | | | | | | | | | | |
| You will deal with an ir | nportan | t water i | issue: w | ater qu | iality. li | n this course 'applied | l' you will apply the | knowledge an | d skills from th | e | | | |
| other two courses 'con | cepts' a | ind 'in pr | ractice' | in spec | ific wat | er systems. Meaning | g that you will prepa | are and carry o | ut ecological w | ater quality n | neasurements | in the field. | |
| Identify the organisms | found a | ind analy | ze phys | sical, ch | emical | and biological data. | And based on prev | ailing policy ins | struments indic | ate the qualit | y. Finally you a | are asked to | |
| evaluate what appropr | iate me | asures c | an be ta | ken to | improv | ve the ecological wat | er quality. | | | | | | |
| | | | | | | | | | | | | | |
| Compulsory literature | Ecolog | v of Aqu | atic Svs | toms F | ohson | & Frid second editio | n | | | | | | |
| Test code | Eorma | y 0j /iqu | arie Sys | iems, e | 005011 | Assessment type | Content | Weighting | Minimum | Planning | Inspection | Resit scheduled | Inspection |
| Test code | TOTIL | | | | | Assessment type | content | Factor (%) | score | test in | of work in | in wook | of resit in |
| | | | | | | | | | 50010 | week | week | in week | week |
| | | | | | | _ | | | | | WEEK | | WEEK |
| | V | w | 0 | I | G | | | | | | | | |
| TEST 1 (VT) | x | x | | x | x | Portfolio | 2.2, 3.2, 4.1, | 100% | 5.5 | S1.8 | S1.9 | S1.10 | S1.11-13 |
| | | | | | | | 6.1, 7.1, 8.1, | | | | | | |
| | | | | | | | 8.2 (table 3) | | | | | | |





| Blok 5 / Semester 3 | | | | | | | | | | | | | |
|--|----------|------------|----------|---------|------------|-------------------------|----------------------|-----------------|-------------------|---------------|-----------------|-----------------------|-------------|
| CU20592V1 | Title: | Ecologica | al Water | Quali | ity in Pr | actise Nu | umber of study | Numbe | er of contact | Mandat | ory | Teaching language: E | nglish |
| | | | | | | cr | edits: 2,5 | hours: | 22 | | | | |
| Conditions for course participation: Agreement to laboratory instructions. | | | | | | | | | | | | | |
| Conditions for test participation: Presence at all lab practicals is compulsory. | | | | | | | | | | | | | |
| Brief description of co | urse coi | ntent: | | | | | | | | | | | |
| You will deal with an in | nportan | t water is | ssue: wa | ater qu | uality. Ir | this course ' in practi | ce', you will learn | specific tools | to assess the wa | ter quality b | ased on the pr | esence of organisms a | nd |
| pigments. Apart from t | hat you | learn in | an expe | rimen | tal setti | ng how the role of spe | ecific organisms lik | e filter feeder | s, in the food ch | ain can be d | etermined bas | ed on the processes m | easured. |
| And you will work with | a comp | uter mo | del, use | d in w | ater ma | nagement practice, to | analyze causes ar | nd feasible me | asures to impro | ve water qua | ality in lakes. | | |
| Compulsory literature | : Labkit | and lab | coat | | | | | | | | | | |
| Test code | Forma | ıt | | | | Assessment type | Content | Weighting | Minimum | Planning | Inspection | Resit scheduled | Inspection |
| | | | | | | | | Factor (%) | score | test in | of work in | in week | of resit in |
| | | | | | | | | | | week | week | | week |
| | v | 14/ | • | | C | | | | | | | | |
| | v | vv | 0 | | G | | | | | | | | |
| TEST 1 (VT) | | x | | | x | Portfolio | 6.1, 7.1 (table | 100% | 5.5 | S1.8 | S1.9 | S1.10 | S1.11-13 |
| | | | | | | | 3) | | | | | | |

| Block 6 / Sen | nester | 3 | | | | | | | | | | | | | |
|-----------------------|--|---------|---------|----------|---------|-----------------------|------------|---------------------|-------------------------|------------------|---------------------------|-----------|----------------------------------|-------------------------------|-----------------------------------|
| CU20593v1 | Title | : Conce | epts of | f wate | r pollu | ution and | Numbe | er of study credit | s: Numbe | r of contact ho | ours: | Manda | tory 1 | Feaching langua | ge: English |
| | treat | ment | | | | | 5.0 | | 55 | | | | | | |
| Conditions for | onditions for course participation: not applicable | | | | | | | | | | | | | | |
| Conditions for | iditions for test participation: not applicable | | | | | | | | | | | | | | |
| Brief description | on of c | ourse | conte | nt: In t | this m | odule, you will inves | tigate tl | ne possibilities o | f combatting | poor water qua | lity with | various | treatment | techniques. Dur | ing this |
| module you wi | ll learr | n abou | t the v | vater s | system | and how to monito | or its sta | tus. You will use | calculations t | o determine th | e effect o | of differ | ent dischar | ges on a water s | system and |
| how you can li | mit the | ese eff | ects th | rough | wate | r treatment. Treatme | ent type | es that will be inv | estigated inc | lude biological, | chemica | al and ph | nysical. | | |
| Compulsory lit | eratur | e: not | applic | able | | | | | | | | | | | |
| Test code | Form | nat | | | | Assessment type | | Content | Weighting Factor (%) | Minimum score | Planni test in week | ng l v | Inspection of work in week | Resit scheduled in week | Inspection of resit in week |
| | V W O I G | | | | | | | | | | | | | | |
| TEST 1 (VT) | | x | | x | | Written knowledge | e test | 1.1 (table 3) | 100% | 5.5 | S1.18 | 9 | S1.20 | S2.10 | S2.12 |





| Block 6 / Sen | nester | r 3 | | | | | | | | | | | | | |
|-------------------|--|-----------------|---------|---------|---------|------------------------|----------|--------------------|-------------------------|------------------|----------------------------|------------------------------|-------------|-------------------------------|-----------------------------------|
| CU20595v1 | Title | : Appli | catior | ns of w | /ater p | ollution and | Numbe | er of study credi | ts: Numbe | r of contact ho | urs: N | Mandatory | Те | eaching languag | ge: English |
| | treat | tment | | | | | 5.0 | | 50 | | | | | | |
| Conditions for | cours | e parti | cipati | on: Ab | iding l | by laboratory instruct | tions an | nd behaving safe | ly in the lab | | | | | | |
| Conditions for | iditions for test participation: not applicable | | | | | | | | | | | | | | |
| Brief description | escription of course content: In the 'Applied' project, you will work on a problem for a local company to help them to try and solve a water quality issue that they | | | | | | | | | | | | | | |
| have, by produ | icing a | desigr | n for a | treatr | nent t | echnique. You will rep | port yo | ur results and fir | nal design bacl | k to the compa | ny at the | end of the pro | oject. | | |
| Compulsory lit | eratu | r e: not | applic | cable | | | | | | | | | | | |
| Test code | Form | nat | | | | Assessment type | | Content | Weighting Factor (%) | Minimum score | Plannin test in week | g Inspect of worl week | ion (in | Resit scheduled in week | Inspection of resit in week |
| | v | w | 0 | I | G | | | | | | | | | | |
| TEST 1 (VT) | | x | | x | x | individual and group | р | 2.1, 2.2, 3.2, | 100% | 5.5 | S1.18 | S1.19 | | S1.20 | S2.1 |
| | | | | | | assignments | | 4.1, 6.1, 7.1, | | | | | | | |
| | | | | | | Portfolio | | 8.1 (table 3) | | | | | | | |

| Block 6 / Sem | nester | · 3 | | | | | | | | | | | | |
|-------------------|---|--------|---------|---------|---------|-------------------------|-----------|--------------------|-------------------------|------------------|-----------------------------|--------------------------------|--|-----------------------------------|
| CU20594v1 | Title | : Wate | r pollu | ution a | and tre | eatment in | Numb | er of study credit | s: Numbe | er of contact ho | urs: M | andatory | Teaching langua | ge: English |
| | prac | tice | | | | | 2.5 | | 22 | | | | | |
| Conditions for | Conditions for course participation: Abiding by laboratory instructions and behaving safely in the lab | | | | | | | | | | | | | |
| Conditions for | iditions for test participation: not applicable | | | | | | | | | | | | | |
| Brief description | on of c | ourse | conte | nt: Du | ring th | ne 'In practice' lab se | essions y | ou will learn hov | v to perform | water quality a | nalysis of co | ertain essentia | l water quality pa | rameters in |
| the world of w | ater tr | eatme | nt. Be | sides t | he lab | skills you learn to u | ıse balaı | nces to analyze a | water systen | n. Water and m | ass balance | s will be appli | ed to analyze both | n natural |
| water systems | and a | waste | water | treatr | nent s | system. You also lea | rn to use | e some analysis t | ools in GIS. | | | | | |
| Compulsory lit | eratur | e: not | applic | able | | | | | | | | | | |
| Test code | Form | nat | | | | Assessment type | | Content | Weighting Factor (%) | Minimum score | Planning test in week | Inspectio of work i week | n Resit ⁿ scheduled in week | Inspection of resit in week |
| | v | W | 0 | I | G | | | | | | | | | |
| TEST 1 (VT) | x X group assignments 6.1, 7.1, 100% 5.5 \$1.18 \$1.19 \$1.20 \$2.1 | | | | | | | | | S2.1 | | | | |
| | | | | | | Portfolio | | (table 3) | | | | | | |





SEMESTER 4 AET Block 7 Hydrology & block 8 Eco Engineering

| Block 7 / Sen | neste | r 4 | | | | | | | | | | | | |
|-------------------|--|--------|--------|--------|-------|--------------------------|-----------------|-------------------------|------------------|-----------------------------|----------------------------------|-------------------------------|--------------------------------|--|
| CU20611v4 | Title | e: Con | cepts | s of h | ydrol | ogy I | Number of study | credits: 5,0 | Number of con | tact hours: 38 | Mandato | ory Teachin | g language: English | |
| Conditions for | cours | se par | ticipa | ation | Not | applicable | | | | | | | | |
| Conditions for | nditions for test participation: Not applicable | | | | | | | | | | | | | |
| Brief description | escription of course content: | | | | | | | | | | | | | |
| This course is e | se is explaining the theory about rural water requirements in polders; water in the saturated and unsaturated zone, managing the water levels, small hydraulic structures, | | | | | | | | | | | | | |
| wetlands. You | nds. You apply the knowledge in calculations. | | | | | | | | | | | | | |
| Compulsory lit | eratu | re: | | | | | | | | | | | | |
| Test code | Fori | mat | | | | Assessment ty | pe Content | Weighting Factor (%) | Minimum score | Planning test in week | Inspection of work in week | Resit scheduled in week | Inspection of resit in week | |
| | v | w | 0 | I | G | | | | | | | | | |
| TEST01 (VT) | | | х | х | | Portfolio | 1.1 | 20% | 5.5 | S2.3 | S2.4 | S2.10 | S2.13 | |
| TEST02 (VT) | | х | | х | | Written knowledge tes | 1.1 t | 70% | 5.5 | S2.8 | S2.9 | S2.10 | \$2.13 | |
| TEST03 (VT) | | | х | | х | Portfolio | 1.1 | 10% | 5.5 | S2.4 | S2.5 | S2.10 | S2.13 | |
| | | | | | | | | | | | | | | |





| Block 7 / Ser | nest | er 4 | | | | | | | | | | | | |
|-----------------|---|--------|---------|-------|-------|-----------------|--------------|-------------------------|----------------------|-----------------------------|----------------------------------|-------------------------------|--------------------------------|--|
| CU20616v1 | Title | e: App | lied h | ydro | logy | Num | ber of study | credits: 5,0 | Number o | f contact hou | rs: 20 Mar | datory | Teaching language: English | |
| Conditions for | r cour | 'se pa | rticipa | ation | : Not | applicable | | | | | | | | |
| Conditions for | r test | partio | ipatio | on: N | ot ap | plicable | | | | | | | | |
| Brief descripti | ion of | fcours | se cor | ntent | : | | | | | | | | | |
| n this course | ourse the rural problems of water excesses and fresh water shortages in the delta are explored. The course focusses on designing water solutions for stakeholders in agriculture. | | | | | | | | | | | | | |
| Compulsory li | Isory literature: | | | | | | | | | | | | | |
| Fest code | Forr | nat | | | | Assessment type | Content | Weighting Factor (%) | Minimu m score | Planning test in week | Inspection of work in week | Resit scheduled in week | Inspection of resit in week | |
| | v | W | 0 | Ι | G | | | | | | | | | |
| FEST01 (VT) | х | х | | х | | Portfolio | 1.2, 2.1, | 100% | 5.5 | S2.8 | S2.9 | S2.10 | \$2.13 | |
| | | | | | | | 2.2, 5.1, | | | | | | | |
| | | | | | | | 8.1, 8.2, | | | | | | | |
| | | | | | | | 9.1, 9.2 | | | | | | | |

| Block 7 / Sei | mest | er 4 | | | | | | | | | | | | | |
|----------------|--|---------|--------|--------|--------|-----------------|---------------------|-------------------------|------------------|-------------------------------|----------------------------------|-------------------------------|--------------------------------|--|--|
| CU20615v1 | Title | : Hydı | rology | y in p | ractic | e | Number of study | credits: 2,5 | Nu | mber of contact | t hours: 22 | Mandatory | Teaching language: English | | |
| Conditions fo | r cour | se par | ticipa | ation: | Not a | applicable | | | | | | | | | |
| Conditions fo | r test | partic | ipatio | on: No | ot app | olicable | | | | | | | | | |
| Brief descript | ription of course content: rse you will learn how to work with two software systems: a system to model hydraulic water systems 'Sobek' and a GIS system 'ARC GIS' | | | | | | | | | | | | | | |
| In this course | you w | ill lea | rn ho | w to v | vork | with two softwa | re systems: a syste | em to model hyd | draulic wat | er systems 'Sob | ek' and a GIS sy | stem 'ARC GIS' | | | |
| Compulsory li | iterat | ure: | | | | | | | | | | | | | |
| Test code | Forr | nat | | | | Assessment ty | pe Content | Weighting Factor (%) | Minimur score | n Planning test in week | Inspection of work in week | Resit scheduled in week | Inspection of resit in week | | |
| | v | w | 0 | I | G | | | | | | | | | | |
| TEST01 (VT) | | х | | х | | (Work place) | 2.1, 3.1 | 100% | 5.5 | S2.8 | S2.9 | S2.10 | \$2.12 | | |
| | | | | | | Assessment | | | | | | | | | |





| Block 8 / Sen | nester | 4 | | | | | | | | | | |
|--|---|--|---|---|--|--|--|---|---|--|---|---|
| CU20617V4 | Title: | Concep | ts of Ec | o Engi | ineering | Number of study credit | ts: 5 Numb | er of contact h | ours: 24 | Mandatory | Teaching language | e: English |
| Conditions for | course | partici | pation: | Not a | pplicable. | | | | | I | | |
| Conditions for | test pa | rticipat | ion: No | ot appl | icable. | | | | | | | |
| Brief descripti loss in biodiver and working w In <i>concepts</i> yo area. The focu of species to h | on of co rsity and rith natu u will ge s is on t arsh en terature | d habita ure in de et insigh he inter vironme e: Litera | ontent: its, clim elta are it into c ractions ents, bio ture av | Eco er nate ch as. coastal s and f odiver ailable | ngineering is the desig nange and sea level ris protection through m eedback loops betwee sity, ecosystem engine e on HZ Learn. | n of sustainable ecosystems e make eco engineering neo easures that are based on a en hydrology (waves, tides, eers as oysters and mussels | s that integrate l cessary. In this n natural material currents), morp ;). | numan society v iodule the focus and processes nology (sedimen | vith its natur s is on things , that also in nt transport, | ral environment for I like building with r crease the landscap erosion, sedimenta | the benefit of both nature, nature-base be and natural valu ation) and ecology (| n. Threats like ed solutions es of the adaptations |
| Test code | Forma | at W | 0 | 1 | Assessment t | ype Content | Weighting Factor (%) | Minimum score | Planning test in week | Inspection of work in week | Resit scheduled in week | Inspection of resit in week |
| TEST01 | | x | | x | Ethics Written know | 1.2 rledge test | 20% | 5.5 | 15 | 17 | 20 | 22 |
| TEST02 | | х | | x | Eco engineeri Written know | ng 1.1 rledge test | 80% | 5.5 | 18 | 19 | 20 | 22 |





| Block 8 / Sen | nester | 4 | | | | | | | | | | | | | | |
|---|--|---|---|---|--|---|---|---|---------------------------------------|-----------------------------------|--|---|---|----------------------------|---|---|
| CU20620V4 | Title: | Applied | Eco En | nginee | ring | | Number o | of study credits: 5 | 5 [| Number | of contact he | ours: 39 | Mandatory | Т | eaching language | e: English |
| Conditions for | course | particip | oation: | Not a | pplicabl | le. | | | | | | | | | | |
| Conditions for | test pa | rticipat | ion: No | ot appl | icable. | | | | | | | | | | | |
| Brief description loss in biodiver and working w In <i>applied</i> you analyze maps a | on of co rsity and ith natu will pro and dat | burse co d habita ure in de oduce an a and pr | ntent: ts, clim elta are n own e roduce | Eco er late ch as. experin innova | ngineeri ange al nental o ative ido | ing is the design of nd sea level rise r design in a resear eas for further re | of sustainat make eco er rch setting t search. | ble ecosystems th ngineering necess to tackle coastal s | nat integ sary. In t safety iss | grate hui this moo sues and | man society w dule the focus d to increase b | vith its nation is on thing biodiversity | ural environment gs like building wi y in the Dutch del | for th th nat ta. Yo | he benefit of both ture, nature-base ou will work in sm | n. Threats like d solutions all groups to |
| Compulsory lit | erature | e: Not ap | oplicab | le. | | | | | | | | | | | | |
| Test code | Form | at | | | | Assessment typ |)e | Content | Weig Facto | hting or (%) | Minimum score | Planning test in week | g Inspecti of work week | on in | Resit scheduled in week | Inspection of resit in week |
| | v | w | 0 | I | G | | | | | | | | | | | |
| TEST01 | | | х | | x | research propos | sal | 1.2, 1,3, 2.2, 6.1, 7.1, 8.1, 8.2, 9.1, 9.2 | 20 | 0% | 5.5 | 14 | 17 | | 20 | 22 |
| TEST02 | | | x | | x | research report Assignment | | 1.2, 1,3, 6.1, 7.1, 8.1, 8.2, 9.1, 9.2 | 80 | 0% | 5.5 | 18 | 19 | | 20 | 22 |





| Block 8 / Sem | nester | 4 | | | | | | | | | | | | | |
|---|---|--|--|---|--------------------------------|--|--|---|--|---|--|---|----------------|---|--|
| CU20618V1 | Title: | Eco Eng | ineerin | g in p | ractice | | Number o | of study credits: 2. | 5 Numbe | r of contact ho | ours: 24 | Mandatory | | Teaching language | e: English |
| Conditions for | course | particip | oation: | Not ap | oplicabl | le. | | | | | | | | | |
| Conditions for | test pa | rticipat | ion: No | t appli | icable. | | | | | | | | | | |
| Brief description loss in biodiver and working w You will <i>praction</i> apply them in s Compulsory lit | on of co rsity and ith natu ce with several cerature | d habita ure in de several researc e: Not aj | ntent: ts, clim elta area eco-eną h cases. oplicabl | Eco er ate ch as. gineer e. | ngineeri ange ai ing too | ing is the design o nd sea level rise m ls and software. C | f sustainat nake eco en oncepts ar | ble ecosystems that ngineering necessa nd how to apply th | it integrate hu ary. In this mo nem will be ex | iman society w dule the focus plained for eco | ith its natu is on thing tope maps | ural environme gs like building 5, suitability ma | nt for twith n | the benefit of both ature, nature-base d hypsometric curv | i. Threats like d solutions es. You will |
| Test code | Forma | at | | | | Assessment type | e | Content | Weighting Factor (%) | Minimum score | Planning test in week | g Inspec of wo week | ction rk in | Resit scheduled in week | Inspection of resit in week |
| | V | W | 0 | 1 | G | | | | | | | | | | |
| TEST01 | | | х | х | | Portfolio | | 9.1 | 100% | 5.5 | 13-17 | 18 | | 20 | 22 |





SEMESTER 7 AET

| Block 13 & 14 | / Ser | neste | r 7 | | | | | | | | | | |
|-------------------|---------|---------|---------|----------|---------|------------------------------------|--------------------------|-------------------------|------------------|----------------------------|---------------------------------|-----------------------------------|-----------------------------------|
| CU79085V1 | Title | : Integ | rated | coast | al chal | lenge Nu | mber of study credi | ts: Numbe | er of contact ho | ours: | Mandatory | Teaching langua | age: |
| | | | | | | 10 | | 60 | | | | English | |
| Conditions for | course | e parti | cipatio | on: - | | | | | | | | | |
| Conditions for | test pa | articip | ation: | - | | | | | | | | | |
| Brief description | on of c | ourse | conter | nt: In t | this co | urse, you will develop al | bilities to work in a r | nultidisciplina | iry environmen | t. You wil | l work in a grou | p with colleagues | from |
| different study | progra | ams. T | he coa | stal cl | nallen | ge is based on a complex | k real-life case of a cl | lient. It uses t | he principles of | f integrate | ed coastal zone | management as a | framework. |
| You will initiate | and d | lesign | the pro | oject a | and als | o learn and apply tools | for communication, | collaboration | , management, | and inno | vation. | | |
| Compulsory lite | eratur | e: - | | | | | | | | | | | |
| Test code | Form | nat | | | | Description and assessment type | Content | Weighting Factor (%) | Minimum score | Plannir test in week | g Inspection of work week | n Resit n scheduled in week | Inspection of resit in week |
| | v | w | 0 | I | G | | | | | | | | |
| TEST01 (VT) | | x | | x | | Assessment | 8, 9 (table 3) | 40% | 5.5 | S1.19 | S1.19 | S1.20 | S2.2 |
| | | | | | | professional | | | | | | | |
| | | | | | | development (Portfoli | o) | | | | | | |
| TEST02 (VT) | | x | | | x | End products (Portfoli | o) 1, 2, 3, 7, 8 | 40% | 5.5 | S1.17 | S1.18 | S1.19 | S1.20 |
| | | | | | | | (table 3) | | | | | | |
| TEST03 (VT) | x | | | | x | Presentation | 8, 9 (table 3) | 20% | 5.5 | S1.18 | S1.19 | S1.20 | S2.2 |





| Block 13 & 1 | 4 / Se | meste | er 7 | | | | | | | | | | |
|---------------------------|----------|---------|---------|---------|-----------|-----------------------|------------------------------|---------------------|-------------------|----------------|--|-------------------|--------------|
| CU20700v1 | Title | : Adva | nced V | Nater | Techn | ology | Number of study cre 10.0 | edits: Numbe 90 | er of contact ho | ours: Elec | tive | Teaching langua | age: English |
| Conditions for | cours | e parti | cipatio | on: | | | | | | | | | |
| • The | course | will or | nly be | given | if at lea | ast 8 students subscr | ribe for this elective o | course | | | | | |
| Prop | edeut | ic exan | n passe | ed | | | | | | | | | |
| At le | ast 12 | 0 EC oł | otaine | d (incl | uding | provisional credits) | | | | | | | |
| Inter | rnship | OR Mi | nor pa | ssed | | | | | | | | | |
| • AET | applica | ants sh | ould h | ave co | omplet | ed and passed AET c | ourse: Water Pollutio | on and Treatmer | nt (CU20593) | | | | |
| Civil | Engine | ering | applica | ants sl | hould h | have a biology and ch | nemistry profile from | high school and | should have co | ompleted CE c | ourse: Sanita | ary Engineering (| CU23880) |
| with | a pass | grade | of 7.5 | orhi | gner. | | - house has a set of balance | 2022 http://www. | | | | | |
| • CIVII | Engine | ering | арриса | ants si | noula r | egister for the cours | e by the end of May | 2022 by contact | ing their study | career coach | | | |
| Conditions for | test p | articip | ation: | not a | pplicat | ble | | | | | | | |
| Brief descripti | on of o | course | conte | nt: | | | | | | | | | |
| This course wi | ll build | on the | e stude | ents' e | existing | basic knowledge of | wastewater treatme | nt theory and te | chnologies use | d. During this | course the st | tudent will learn | to determine |
| what water qu | ality n | neasur | ement | s are | needeo | for a specific water | source and desired v | vater product ar | nd they will be a | able to set up | a water trea | tment scheme to | treat the |
| water from qu | ality A | (sourc | e) to c | quality | / B (pro | oduct). Once they hav | ve set up a theoretica | al treatment sch | eme, they will a | also learn how | to calculate | the water balan | ce, water |
| recovery and h | now to | monit | or the | syste | m on n | nain performance pa | rameters, including s | statistical analysi | s and optimisat | tion. | | | |
| Compulsory li | teratu | re: not | applic | able | | | | | | | | | |
| Test code | Forn | nat | | | | Assessment type | Content | Weighting | Minimum | Planning | Inspection | n Resit | Inspection |
| | | | | | | | | Factor (%) | score | test in | of work in | scheduled | of resit in |
| | | | | | | | | | | week | week | in week | week |
| | v | w | 0 | 1 | G | | | | | | | | |
| TEST01 (VT) | | x | - | x | _ | Concepts of Advan | ced 1.1.6.1 | 25% | 5.5 | S1. Wk 39- | S1. Wk 39 | - S1. Wk 39- | S1. Wk 39- |
| | | ~ | | | | Water Technology | (Table 1) | 2070 | 0.0 | 3 | 3 | 5 | 5 |
| | | | | | | Portfolio | . , | | | 0 | J. J | Ū | 0 |
| TEST02 (VT) | | x | | x | x | Applications of | 1.2, 1.3, 2.1, | , 50% | 5.5 | S1. Wk 39- | S1. Wk 39 | - S1. Wk 39- | S1. Wk 39- |
| | | | | | | Advanced Water | 3.1, | | | 3 | 3 | 5 | 5 |
| | | | | | | Technology | 7.1 (Table 1) |) | | | | | |
| | | | | | | portfolio | | | | | | | |
| TEST03 (VT) | | | x | x | x | Advanced Water | 1.1, 7.2 | 25% | 5.5 | S1. Wk 39- | S1. Wk 39 | - S1. Wk 39- | S1. Wk 39- |
| | | | | | | Technology in Prac | tice (Table 1) | | | 3 | 3 | 5 | 5 |
| | | | | | | Portfolio | | | | | | | |





| Block 13 & 14 / | Semeste | er 7 | | | | | | | | | | | |
|-----------------------|-------------|--------------------|-------------------|-----------|-----------|--------------------------------|----------------------------------|-------------------|---------------------|-------------------|---------------------|------------------------|-----------------|
| CU79044v1 | Title: | Ecologi | cal Risk | Assess | ment | | Number of study credits: 10 | Numbe | r of contact hour | s: 70 Ele | ctive | Teaching language | : English |
| Conditions for | course pa | articipat | ion: | | | | | | | | | | |
| • The | course w | ill only b | be given | if at lea | ast 8 stu | idents subscribe for this ele | ctive course | | | | | | |
| Prop | aedeutic | exam p | assed | | | | | | | | | | |
| At le | ast 120 E | C obtai | ned (inc | luding p | provisio | nary credits) | | | | | | | |
| • Inter | rnship OF | R Minor | passed | | | | | | | | | | |
| Conditions for | test parti | cipatior | n: To be | allowed | d to par | ticipate in TEST04 (VT) appr | oval of the literature review is | required | | | | | |
| Brief descriptio | n of cour | rse cont | ent: | | | | | | | | | | |
| During the cour | se, you w | vill make | e an eco | logical r | risk asse | essment on a project that is | being carried out or planned a | nd can have an | environmental ir | npact. Example | es of these project | ts are dumping of p | olluted |
| dredging sludge | e or the u | se of LD | steel sl | ag as su | Ibstrate | for dikes. For this, practical | laboratory skills and theoretic | al knowledge a | bout ecotoxicolo | gy is necessary | in order to analys | e and predict adve | erse effects of |
| pollution on the | e aquatic | environ | ment. E | ffects w | ill be st | udied at different levels, in | particular from the level of mo | plecules to the l | evel of ecosystem | ns. In order to c | ome up with a w | ell-founded conclu | sion on |
| ecotoxicologica | l effects, | you nee | ed know | ledge o | n the be | ehaviour of chemical substa | nces in the abiotic and biotic e | nvironment. Ir | e biotic environn | nent can be stu | died at the level o | of the cell, tissue, o | rganism, |
| population, con | nmunity (| or ecosy | stem. Y | ou will i | earn wi | nat guiding principles are in | environmental policy on diffe | rent levels (UN | , EU, national, reg | gional) and wha | t legal policy inst | ruments are, whic | n are used in |
| the processe. For the | e legal ins | strumer ^ | it enviro | nmenta | ai impac | t assessment (EIA) you will | go through the whole procedu | ire of an impact | assessment, in a | interent roles b | y means of a case | e study. In such a w | ay you learn |
| | | A. Taatawia | alam, Fr | contial | - Couiro | nmantal Contaminants and | Their Dialogical Effects on Anir | male and Dlants | 1 at Edition And | 115 2016 | | | |
| | or: Dona | ld Sparl | ing | sentiuis | EIIVIIO | | Their Biologicul Ejjects on Ann | nuis unu Piunts | , 1St Eultion - Api | 11 15, 2010 | | | |
| • Auti | | nu span | 1115 11 2001 (| 171 | | | | | | | | | |
| • Pape | | סיפ אום סיניסקר | 2010610 | 9474 | | | | | | | | | |
| Test code | Form | at | 010010 | | | Assessment type | Content | Weighting | Minimum | Planning | Inspection | Resit | Inspection |
| Test touc | 10111 | u | | | | Assessment type | content | Factor (%) | score | test in | of work in | scheduled in | of resit in |
| | | | | | | | | | | week | week | week | week |
| | | | | | | | | | | | | | |
| | v | w | 0 | Ι | G | | | | | | | | |
| TEST01 (VT) | | x | | Х | | mid-term Ecotoxicology (| l) 1.1, 1.3, 5.1, 7.2 | 30% | 5.5 | S1.8 | S1.9 | S1.10 | S2.1 |
| | | | | | | written knowledge test | (table 1) | | | | | | |
| TEST02 (VT) | | x | | X | | Portfolio (G) | 2.1, 3.1, 4.1 , 6.1, | 25% | 5.5 | S1.17 | S1.18 | S1.19 | S1.20 |
| | | | | | | | 7.3 (table 1) | | | | | | |
| TEST03 (VT) | | x | | x | | Report: Environmental In | npact 2.1, 2.2, 3.1, 6.1, | 30% | 5.5 | S1.17 | S1.19 | S1.20 | S2.1 |
| | | | | | | Assessment (G) | 7.2, 8.2, 9.2 | | | | | | |
| | | | | | | Assignment | (table 1) | | | | | | |
| TEST04 (VT) | x | | | | x | Poster | 1.1, 7.1, 7.2 | 15% | 5.5 | S1.7 | S1.7 | S1.9 | S2.1 |
| | | | | | | presentation | (table 1) | | | | | | |



_

TEST04 (VT)

x



| BIOCK 13 & 14 | i / Sen | iester | / | | | | | | | | | | |
|-------------------|-----------|----------|----------|-----------|----------|---------------------------|-------------------------------|--------------------|-------------------|-----------------|--------------------|--------------------|----------------|
| CU79043V1 | Title: | Aquad | ulture | | | | Number of study credits: | LO Numbe | r of contact hou | urs:88 Ele | ective T | eaching langua | ge: English |
| Conditions for | course | partic | ipation | : | | | | | | | | | |
| • The c | ourse v | will be | given o | only if a | at least | 8 students subscribe to | this elective course | | | | | | |
| Propa | aedeuti | ic exan | n passe | d | | | | | | | | | |
| At lea | ast 120 | EC obt | ained (| includ | ing pro | visionary credits) | | | | | | | |
| • Inter | nship o | r mino | r passe | d | | | | | | | | | |
| • Excu | rsions: | particip | bation i | s man | datory | | | | | | | | |
| Conditions for | test pa | rticipa | tion: N | ot app | licable | | | | | | | | |
| Brief description | on of co | ourse c | ontent | : | | | | | | | | | |
| This introducto | ory cour | se to a | quacul | ture is | an ele | ctive course, in which th | ne focus will primarily be or | n the cultivation | n of saltwater or | rganisms and | d the setup of an | aquaculture bu | usiness case. |
| More and more | e shellfi | ish and | fish, cı | rops lil | ke Salio | ornia, and also for insta | nce ragworms are being cu | ltivated under | controlled circu | mstances. T | here is also a lar | ge sector still cu | ultivating in |
| natural areas, v | which b | rings it | s own | challer | nges. T | he large amount of inpu | it from experts of the secto | r (guest lecture | es and excursion | is) in this cou | urse and the vari | ous case studie | s mean you |
| will get a good | impres | sion of | all the | differ | ent asp | ects of aquaculture, bo | th in the Netherlands as we | ell as globally. Y | ou will learn ab | out the biolo | ogy of the organi | isms, the techni | cal aspects of |
| culturing (repr | oductio | n), the | cultiva | ition sy | ystems | , sustainability of aquac | ulture, the legislation, anim | ial welfare, hea | Ith managemen | nt and econo | mic aspects. In a | addition you wil | l get a taste |
| for cost price c | alculati | ons, ho | ow to n | nake a | financ | ial business plan, and ho | ow to bring your chosen pro | oduct to the ma | arket. | | | | |
| Compulsory lit | erature | e: | | | | | | | | | | | |
| Test code | Form | at | | | | Assessment type | Content | Weighting | Minimum | Planning | Inspection | Resit | Inspection |
| | | | | | | | | Factor (%) | score | test in | of work in | scheduled | of resit in |
| | | | | | | | | | | week | week | in week | week |
| | V | w | 0 | I | G | | | | | | | | |
| TEST01 (VT) | | x | | X | | Written knowledge te | est 1.1, 1.2, 7.2 | 25% | 5.5 | S1.18 | S1.19 | S1.20 | S1.22 |
| TEST02 (VT) | | x | | | X | Paper | 2.1, 2.2, 3.1, | 40% | 5.5 | S1.18 | S1.19 | S1.20 | S1.22 |
| | | | | | | assignment | 7.3, 8.1, 8.2, | | | | | | |
| | | | | | | | 8.3, 9.5, 9.6 | | | | | | |
| TEST03 (VT) | | X | | | x | Paper | 1.3, 2.2, 5.1, | 25% | 5.5 | S1.13 | S1.15 | S1.19 | S1.21 |

8.2, 8.3

8.4

1.1, 1.2, 1.3,

10%

5.5

Assignment

Presentation

х

S1.15

S1.16

S1.19

S1.21





| Block 13 & 14 | l / Ser | neste | r 7 fo | r fou | r year | track only (240 EC) | | | | | | | |
|-------------------|---------|----------|---------|---------|-------------------|---------------------------|----------------------------|------------------|------------------|---------------|------------------|----------------------------|---------------|
| CU79087V1 | Title | : Urba | n Wat | er Ma | nager | nent N 1 | lumber of study credi 0 | its: Numbe 70 | r of contact h | ours: Ele | ctive | Teaching langua English | age: |
| Conditions for | course | e parti | cipatio | on: Th | e cour | se will only be given if | at least 10 students s | ubscribe for th | nis elective cou | rse | | | |
| Conditions for | test pa | articip | ation: | - | | | | | | | | | |
| Brief description | on of c | ourse | contei | nt::S | ewer s | ystems are critical infra | astructures from tech | nical, environ | mental and ma | nagement v | ewpoints. The | course takes a | dvantage of |
| this scenario to | devel | op sev | eral cr | ross-d | isciplir | ne and transferable skil | lls. About 60% of the o | course focuses | s on sewer syst | ems design, | from the calcu | lation of wastev | vater and |
| rainwater input | t to th | e sizing | g of th | e duct | ts and | the pumping stations. | This requires applying | g the theory pr | roactively and | tailoring the | solution to the | particular case | study, as the |
| design cannot r | ely on | comp | rehen | sive m | nanual | s such as the Eurocode | e. Proper design, const | truction and fu | unctioning of s | ewer system | s are crucial in | order to avoid p | ollution of |
| soll and water. | ine re | emainii | ng 40% | 6 OT Tr | ie coul | rse deals with manager | ment and maintenand | ce, which is col | mplicated due | to the infras | tructure being | underground ar | na prone to |
| infrastructures | The h | n learn | gineer | s hav | ny Assi a knov | vledge about all aspect | s of the complete life | | structure This | course has h | een developer | in conservation | 5 with the |
| asset managem | nent re | esearch | a grou | b of H | Z and | external experts from t | the professional field. | | | | | | with the |
| Compulsory lite | eratur | e: - | 0.00 | | | <u> </u> | | | | | | | |
| | | | | | | | | | | | | | |
| Test code | Forn | nat | | | | Description and | Content | Weighting | Minimum | Planning | Inspection | Resit | Inspection |
| | | | | | | assessment type | | Factor (%) | score | test in | of work in | scheduled | of resit in |
| | | | | | | | | | | week | week | in week | week |
| | v | w | 0 | | G | - | | | | | | | |
| TEST01 (VT) | - | x | - | | x | Portfolio sewer syste | ems 1.1, 2.1, 3.1, | 30% | 5.5 | S1.08 | S1.09 | S1.10 | S1.11 |
| | | | | | | design (Portfolio) | 7.2, 8.1 | | | | | | |
| | | | | | | | (table 1) | | | | | | |
| TEST02 (VT) | | x | | | x | Portfolio asset | 1.1, 1.3, 4.1, | 30% | 5.5 | S1.18 | S1.19 | S1.20 | S2.2 |
| | | | | | | management | 5.1, 8.2, 9.2 | | | | | | |
| | | | | | | (Portfolio) | (table 1) | | | | | | |
| | | | | | | | | | | | | | |
| TEST03 (VT) | | x | | x | | Final exam (Written | 1.1, 1.3, 2.1, | 40% | 5.5 | S1.18 | S1.19 | S1.20 | S2.2 |
| | | | | | | knowledge test) | 2.2, 3.1, 4.1, | | | | | | |
| | | | | | | | 5.1 (table 1) | | | | | | |
| | | | | | | | | | | | | | |





Courses offered within Water Management programme – Delta Management

SEMESTER 3 DM Block 5 Vision Development & Block 6 Adaptive Planning for Climate Change

| Block 5 / Sem | nester | 3 | | | | | | | | | | | |
|---|--|--|--|------------------------------------|-------------------------|---|---|----------------------------|--------------------------------|-------------------------------|----------------------------------|-------------------------------|-----------------------------------|
| CU79103V2 | Title | : Princi | iples o | of Data | a Anal | ysis M | Number of study credit | ts: Numbe | r of contact ho | ours: Man | datory | Teaching langua | ge: English |
| | | | | | | 2 | 2.5 | 24 | | | | | |
| Conditions for | course | e parti | cipatio | on: no | t appli | icable | | | | | | | |
| Conditions for | test p | articip | ation: | not a | pplical | ble | | | | | | | |
| Brief description Student will le to test for sta Compulsory lit | on of c earn t tistica eratur | ourse o prep al sign re: Exce | conter pare d ificant el 2007 | nt: lata s ce, to 7 or hi | ets fo visua gher | r analysis (data man llise the data in a cle | agement), methods ear and concise way, | to summariz and to answ | e and describ er research q | be a data set uestions bas | (descriptive ed on data. | analysis), basi | ic methods |
| Test code | Form | nat | | | | Assessment type | Content | Weighting Factor (%) | Minimum score | Planning test in week | Inspection of work in week | Resit scheduled in week | Inspection of resit in week |
| | v | w | 0 | I | G | | | | | | | | |
| TEST01 (VT) | | x | x | x | | Portfolio | 7.1.2 | 40% | 4.0 | S1.8 | S1.9 | S1.10 | S1.12 |
| TEST02 (VT) | | x | x | x | | Written knowledge t | est 6.1.1, 6.1.2 | 60% | 5.5 | S1.8 | S1.9 | S1.10 | S1.12 |





| CU79025v1 | Title | | | | | | | | | | | | | |
|---|-----------|------------------------------------|---------------------------------|----------|---------|---|-------------------------------|--------------------------|-------------------------|--|-------------------------------------|---|---|------------------------------|
| Conditions for | | Vision | devel | opmen | t theor | γ | Number of s | tudy credits: 3. | 0 Number | of contact hou | ırs: 26 🛛 🛛 | Mandatory | Teaching langua | ge: English |
| Conditions for | r course | partici | pation | : Not a | pplicab | le | | | | | | | | |
| Conditions for | r test pa | rticipa | tion: N | Vot app | licable | | | | | | | | | |
| Brief descripti | ion of co | ourse c | ontent | : | | | | | | | | | | |
| This course co | vers the | eories a | bout v | ision de | evelopr | ment. You will learn ho | w to formulate | e a vision by usi | ng scenarios b | based on differe | ent uncerta | inties and drivir | ig forces. Furtheri | more, you |
| learn about th | ie mana | gemen | t of the | ese pro | cesses | (embedded within the | Environmenta | al and Developm | nent Act), stak | eholder partici | pation and | communication | with different tai | rget groups. |
| Compulsory lit | terature | e: not a | pplical | ole | | | | | | | | | | |
| Test code | Form | at | | | | Assessment type | Co | ontent | Weighting | Minimum | Planning | Inspection | n Resit | Inspection |
| | | | | | | | | | Factor (%) | score | test in | of work in | scheduled | of resit in |
| | | | | | | | | | | | week | week | in week | week |
| | v | w | 0 | | G | | | | | | | | | |
| TEST01 (VT) | | x | | x | | Written knowledge te | est 1.1 | 1.3 (table 3) | 100% | 5.5 | S1.8 | S1.9 | S1.10 | S1.11 |
| learn about th Compulsory lit Test code | terature | gemen e: not a nat W x | t of the pplical O | ese proo | G | (embedded within the Assessment type Written knowledge te | Environmenta Co est 1.1 | I and Developm Intent | Weighting Factor (%) | eholder partici Minimum score 5.5 | Planning test in week S1.8 | communication Inspectior of work in week S1.9 | with different tail Resit scheduled in week S1.10 | Inspector of resi week |

| Block 5 / Sem | ester 3 | 3 | | | | | | | | | | | | |
|------------------|--|----------|---------|---------|---------|----------------------|----------|----------------------|------------|-----------------------------|-------------|------------|------------------|-------------|
| CU79055v3 | Title: | Climat | e chan | ge phy | sics & | effects | Number o | of study credits: 2. | 5 Number | [·] of contact hoι | ırs: 22 Maı | datory 1 | Feaching languag | ge: English |
| Conditions for o | course | partici | pation | : Not a | oplicab | le | | | | | | | | |
| Conditions for t | est pa | rticipat | ion: No | ot appl | icable | | | | | | | | | |
| Brief descriptio | f description of course content: | | | | | | | | | | | | | |
| This course cove | course covers the theories about the climate change physics and effects. You will learn the basic physics and calculations behind the climate change effects (drought, heat stress, | | | | | | | | | | | | | |
| floods and extre | ds and extreme precipitation) in Europe and their social and economic impact. Complementary to the aforementioned content you will learn and practice basic hydrology calculations. | | | | | | | | | | | | | |
| Compulsory lite | ods and extreme precipitation) in Europe and their social and economic impact. Complementary to the aforementioned content you will learn and practice basic hydrology calculations. | | | | | | | | | | | | | |
| Test code | Form | at | | | | Assessment type | | Content | Weighting | Minimum | Planning | Inspection | Resit | Inspection |
| | | | | | | | | | Factor (%) | score | test in | of work in | scheduled | of resit in |
| | | | | | | | | | | | week | week | in week | week |
| | v | w | 0 | I | G | | | | | | | | | |
| TEST01 (VT) | | X | | X | | Written knowledge te | est | 9.2.1. | 100% | 5.5 | S1.8 | S1.9 | S1.10 | S1.11 |





| Block 5 / Sem | ester | 3 | | | | | | | | | | | | |
|-------------------|----------|-----------|----------|----------|---------|--------------------------|--------------|---------------------|-------------------------|------------------|-----------------------------|----------------------------------|-------------------------------|-----------------------------------|
| CU79028v3 | Title: | Advar | iced GI | S | | | Number | of study credits: 2 | .0 Number | of contact hou | ırs: 18 Mar | ndatory | Feaching langua | ge: English |
| Conditions for | course | partici | pation | : Not a | pplicab | ole | | | | | | | | |
| Conditions for | test pa | rticipa | tion: N | lot app | licable | | | | | | | | | |
| Brief description | on of co | ourse c | ontent | : | | | | | | | | | | |
| In this course is | the fo | llow up | o of the | 'intro | duction | into GIS course'. You v | will learn ł | now to conduct a ra | aster, vector a | nd a DEM analy | sis, with the u | ses ARC GIS P | ro software. By r | ealizing a |
| flood impact an | alysis o | of a flo | od pror | ne area | . Cours | se will be assessed by a | portfolio | test in week 7 of s | emester 1. | | | | | |
| Compulsory lite | erature | e: for th | nis cour | rse is A | RC GIS | Pro, running under HZ | licence at | MacOS, Microsoft | Windows or Li | nux, and the us | e of a non-de | sktop comput | er required. | |
| Test code | Form | at W | 0 | I | G | Assessment type | | Content | Weighting Factor (%) | Minimum score | Planning test in week | Inspection of work in week | Resit scheduled in week | Inspection of resit in week |
| TEST01 (VT) | | | X | X | | Portfolio | | 1.1.1, 6.1.1 | 100% | 5.5 | S1.7 | S1.9 | S1.10 | S1.12 |





Block 5 / Semester 3

CU79107V1 Title: Climate Proof Area Vision Number of study credits: 5.0 Number of contact hours: 44 Mandatory Teaching language: English

Conditions for course participation: Not applicable

Conditions for test participation: 'Netherlands 2150-day' (SG) in S1.1; Field trip to course related cases/sites

Brief description of course content:

In this project you will develop a vision for an European flood prone region. This policy document will be based on area analysis, desk research and scenarios.

The course will be assessed on behalf of a report of your vision performed on the basis of the research circle, a digital presentation of your vision as group product and a supporting water balance.

Compulsory literature: not applicable

| Test code | Form | at | | | | Assessment type | Content | Weighting Factor (%) | Minimum score | Planning test in week | Inspection of work in week | Resit scheduled in week | Inspection of resit in week |
|-------------|------|----|---|---|---|-----------------|----------------------|-------------------------|------------------|-----------------------------|----------------------------------|-------------------------------|-----------------------------------|
| | v | w | 0 | Ι | G | | | | | | | | |
| TEST01 (VT) | | Х | | | Х | Paper | 7.1.1, 7.1.2, 7.1.3, | 30% | 5.5 | S1.7 | S1.9 | S1.10 | S1.12 |
| | | | | | | assignment | 7.1.4 (table 3) | | | | | | |
| TEST02 (VT) | Х | | | | Х | Presentation | 1.1.1, 1.2.1, 2.2.3 | 50% | 5.5 | S1.8 | S1.9 | S1.10 | S1.12 |
| | | | | | | | table 3) | | | | | | |
| TEST03 (VT) | | | Х | Х | | Portfolio | 1.1.1, 1.1.3, 2.1.1, | 20% | 5.5 | S1.4- S1.7 | S1.9 | S1.10 | S1.12 |
| | | | | | | | 2.1.2 (table 3) | | | | | | |





Block 6 / Semester 3

CU79030v1 Title: Adaptive Planning Theory Number of study credits: 3.0 Number of contact hours: 26 Mandatory Teaching language: English

Conditions for course participation: Not applicable

Conditions for test participation: Not applicable

Brief description of course content:

This course covers theories for planning and management for adaptation and mitigation. This will be explained via the application in the Dutch Delta program, taking into consideration the different socio-economic and cultural dimensions and the European context. This course prepares for the adaptive Climate Change Tender.

| Compu | sory | literature: |
|-------|------|-------------|
| | | |

| Test code | Form | at | | | | Assessment type | Content | Weighting Factor (%) | Minimum score | Planning test in week | Inspection of work in week | Resit scheduled in week | Inspection of resit in week |
|-------------|------|----|---|---|---|------------------------|-----------------|-------------------------|------------------|-----------------------------|----------------------------------|-------------------------------|-----------------------------------|
| | v | w | 0 | I | G | | | | | | | | |
| TEST01 (VT) | | x | | X | | Written knowledge test | 2.1.1, 2.1.2, | 100% | 5.5 | S1.18 | S1.19 | S1.20 | S1.21 |
| | | | | | | | 4.1.1 (table 3) | | | | | | |

| Block 6 / Sem | ester | 3 | | | | | | | | | | | | |
|------------------|---|----------|--------|---------|---------|-----------------|----------------------------------|------------|----------------|-------------|------------|-----------------|------------------|--|
| CU79105V1 | Title: | Resear | rch Me | thodo | logy | | Number of study credits: 2 | .0 Number | of contact hou | urs: 18 Man | datory T | eaching languag | ge: English | |
| Conditions for a | course | partici | pation | : Not a | pplicab | ole | | | | | | | | |
| Conditions for t | test pa | rticipat | ion: N | lot app | licable | | | | | | | | | |
| Brief descriptio | n of co | ourse co | ontent | : | | | | | | | | | | |
| This course cov | ourse covers the steps of the research cycle from the research proposal till writing your report. The report will be assessed with an assessment form and a peer assessment of your | | | | | | | | | | | | | |
| individual contr | vidual contribution to the group work. | | | | | | | | | | | | | |
| Compulsory lite | aividual contribution to the group work. pmpulsory literature: | | | | | | | | | | | | | |
| Test code | Form | at | | | | Assessment type | Content | Weighting | Minimum | Planning | Inspection | Resit | Inspection | |
| | | | | | | | | Factor (%) | score | test in | of work in | scheduled | of resit in week | |
| | | | | | | | | | | week | week | in week | | |
| | v | w | 0 | | G | | | | | | | | | |
| | | | | | v | Paper | 712713 | 100% | 55 | \$1.17 | \$1.10 | \$1.20 | \$1.22 | |
| 113101 (01) | | | ~ | | ^ | Accignment | 7.1.2, 7.1.3, 7.1.4 (table 2) | 100% | 5.5 | 51.17 | 51.13 | 51.20 | 51.22 | |
| | | | | | | Assignment | 7.1.4 (table 3) | | | | | | | |





| Block 6 / Sem | ester | 3 | | | | | | | | | | | | |
|-------------------|---|----------|-----------------|---------|---------|-----------------|--------|---------------------|------------|------------------|-----------|------------|-----------------|-------------|
| CU79033v3 | Title: | Data V | /isualis | ation | | | Number | of study credits: 2 | .5 Numbe | er of contact ho | urs: 22 M | andatory | Teaching langua | ge: English |
| Conditions for | course | partici | pation | : Not a | pplicat | ole | | | | | | | | |
| Conditions for | test pa | rticipa | t ion: N | ot app | licable | | | | | | | | | |
| Brief descriptio | n of co | ourse co | ontent | • | | | | | | | | | | |
| In this course y | course you will learn how to visualize data in a professional way. You will learn how to upgrade GIS maps into professional visuals by the use of Adobe Illustrator and display them in gital environment of ArcGis storymaps . The course will be assessed by an digital portfolio | | | | | | | | | | | | | |
| the digital envir | digital environment of ArcGis storymaps . The course will be assessed by an digital portfolio | | | | | | | | | | | | | |
| Compulsory lite | the digital environment of ArcGis storymaps . The course will be assessed by an digital portfolio Compulsory literature: For this course is ArcGIS Pro and Adobe Illustrator, running at macOS, Microsoft Windows or Linux, and the use of a non-desktop computer required. | | | | | | | | | | | | | |
| Test code | Form | at | | | | Assessment type | | Content | Weighting | Minimum | Planning | Inspection | Resit | Inspection |
| | | | | | | | | | Factor (%) | score | test in | of work in | scheduled | of resit in |
| | | | | | | | | | | | week | week | in week | week |
| | v | w | 0 | | G | | | | | | | | | |
| | • | •• | v | v | • | Portfolio | | 612911 | 100% | 5 5 | C1 10 | \$1.10 | <u> </u> | <u> </u> |
| | | | X | ~ | | FULLUIU | | (1.1.2, 0.1.1) | 100% | 5.5 | 31.10 | 51.19 | 51.20 | 31.21 |
| | | | | | | | | (table 3) | | | | | | |

| Block 6 / Sem | nester 3 | 3 | | | | | | | | | | | |
|-------------------|----------|-----------|-----------|---------|---------|------------------------------|--|-------------------------|------------------|-----------------------------|----------------------------------|-------------------------------|-----------------------------------|
| CU79106V1 | Title: | Climate | e Adaptiv | ve area | reque | est for proposal | Number of study credits: 5 | .0 Numbe | r of contact ho | ours: 36 Man | datory 1 | Teaching languag | e: English |
| Conditions for | course | particip | oation: N | lot app | licable | 1 | | | | | | | |
| Conditions for | test par | rticipati | ion: Not | applica | able | | | | | | | | |
| Brief description | on of co | urse co | ntent: | | | | | | | | | | |
| In this project | you will | enrol a | s team (y | your gr | oup) f | or a 'climate adaptive | area request for proposal'. T | his request f | or proposal wil | l be based on ar | ea analysis, d | lesk research and | d theories fo |
| planning and m | nanagen | nent fo | r adaptai | tion an | d miti | , gation. The vision will | be displayed in an request for | or proposal, a | group product | , which is suppo | orted by a cal | culated water sys | stem design. |
| The request fo | r propos | al of th | ie vision | will be | prese | nted as a group produ | ict, assessed by the lecturers | according to | the completio | n criteria and in | , dividual oral (| examination. | Ũ |
| Compulsory lit | erature | : | | | • | 0 1 1 | | | | | | | |
| Test code | Forma | ət | | | | Assessment type | Content | Weighting Factor (%) | Minimum score | Planning test in week | Inspection of work in week | Resit scheduled in week | Inspection of resit in week |
| | v | W | 0 | I | G | 1 | | | | | | | |
| FEST01 (VT) | | x | | | Х | Paper Assignment | 3.2.1, 5.1.1, 8.1.1, 8.2.1 (table 3) | 30% | 5.5 | S1.17 | S1.19 | S1.20 | S1.22 |
| TESTO2 (VT) | Х | | | Х | | Presentation | 6.1.1, 8.1.1, 8.2.2, 8.2.3, 9.2.2 (table 3) | 40% | 5.5 | S1.18 | S1.18 | S1.20 | S1.20 |
| TEST03 (VT) | | | Х | х | | Portfolio | 2.2.1, 3.1.1, 9.2.2 (table 3) | 30% | 5.5 | S1.12 - S1.15 | S1.19 | S1.20 | S1.22 |





SEMESTER 4 DM Block 7 Risk and Disaster Management & Block 8 Strategic Planning for Resilient Deltas

| Block 7 / Semest | er 4 | | | | | | | | | | | | | | |
|---|--|----------|----------|---------|-------------------|-------------------|-------------------------------------|-------------------------|------------------|-----------------------------|-------------------------------|-------------------------------|-----------------------------------|--|--|
| CU79035v1 | Title | e: Spati | ial Plar | nning f | or Deltaic Risks | Numbe credits: | r of study 3 | Number of hours:22 | of contact | Mandatory | / | Teaching language | : English | | |
| Conditions for cou | rse pa | rticipat | tion: n | ot app | licable | | | | | · | · | | | | |
| Conditions for test | partio | cipatio | n: not | applic | able | | | | | | | | | | |
| Brief description o which environment theories about plar Compulsory literat | Srief description of course content: Within this module you will focus on vulnerabilities and risks present in delta areas in general and the Mississippi delta, USA specifically. You will learn vhich environmental, ecological, spatial and climate risks are present and how they relate to each other and to the social-economic and institutional risks. Furthermore, you will learn heories about planning for risks and disaster management. | | | | | | | | | | | | | | |
| Test code | Form | nat | | 1 | Assessme | nt type | Content | Weighting Factor (%) | Minimum score | Planning test in week | Inspection of work in week | Resit scheduled in week | Inspection of resit in week | | |
| | v | w | 0 | I | G | | | | | | | | | | |
| TEST01 (VT) | | x | | x | Written k test | owledge | 1.1.1, 1.1.3, 1.2.1 (table 3) | 100% | 5.5 | S2.8 | S2.9 | S2.10 | S2.11 | | |





| Block 7 / Seme | ster 4 | ļ. | | | | | | | | | | | |
|--|----------------------------|--------------------------------|--|-------------------------------------|---------------------------|---|---|---|---|---|--|--|------------------------------------|
| CU79036v1 | Title | : Socia | l and E | conor | nic Ris | iks N cr | umber of study redits: 3 | Number 22 | of contact hours: | Mandatory | , | Teaching language: | English |
| Conditions for co | urse p | articip | ation: | not ap | plicab | le | | | | | | | |
| Conditions for tes | st part | icipati | on: no | t appli | cable | | | | | | | | |
| Brief description of change. You will le from different per Compulsory litera | of cou earn th spect | heories ives an literatu | ntent: about d appl ⁱ ure in t | Withir disas y your he for | this r ter eco know | nodule you will le pnomics, econom ledge on cases, in urticles, policy doc | arn about econon ic value of ecosyst particular the cas cuments and book | nic and socioecor em services and se of the Mississig chapters will be | nomic risks for delta you will also get an opi delta in Louisian handed out during | a areas. You will introduction in a, USA. the lectures | learn about the ec system thinking. Y | onomic and social i ou will learn to lool | isks of climate at these topics |
| Test code | Forn | nat | | | | Assessment type | Content | Weighting Factor (%) | Minimum score | Planning test in week | Inspection of work in week | Resit scheduled in week | Inspection of resit in week |
| | V | w | 0 | I | G | | | | | | | | |
| TEST01 (VT) | | x | | x | | Written knowledge test | 1.1.1, 1.1.3, 1.2.1 (table 3) | 100% | 5.5 | S2.8 | S2.9 | S2.10 | 52.11 |





| Block 7 / Seme | ster 4 | | | | | | | | | | | | | |
|--------------------|---------|----------|----------|--------|----------|--------------------------|-----------------------|-------------|-------------|--------------------|-----------------|-----------------------|----------------------|---------------|
| CU79037v1 | Title | : Proje | ct & Pi | ocess | I | | Number of study | | Number o | of contact hours: | Mandato | ory | Teaching language | English |
| | | | | | | | credits: 3 | | 22 | | | | | |
| Conditions for co | urse p | articipa | ation: | not ap | plicab | le | | | | | | | | |
| Conditions for tes | t part | icipatio | on: not | appli | cable | | | | | | | | | |
| Brief description | of cou | rse con | ntent: | Withir | n this r | module you will | learn about risk ana | alysis of o | delta areas | s. We will focus c | on the case of | he Mississippi delta: | in Louisiana, USA. Y | ou will learn |
| which social and i | nstitut | tional r | isks ar | e pres | ent wi | ithin deltas. You | will learn theories a | about pr | ocess mar | agement and de | sign, actor- ar | d stakeholder analys | is, and governance. | |
| Compulsory litera | ture: | literatu | ire in t | he for | m of a | articles, policy de | ocuments and book | chapter | s will be h | anded out during | g the lectures | | | |
| Test code | Forn | nat | | | | Assessment | Content | Weight | ting | Minimum | Planning | Inspection | Resit | Inspection |
| | | | | | | type | | Factor | (%) | score | test in | of work in week | scheduled in | of resit in |
| | | | | | | | | | | | week | | week | week |
| | v | w | 0 | I | G | | | | | | | | | |
| | | | | | | 14/2:55 - 2 | 111112 | 10 | 00/ | F F | 62.0 | 62.0 | 52.10 | 62.11 |
| | | х | | х | | written knowlodgo tog | 1.1.1, 1.1.3, | 10 | JU% | 5.5 | 52.8 | 52.9 | 52.10 | 52.11 |
| | | | | | | knowledge tes | 2) | | | | | | | |
| | | | | | | | 5) | | | | | | | |





| Block 7 / Seme | ster | 4 | | | | | | | | | | | |
|--|---------------------------------------|---|--|----------------------------------|--|---|--|--|---|--|---|---|---|
| CU79038v1 | Title Area | e: Integ as | rated | Risk / | Assess | ment for Delta | Number of st | udy credits: 3.5 | Number of o hours:30 | contact | Mandatory | Teac Engl | hing language: sh |
| Conditions for co | urse p | articip | ation: | not a | pplica | ble | | | · | | | | |
| Conditions for tes | st part | ticipatio | on: no | t app | licable | 2 | | | | | | | |
| Brief description ecosystem service knowledge in a gr You will also refle | of cou es, spa oup p ct on v | irse cor itial ana roject. your pe | ntent: alysis, In this erform | In thi proce proje ance | s proje ess ma ect you and de | ect you will execute a nagement and desig u also have to apply t evelopment within a | a risk assessme n, actor- and st the statistics, G group and will | nt of a certain are akeholder analysi IS and visualizatio be assessed on th | a in the Mississip s, governance, sp n skills you have o is. | pi delta. You wil atial economics obtained in prev | l apply theories of r and disaster econo ious modules and v | isk and disaster r mics. You will app vill further develo | nanagement, bly this pp in this module. |
| Compulsory litera | ture: | literatı | ure in t | the fo | rm of | articles, policy docu | ments and boo | k chapters will be | handed out durir | ng the lectures | | | |
| Test code | Forr | nat | | | | Assessment type | Content | Weighting Factor (%) | Minimum score | Planning test in week | Inspection of work in week | Resit scheduled in week | Inspection of resit in week |
| | v | w | 0 | 1 | G | | | | | | | | |
| TESTO1 (VT) | | × | | | x | Paper Assignment | 1.1, 1.2.1, 2.2.3, 7.1.2, 8.1.1, (table 3) | 75% | 5.5 | \$2.7 | S2.9 | S2.10 | \$2.11 |
| TESTO1 (VT) | x | x | | x | | Criterion-based interview | 8.2.1, 8.2.2, 9.1.1, 9.1.2, 9.1.3 (table 3) | 25% | 5.5 | S2.8 | S2.8 | S2.10 | \$2.10 |





| Block 8 / Semes | ter 4 | | | | | | | | | | | | | |
|--------------------|---|----------|----------|---------|----------|----------------------------|-------------------------------------|-------------------------|---------------------|-----------------------------|-------------------------------|-------------------------------|-----------------------------------|--|
| CU79097v1 | Title | : Spati | al Plan | nning f | or Res | silience N | umber of study | Numbe | r of contact hours: | Mandatory | <i>ı</i> | Teaching language: | : English | |
| | | | | | | cr | edits: 2 | 22 | | | | | | |
| Conditions for co | urse p | articipa | ation: | not ap | plicab | ble | | | | | | | | |
| Special condition | for av | varding | g studγ | point | ts (tick | k-box test): not ap | plicable | | | | | | | |
| Brief description | ription of course content: Within this course you will learn theories on resilience building, the different types of resilience (spatial, technical, ecological, etc.), levels of resilience as sign qualities contributing to resilience. Next to that, spatial planning in the US context and strategy development for resilient deltas will be further explored. | | | | | | | | | | | | | |
| well as design qua | cription of course content: Within this course you will learn theories on resilience building, the different types of resilience (spatial, technical, ecological, etc.), levels of resilience as esign qualities contributing to resilience. Next to that, spatial planning in the US context and strategy development for resilient deltas will be further explored. | | | | | | | | | | | | | |
| Compulsory litera | ture: | literatu | ire in t | he for | m of a | articles, policy doc | uments and book | chapters will be | handed out during | the lectures | | | | |
| Test code | Forn | nat | | | | Assessment type | Content | Weighting Factor (%) | Minimum score | Planning test in week | Inspection of work in week | Resit scheduled in week | Inspection of resit in week | |
| | v | W | 0 | I | G | | | | | | | | | |
| TEST01 (VT) | | х | | x | | Portfolio | 1.2.2, 1.3.1, 1.3.2 (table 3) | 100% | 5.5 | S2.18 | S2.19 | S2.20 | S2.21 | |





| Block 8 / Seme | ster 4 | ļ | | | | | | | | | | | | |
|--------------------|---|----------|----------|---------|----------|---------------------|--|-------------------------|-----------------------|---------------------|-------------------------------|-----------------------|---------------------------|--|
| CU79098v1 | Title | : Socio | econo | mic Re | esilien | ce N | lumber of study redits: 2 | Numb | er of contact hours: | Mandatory | / | Teaching language: | English | |
| | | | | | | | | | | | | | | |
| Conditions for co | urse p | articipa | ation: | not ap | plicab | le | | | | | | | | |
| Conditions for tes | st part | icipatio | on: no | t appli | cable | | | | | | | | | |
| Brief description | of cou | rse cor | ntent: | Withir | n this c | ourse you will lea | arn about strategic | planning for r | esilient deltas. We w | ill focus on the | case of the Mississi | opi delta in Lousian | a, USA. You will | |
| learn theories on | neories on concepts of resilience, strategy development, economic thinking and system thinking, cost estimation and social cost and benefit analysis. You will have to apply your dge in the project and in a portfolio with a practical assignment/small research. | | | | | | | | | | | | | |
| knowledge in the | edge in the project and in a portfolio with a practical assignment/ small research. | | | | | | | | | | | | | |
| Compulsory litera | ature: | literatu | ire in t | he for | m of a | rticles, policy doo | cuments and book | chapters will b | e handed out during | the lectures | | | | |
| Test code | Forn | nat | | | | Assessment type | Content | Weighting Factor (%) | Minimum score | Planning test in | Inspection of work in week | Resit scheduled in | Inspection of resit in | |
| | | | | | | | | | | week | | week | week | |
| | v | w | 0 | I | G | | | | | | | | | |
| TEST01 (VT) | | x | | х | | Portfolio | 1.1.2, 1.2.2, 2.1.1, 3.1.1, 9.2 (table 3) | 100% | 5.5 | S2.18 | S2.19 | S2.20 | S2.21 | |





| Block 8 / Seme | ster 4 | ļ. | | | | | | | | | | | | |
|--------------------|---|----------|----------|---------|--------|--------------------|-------------------------------------|-----------------|----------------|-------------------|-----------------------------|------------------------------|---------------------------------|-----------------------------------|
| CU79100v1 | Title | : Proje | ct & P | rocess | II | | Number of study | | Number o | of contact hours: | Manda | ory | Teaching language | : English |
| | | | | | | | credits: 2 | | 22 | | | | | |
| Conditions for co | urse p | articipa | ation: | not ap | plicab | ole | | | | | | | | |
| Conditions for tes | t part | icipatio | on: no | t appli | cable | | | | | | | | | |
| Brief description | cription of course content: Within this module you will learn about risk analysis of delta areas. We will focus on the case of the Mississippi delta in Louisiana, USA. You will learn cial and institutional risks are present within deltas. You will learn theories about process management and design, actor- and stakeholder analysis, and governance | | | | | | | | | | | | | |
| which social and i | ocial and institutional risks are present within deltas. You will learn theories about process management and design, actor- and stakeholder analysis, and governance. | | | | | | | | | | | | | |
| Compulsory litera | ture: | literatu | ure in t | he for | m of a | articles, policy o | documents and book | chapte | rs will be h | anded out durin | g the lectures | | | |
| Test code | Forn | nat | | | | Assessment type | Content | Weigh Factor | nting r (%) | Minimum score | Planning test in week | Inspection of work in wee | Resit k scheduled in week | Inspection of resit in week |
| | v | w | 0 | I | G | | | | | | | | | |
| TEST01 (VT) | | x | | x | | Portfolio | 1.3.1, 1.3.2. 3.1.1 (table 3) | 1 | .00% | 5.5 | S2.18 | S2.19 | S2.20 | 52.21 |





| Block 8 / Semes | ter 4 | | | | | | | | | | | | |
|---|-------------------------------------|---------------------------------|--|--------------------------------------|---|---|--|--|---|---|---|---|--|
| CU79099v1 | Title | e: Strate | egic Pl | annin | g for F | Resilient Deltas | Number of st | tudy credits: 6.5 | Number of 66 | contact hours: | Mandatory | Te En | aching language: glish |
| Conditions for co | urse p | articip | ation: | not ap | plicat | ble | | | | | | | |
| Conditions for tes | st part | ticipatio | on: no | t appli | cable | | | | | | | | |
| Brief description will learn to apply benefit analysis. Y visualisation, GIS | of cou theor 'ou wi and st | ries on Il apply atistics | ntent: resilier this k skills i | Withir nce, sr nowle in the | n this i batial i dge w projec | module you will learn planning in the US cou ithin an individual pro ct. You will develop yo | about strategie ntext, strategy oject where you our presentatio | c planning for resil development, eco u work on a propo n skills to give a pi | ient deltas. We w nomic thinking a sal for a competi tch for the propo | will focus on a cas nd system thinkin tion to make a N osal. | se within the Missis ng, project/process ew Orleans more ro | ssippi delta in Lo management a esilient. You wil | usiana, USA. You nd social cost and apply your |
| Compulsory litera | ature: | literatu | ure in t | he for | m of a | articles, policy docum | ents and book | chapters will be ha | anded out during | g the lectures | | | |
| Test code | Form | nat | | | | Assessment type | Content | Weighting Factor (%) | Minimum score | Planning test in week | Inspection of work in week | Resit scheduled in week | Inspection of resit in week |
| | v | w | 0 | I | G | - | | | | | | | |
| TESTO1 (VT) | | x | | x | | Paper Assignment | 1.2.2, 1.3, 2.1, 2.2, 3.1, 3.2, 4.1, 5.1, 6.1.1, 7.1.2, 8.1, 8.2.3 (table 3) | 75% | 5.5 | \$2.17 | \$2.19 | \$2.20 | \$2.21 |
| TEST01 (VT) | x | | | х | | Presentation | 2.2, 8.1.1 (table 3) | 25% | 5.5 | S2.18 | S2.19 | S2.20 | \$2.21 |





SEMESTER 7 DM

| Block 13 & 14 | / Ser | neste | r 7 | | | | | | | | | | | |
|-------------------|--|---------|---------|----------|---------|---|-------------------------------|-------------------------|------------------|----------------------------|-----------------------------------|-----------------------------------|-----------------------------------|--|
| CU79085V1 | Title | : Integ | rated | coast | al chal | lenge Nu | umber of study credi | ts: Numbe | er of contact ho | ours: | Mandatory | Teaching langua | ge: | |
| | | | | | | 10 | | 60 | | | | English | | |
| Conditions for | course | e parti | cipatio | on: - | | | | | | | | | | |
| Conditions for | test pa | articip | ation: | - | | | | | | | | | | |
| Brief description | on of c | ourse | contei | nt: In t | this co | urse, you will develop a | bilities to work in a n | nultidisciplina | ry environmen | t. You wil | I work in a grou | with colleagues | from | |
| different study | progra | ams. T | he coa | stal cl | nallen | ge is based on a complex | x real-life case of a cl | ient. It uses t | ne principles of | ⁱ integrate | ed coastal zone i | nanagement as a | framework. | |
| You will initiate | initiate and design the project and also learn and apply tools for communication, collaboration, management, and innovation. | | | | | | | | | | | | | |
| Compulsory lite | ulsory literature: - | | | | | | | | | | | | | |
| Test code | Form | nat | | | | Description and assessment type | Content | Weighting Factor (%) | Minimum score | Plannir test in week | ng Inspectio of work i week | n Resit n scheduled in week | Inspection of resit in week | |
| | v | W | 0 | I | G | | | | | | | | | |
| TEST01 (VT) | | x | | x | | Assessment professional development (Portfoli | 8, 9 (table 3) | 40% | 5.5 | S1.19 | S1.19 | S1.20 | S2.2 | |
| TEST02 (VT) | | x | | | x | End products (Portfoli | o) 1, 2, 3, 7, 8 (table 3) | 40% | 5.5 | S1.17 | S1.18 | S1.19 | S1.20 | |
| TEST03 (VT) | x | | | | x | Presentation | 8, 9 (table 3) | 20% | 5.5 | S1.18 | S1.19 | S1.20 | S2.2 | |





| Block 13 / Seme | ster 7 | 7 | | | | | | | | | | | | | | |
|-------------------------------------|---------|--|---|---------|---------|----------------------|------------------|-----------------|--------------------------|---------------------|--------------------|-----------------------|---------------------------|--|--|--|
| CU79047v1 | Title | : Meko | ong de | lta - i | integra | ated area Nu | mber of study | Num | nber of contact hours: | Mandator | y | Teaching language: | English | | | |
| | and | system | i anaiy | SIS | | cre | alts: 2,5 | 22 | | | | | | | | |
| Conditions for cou | urse pa | articipa | ation: | | | | | | | | | | | | | |
| Propaedeutic ex | kam pa | assed | | | | | | | | | | | | | | |
| • At least 120 EC o | obtain | ed (incl | luding | prov | isiona | l credits) | | | | | | | | | | |
| Internship OR M | inor p | assed | | | | | | | | | | | | | | |
| Conditions for tes | t part | icipatio | on: no | t app | licable | 2 | | | | | | | | | | |
| Brief description of | of cou | rse con | tent: | In thi | s cour | se an integrated are | ea and system ar | nalysis of an a | area in the Vietnamese N | /lekong Delta | will be conducted. | This analysis will be | used to develop | | | |
| relevant scenarios | for a | a more circular development of this delta. | | | | | | | | | | | | | | |
| Compulsory litera | ture: | literatu | terature in the form of articles, policy documents and book chapters will be handed out during the lectures | | | | | | | | | | | | | |
| Test code | Forn | nat | | | | Assessment type | Content | Weighting | Minimum | Planning tost in | Inspection | Resit | Inspection of rosit in | | | |
| | | | | | | | | | score | week | OI WOIK III WEEK | week | week | | | |
| | | 147 | | | | | | | | | | | | | | |
| | v | vv | 0 | 1 | G | | | | | | | | | | | |
| TEST01 (VT) | | х | | | х | Paper | 1.1, 1.2, | 100% | 5.5 | S1.7 | S1.8 | S1.9 | S1.10 | | | |
| | | | | | | Assignment | 1.3, 7.1, | | | | | | | | | |
| | | | | | | Assignment | 7.2, 7.3, | | | | | | | | | |
| | | | | | | | 8.2, 8.3, | | | | | | | | | |
| | | | | | | | 8.4, 9.3, | | | | | | | | | |
| | | | | | | | 9.3, 9.5, 9.6 | | | | | | | | | |
| | | | | | | | (table 2) | | | | | | | | | |
| | | | | | | | | | | | | | | | | |





| Block 13 / Sem | ester | 7 | | | | | | | | | | | | |
|--------------------|---|----------|-------------|---------|----------|-----------------------|----------------------|---------------------|----------------------|-------------------|----------------------|----------------------|------------------|--|
| CU79048v1 | Title | : Spati | al plan | ning f | for circ | ularity Nu | mber of study | Number | of contact hours: | Mandatory | 1 | Feaching language: | English | |
| | | | | | | cre | edits: 2,5 | 22 | | | | | | |
| Conditions for co | irco n | articin | ation | | | | | | | | | | | |
| Propaedeutic et | an se p | assed | ation. | | | | | | | | | | | |
| • At least 120 FC | htain | ed (inc | luding | nrovi | sional | credits) | | | | | | | | |
| Internship OR M | linor p | assed | i a a i i g | prom | Sienai | | | | | | | | | |
| Conditions for tes | t part | icipatio | on: no | t appli | icable | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Brief description | of cou | rse cor | ntent: | The co | ourse S | Spatial planning for | circularity consis | ts of three mayo | or components in the | e context of the | e Vietnamese Meko | ong delta: • Designi | ng with | |
| ecosystem service | s (ma | ngrove | s, sedi | menta | ation a | nd erosion, saliniza | ation, etc.)• Planı | ning for spatial re | esilience: methods t | he Vietnamese | e society has develo | ped for planning a | nd managing the | |
| Mekong delta con | dition | s and h | now to | adap | t the V | MD to the spatial a | and ecological cha | allenges of climat | te change • Planning | g for circularity | : flow charts, (urba | n0 metabolism plar | nning, landscape | |
| as contributing fo | Im services (mangroves, sedimentation and erosion, salinization, etc.) • Planning for spatial resilience: methods the Vietnamese society has developed for planning and managing the delta conditions and how to adapt the VMD to the spatial and ecological challenges of climate change • Planning for circularity: flow charts, (urban0 metabolism planning, landscape ibuting force for organising circular processes | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Compulsory litera | ture: | literatu | ure in t | he for | rm of a | articles, policy docu | iments and book | chapters will be | handed out during t | he lectures | | | | |
| Test code | Forn | nat | | | | Assessment | Content | Weighting | Minimum | Planning | Inspection | Resit | Inspection | |
| | | | | | | type | | Factor (%) | score | test in | of work in week | scheduled in | of resit in | |
| | | | | | | | | | | week | | week | week | |
| | | | | | 1 | | | | | | | | | |
| | v | w | 0 | I | G | | | | | | | | | |
| TEST01 (VT) | | х | | х | | Written | 2.1, 2.2, | 100% | 5.5 | S1.8 | S1.9 | S1.10 | \$1.11 | |
| . , | | | | | | knowledge test | 3.3. 4.1. | | | | | | | |
| | | | | | | Ç | 7.2. 9.2 | | | | | | | |
| | | | | | | | (table 2) | | | | | | | |
| | | | | | | | (10010 =) | | | | | | | |





| Block 13 / Sem | ester | 7 | | | | | | | | | | | | |
|--------------------|---------|----------|----------|---------|---------|--------------------|-----------------------|-------------|--------------|---------------------|-----------------|---------------------|----------------------|-------------------|
| CU79049v1 | Title | : Delta | Econo | omics | | | Number of study | 1 | Number of | f contact hours: | Mandator | у | Teaching language | : English |
| | | | | | | | credits: 2,5 | 1 | 22 | | | | | |
| Conditions for co | urse p | articip | ation: | | | | | | | | | | | |
| Propaedeutic e | xam p | assed | | | | | | | | | | | | |
| • At least 120 EC | obtain | ed (inc | luding | provis | sional | credits) | | | | | | | | |
| Internship OR N | 1inor p | bassed | | | | | | | | | | | | |
| Conditions for tes | st part | icipatio | on: no | t appli | cable | | | | | | | | | |
| Brief description | of cou | rse cor | ntent: | In the | cours | e Delta Econom | ics 3 you learn to ar | nalyse the | e economic | system of the Vi | etnamese Me | kong delta. We will | look at value chains | and making |
| value chains more | e susta | inable | and ed | qual. Y | 'ou wi | ll also look at eo | conomic systems and | d forces, o | economic (| policies and globa | l trends in eco | onomic developmer | nt and thinking. Con | cepts of circular |
| economy will be o | liscus | ed and | l latest | deba | te on l | how to shift tow | vards sustainable ec | onomic s | solutions fo | or climate resilien | e and circula | development. | | |
| | | | | | | | | | | | | | | |
| Compulsory litera | ature: | literatu | ure in t | he for | m of a | articles, policy d | ocuments and book | c chapters | s will be ha | inded out during t | he lectures | | | |
| Test code | Form | nat | | | | Assessment | Content | Weight | ting | Minimum | Planning | Inspection | Resit | Inspection |
| | | | | | | type | | | (0/) | | | | scheduled in | e |
| | | | | | | | | Factor | (%) | score | test in | of work in week | week | of resit in |
| | v | ۱۸/ | 0 | | G | - | | | | | week | | | week |
| | v | vv | U | • | U | | | | | | | | | |
| TEST01 (VT) | | х | | х | | Written | 1.2, 1.3, | 10 | 0% | 5.5 | S1.8 | S1.9 | S1.10 | S1.11 |
| | | | | | | knowledge te | st 2.2, 3.1, 6.1 | | | | | | | |
| | | | | | | _ | (table 2) | | | | | | | |
| | | | | | | | · · · | | | | | | | |





| Block 13 / Sem | ester | 7 | | | | | | | | | | | | |
|---------------------------------------|------------------------|-------------------------|----------|---------|--------|---------------------------|---|-----------------|---------------|--------------------|-----------------------------|-------------------------------|-------------------------------|--------------------------------|
| CU79050v1 | Title | : Delta | Mana | igeme | nt | N | umber of study | | Number of | contact hours: | Mandatory | | Teaching language | e: English |
| | | | | | | cr | redits: 2,5 | | 22 | | | | | |
| Conditions for co • Propaedeutic e | urse p xam p | articip assed | ation: | | | | | | | | | | | |
| • At least 120 EC | obtain | ed (inc | luding | provis | sional | credits) | | | | | | | | |
| Internship OR N | 1inor p | bassed | | | | | | | | | | | | |
| Conditions for tes | st part | icipati | on: no | t appli | cable | | | | | | | | | |
| Brief description | of cou | rse con | ntent: | In the | course | e Delta Managem | ent you learn abo | ut projec | ct and proce | ss management a | and adaptive pla | anning in an interna | tional context, deal | ing with |
| uncertainties and | cultur | al diffe | erence | s. | | | | | | | | | | |
| Compulsory litera | ature: | literatı | ure in t | the for | m of a | articles, policy doc | cuments and book | chapter | s will be han | ided out during th | he lectures | | | |
| Test code | Form | nat | | | | Assessment type | Content | Weigh Factor | ting (%) | Minimum score | Planning test in week | Inspection of work in week | Resit scheduled in week | Inspection of resit in week |
| | v | w | 0 | I | G | | | | | | | | | |
| TEST 01 (VT) | | x | | x | | Written knowledge test | 1.1, 1.2, 1,3, 2,2, 3.2 (table 2) | 1 | 100% | 5.5 | S1.8 | S1.9 | S1.10 | S1.11 |





| Block 14 / Seme | ester 8 | 8 | | | | | | | | | | | |
|--|-----------|----------|-----------|---------|----------|---------------------------|-------------------|-------------------------|-------------------|---------------------------------|--------------------|-------------------|----------------------------|
| CU79051v1 | Title | Mekor | ng proj | ect | | | Number of stu | udy credits: 10 | Number of | contact hours: 95 | Mandatory | Teac | hing language: English |
| Conditions for cour | se part | icipatio | n: | | | | | | • | | | • | |
| Propaedeutic exa | m pass | ed | | | | | | | | | | | |
| At least 120 EC ob | tained | (includi | ng pro | vision | al cred | lits) | | | | | | | |
| Internship OR Min | or pass | sed | | | | | | | | | | | |
| CU79048v1 partic | ipated | | | | | | | | | | | | |
| Conditions for test | partici | pation: | not app | olicab | le | | | | | | | | |
| Brief description of | course | conter | nt: In th | nis cou | irse a r | egenerative landscape | needs to be deve | eloped for an area in t | he Vietnamese I | Mekong delta, based on th | e system analysis | in module 13. Th | his regenerative landscape |
| should be implement | nted on | the reg | gional s | cale, | prefera | ably improve a current r | negative landscap | pe feature, contribute | to the overall c | imate resilience and the c | ircular economy o | f the province. N | lext to that your solution |
| should fit within the | e Vietna | amese/I | Mekon | g delt | a polici | ies and culture. You will | learn about usin | ng the landscape as dr | iving force for m | etabolism optimization an | d economic devel | opment in delta | areas and you will learn |
| how to manage the | realisa | tion, ma | aintena | ince, i | monito | oring and evaluation of p | projects and prog | grammes. You will also | learn to specify | r feasibility, practicability a | nd sustainability, | social costs and | benefits and funding |
| options. The form for | or the a | issignm | ent wil | l be a | n interi | national tender. | | | | | | | |
| | | | | | | | | | | | | | |
| Commulation literate | | | | | £ | | | | | | | | |
| compulsory illerati | ire: iite | rature | n the i | orm c | | es, policy documents ar | nu book chapters | s will be handed out d | uning the lecture | 25 | | | |
| Test code | Form | at | | | | Assessment type | Content | Weighting | Minimum | Planning | Inspection | Resit | Inspection |
| | | | | | | | | Factor (%) | score | test in | of work in | scheduled in | of resit in week |
| | | | | | | | | | | week | week | week | |
| | | | | | | | | | | | | | |
| | v | W | 0 | 1 | G | | | | | | | | |
| | | | | | | | | | | | | | |
| TEST 01 (VT) | | х | | | | Paper | 2.1, 2.2, 3.1, | 75% | 5.5 | S1.17 | S1.18 | S1.19 | S1.20 |
| | | | | | | | 3.2, 3.3, 4.1, | | | | | | |
| | | | | | | Assignment | 5.1, 6.1, 7.1, | | | | | | |
| | | | | | | | 7.2, 8.2, 8.4, | | | | | | |
| | | | | | | | 9.6 (table 2) | | | | | | |
| | | | | | | | | | | | | | |
| TEST 02 (VT) | х | х | | | | Presentation | 8.1, 8.2, 8.4, | 25% | 5.5 | S1.18 | S1.19 | S1.20 | S1.20 |
| | | | | | | | 9.2 (table 2) | | | | | | |
| | | | | | | | | | | | | | |





Courses offered within the Water Management programme – Spatial Planning & Design

SEMESTER 3 SPD Block 5 Vision Development & Block 6 Adaptive Planning for Climate Change

| Block 5/ Semes | ter 3 | | | | | | | | | | | | | |
|---|--|----------|----------|---------|----------|---------------------|--------|---------------------|-------------------------|------------------|----------------------------|----------------------------------|-----------------------------------|-----------------------------|
| CU79103V2 | Title: | Princi | oles of | Data A | Analysi | S | Number | of study credits: 2 | .5 Numb | er of contact ho | urs: 24 | Mandatory | Teaching langua | ge: English |
| Conditions for co | urse pa | articipa | ation: r | not app | olicable | 2 | | | | | | | | |
| Conditions for te | st parti | icipatio | on: not | applic | able | | | | | | | | | |
| Brief description Student will learn visualise the data | f description of course content: lent will learn to prepare data sets for analysis (data management), methods to summarize and describe a data set (descriptive analysis), basic methods to test for statistical significance, to alise the data in a clear and concise way, and to answer research questions based on data. | | | | | | | | | | | | | |
| Compulsory liter | ature: I | Excel 2 | 007 or | higher | | | | | | | | | | |
| Test code | Form | at | | | | Assessment type | | Content | Weighting Factor (%) | Minimum score | Plannin test in week | g Inspectio of work i week | n Resit n scheduled in week | Inspection of resit in week |
| | v | w | 0 | I | G | | | | | | | | | |
| TEST01 (VT) | | x | x | x | | Portfolio | | 7.1.2 | 40% | 4.0 | S1.8 | S1.9 | S1.10 | S1.12 |
| TEST02 (VT) | | x | x | x | | Written knowledge t | est | 6.1.1, 6.1.2 | 60% | 5.5 | S1.8 | S1.9 | S1.10 | S1.12 |





Block 5 / Semester 3 CU79025v1 Title: Vision development theory Number of study credits: 3.0 Number of contact hours: 26 Mandatory **Teaching language: English** Conditions for course participation: Not applicable Conditions for test participation: Not applicable Brief description of course content: This course covers theories about vision development. You will learn how to formulate a vision by using scenarios based on different uncertainties and driving forces. Furthermore, you learn about the management of these processes (embedded within the Environmental and Development Act), stakeholder participation and communication with different target groups. **Compulsory literature:** Test code Weighting Resit Format Assessment type Content Minimum Planning Inspection Inspection of resit in Factor (%) of work in score test in scheduled week week week in week v W 0 G Т TEST01 (VT) Х 1.1.3 (table 3) 100% 5.5 S1.8 S1.9 S1.11 Written knowledge test S1.10 х

| Block 5 / Sem | ester | 3 | | | | | | | | | | | | |
|------------------|---|----------|-----------------|---------|----------|---------------------|----------|----------------------|-------------------------|------------------|-----------------------------|--------------------------|--------------------|-----------------------------------|
| CU79055v3 | Title: | Climat | e chan | ge phy | sics & e | effects | Number o | of study credits: 2. | 5 Number | of contact hou | urs: 22 Ma | ndatory | Teaching languag | ge: English |
| Conditions for | course | partici | pation | : Not a | pplicab | le | | | | | | | | |
| Conditions for t | test pa | rticipat | t ion: N | ot appl | icable | | | | | | | | | |
| Brief descriptio | description of course content: | | | | | | | | | | | | | |
| This course cov | course covers the theories about the climate change physics and effects. You will learn the basic physics and calculations behind the climate change effects (drought, heat stress, | | | | | | | | | | | | | |
| floods and extre | ds and extreme precipitation) in Europe and their social and economic impact. Complementary to the aforementioned content you will learn and practice basic hydrology calculations. | | | | | | | | | | | | | |
| Compulsory lite | erature | :: | | | | | | | | | | | | |
| Test code | Form | at | | | | Assessment type | | Content | Weighting Factor (%) | Minimum score | Planning test in week | Inspection of work in | Resit scheduled | Inspection of resit in week |
| | | | | | | | | | | | | WEEK | In week | WEEK |
| | V | W | 0 | I | G | | | | | | | | | |
| TEST01 (VT) | | X | | X | | Written knowledge t | est | 9.2.1. | 100% | 5.5 | S1.8 | S1.9 | S1.10 | S1.11 |





| Block 5 / Sem | ester | 3 | | | | | | | | | | | | |
|-------------------|-----------|-----------|---------|---------|---------|---------------------------|--------------|---------------------|-----------------|-----------------|-----------------|----------------|------------------|-------------|
| CU79028v3 | Title: | Advan | ced GI | S | | | Number | of study credits: 2 | .0 Numbe | r of contact ho | urs: 18 Mar | datory T | eaching languag | ge: English |
| Conditions for | course | partici | pation | : Not a | pplicat | ble | | | | | | | | |
| Conditions for | test pa | rticipat | tion: N | lot app | licable | ! | | | | | | | | |
| Brief description | on of co | ourse co | ontent | : | | | | | | | | | | |
| In this course is | the fo | llow up | of the | 'intro | ductior | n into GIS course'. You v | vill learn l | how to conduct a ra | aster, vector a | nd a DEM analy | sis, with the u | ses ARC GIS Pr | o software. By r | ealizing a |
| flood impact ar | nalysis d | of a floo | od proi | ne area | a. Cour | se will be assessed by a | portfolio | test in week 7 of s | emester 1. | | | | | |
| Compulsory lite | erature | e: for th | is cour | se is A | RC GIS | Pro, running under HZ | licence at | : MacOS, Microsoft | Windows or L | inux, and the u | se of a non-des | sktop compute | r required. | |
| Test code | Form | at | | | | Assessment type | | Content | Weighting | Minimum | Planning | Inspection | Resit | Inspection |
| | | | | | | | | | Factor (%) | score | test in | of work in | scheduled | of resit in |
| | | | | | | | | | | | week | week | in week | week |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | 1 | 1 | r | | | | | | | | | |
| | V | W | 0 | I | G | | | | | | | | | |
| TEST01 (VT) | | | X | X | | Portfolio | | 1.1.1, 6.1.1 | 100% | 5.5 | S1.7 | S1.9 | S1.10 | S1.12 |





Block 5 / Semester 3 CU79104V1 Title: Climate Proof Spatial Vision Number of study credits: 5.0 Number of contact hours: 44 Mandatory **Teaching language: English** Conditions for course participation: Not applicable Conditions for test participation: 'Netherlands 2150-day' (SG) in S1.1; Field trip to course related cases/sites; Minimal of 80% attendance required to do TEST02 and TEST03. Brief description of course content: In this project you will develop as a design team a vision for an urbanized European flood prone region. This distinctive vision will be based on site visit, area analysis, desk research and spatial scenarios. The vision will be developed by the use of a multilayer based approach. The maps will be elaborated by use of GIS, visualization. The vision will be displayed in a paper, a group product, and underpinned by the knowledge of the courses of the previous modules. The course will be assessed on behalf of a paper of your vision performed on the basis on research, a digital presentation of your vision as group product and a supporting water balance. **Compulsory literature:** Test code Format Assessment type Content Weighting Minimum Planning Inspection Resit Inspection Factor (%) score test in of work in of resit in scheduled week week week in week v w 0 G TEST01 (VT) Х Х 7.1.1, 7.1.2, 7.1.3, 30% 5.5 S1.7 S1.9 S1.10 S1.12 Paper Assignment 7.1.4 (table 3) TEST02 (VT) Х Х 1.1.1, 1.2.1, 2.2.3 50% 5.5 S1.8 S1.9 S1.10 S1.12 Presentation table 3) TEST03 (VT) Х Х Portfolio 1.1.1, 1.1.3, 2.1.1, 20% 5.5 S1.4-S1.7 S1.9 S1.10 S1.12 2.1.2 (table 3)





| Block 6 / Seme | ster 3 | | | | | | | | | | | | | | |
|-------------------|--|----------|---------|----------|----------|----------------------|-----------------------|----------|----------|----------------|----------|--------------|------------------|-------------|--|
| CU79030v1 | Title: | Adapti | ve Plar | nning T | heory | | Number of study credi | its: 3.0 | Number | of contact hou | rs: 26 | Mandatory | Teaching languag | ge: English | |
| Conditions for c | ourse p | oarticip | ation: | Not ap | plicable | 2 | | | | | | | | | |
| Conditions for to | est part | ticipati | on: No | ot appli | cable | | | | | | | | | | |
| Brief description | ief description of course content: | | | | | | | | | | | | | | |
| This course cove | s course covers theories for planning and management for adaptation and mitigation. This will be explained via the application in the Dutch Delta program, taking into consideration the | | | | | | | | | | | | | | |
| different socio-e | ferent socio-economic and cultural dimensions and the European context. This course prepares for the adaptive Climate Change Tender. | | | | | | | | | | | | | | |
| Compulsory lite | fferent socio-economic and cultural dimensions and the European context. This course prepares for the adaptive Climate Change Tender. | | | | | | | | | | | | | | |
| Test code | Forma | at | | | | Assessment type | Content | We | eighting | Minimum | Planning | g Inspection | n Resit | Inspection | |
| | | | | | | | | Fac | tor (%): | score | test in | of work in | scheduled | of resit in | |
| | | | | | | | | | | | week | week | in week | week | |
| | v | w | 0 | I | G | | | | | | | | | | |
| TEST01 (VT) | | x | | X | | Written knowledge te | st 2.1.1, 2.1.2, | | 100% | 5.5 | S1.18 | S1.19 | S1.20 | S1.21 | |
| | | | | | | | 4.1.1 (table | 3) | | | | | | | |

| Block 6 / Semeste | er 3 | | | | | | | | | | | | | | |
|----------------------|--|---------|----------|----------|------|-----------------|--------|----------------------|------------|------------------|----------|-----------|-----------------|-------------|--|
| CU79033v3 | Title: | Data V | 'isualis | ation | | | Number | of study credits: 2. | .5 Numbe | r of contact hou | ırs: 22 | Mandatory | Teaching langua | ge: English | |
| Conditions for cour | se part | icipati | on: No | t applio | able | | | | | | | | | | |
| Conditions for test | partici | pation: | Not a | oplicab | le | | | | | | | | | | |
| Brief description of | description of course content: | | | | | | | | | | | | | | |
| In this course you w | this course you will learn how to visualize data in a professional way. You will learn how to upgrade GIS maps into professional visuals by the use of Adobe Illustrator and display them in the | | | | | | | | | | | | | | |
| digital environment | this course you will learn now to visualize data in a professional way. You will learn now to upgrade GIS maps into professional visuals by the use of Adobe illustrator and display them in the gital environment of ArcGis storymaps . The course will be assessed by an digital portfolio | | | | | | | | | | | | | | |
| Compulsory literatu | gital environment of ArcGis storymaps . The course will be assessed by an digital portfolio ompulsory literature: For this course is ArcGIS Pro and Adobe Illustrator, running at macOS, Microsoft Windows or Linux, and the use of a non-desktop computer required. | | | | | | | | | | | | | | |
| Test code | Form | at | | | | Assessment type | | Content | Weighting | Minimum | Planning | Inspectio | n Resit | Inspection | |
| | | | | | | | | | Factor (%) | score | test in | of work i | n scheduled | of resit in | |
| | | | | | | | | | | | week | week | in week | week | |
| | v | w | 0 | I | G | | | | | | | | | | |
| TEST01 (VT) | | | x | X | | Portfolio | | 6.1.2, 8.1.1 | 100% | 5.5 | S1.18 | S1.19 | S1.20 | S1.21 | |
| (-) | | | | - | | | | (table 3) | | | | | | - | |





| Block 6 / Sem | ester 3 | 3 | | | | | | | | | | | | | |
|------------------|---|-----------|---------|---------|---------|-----------------|-----------------------------|-------------------------|------------------|-----------------------------|----------------------------------|-------------------------------|-----------------------------------|--|--|
| CU79105V1 | Title: | Resear | ch Me | thodol | ogy | | Number of study credits: 2. | 0 Number | r of contact hou | rs: 18 🛛 🛚 🔊 | /landatory | Teaching languag | ge: English | | |
| Conditions for a | course | particip | oation: | Not ap | plicabl | e | | | | | | | | | |
| Conditions for t | est par | rticipati | ion: N | ot appl | icable | | | | | | | | | | |
| Brief descriptio | ief description of course content: | | | | | | | | | | | | | | |
| This course cove | is course covers the steps of the research cycle from the research proposal till writing your report. The report will be assessed with an assessment form and a peer assessment of your | | | | | | | | | | | | | | |
| individual contr | dividual contribution to the group work. | | | | | | | | | | | | | | |
| Compulsory lite | erature | : | | | | | | | | | | | | | |
| Test code | Form | at | | | | Assessment type | Content | Weighting Factor (%) | Minimum score | Planning test in week | Inspection of work ir week | Resit scheduled in week | Inspection of resit in week | | |
| | V | W | 0 | I | G | | | | | | | | | | |
| TEST01 (VT) | | | x | | x | Paper | 7.1.2, 7.1.3, | 100% | 5.5 | \$1.17 | S1.19 | S1.20 | S1.22 | | |
| | | | | | | Assignment | 7.1.4 (table 3) | | | | | | | | |





| Block 6 / Sen | nestei | r 3 | | | | | | | | | | | | | |
|-----------------|--------------------------|----------------------------------|-----------|----------|----------|------------------------|--------------------------|----------------|-------------------|------------|------------------|--------------------|--------------|--|--|
| CU79108V1 | Title | : Strat | egic spa | atial in | nterve | ntions | Number of study cred | lits: Numbe | r of contact ho | ours: I | Mandatory | Teaching langua | age: English | | |
| | | | | | | | 5.0 | 36 | | | | | | | |
| Conditions for | cours | e parti | cipatio | n: Not | appli | cable | | | | | | | | | |
| Conditions for | test p | articip | ation: | Minim | nal of a | 80% attendance req | uired to do TEST01 and | TEST02. | | | | | | | |
| Brief descripti | on of o | course | conten | it: | | | | | | | | | | | |
| In this project | you wi | ill indiv | vidually | elabo | rate y | our vision for an urb | anized European flood (| prone region. | You will elabor | ate your i | ntervention wit | hin the framewor | k of your | | |
| Climate Proof | Spatia | l Visior | n into ai | n integ | grated | spatial proposal wit | h impact on different th | nemes and sca | le levels. The in | nterventio | ons shows how | the area will be m | ore climate | | |
| adaptive and b | oiodive | erse in | combin | ation | with r | elevant spatial challe | enges. The vision will b | e displayed in | a design, an in | dividual p | product, which i | s underpinned by | the | | |
| knowledge of | of the previous courses. | | | | | | | | | | | | | | |
| Compulsory lit | eratu | ie previous courses. Prature: | | | | | | | | | | | | | |
| Test code | Forn | nat | | | | Assessment type | Content | Weighting | Minimum | Plannin | g Inspectio | n Resit | Inspection | | |
| | | | | | | | | Factor (%) | score | test in | of work i | n scheduled | of resit in | | |
| | | | | | | | | | | week | week | in week | week | | |
| | | | _ | | | - | | | | | | | | | |
| | V | w | 0 | | G | | | | | | | | | | |
| TEST01 (VT) | Х | | | Х | | Presentation | 3.2.1, 5.1.1, | 70% | 5.5 | S1.18 | S1.18 | S1.20 | S1.20 | | |
| | | | | | | | 6.1.1, 8.1.1, | | | | | | | | |
| | | | | | | | 8.2.1, 8.2.2, | | | | | | | | |
| | | | | | | | 8.2.3, 9.2.2 | | | | | | | | |
| | | | | | | | (table 3) | | | | | | | | |
| TEST02 (VT) | | | Х | Х | 1 | Portfolio | 2.2.1, 3.1.1, | 30% | 5.5 | S1.12 - | S1.19 | S1.20 | S1.22 | | |
| | | | | | | | 9.2.2 (table 3) | | | S1.15 | | | | | |





SEMESTER 4 SPD Block 7 Risk and Disaster Management & Block 8 Strategic Planning for Resilient Deltas

| Block 7 / Semeste | er 4 | | | | | | | | | | | |
|--|--------------------------------|---|--|---------------------------|--|--|---|--|--|---|-------------------------------|-------------------------------------|
| CU79035v1 | Title | : Spati | al Plar | ning f | or Deltaic Risks | Number of study credits: 3 | Numbe 22 | r of contact hours: | Mandatory | / | Teaching language | : English |
| Conditions for cour | se par | ticipat | ion: no | ot app | licable | | | | | | | |
| Conditions for test | partic | ipation | not a | pplica | ble | | | | | | | |
| Brief description of which environment about planning for r Compulsory literate | al, ecc risks a ure: lit | e conte ological nd disa erature | ent: W , spatia ster m e in the | al and anage e form | nis module you wi climate risks are p ment. of articles, policy | esent and how they resent and how they reserved and how they reserved and book of the served and book of the serve | les and risks pres elate to each oth chapters will be h | sent in delta areas in g her and to the social-e nanded out during the | general and th economic and i e lectures | e Mississippi delta, nstitutional risks. F | USA specifically. Yo | ou will learn ill learn theories |
| Test code | Form | nat | | | Assessmer type | t Content | Weighting Factor (%) | Minimum score | Planning test in week | Inspection of work in week | Resit scheduled in week | Inspection of resit in week |
| | v | w | 0 | I | G | | | | | | | |
| TEST01 (VT) | | х | | x | Written knowledge | test 1.1.1, 1.1.3, 1.2.1 (table 3) | 100% | 5.5 | S2.8 | \$2.9 | \$2.10 | 52.11 |





| Block 7 / Seme | ster 4 | 4 | | | | | | | | | | | | |
|--------------------|---|-----------|----------|---------|--------|---------------------|-------------------|----------|-------------|-------------------|---------------------|-----------------|-------------------|---------------------------|
| CU79095v1 | Title | : Socia | l Syste | ms Ri | sks | | Number of study | 1 | Number o | of contact hours: | Mandator | У | Teaching language | : English |
| | | | | | | | credits: 3 | | 22 | | | | | |
| Conditions for co | urse p | articip | ation: | not ap | plicat | ole | | | | | | | | |
| Conditions for tes | t part | ticipatio | on: no | t appli | cable | | | | | | | | | |
| Brief description | escription of course content: Within this course you will learn the basics about economic and socioeconomic risks in delta areas. You will learn about the economic and social risks of e change. You will learn to identify process related risks that have impact on the feasibility of your project in the Mississippi delta | | | | | | | | | | | | | |
| climate change. Ye | ate change. You will learn to identify process related risks that have impact on the feasibility of your project in the Mississippi delta. | | | | | | | | | | | | | |
| Compulsory litera | ture: | literatu | ure in t | he for | m of a | articles, policy do | ocuments and book | chapters | s will be h | anded out during | the lectures | | | |
| Test code | Forn | nat | | | | Assessment | Content | Weight | ting (%) | Minimum | Planning tost in | Inspection | Resit | Inspection of resit in |
| | | | | | | туре | | Factor | (70) | score | week | of work in week | week | week |
| | v | w | 0 | Ι | G | | | | | | | | | |
| | | | | | | | | | | | | | | |
| TEST01 (VT) | | х | | х | | Written | 1.1.1, 1.1.3, | 10 | 0% | 5.5 | S2.8 | S2.9 | S2.10 | S2.11 |
| | | | | | | knowledge tes | st 1.2.1 (table | | | | | | | |
| | | | | | | | 3) | | | | | | | |





| Block 7 / Seme | ster 4 | | | | | | | | | | | | | |
|--------------------|--|----------|----------|---------|---------|--------------------|-------------------|-----------|-------------|-----------------|-----------------|-----------------|----------------------|---------------------|
| CU79096v1 | Title | : Desigi | n Metl | hodolo | ogies I | | Number of study | N | Number of | contact hours: | Mandatory | / | Teaching language: | English |
| | | | | | | | creats: 5 | 2 | 22 | | | | | |
| Conditions for co | urse pa | articipa | tion: | not ap | plicabl | e | | | | | | | | |
| Conditions for tes | ons for test participation: not applicable | | | | | | | | | | | | | |
| Brief description | or test participation: not applicable otion of course content: In this course you will explore a variety of design methodologies and you will learn for what design assignments you can apply the different | | | | | | | | | | | | | |
| methodologies. D | cription of course content: In this course you will explore a variety of design methodologies and you will learn for what design assignments you can apply the different logies. During the lessons we will explain the pros and cons of diverse design methodologies. You will practice the different methodologies and will be assessed with a portfolio, in | | | | | | | | | | | | | |
| which you demon | strate | your al | oility t | o apply | y the c | lifferent metho | dologies. | | | | | | | |
| Compulsory litera | ture: | literatu | re in t | he forr | m of a | rticles, policy do | ocuments and book | chapters | will be har | nded out during | the lectures | | | |
| Test code | Form | nat | | | | Assessment | Content | Weighti | ing I | Minimum | Planning | Inspection | Resit | Inspection |
| | | | | | | type | | Factor (S | (%) s | score | test in week | of work in week | scheduled in week | of resit in week |
| | | | | | | | | | | | | | | |
| | v | W | 0 | Ι | G | | | | | | | | | |
| TEST01 (VT) | х | | х | х | | Portfolio | 7.1.1, 7.1.3 | 100 | 0% 5 | 5.5 | S2.8 | S2.9 | S2.10 | S2.11 |
| | | | | | | | (table 3) | | | | | | | |





| Block 7 / Seme | ster 4 | 4 | | | | | | | | | | | | | | |
|---------------------|--|--|--|--------|---------|------------------------|-----------------|----------------------|-----------------|--------------------|---------------------|------------------|------------------|--|--|--|
| CU79038v1 | Title | : Integ | rated I | Risk A | ssess | ment for Delta | Number of st | udy credits: 3.5 | Number of | contact | Mandatory | Te | aching language: | | | |
| | Area | 45 | | | | | | | nours:30 | | | En | giish | | | |
| Conditions for co | urse p | articipa | ation: | not a | pplica | ble | | | | | | | | | | |
| Conditions for tes | st part | ticipatio | on: not | t appl | icable | | | | | | | | | | | |
| Brief description | of cou | irse cor | ntent: | In thi | s proje | ect you will execute a | a risk assessme | nt of a certain area | in the Mississi | ppi delta. You wil | l apply theories of | risk and disaste | r management, | | | |
| ecosystem service | es, spa | tial analysis, process management and design, actor- and stakeholder analysis, governance, spatial economics and disaster economics. You will apply this roject. In this project you also have to apply the statistics, GIS and visualization skills you have obtained in previous modules and will further develop in this module your performance and development within a group and will be assessed on this. | | | | | | | | | | | | | | |
| knowledge in a gr | roup project. In this project you also have to apply the statistics, GIS and visualization skills you have obtained in previous modules and will further develop in this module. ect on your performance and development within a group and will be assessed on this. | | | | | | | | | | | | | | | |
| You will also refle | ct on y | your pe | our performance and development within a group and will be assessed on this. | | | | | | | | | | | | | |
| Compulsory litera | ture: | literatu | iterature in the form of articles, policy documents and book chapters will be handed out during the lectures | | | | | | | | | | | | | |
| Test code | Form | nat | | | | Assessment | Content | Weighting | Minimum | Planning | Inspection | Resit | Inspection | | | |
| | | | | | | type | | Factor (%) | score | test in | of work in | scheduled in | of resit in | | | |
| | | | | | | | | | | week | week | week | week | | | |
| | v | w | 0 | I | G | | | | | | | | | | | |
| TEST01 (VT) | | х | | | х | Paper | 1.1, 1.2.1, | 75% | 5.5 | S2.7 | S2.9 | S2.10 | S2.11 | | | |
| | | | | | | Accianment | 2.2.3, 7.1.2, | | | | | | | | | |
| | | | | | | Assignment | 8.1.1 (table | | | | | | | | | |
| | | | | | | | 3) | | | | | | | | | |
| TEST01 (VT) | х | х | | х | | Criterion-based | 8.2.1, 8.2.2, | 25% | 5.5 | S2.8 | S2.8 | S2.10 | S2.10 | | | |
| | | | | | | interview | 9.1.1, 9.1.2, | | | | | | | | | |
| | | | | | | | 9.1.3 (table | | | | | | | | | |
| | | | | | | | 3) | | | | | | | | | |
| · | | | 1 | | | | | | | 1 | | 1 | | | | |





| Block 8 / Semes | ter 4 | | | | | | | | | | | | | |
|--------------------|---|----------|----------|--------|----------|--------------------|-------------------------------------|---------------|----------------|--------------------|-----------------------------|-------------------------------|-------------------------------|-----------------------------------|
| CU79097v1 | Title | : Spati | al Plan | ning f | or Res | silience | Number of study credits: 2 | | Number | of contact hours: | Mandat | ory | Teaching language | : English |
| | | | | | | | | | | | | | | |
| Conditions for co | urse p | articipa | ation: | not ap | plicab | ble | | | | | | | | |
| Special condition | condition for awarding study points (tick-box test): not applicable escription of course content: Within this course you will learn theories on resilience building, the different types of resilience (spatial, technical, ecological, etc.), levels of resilience as | | | | | | | | | | | | | |
| Brief description | of cou | rse cor | ntent: | Withir | n this c | course you will | learn theories on res | ilience | building, t | he different types | of resilience | (spatial, technical, e | ological, etc.), level | s of resilience as |
| well as design qua | escription of course content: within this course you will learn theories on resilience building, the different types of resilience (spatial, technical, ecological, etc.), levels of resilience as design qualities contributing to resilience. Next to that, spatial planning in the US context and strategy development for resilient deltas will be further explored. | | | | | | | | | | | | | |
| Compulsory litera | ture: | literatu | ure in t | he for | m of a | articles, policy d | locuments and book | chapte | ers will be h | nanded out during | the lectures | | | |
| Test code | Forn | nat | | | | Assessment type | Content | Weig Facto | hting r (%) | Minimum score | Planning test in week | Inspection of work in weel | Resit scheduled in week | Inspection of resit in week |
| | v | w | 0 | I | G | | | | | | | | | |
| TEST01 (VT) | | x | | x | | Portfolio | 1.2.2, 1.3.1, 1.3.2 (table 3) | 1 | 100% | 5.5 | S2.18 | 52.19 | S2.20 | 52.21 |





| Block 8 / Seme | ster 4 | Ļ | | | | | | | | | | | | |
|--------------------|---|----------|----------|---------|---------|----------------------|-----------------|--------------------|-------------------|--------------|-----------------|-------------------|-------------|--|
| CU79102v1 | Title | : Desig | n Met | hodolo | ogies I | I Ni | mber of study | Number | of contact hours: | Mandatory | ר י | eaching language: | English | |
| | | | | | | cr | edits: 3 | 22 | | | | | | |
| Conditions for co | urse p | articipa | ation: | not ap | plicab | le | | | | | | | | |
| Conditions for tes | ns for test participation: not applicable cription of course content: This course is an elaboration of the previous methodology course, in which you have explored different design methodologies. In this course we will | | | | | | | | | | | | | |
| Brief description | ption of course content: This course is an elaboration of the previous methodology course, in which you have explored different design methodologies. In this course we will variety of methodology in depth. You will learn how scales of interventions and the phase in which the design is affect which methodology is the most suitable. You will practice | | | | | | | | | | | | | |
| analyze the variet | cription of course content: This course is an elaboration of the previous methodology course, in which you have explored different design methodologies. In this course we will he variety of methodology in depth. You will learn how scales of interventions and the phase in which the design is affect which methodology is the most suitable. You will practice applies your own methodology. This course will be assessed with a portfolio. | | | | | | | | | | | | | |
| with designing you | he variety of methodology in depth. You will learn how scales of interventions and the phase in which the design is affect which methodology is the most suitable. You will practice igning your own methodology. This course will be assessed with a portfolio. | | | | | | | | | | | | | |
| Compulsory litera | ture: | literatu | ire in t | he fori | n of a | rticles, policy docu | iments and book | chapters will be h | anded out during | the lectures | | | | |
| Test code | Form | nat | | | | Assessment | Content | Weighting | Minimum | Planning | Inspection | Resit | Inspection | |
| | | | | | | type | | Factor (%) | score | test in | of work in week | scheduled in | of resit in | |
| | | | | | | | | | | week | | week | week | |
| | v | w | 0 | I | G | | | | | | | | | |
| TEST01 (VT) | х | | х | х | | Portfolio | 7.1.4 (table | 100% | 5.5 | S2.8 | S2.9 | S2.10 | S2.11 | |
| | | | | | | | 3) | | | | | | | |





| Block 8 / Seme | ster 4 | ļ | | | | | | | | | | | | | |
|-----------------------|--|---|---------------|---------|---------|-------------------------|--|---------------------|-----------------|-------------------|---------------------|-----------------------------------|---------------------------|--|--|
| CU79101V1 | Title | : Integ | rated | Spatia | al Wat | er Plan | Number of st | tudy credits: 7.5 | Number of 30 | contact hours: | Mandatory | Te En | aching language: glish | | |
| Conditions for co | urse p | articipa | ation: | not ap | oplical | ble | | | | | | | | | |
| Conditions for tes | t part | icipatio | on: no | t appli | icable | | | | | | | | | | |
| Brief description | of cou | rse cor | ntent: | With a | a (stra | tegic) spatial plan for | r an urbanized o | delta region, you p | propose concret | e water-related o | lesign solutions as | part of an integ | rated approach for | | |
| resilient, liveable a | and at | attractive delta regions in the future. | | | | | | | | | | | | | |
| Compulsory litera | ture: | literatu | ire in t | the for | rm of | articles, policy docum | nents and book | chapters will be h | anded out durii | ng the lectures | | | | | |
| Test code | Format Assessment type Content Weighting Factor (%) Minimum score Planning test in week Inspection Resit scheduled in week | | | | | | | | | | | Inspection of resit in week | | | |
| | v | w | 0 | I | G | | | | | | | | | | |
| TEST01 (VT) | | x | | x | | Paper Assignment | 1.1.3, 1.2, 1.3, 2.1, 2.2, 3.1, 3.2, 4.1, 8.1, 8.2, 9.2 (table 3) | 75% | 5.5 | S2.17 | S2.19 | \$2.20 | S2.21 | | |
| TEST01 (VT) | х | | | x | | Presentation | 2.2, 8.1.1 (table 3) | 25% | 5.5 | S2.18 | S2.19 | S2.20 | S2.21 | | |