

## **Annex SFB**

## Studienfachbeschreibung (subject description, SFB) for the subject Computer Science as a Bachelor's with 1 major with the degree "Bachelor of Science" (180 ECTS credits)

Responsible: Institute of Computer Science

Examination regulations version: 2010

Abbreviations used: Course types: **E** = field trip, **K** = colloquium, **O** = conversatorium, **P** = placement/lab course, **R** = project, **S** = seminar, **T** = tutorial, **Ü** = exercise, **V** 

= lecture

Term: **SS** = summer semester, **WS** = winter semester

Methods of grading: NUM = numerical grade, B/NB = (not) successfully completed

Regulations: (L)ASPO = general academic and examination regulations (for teaching-degree programmes), FSB = subject-specific provisions, SFB

= list of modules

Other: **A** = thesis, **LV** = course(s), **PL** = assessment(s), **TN** = participants, **VL** = prerequisite(s)

Conventions for the Unmodules in this SFB: di

Unless otherwise stated, courses and assessments will be held in German, assessments will be offered every semester and modules are not creditable for bonus.

Information on assessment procedures:

Should there be the option to choose between several methods of assessment, the lecturer will agree with the module coordinator on the method of assessment to be used in the current semester by two weeks after the start of the course at the latest and will communicate this in the customary manner.

Should a module comprise more than one graded assessment, all assessments will be equally weighted, unless otherwise stated below.

Should the assessment comprise several individual assessments, successful completion of the module will require successful completion of all

individual assessments.

In accordance with the general regulations governing the degree subject described in this module catalogue:

## ASPO2009

associated official publications (FSB (subject-specific provisions)/SFB (list of modules)):

## 03-Aug-2010 (2010-42)

This module handbook seeks to render, as accurately as possible, the data that is of statutory relevance according to the examination regulations of the degree subject. However, only the FSB (subject-specific provisions) and SFB (list of modules) in their officially published versions shall be legally binding. In the case of doubt, the provisions on, in particular, module assessments specified in the FSB/SFB shall prevail.

Every module will be described using the following form:

| Abbreviation | Module title               |         |                  |   |                       |                      |              |  |  |  |  |
|--------------|----------------------------|---------|------------------|---|-----------------------|----------------------|--------------|--|--|--|--|
|              | ECTS                       |         | Duration         | (in semesters)  | Method of grading     |                      | Module level |  |  |  |  |
|              | Courses                    |         | To be spe        | be specified in the form X (y) with course type X abbreviated as specified above and number of weekly contact hours y |                       |                      |              |  |  |  |  |
|              | Method of as               | ssessme | ent              |   |                       |                      |              |  |  |  |  |
|              | Only after su completion o |         | l if applica     | ble   |                       |                      |              |  |  |  |  |
|              | Other prereq               | uisites | if applica       | if applicable   |                       |                      |              |  |  |  |  |
|              | Participants on of places  |         | cati- if applica | if applicable   |                       |                      |              |  |  |  |  |
|              | Additional information     |         | on if applica    | if applicable   |                       |                      |              |  |  |  |  |
|              | Referred to in             | n LPO I | if applica       | ble (examination re   | gulations for teachin | g-degree programmes) |              |  |  |  |  |

| Compulsory Course | s (86 ECTS cred        | its)   |  |  |  |  |                    |  |  |  |  |
|-------------------|------------------------|--|--|--|--|--|--------------------|--|--|--|--|
| Computer Science  | 80 ECTS credits        | )  |  |  |  |  |                    |  |  |  |  |
| 10-I-ADS-102-m01  | Algorithm and          | data stru  | ctures   |  |  |  |                    |  |  |  |  |
|                   | ECTS 10                | Duration   |  | 1 semester   | Method of grading                          |  | Modul level        | undergraduate  |  |  |  |
|                   | Courses                |  |  |  |  | hours) and course languag                              |                    |  |  |  |  |
|                   | Method of asse         | essment  | writte<br>90 mi  | written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 3. |  |  |                    |  |  |  |  |
|                   | other prerequis        | ites   | cours  | e).  |  | .,,  | ,                  | cturer at the beginning of the                                 |  |  |  |
|                   | Referred to in L       | PO I   |  |  |  | k, Algorithmen und Datens<br>k, Algorithmen und Datens |                    |  |  |  |  |
| 10-I-ST-102-m01   | Software Techn         | Cechnology Company of the Company of |  |  |  |  |                    |  |  |  |  |
|                   | ECTS 10                | Duration   |  | 1 semester   | Method of grading                          |  | Modul level        | undergraduate  |  |  |  |
|                   | Courses                |  |  | <u>-                                      </u>   | · · · · · · · · · · · · · · · · · · ·      | hours) and course languag                              | <u> </u>           |  |  |  |  |
|                   | Method of asse         | essment  | written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 3. |  |  |  |                    | l examination in groups. A 80 to e candidate each, a 30 minute |  |  |  |
|                   | other prerequisites    |  | Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).   |  |  |  |                    |  |  |  |  |
|                   | Referred to in LPO I   |  | § 49 (1) 1. b) Datenbanksysteme und Softwaretechnologie<br>§ 69 (1) 1. b) Datenbanksysteme und Softwaretechnologie   |  |  |  |                    |  |  |  |  |
| 10-I-PP-102-m01   | <b>Practical Cours</b> | e in Prog  | rammi  | ng   |  |  |                    |  |  |  |  |
|                   | ECTS 10                | Duration   | 1  | 1 semester   | Method of grading                          | (not) successfully comple                              | ted Modul level    | undergraduate  |  |  |  |
|                   | Courses                |  | ,  |  | <u> </u>                                   | rs) and course language av                             |                    |  |  |  |  |
|                   | Method of asse         | essment  | writte<br>90 mi  | written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 3. |  |  |                    |  |  |  |  |
|                   | other prerequis        |  | cours  | e).  |  | .,,,   | nnounced by the le | cturer at the beginning of the                                 |  |  |  |
|                   | Additional Info        |  | Additional information on module duration: 1 to 2 semesters.   |  |  |  |                    |  |  |  |  |
|                   | Referred to in LPO I   |  |  |  | aktische Softwareen<br>aktische Softwareen |  |                    |  |  |  |  |

| 10-I-SWP-102-m01 | Practic                  | al cours  | se in softv | vare             |  |  |                                     |  |  |  |  |
|------------------|--------------------------|-----------|-------------|------------------|--|--|-------------------------------------|--|--|--|--|
|                  | ECTS                     | 10        | Duration    | 1                | 1 semester   | Method of grading (not) successfully completed   | Modul level                         | undergraduate  |  |  |  |
|                  | Course                   | S         |             | P (no            | information on SWS   | (weekly contact hours) and course language availa  | ble)                                |  |  |  |  |
|                  | Method                   | d of ass  | essment     | comp             | completion of project assignments, presentation  |  |                                     |  |  |  |  |
|                  | Referre                  | d to in I |             | § 49 (<br>§ 69 ( | § 49 (1) 1. c) Informatik Praktische Softwareentwicklung<br>§ 69 (1) 1. d) Informatik Praktische Softwareentwicklung   |  |                                     |  |  |  |  |
| 10-I-RAL-102-m01 | Digital computer systems |           |             |                  |  |  |                                     |  |  |  |  |
|                  | ECTS                     | 10        | Duration    | า                | 1 semester   | Method of grading numerical grade  | Modul level                         | undergraduate  |  |  |  |
|                  | Course                   | S         |             | V + Ü            | (no information on   | SWS (weekly contact hours) and course language av  | ailable)                            |  |  |  |  |
|                  | Method                   | d of ass  | essment     |                  |  | rox. 80 to 90 minutes). If announced by the lecturer   |                                     |  |  |  |  |
|                  |                          |           |             | 90 mi            | written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 3. |  |                                     |  |  |  |  |
|                  | other prerequisites      |           |             |                  | Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).   |  |                                     |  |  |  |  |
|                  | Referre                  | d to in I | LPO I       | § 69 (           | 1) 1. c) Informatik To   | echnische Informatik   |                                     |  |  |  |  |
| 10-l-lÜ-102-m01  | Information Transmission |           |             |                  |  |  |                                     |  |  |  |  |
|                  | ECTS                     | 10        | Duration    | 1                | 1 semester   | Method of grading   numerical grade  | Modul level                         | undergraduate  |  |  |  |
|                  | Course                   | S         |             | V + Ü            | V + Ü (no information on SWS (weekly contact hours) and course language available)   |  |                                     |  |  |  |  |
|                  | Method of assessment     |           |             | writte<br>90 mi  | n examination can l<br>nute written examir   | rox. 80 to 90 minutes). If announced by the lecturer one replaced by an oral examination of one candidate nation is equivalent to a 20 minute (approx.) oral examin groups of 2 and a 40 minute (approx.) oral examinute (approx.) | e éach or an ora<br>amination of on | l examination in groups. A 8o to e candidate each, a 30 minute |  |  |  |
|                  | other prerequisites      |           |             |                  | Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).   |  |                                     |  |  |  |  |
|                  | Referre                  | d to in I | LPO I       | § 69 (           | (1) 1. c) Informatik To  | echnische Informatik   |                                     |  |  |  |  |
| 10-I-HWP-102-m01 | Practica                 | al Cour   | se in Hard  | ware             |  |  |                                     |  |  |  |  |
|                  | ECTS                     | 10        | Duration    | 1                | 1 semester   | Method of grading (not) successfully completed   | Modul level                         | undergraduate  |  |  |  |
|                  | Course                   |           |             |                  |  | (weekly contact hours) and course language availa  |                                     |  |  |  |  |
|                  | Method of assessment     |           |             |                  | letion of project ass<br>course)   | ignments, presentation (type and expenditure of tim  | ne to be specifie                   | ed by the lecturer at the beginning                            |  |  |  |

| 10-I-TI-102-m01          | Theore              | tical inf  | ormatics |  |  |  |                 |                 |   |  |  |
|--------------------------|---------------------|------------|----------|--|--|--|-----------------|-----------------|---|--|--|
|                          | ECTS                | 10         | Duratio  | 1  | 1 semester   | Method of grading                                | numerical grade | Modul level     | undergraduate   |  |  |
|                          | Course              | !S         |          | V + Ü (no information on SWS (weekly contact hours) and course language available)   |  |  |                 |                 |   |  |  |
|                          | Method              | d of ass   | essment  | writte<br>90 mi  | n examination can b<br>nute written examin   | pe replaced by an ora<br>lation is equivalent to |                 | each or an oral | rior to the examination date, the examination in groups. A 80 to e candidate each, a 30 minute ps of 3. |  |  |
|                          | other p             | rerequi    | sites    |  | Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).   |  |                 |                 |   |  |  |
|                          | Referre             | ed to in I | PO I     | § 49 (<br>§ 69 (   | § 49 (1) 1. a) Informatik Theoretische Informatik, Algorithmen und Datenstrukturen<br>§ 69 (1) 1. a) Informatik Theoretische Informatik, Algorithmen und Datenstrukturen   |  |                 |                 |   |  |  |
| <b>Basics of Mathema</b> | tics (6 E           | CTS cre    | dits)    |  |  |  |                 |                 |   |  |  |
| 10-l-LOG-102-m01         | Logic f             | or infor   | natics   |  |  |  |                 |                 |   |  |  |
|                          | ECTS                | 6          | Duration | 1  | 1 semester   | Method of grading                                | numerical grade | Modul level     | undergraduate   |  |  |
|                          | Course              | es.        |          | V + Ü  | V + Ü (no information on SWS (weekly contact hours) and course language available)   |  |                 |                 |   |  |  |
|                          | Method              | d of ass   | essment  | writte   | written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) |  |                 |                 |   |  |  |
|                          | other prerequisites |            |          | Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course). |  |  |                 |                 |   |  |  |

| Mathematics (29 I | ECTS credits)          |   |  |  |  |  |  |  |  |  |
|-------------------|------------------------|---|--|--|--|--|--|--|--|--|
| 10-M-INF12-102-   | Mathematics 1 and 2 fo | students in Computer Science  |  |  |  |  |  |  |  |  |
| mo1               | ECTS 20 Duratio        | n 2 semester Method of grading numerical grade Modul level undergraduate  |  |  |  |  |  |  |  |  |
|                   | Courses                | This module comprises 2 module components. Information on courses will be listed separately for each module component.  10-M-INF12-1-102: V + Ü (no information on SWS (weekly contact hours) and course language available)  10-M-INF12-2-102: V + Ü (no information on SWS (weekly contact hours) and course language available)  |  |  |  |  |  |  |  |  |
|                   | Method of assessment   | Assessment in this module comprises the assessments in the individual module components as specified below. Unless stated otherwise, successful completion of the module will require successful completion of all individual assessments.  Assessment in module component 10-M-INF12-1-102: Mathematics 1 for students in Computer Science Mathematics 1 for students in Computer Science  10 ECTS, Method of grading: (not) successfully completed  written examination (approx. 90 to 120 minutes); if announced by the lecturer, the written examination can be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups (groups of 2, approx. 30 minutes)  Language of assessment: German, English if agreed upon with the examiner  Other prerequisites: Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew and have to register anew, too. |  |  |  |  |  |  |  |  |
|                   | other prerequisites    | <ul> <li>Assessment in module component 10-M-INF12-2-102: Mathematics 2 for students in Computer Science Mathematics 2 for students in Computer Science</li> <li>10 ECTS, Method of grading: numerical grade</li> <li>written examination (approx. 90 to 120 minutes); if announced by the lecturer, the written examination can be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups (groups of 2, approx. 30 minutes)</li> <li>Language of assessment: German, English if agreed upon with the examiner</li> <li>Other prerequisites: Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew and have to register anew, too.</li> </ul>  |  |  |  |  |  |  |  |  |

| 10-M-INF3-102- | Mather | Mathematics 3 for students in Computer Science |          |   |                      |                      |                                |             |   |  |  |  |  |
|----------------|--------|--|----------|---|----------------------|----------------------|--------------------------------|-------------|---|--|--|--|--|
| mo1            | ECTS   | 9  | Duration | 1   | 1 semester           | Method of grading    | numerical grade                | Modul level | undergraduate   |  |  |  |  |
|                | Course | S  |          | V + Ü   | (no information on S | WS (weekly contact   | hours) and course language ava | ailable)    |   |  |  |  |  |
|                | Method | d of asse                                      |          | oral e<br>tes)  | xamination of one ca | andidate each (appro |                                |             | amination can be replaced by an os (groups of 2, approx. 30 minu- |  |  |  |  |
|                | otherp | rerequis                                       |          | Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew and have to register anew, too. |                      |                      |                                |             |   |  |  |  |  |

| 10-M-LRI12-092- | Mathematics 1 and 2 for students of Space- and Aerospace Computer Science |          |   |  |   |  |  |  |  |  |  |  |  |  |
|-----------------|---|----------|---|--|---|--|--|--|--|--|--|--|--|--|
| mo1             | ECTS 20   | Duration | 2 semester  | Method of grading numerical gr   | ade Modul   | level undergraduate  |  |  |  |  |  |  |  |  |
|                 | Courses   |          | • 10-M-LRl12-1-09   | s 2 module components. Information<br>2: V + Ü (no information on SWS (wee<br>2: V + Ü (no information on SWS (we  | ekly contact hours) and co  |  |  |  |  |  |  |  |  |  |
|                 | Method of ass   | sessment |   | dule comprises the assessments in t<br>essful completion of the module will  |   |  |  |  |  |  |  |  |  |  |
|                 |   |          | Mathematics 1 for stude  10 ECTS, Metho  written examinate by an oral examinate approx. 30 minute Language of asset Other prerequise announced by the met to qualify for a decent and into effect. Stude semester. For a semester. For a semester in module mathematics 2 for stude  10 ECTS, Metho written examinate by an oral examinate approx. 30 minute or semester. | dents of Space- and Aerospace Compid of grading: (not) successfully compition (approx. 90 to 120 minutes); if an ination of one candidate each (approxes) sessment: German, English if agreed sites: Registration for the exercise muthe lecturer in accordance with the sor admission to assessment (e. g. storm students about the respective deted a declaration of will to seek admission assessment over the course of the dents who meet all prerequisites will essessment at a later date, students who register anew, too.  The component 10-M-LRI12-2-092: Mathematical grade and all the course of the dents of Space- and Aerospace Compid of grading: numerical grade attion (approx. 90 to 120 minutes); if an ination of one candidate each (approxes) | uter Science leted nounced by the lecturer, theox. 20 minutes) or an oracupon with the examiner ust be made via SB@homespecified registration deauccessful completion of a tails at the beginning of the science it have to obtain the qual nematics 2 for students of uter Science nounced by the lecturer, theox. 20 minutes) or an orace | Space- and Aerospace Computer Science to written examination can be replaced I examination in groups (groups of 2, et at the beginning of the course or as dlines. Certain prerequisites must be certain percentage of exercises). The e course. Registration for the exercise dents have obtained the qualification I put their registration for assessment in the current or in the subsequent ification for admission to assessment Space- and Aerospace Computer Science written examination can be replaced I examination in groups (groups of 2, |  |  |  |  |  |  |  |  |
|                 |   |          | <ul> <li>Other prerequise announced by met to qualify for lecturer will information will be consider for admission to effect. Studies and the semester. For as</li> </ul>   | the lecturer in accordance with the sor admission to assessment (e.g. sorm students about the respective defeed a declaration of will to seek admission assessment over the course of the dents who meet all prerequisites will  | ast be made via SB@homespecified registration deal<br>accessful completion of a<br>tails at the beginning of thesion to assessment. If stu<br>semester, the lecturer will<br>be admitted to assessme  | e at the beginning of the course or as dlines. Certain prerequisites must be certain percentage of exercises). The e course. Registration for the exercise dents have obtained the qualification I put their registration for assessment nt in the current or in the subsequent ification for admission to assessment  |  |  |  |  |  |  |  |  |
|                 | other prerequ   | isites   |   | dditional prerequisites are listed in th   | ne section on assessment  | S.   |  |  |  |  |  |  |  |  |

| 10-M-ANA-082- | Analysis |            |          |              |  |   |  |                                     |                                |  |  |  |  |
|---------------|----------|------------|----------|--------------|--|---|--|-------------------------------------|--------------------------------|--|--|--|--|
| mo1           | ECTS     | 17         | Duration | n            | 2 semester   | Method of grading   | numerical grade  | Modul level                         | undergraduate                  |  |  |  |  |
|               | Course   | S          |          | •            | This module comprises 3 module components. Information on courses will be listed separately for each module component.  • 10-M-ANA-1-082: V + Ü (no information on SWS (weekly contact hours) and course language available)  • 10-M-ANA-2-082: V + Ü (no information on SWS (weekly contact hours) and course language available)  • 10-M-ANA-P-082: M (no information on SWS (weekly contact hours) and course language available) |   |  |                                     |                                |  |  |  |  |
|               | Metho    | d of asso  | essment  | stated Asses | otherwise, succes<br>sment in module c<br>8 ECTS, Method of  | osful completion of the omponent 10-M-ANA-f grading: (not) succes                                 |  | l completion of                     | all individual assessments.    |  |  |  |  |
|               |          |            |          | •            | 20 minutes) or c) of Language of assess Other prerequisites  | oral examination in gi<br>ssment: German, Eng<br>es: Modules 10-M-VKN                             | nutes; usually chosen) or b) ora roups (groups of 2, approx. 30 r lish if agreed upon with the exa M and 10-M-PPM are recommend -2-082: Analysis 2 | ninutes)<br>miner                   | of one candidate each (approx. |  |  |  |  |
|               |          |            |          | •            | 7 ECTS, Method of<br>a) written examina<br>20 minutes) or c) of<br>Language of assess  | f grading: (not) succes<br>ation (approx. 90 min<br>oral examination in gi<br>ssment: German, Eng | ssfully completed<br>nutes; usually chosen) or b) ora<br>roups (groups of 2, approx. 30 r<br>lish if agreed upon with the exa                      | ninutes)<br>miner                   | .,                             |  |  |  |  |
|               |          |            |          | Asses        | ANA-1 is recomme sment in module c   | ended for module com<br>component 10-M-ANA-   | -P-082: Examination in Analysis  |                                     | ion, module component 10-M-    |  |  |  |  |
|               |          |            |          |              | oral examination of<br>Language of asses<br>Only after success<br>10-M-ANA-1, 10-M-P.  | ssment: German, Eng<br>ful completion of mod<br>-ANL-1, 10-M-ANA-2, 1                             | n (approx. 30 minutes)<br>lish if agreed upon with the exa<br>dule components: Successful co<br>o-M-ANL-2 is a prerequisite for p                  | mpletion of any<br>participation in |                                |  |  |  |  |
|               |          | rerequi    |          |              | · · · · · · · · · · · · · · · · · · ·  |   | are listed in the section on asse  | essments.                           |                                |  |  |  |  |
|               | Referre  | ed to in L | PO I     | § 73 (1      | .) 1. Mathematik Ar  | nalysis   |  | _                                   |                                |  |  |  |  |

| 10-M-LNA-082- | Linear Algebra |          |  |  |   |   |   |  |  |  |  |  |  |
|---------------|----------------|----------|--|--|---|---|---|--|--|--|--|--|--|
| mo1           | ECTS 14        | Duration | n 2 semester   | Method of grading  | numerical grade   | Modul level   | undergraduate   |  |  |  |  |  |  |
|               | Courses        |          | This module comprises 3 module components. Information on courses will be listed separately for each module components of 10-M-LNA-1-082: V + Ü (no information on SWS (weekly contact hours) and course language available)  10-M-LNA-2-082: V + Ü (no information on SWS (weekly contact hours) and course language available)  10-M-LNA-P-082: M (no information on SWS (weekly contact hours) and course language available) |  |   |   |   |  |  |  |  |  |  |
|               | Method of as   | sessment |  |  |   |   | ts as specified below. Unless<br>f all individual assessments.  |  |  |  |  |  |  |
|               |                |          | <ul> <li>7 ECTS, Method</li> <li>written examina oral examination 30 minutes)</li> <li>Language of ass</li> <li>Other prerequist students about a declaration of assessment over dents who mee assessment at a sessment in module</li> <li>5 ECTS, Method</li> <li>written examination 30 minutes)</li> </ul>  | of grading: (not) succetion (approx. 90 minutes of one candidate each of one candidate each of one candidate each of sessment: German, Engites: Certain prerequisite the respective details of will to seek admissioner the course of the sert all prerequisites will be a later date, students we component 10-M-LNA-of grading: (not) succetion (approx. 90 minutes of one candidate each  | es); if announced by the lead to he (approx. 20 minutes) or alish if agreed upon with the ses must be met to qualify that the beginning of the conton assessment. If studer mester, the lecturer will proper admitted to assessment ill have to obtain the qual examples as Linear Algebra 2 Lessfully completed es); if announced by the lead he (approx. 20 minutes) or   | cturer, the written exa<br>an oral examination<br>ne examiner<br>for admission to asse<br>curse. Registration fo<br>the state of the curse of the<br>at their registration of<br>the current or in<br>iffication for admission<br>inear Algebra 2 | amination can be replaced by an in groups (groups of 2, approx.  essment. The lecturer will inform or the course will be considered e qualification for admission to for assessment into effect. Stunt the subsequent semester. For on to assessment anew.  amination can be replaced by an in groups (groups of 2, approx. |  |  |  |  |  |  |
|               |                |          | Other prerequis students about a declaration of assessment over dents who mee assessment at a Assessment in module     2 ECTS, Method     oral examinatio     Language of asses     Only after success   | ites: Certain prerequisit the respective details the respective details will to seek admissioner the course of the sert all prerequisites will halater date, students we component 10-M-LNA-of grading: numerical and of one candidate each sessment: German, Engessful completion of more candidate of more | at the beginning of the conton to assessment. If studer mester, the lecturer will pose admitted to assessment ill have to obtain the qual P-082: Examination in Lingrade (approx. 30 minutes) lish if agreed upon with the conton of the conton | for admission to asse-<br>ourse. Registration fo<br>outs have obtained the<br>out their registration fo<br>nt in the current or in<br>ification for admission<br>near Algebra   | module component 10-M-LNA-1   |  |  |  |  |  |  |
|               | other prerequ  | uisites  | By way of exception, additional prerequisites are listed in the section on assessments.  |  |   |   |   |  |  |  |  |  |  |
|               | Referred to in | LPO I    | § 73 (1) 2. Mathematik   | Lineare Algebra, Algeb   | ra und Elemente der Zahle   | entheorie   |   |  |  |  |  |  |  |

| Computer Science | (23 ECTS             | credits | s)        |  |  |  |   |                            |                 |  |  |  |
|------------------|----------------------|---------|-----------|--|--|--|---|----------------------------|-----------------|--|--|--|
| 10-I-GT-102-m01  | Algorith             | nmic Gr | aph Theo  | ry   |  |  |   |                            |                 |  |  |  |
|                  | ECTS                 | 5       | Duration  | 1  | 1 semester   | Method of gradin   | g numerical grade                               |                            | Modul level     | undergraduate  |  |  |
|                  | Courses              | 5       |           | V + Ü  | (no information o  | n SWS (weekly conta  | ct hours) and course                            | language av                | ailable)        |  |  |  |
|                  | Method               | of ass  | essment   | writte<br>didat  | rritten examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the<br>rritten examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one car<br>lidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes)<br>anguage of assessment: German, English if agreed upon with the examiner |  |   |                            |                 |  |  |  |
|                  | other pr             | rerequi | sites     | Admi:<br>cours   |  | on prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the   |   |                            |                 |  |  |  |
| 10-I-DB-102-m01  | Databases            |         |           |  |  |  |   |                            |                 |  |  |  |
|                  | ECTS                 | 5       | Duratio   | 1  | 1 semester   | Method of gradin   | g numerical grade                               |                            | Modul level     | undergraduate  |  |  |
|                  | Courses              | 5       |           | V + Ü  | (no information o  | n SWS (weekly conta  | ct hours) and course                            | language av                | ailable)        |  |  |  |
|                  | Method               | 01 8550 | essment   | if ann<br>exam<br>tes, g<br>Langu  | ounced by the led<br>ination of one car<br>roups of 3: 25 min<br>uage of assessme  | examination (approx. 50 to 60 minutes) Inced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an ation of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 maps of 3: 25 minutes) The of assessment: German, English if agreed upon with the examiner |   |                            |                 |  |  |  |
|                  | other prerequisites  |         |           | Admi:<br>cours   |  | e to assessment: exer  | cises (type and scop                            | e to be anno               | unced by the le | cturer at the beginning of the                                       |  |  |
|                  | Referred to in LPO I |         |           |  |  | ksysteme und Softwa<br>ksysteme und Softwa   |   |                            |                 |  |  |  |
| 10-I-WBS-102-m01 | Knowle               | dge-ba  | sed Syste | l Systems  |  |  |   |                            |                 |  |  |  |
|                  | ECTS                 | 5       | Duration  | 1  | 1 semester   | Method of gradin   | g numerical grade                               |                            | Modul level     | undergraduate  |  |  |
|                  | Courses              | 5       |           | V + Ü  | (no information o  | n SWS (weekly conta  | ct hours) and course                            | language av                | ailable)        |  |  |  |
|                  | Method               | of asso | essment   | if ann exam tes, g   | ounced by the led<br>ination of one car<br>roups of 3: 25 mir  | ndidate each or an or  | orior to the examinati<br>al examination in gro | ups (one car               |                 | ation can be replaced by an oral<br>5 minutes, groups of 2: 20 minu- |  |  |
| 10-I-DM-102-m01  | Data Mi              | ining   |           |  |  |  |   |                            |                 |  |  |  |
|                  | ECTS                 | 5       | Duration  | 1  | 1 semester   | Method of gradin   | g numerical grade                               |                            | Modul level     | undergraduate  |  |  |
|                  | Courses              | 5       |           | V + Ü  | (no information o  | n SWS (weekly conta  | ct hours) and course                            | language av                | ailable)        |  |  |  |
|                  | Method               | of asso | essment   | writte<br>didat  | n examination ca<br>e each: 15 minute  | n be replaced by an o<br>s, groups of 2: 20 min  | oral examination of o<br>nutes, groups of 3: 29 | ne candidate<br>5 minutes) |                 | orior to the examination date, the l examination in groups (one can- |  |  |
|                  | other prerequisites  |         |           | Language of assessment: German, English if agreed upon with the examiner  Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course). |  |  |   |                            |                 |  |  |  |

| 10-I-00P-102-m01 | Object-o             | riente  | d Progran | nming   |  |                         |                       |                          |                                    |  |  |  |
|------------------|----------------------|---------|-----------|---|--|-------------------------|-----------------------|--------------------------|------------------------------------|--|--|--|
|                  | ECTS                 | 5       | Duration  | )   | 1 semester   | Method of grading       | numerical grade       | Modul level              | undergraduate                      |  |  |  |
|                  | Courses              |         |           | V + Ü   | (no information o  | on SWS (weekly contact  | hours) and course la  | nguage available)        | -                                  |  |  |  |
|                  | Method               | of asse | essment   |   |  |                         |                       |                          | prior to the examination date, the |  |  |  |
|                  |                      |         |           | didate  | ritten examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one canidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) anguage of assessment: German, English if agreed upon with the examiner |                         |                       |                          |                                    |  |  |  |
|                  | other prerequisites  |         |           |   | dmission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the burse).   |                         |                       |                          |                                    |  |  |  |
| 10-I-KT-102-m01  | Theory of Complexity |         |           |   |  |                         |                       |                          |                                    |  |  |  |
|                  | ECTS 5 Duration      |         |           | )   | 1 semester   | Method of grading       | numerical grade       | Modul level              | undergraduate                      |  |  |  |
|                  | Courses              |         |           | V + Ü   | (no information o  | on SWS (weekly contact  | hours) and course la  | nguage available)        | -                                  |  |  |  |
|                  | Method of assessment |         |           | written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes)  Language of assessment: German, English if agreed upon with the examiner  |  |                         |                       |                          |                                    |  |  |  |
|                  | other pre            | erequis | sites     | Admis<br>cours  |  | e to assessment: exerci | ses (type and scope t | o be announced by the le | ecturer at the beginning of the    |  |  |  |
| 10-I-AR-102-m01  |                      |         | d Control | Techn   | ology  |                         |                       |                          |                                    |  |  |  |
|                  | ECTS 8               | 8       | Duration  | 1   | 1 semester   | Method of grading       | numerical grade       | Modul level              | undergraduate                      |  |  |  |
|                  | Courses              |         |           | V + Ü   | (no information o  | on SWS (weekly contact  | hours) and course la  | nguage available)        |                                    |  |  |  |
|                  | Method               | of asse | essment   | written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3. Language of assessment: German, English if agreed upon with the examiner |  |                         |                       |                          |                                    |  |  |  |
|                  | other pre            | erequis |           | Admis<br>cours  |  | e to assessment: exerci | ses (type and scope t | o be announced by the le | ecturer at the beginning of the    |  |  |  |
| 10-I-BS-102-m01  | Operatin             | ig Syst | tems      |   |  |                         |                       |                          |                                    |  |  |  |
|                  | ECTS 4               | 5       | Duration  | 1   | 1 semester   | Method of grading       | numerical grade       | Modul level              | undergraduate                      |  |  |  |
|                  | Courses              |         |           | V + Ü   | (no information o  | on SWS (weekly contact  | hours) and course la  | nguage available)        |                                    |  |  |  |
|                  | Method               | of asse | essment   | written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes)  Language of assessment: German, English if agreed upon with the examiner  |  |                         |                       |                          |                                    |  |  |  |
|                  | other pre            | erequis | sites     | Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).  |  |                         |                       |                          |                                    |  |  |  |
|                  | Referred             | to in L | PO I      | § 69 (  | (1) 1. c) Informatik   | c Technische Informatik |                       |                          |                                    |  |  |  |

| 10-I-RAK-102-m01 | Comput                                      | ter Arch  | itecture |   |  |  |                         |               |  | -                              |
|------------------|---|-----------|----------|---|--|--|-------------------------|---------------|--|--------------------------------|
|                  | ECTS  | 5         | Duration | ı   | 1 semester   | Method of grading  | numerical grade         | M             | odul level   | undergraduate                  |
|                  | Courses                                     | s<br>S    |          | V + Ü   | (no information o  | n SWS (weekly contac   | t hours) and course lar | nguage availa | ıble)  |                                |
|                  | Method                                      | d of asse | essment  | writte<br>didate  | written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes)  Language of assessment: German, English if agreed upon with the examiner |  |                         |               |  |                                |
|                  | other p                                     | rerequis  |          | Admis<br>course   |  | e to assessment: exerc   | ises (type and scope to | o be announc  | ed by the le   | cturer at the beginning of the |
|                  | Referre                                     | d to in L | PO I     | § 69 (  | 69 (1) 1. c) Informatik Technische Informatik  |  |                         |               |  |                                |
| 10-I-RK-102-m01  | Computer Networks and Communication Systems |           |          |   |  |  |                         |               |  |                                |
|                  | ECTS  | 8         | Duration | ı   | 1 semester   | Method of grading  | numerical grade         | M             | odul level   | undergraduate                  |
|                  | Courses                                     | S         |          | V + Ü   | (no information o  | n SWS (weekly contac   | t hours) and course lar | nguage availa | ıble)  |                                |
|                  | Method of assessment                        |           |          | written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 3. Language of assessment: German, English if agreed upon with the examiner |  |  |                         |               | l examination in groups. A 80 to e candidate each, a 30 minute |                                |
|                  | other prerequisites                         |           |          | Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).  |  |  |                         |               | cturer at the beginning of the                                 |                                |
| 07-BI-102-m01    | Bioinfo                                     | rmatics   |          |   |  | ,  |                         | •             |  |                                |
|                  | ECTS  | 5         | Duration | 1   | 1 semester   | Method of grading  | numerical grade         | M             | odul level   | undergraduate                  |
|                  | Courses                                     | S         |          | V + Ü   | (no information o  | n SWS (weekly contac   | t hours) and course lar | nguage availa | ıble)  |                                |
|                  | Method of assessment                        |           |          | written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes)  Language of assessment: German, English if agreed upon with the examiner  |  |  |                         |               |  |                                |
|                  | other prerequisites                         |           |          | Admis<br>course   |  | e to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the |                         |               |  |                                |

| <b>Subsidiary Subject</b> | t (10 ECTS credits)      |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|--------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Mathematics (10 E         | CTS credits)             |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10-M-EDM-072-             | Introduction to Discrete | Introduction to Discrete Mathematics   |  |  |  |  |  |  |  |  |  |  |  |  |
| mo1                       | ECTS 5 Duration          | n 1 semester Method of grading numerical grade Modul level undergraduate   |  |  |  |  |  |  |  |  |  |  |  |  |
|                           | Courses                  | V + Ü (no information on SWS (weekly contact hours) and course language available)   |  |  |  |  |  |  |  |  |  |  |  |  |
|                           | Method of assessment     | written examination (approx. 90 minutes); if announced by the lecturer, the written examination can be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English if agreed upon with the examiner  |  |  |  |  |  |  |  |  |  |  |  |  |
|                           | other prerequisites      | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. |  |  |  |  |  |  |  |  |  |  |  |  |
|                           | Referred to in LPO I     | § 73 (1) 2. Mathematik Lineare Algebra, Algebra und Elemente der Zahlentheorie   |  |  |  |  |  |  |  |  |  |  |  |  |
| 10-M-NM1-082-             | Numerical Mathematics 1  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| mo1                       | ECTS 8 Duratio           | n 1 semester Method of grading numerical grade Modul level undergraduate   |  |  |  |  |  |  |  |  |  |  |  |  |
|                           | Courses                  | V + Ü (no information on SWS (weekly contact hours) and course language available)   |  |  |  |  |  |  |  |  |  |  |  |  |
|                           | Method of assessment     | written examination (approx. 90 minutes); if announced by the lecturer, the written examination can be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English if agreed upon with the examiner  |  |  |  |  |  |  |  |  |  |  |  |  |
|                           | other prerequisites      | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. |  |  |  |  |  |  |  |  |  |  |  |  |
|                           | Referred to in LPO I     | § 73 (1) 5. Mathematik Angewandte Mathematik   |  |  |  |  |  |  |  |  |  |  |  |  |

| 10-M-ST1-082-m01 | Stocha               |           |           |  |  |                   |                              |             |                                 |  |  |  |  |  |
|------------------|----------------------|-----------|-----------|--|--|-------------------|------------------------------|-------------|---------------------------------|--|--|--|--|--|
|                  | ECTS                 | 8         | Duration  | 1  | 1 semester   | Method of grading | numerical grade              | Modul level | undergraduate                   |  |  |  |  |  |
|                  | Course               | <br>S     |           | V + Ü  | / + Ü (no information on SWS (weekly contact hours) and course language available)   |                   |                              |             |                                 |  |  |  |  |  |
|                  | Method               | of asse   | essment   |  |  |                   |                              |             | tion can be replaced by an oral |  |  |  |  |  |
|                  |                      |           |           |  | examination of one candidate each (approx. 20 minutes) or an oral examination in groups (groups of 2, approx. 30 minutes)  Language of assessment: German, English if agreed upon with the examiner  |                   |                              |             |                                 |  |  |  |  |  |
|                  | other prerequisites  |           |           | tive d<br>on to<br>the le<br>sessr   | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. |                   |                              |             |                                 |  |  |  |  |  |
|                  |                      | d to in L |           |  | 1) 3. Mathematik   | Stochastik        |                              |             |                                 |  |  |  |  |  |
| 10-M-COM-082-    | <u> </u>             | terorien  | ted Math  | emati  | cs   |                   |                              |             |                                 |  |  |  |  |  |
| mo1              | ECTS                 | 3         | Duration  |  | 1 semester   |                   | (not) successfully completed |             | undergraduate                   |  |  |  |  |  |
|                  | Course               |           |           |  | -  | <u> </u>          | hours) and course language a | <u> </u>    |                                 |  |  |  |  |  |
|                  | Method of assessment |           |           | project in the form of programming exercises (as specified at the beginning of the course) Assessment offered: once a year, summer semester Language of assessment: German, English if agreed upon with the examiner   |  |                   |                              |             |                                 |  |  |  |  |  |
|                  | other prerequisites  |           |           | Admission prerequisite to assessment: regular attendance of exercises (attendance monitored, a maximum of one incident of unexcused absence).  |  |                   |                              |             |                                 |  |  |  |  |  |
|                  | Referred to in LPO I |           |           | § 73 (1) 5. Mathematik Angewandte Mathematik   |  |                   |                              |             |                                 |  |  |  |  |  |
| 10-M-EZT-082-m01 | Introdu              | ction to  | Number    | Гћеогу   |  |                   |                              |             |                                 |  |  |  |  |  |
|                  | ECTS                 | 5         | Duration  | 1  | 1 semester   | Method of grading | numerical grade              | Modul level | undergraduate                   |  |  |  |  |  |
|                  | Course               | S         |           | V + Ü  | ' + Ü (no information on SWS (weekly contact hours) and course language available)   |                   |                              |             |                                 |  |  |  |  |  |
|                  | Method of assessment |           |           |  | a) written examination (approx. 90 minutes; usually chosen) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes)   |                   |                              |             |                                 |  |  |  |  |  |
| 10-M-ODE-082-    | Ordina               | ry Differ | ential Eq | uation   | S  |                   |                              |             |                                 |  |  |  |  |  |
| mo1              | ECTS                 | 5         | Duration  | 1  | 1 semester   | Method of grading | numerical grade              | Modul level | undergraduate                   |  |  |  |  |  |
|                  | Course               | S         |           | V + Ü  | V + Ü (no information on SWS (weekly contact hours) and course language available)   |                   |                              |             |                                 |  |  |  |  |  |
|                  | Method of assessment |           |           | written examination (approx. 90 minutes); if announced by the lecturer, the written examination can be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English if agreed upon with the examiner  |  |                   |                              |             |                                 |  |  |  |  |  |
|                  | other prerequisites  |           |           | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. |  |                   |                              |             |                                 |  |  |  |  |  |

| 10-M-ORS-072-      | Operati   |                      |            |  |  |                      |                         |             |             |               |  |
|--------------------|---|----------------------|------------|--|--|----------------------|-------------------------|-------------|-------------|---------------|--|
| mo1                | ECTS  | 5                    | Duratio    | า  | 1 semester   | Method of gradir     | ng numerical grade      |             | Modul level | undergraduate |  |
|                    | Courses   | S                    |            | V + Ü  | V + Ü (no information on SWS (weekly contact hours) and course language available) |                      |                         |             |             |               |  |
|                    | Method  | d of ass             | essment    | written examination (approx. 90 minutes); if announced by the lecturer, the written examination can be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English if agreed upon with the examiner  |  |                      |                         |             |             |               |  |
|                    | other p   | rerequi              | isites     | Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. |  |                      |                         |             |             |               |  |
|                    | Referre   | d to in              | LPO I      | § 73   | (1) 5. Mathematik /  | Angewandte Mathem    | natik                   |             |             |               |  |
| Physics (10 ECTS c | redits)   |                      |            |  |  |                      |                         |             |             |               |  |
| 11-EFNF-072-m01    | Introdu   | ıction te            | o Physics  | for St   | udents of Non-phy  | sics-related Minor S | ubjects                 |             |             |               |  |
|                    | ECTS  | 7                    | Duratio    | า  | 2 semester   | Method of gradir     | ng numerical grade      |             | Modul level | undergraduate |  |
|                    | Courses   |                      |            | V + V (no information on SWS (weekly contact hours) and course language available)   |  |                      |                         |             |             |               |  |
|                    | Methoc  | Method of assessment |            |  | written examination (approx. 120 minutes)  |                      |                         |             |             |               |  |
|                    | Particip<br>cation o  |                      |            | Only as part of pool of general key skills (ASQ): 10 places. Places will be allocated by lot.  |  |                      |                         |             |             |               |  |
| 11-PFNF-072-m01    | 1 Practical Course Physics for Students of Non-physics-related Minor Subjects |                      |            |  |  |                      |                         |             |             |               |  |
|                    | ECTS  | 3                    | Duratio    | า  | 1 semester   | Method of gradir     | ng (not) successfully   | completed   | Modul level | undergraduate |  |
|                    | Courses   | S                    |            | P (no information on SWS (weekly contact hours) and course language available)   |  |                      |                         |             |             |               |  |
|                    | Method  | d of ass             | essment    | a) oral test (approx. 15 minutes) during experiment and b) ungraded written examination (approx. 90 minutes)   |  |                      |                         |             |             |               |  |
|                    | Particip<br>cation o  |                      |            | Only as part of pool of general key skills (ASQ): 10 places. Places will be allocated by lot.  |  |                      |                         |             |             |               |  |
| Business Manager   | nent and  | Econo                | mics (10 E | CTS c  | edits)   |                      |                         |             |             |               |  |
| 12-NW-EBWL-092-    | Introdu   | iction to            | o Busines  | s Adm  | inistration - Minor  | r                    |                         |             |             |               |  |
| mo1                | ECTS  | 5                    | Duratio    | า  | 1 semester   | Method of gradir     | ng numerical grade      |             | Modul level | undergraduate |  |
|                    | Courses   | S                    |            | V + Ü  | (no information o  | n SWS (weekly conta  | act hours) and course l | language av | ailable)    |               |  |
|                    | Method  | of ass               | essment    | writte   | written examination (approx. 60 minutes)   |                      |                         |             |             |               |  |
| 12-NW-EV-          | Introdu   | iction te            | o Econom   | cs - N   | inor   |                      |                         |             | .,          |               |  |
| WL-092-m01         | ECTS  | 5                    | Duratio    | 1  | 1 semester   | Method of gradir     | ng numerical grade      |             | Modul level | undergraduate |  |
|                    | Courses   | S                    |            | V + Ü  | (no information o  | n SWS (weekly conta  | act hours) and course l | anguage av  | ailable)    |               |  |
|                    | Method  | d of ass             | essment    | writte   | en examination (ar   | oprox. 60 minutes)   |                         |             |             |               |  |

| 12-ExtUR-G-082-  | Financia              | l Accounting               |  |  |   |  |  |  |  |
|------------------|-----------------------|----------------------------|--|--|---|--|--|--|--|
| mo1              | ECTS                  | 5 Duration                 | n :  | 1 semester   | Method of grading   | numerical grade  | Modul level  | undergraduate  |  |
|                  | Courses               |                            | V + Ü (r   | no information on  | SWS (weekly contact   | thours) and course language av   | ailable)   |  |  |
|                  | Method                | of assessment              | written  | examination (app   | orox. 60 minutes)   |  |  |  |  |
|                  | Participa<br>cation o | ants and allo-<br>f places | Number of places: 640. No restrictions with regard to available places for Bachelor's students of Wirtschaftswissenschaft (Business Management and Economics), Wirtschaftsmathematik (Mathematics for Economics) and Wirtschaftsinformatik (Business Information Systems). The remaining places will be allocated to students of other subjects. Should the number of applications exceed the number of available places, places will be allocated in a standardised procedure among all applicants irrespective of their subjects according to the following quotas: Quota 1 (50% of places): total number of ECTS credits already achieved in the respective degree subject; among applicants with the same number of ECTS credits achieved, places will be allocated by lot. Quota 2 (25% of places): number of subject semesters of the respective applicant; among applicants with the same number of subject semesters, places will be allocated by lot. Quota 3 (25% of places): allocation by lot. Applicants who already have successfully completed at least one module component of the respective module will be given preferential consideration. Places on all courses of the module component with a restricted number of places will be allocated in the same procedure. A waiting list will be maintained and places re-allocated as they become available. |  |   |  |  |  |  |
| 12-BPL-G-082-m01 | Supply,               | <b>Production and</b>      | Operati  | ions Management  | . An Introduction   |  | ,  |  |  |
|                  | ECTS                  | 5 Duration                 |  | 1 semester   | Method of grading   | _  | Modul level  | undergraduate  |  |
|                  | Courses               |                            | V + Ü (r   | no information on  | SWS (weekly contact   | thours) and course language av   | vailable)  |  |  |
|                  | Method                | of assessment              | written  | examination (app   | orox. 60 minutes)   |  |  |  |  |
|                  | Participa<br>cation o | ants and allo-<br>f places | (Busine applica cants in already will be with the cants we rential   | ess Management a<br>ess Information Sy<br>ations exceed the<br>rrespective of thei<br>y achieved in the r<br>allocated by lot. O<br>e same number of<br>who already have s<br>consideration. Pla | and Economics), Wirt<br>ystems). The remainir<br>number of available p<br>r subjects according<br>espective degree sub<br>Quota 2 (25% of place<br>subject semesters, p<br>successfully completed<br>tees on all courses of | places, places will be allocated to the following quotas: Quota a pject; among applicants with the es): number of subject semester blaces will be allocated by lot. Ced at least one module compon | cs for Economic udents of other sin a standardise (50% of places e same number so of the respect Quota 3 (25% of ent of the resperestricted numb | s) and Wirtschaftsinformatik subjects. Should the number of ed procedure among all applicitions: total number of ECTS credits of ECTS credits achieved, places ive applicant; among applicants places): allocation by lot. Applictive module will be given preferrof places will be allocated in |  |

| 12-IntUR-G-082-  | Managerial                    | Accounting                            |  |   |   |  |  |  |  |  |  |  |  |
|------------------|-------------------------------|---------------------------------------|--|---|---|--|--|--|--|--|--|--|--|
| mo1              | ECTS 5                        | Duratio                               | n  | 1 semester  | Method of grading   | numerical grade  | Modul level  | undergraduate  |  |  |  |  |  |
|                  | Courses                       |                                       | V + Ü  | (no information or  | SWS (weekly contact   | t hours) and course language av  | ailable)   |  |  |  |  |  |  |
|                  | Method of a                   | ssessment                             | writte   | n examination (ap   | prox. 60 minutes)   |  |  |  |  |  |  |  |  |
|                  | Participants<br>cation of pla |                                       | Number of places: 640. No restrictions with regard to available places for Bachelor's students of Wirtschaftswissenschaft (Business Management and Economics), Wirtschaftsmathematik (Mathematics for Economics) and Wirtschaftsinformatik (Business Information Systems). The remaining places will be allocated to students of other subjects. Should the number of applications exceed the number of available places, places will be allocated in a standardised procedure among all applicants irrespective of their subjects according to the following quotas: Quota 1 (50% of places): total number of ECTS credits already achieved in the respective degree subject; among applicants with the same number of ECTS credits achieved, places will be allocated by lot. Quota 2 (25% of places): number of subject semesters of the respective applicant; among applicants with the same number of subject semesters, places will be allocated by lot. Quota 3 (25% of places): allocation by lot. Applicants who already have successfully completed at least one module component of the respective module will be given preferential consideration. Places on all courses of the module component with a restricted number of places will be allocated in the same procedure. A waiting list will be maintained and places re-allocated as they become available. |   |   |  |  |  |  |  |  |  |  |
| 12-I&F-G-082-m01 | Investment                    | vestment and Finance. An Introduction |  |   |   |  |  |  |  |  |  |  |  |
|                  | ECTS 5                        | Duratio                               | n  | 1 semester  | Method of grading   | numerical grade  | Modul level  | undergraduate  |  |  |  |  |  |
|                  | Courses                       |                                       | V + Ü  | (no information or  | SWS (weekly contact   | t hours) and course language av  | ailable)   |  |  |  |  |  |  |
|                  | Method of a                   | ssessment                             | written examination (approx. 60 minutes)   |   |   |  |  |  |  |  |  |  |  |
|                  | Participants<br>cation of pla |                                       | (Busing (Busing applicants) already will be with the cants rentia  | ness Management ness Information Stations exceed the irrespective of the dy achieved in the eallocated by lot. he same number owno already have I consideration. Pl | and Economics), Wirt<br>systems). The remaining<br>number of available pair subjects according<br>respective degree sub<br>Quota 2 (25% of place<br>of subject semesters, particles, | places, places will be allocated to the following quotas: Quota a pject; among applicants with the es): number of subject semester places will be allocated by lot. Ced at least one module compon | cs for Economic udents of other sin a standardise (50% of places e same number so of the respect Quota 3 (25% of ent of the resperestricted numb | s) and Wirtschaftsinformatik subjects. Should the number of ed procedure among all applicitions: total number of ECTS credits of ECTS credits achieved, places ive applicant; among applicants places): allocation by lot. Applictive module will be given preferrof places will be allocated in |  |  |  |  |  |

| 12-EWiinf-G-082- | Introduction to Busines               | s Informatics  |   |   |  |  |  |  |
|------------------|---------------------------------------|--|---|---|--|--|--|--|
| mo1              | ECTS 5 Duratio                        | n 1 semester   | Method of grading numerical grade   | Modul level   | undergraduate  |  |  |  |
|                  | Courses                               | V + Ü (no information o  | n SWS (weekly contact hours) and course language av   | ailable)  |  |  |  |  |
|                  | Method of assessment                  | written examination (a)  | oprox. 60 minutes)  |   |  |  |  |  |
|                  | Participants and allocation of places | Number of places: 640. No restrictions with regard to available places for Bachelor's students of Wirtschaftswissenschaft (Business Management and Economics), Wirtschaftsmathematik (Mathematics for Economics) and Wirtschaftsinformatik (Business Information Systems). The remaining places will be allocated to students of other subjects. Should the number of applications exceed the number of available places, places will be allocated in a standardised procedure among all applicants irrespective of their subjects according to the following quotas: Quota 1 (50% of places): total number of ECTS credits already achieved in the respective degree subject; among applicants with the same number of ECTS credits achieved, places will be allocated by lot. Quota 2 (25% of places): number of subject semesters of the respective applicant; among applicants with the same number of subject semesters, places will be allocated by lot. Quota 3 (25% of places): allocation by lot. Applicants who already have successfully completed at least one module component of the respective module will be given preferential consideration. Places on all courses of the module component with a restricted number of places will be allocated in the same procedure. A waiting list will be maintained and places re-allocated as they become available. |   |   |  |  |  |  |
| 12-GP-G-082-m01  | <b>Business Processes</b>             |  |   |   |  |  |  |  |
|                  | ECTS 5 Duratio                        | n 1 semester   | Method of grading numerical grade   | Modul level   | undergraduate  |  |  |  |
|                  | Courses                               | V + Ü (no information o  | n SWS (weekly contact hours) and course language av   | ailable)  |  |  |  |  |
|                  | Method of assessment                  | written examination (a)  | oprox. 60 minutes)  |   |  |  |  |  |
|                  | Participants and allocation of places | mum 15 places. More p<br>dents of other subjects<br>applicants irrespective<br>dits already achieved it<br>ted by lot. Quota 2 (25°<br>number of subject sem<br>dy have successfully co<br>tion. Places on all cours   | Business Information Systems) Bachelor's (180 ECTS): laces will be available provided there is enough capaciexceed the number of available places, places will be of their subjects according to the following quotas: Quota the respective subject; among applicants with the saw of places): number of subject semesters of the respectives, places will be allocated by lot. Quota 3 (25% of completed at least one module component of the respectives of the module component with a restricted number maintained and places re-allocated as they become a | ity. Should the allocated in a suota 1 (50% of pume number of Extive applicant places): allocative module wir of places will be | number of applications from stu-<br>standardised procedure among all<br>laces): total number of ECTS cre-<br>ECTS credits, places will be alloca-<br>; among applicants with the same<br>tion by lot; applicants who alrea-<br>ll be given preferential considera- |  |  |  |

| 12-FRBE-F-082-      | Forward and Reverse Business Engineering            |   |  |  |  |  |  |  |  |  |  |  |
|---------------------|---|---|--|--|--|--|--|--|--|--|--|--|
| mo1                 | ECTS 5 Duratio                                      | n 1 semester Method of grading numerical grade Modul level undergraduate  |  |  |  |  |  |  |  |  |  |  |
|                     | Courses   | V + Ü (no information on SWS (weekly contact hours) and course language available)  |  |  |  |  |  |  |  |  |  |  |
|                     | Method of assessment                                | written examination (approx. 60 minutes)  |  |  |  |  |  |  |  |  |  |  |
|                     | Participants and allo-<br>cation of places          | Number of places: 50. Should the number of applications exceed the number of available places, places will be allocated as follows: (1) Bachelor's students of Wirtschaftsinformatik (Business Information Systems) will be given preferential consideration. (2) The remaining places will be allocated to students of other subjects. (3) When places are allocated in accordance with (1) and the number of applications exceeds the number of available places, places will be allocated among applicants from within this group according to the respective FSB (subject-specific provisions) regarding Section 7 Subsection 4 ASPO (general academic and examination regulations). (4) When places are allocated in accordance with (2) and the number of applications exceeds the number of available places, places will be allocated in a standardised procedure among all applicants irrespective of their subjects according to the following quotas: Quota 1 (50% of places): total number of ECTS credits already achieved in the respective degree subject; among applicants with the same number of ECTS credits achieved, places will be allocated by lot. Quota 2 (25% of places): number of subject semesters of the respective applicant; among applicants with the same number of subject semesters, places will be allocated by lot. Quota 3 (25% of places): allocation by lot. (5) Within the groups according to (1) and (2), applicants who already have successfully completed at least one module component of the respective module will be given preferential consideration. (6) Places on all courses of the module component with a restricted number of places will be allocated in the same procedure. (7) A waiting list will be maintained and places re-allocated as they become available. |  |  |  |  |  |  |  |  |  |  |
| Linguistics (10 ECT | S credits)  |   |  |  |  |  |  |  |  |  |  |  |
| o4-DtLA-BM-         | Level One Module Introduction to German Linguistics |   |  |  |  |  |  |  |  |  |  |  |
| SW-092-m01          | ECTS 5 Duratio                                      |   |  |  |  |  |  |  |  |  |  |  |
|                     | Courses   | T + V + S (no information on SWS (weekly contact hours) and course language available)  |  |  |  |  |  |  |  |  |  |  |
|                     |   | written examination (approx. 60 minutes)  |  |  |  |  |  |  |  |  |  |  |
|                     | other prerequisites                                 | Admission prerequisite to assessment: regular attendance (a maximum of 2 incidents of unexcused absence) of courses (lectures excluded).  |  |  |  |  |  |  |  |  |  |  |
|                     | Additional Information                              | Additional information on module duration: 1 to 2 semesters.  |  |  |  |  |  |  |  |  |  |  |
|                     | Referred to in LPO I                                | § 43 (1) 2. b) Deutsch Deutsche Sprachwissenschaft (Nebengebiet)<br>§ 63 (1) 2. b) Deutsch Deutsche Sprachwissenschaft (Nebengebiet)  |  |  |  |  |  |  |  |  |  |  |
| o4-DtLA-AM-         | Level Two Module Gram                               | nmatical Structures of German   |  |  |  |  |  |  |  |  |  |  |
| SW1-092-m01         | ECTS 5 Duratio                                      |   |  |  |  |  |  |  |  |  |  |  |
|                     | Courses   | T + V + S (no information on SWS (weekly contact hours) and course language available)  |  |  |  |  |  |  |  |  |  |  |
|                     | Method of assessment                                | written examination (approx. 60 minutes)  |  |  |  |  |  |  |  |  |  |  |
|                     | other prerequisites                                 | Admission prerequisite to assessment: regular attendance (a maximum of 2 incidents of unexcused absence) of courses (lectures excluded).  |  |  |  |  |  |  |  |  |  |  |
|                     | Additional Information                              | Additional information on module duration: 1 to 2 semesters.  |  |  |  |  |  |  |  |  |  |  |
|                     | Referred to in LPO I                                | § 43 (1) 2. b) Deutsch Deutsche Sprachwissenschaft (Nebengebiet)<br>§ 63 (1) 2. b) Deutsch Deutsche Sprachwissenschaft (Nebengebiet)  |  |  |  |  |  |  |  |  |  |  |

| Medicine (10 ECTS   | credits)             |          |            |   |  |  |  |                         |  |  |  |  |  |
|---------------------|----------------------|----------|------------|---|--|--|--|-------------------------|--|--|--|--|--|
| 03-M-MEI-072-       | Medica               | l decisi | on makin   | g   |  |  |  |                         |  |  |  |  |  |
| mo1                 | ECTS 10 Duration     |          |            | 1   | 1 semester   | Method of grading                            | numerical grade  | Modul level             | undergraduate  |  |  |  |  |
|                     | Course               | <u> </u> | •          | V + Ü   | + V (no information  | on SWS (weekly con                           | tact hours) and course   | language available)     |  |  |  |  |  |
|                     | Method               | of ass   | essment    |   | n examination (60 nutes)   | minutes) or oral exan                        | nination (one candidate  | each: 15 minutes, grou  | ips of 2: 20 minutes, groups of 3:                             |  |  |  |  |
| Geography (10 ECT   | S credits            | 5)       |            |   |  |  |  |                         |  |  |  |  |  |
| 09-FERN-072-m01     | Remote Sensing       |          |            |   |  |  |  |                         |  |  |  |  |  |
|                     | ECTS                 | 10       | Duration   | <u></u> า   | 1 semester   | Method of grading                            | numerical grade  | Modul level             | undergraduate  |  |  |  |  |
|                     | Course               | S        |            |   | 09-FERN-1-072: V   | + T (no information o                        | s. Information on course<br>n SWS (weekly contact h<br>n SWS (weekly contact h | nours) and course langu |  |  |  |  |  |
|                     | Method               | d of ass | essment    |   |  |  |  |                         | ts as specified below. Unless<br>f all individual assessments. |  |  |  |  |
|                     |                      |          |            | •<br>Asses  | written examinations written examinations written examination with the world with | omponent og-FERN-2<br>f grading: numerical g | - <b>072:</b> Application of Re  | mote Sensing in Geogra  | aphy Application of Remote Sen-                                |  |  |  |  |
| Thesis (12 ECTS cre |                      |          |            |   |  |  |  |                         |  |  |  |  |  |
| 10-I-BA-072-m01     | Bachel               | or-Thes  | is         |   |  |  |  |                         |  |  |  |  |  |
|                     | ECTS                 | 12       | Duration   | 1   | 1 semester   | Method of grading                            | numerical grade  | Modul level             | undergraduate  |  |  |  |  |
|                     | Course               | S        |            | no courses assigned   |  |  |  |                         |  |  |  |  |  |
|                     | Method of assessment |          |            | written thesis<br>Language of assessment: German or English   |  |  |  |                         |  |  |  |  |  |
|                     | other p              | rerequi  | sites      | Registration for assessment: as specified.  |  |  |  |                         |  |  |  |  |  |
| Subject-specific Ke | y Skills             | (12 ECT  | S credits) |   |  |  |  |                         |  |  |  |  |  |
| 10-I-SEM1-072-      | Semina               | ır 1     |            |   |  |  |  |                         |  |  |  |  |  |
| mo1                 | ECTS                 | 5        | Duration   | า   | 1 semester   | Method of grading                            | numerical grade  | Modul level             | undergraduate  |  |  |  |  |
|                     | Course               | S        | •          | S (no   | information on SW  | S (weekly contact ho                         | urs) and course languag  | ge available)           |  |  |  |  |  |
|                     |                      |          |            | written elaboration and oral presentation with subsequent discussion on a topic from the field of computer science (type and length to be specified by the lecturer at the beginning of the course)  Language of assessment: German, English if required by the examination candidate |  |  |  |                         |  |  |  |  |  |

| 10-I-SEM2-072-  | Seminar 2  |               |         |       |   |  |                 |             |                                  |  |  |
|-----------------|--|---------------|---------|-------|---|--|-----------------|-------------|----------------------------------|--|--|
| mo1             | ECTS   | TS 5 Duration |         | 1     | 1 semester  | Method of grading  | numerical grade | Modul level | undergraduate                    |  |  |
|                 | Course   | S             | •       | S (no | (no information on SWS (weekly contact hours) and course language available)  |  |                 |             |                                  |  |  |
|                 | Method of assessment written elaboration and oral presentation with subsequent discussion on a topic from the field of computer s length to be specified by the lecturer at the beginning of the course)  Language of assessment: German, English if required by the examination candidate |               |         |       |   |  |                 |             | ld of computer science (type and |  |  |
| 10-I-BK-072-m01 | Bachel   | or-Kollo      | quium   |       |   |  |                 |             |                                  |  |  |
|                 | ECTS   | 2             | Duratio | 1     | 1 semester  | Method of grading  | numerical grade | Modul level | undergraduate                    |  |  |
|                 | Course   | S             |         | K (no | information on SWS  | /S (weekly contact hours) and course language available) |                 |             |                                  |  |  |
|                 | Method   | d of asse     | essment |       | oral presentation (talk maximum 30 minutes, approx. 30 to 40 minutes total) with subsequent discussion of Bachelor's thesis and adjacent fields |  |                 |             |                                  |  |  |