

September

2017-2018

In order to graduate students' individual study programme's' must be approved by the specialization coordinator

Legenda:

| Specializations                           |  | Orientations |                                       |                   |                   |               |           |
|---|--|--------------|---------------------------------------|-------------------|-------------------|---------------|-----------|
| F = Financial Engineering and Management  |  | F            | Financial Engineering and Management  |                   |                   |               |           |
| H = Health Care and Technology Management |  | H            | Health Care and Technology Management |                   |                   |               |           |
| P = Production and Logistic Management    |  | s            | Service logistics                     | m                 | Manufacturing     |               |           |
|   |  | t            | SCM & transportation                  | hl                | Health logistics  |               |           |
| <b>first year, September</b>              |  |              |                                       | Mandatory courses | Mandatory courses | Recom- mended | Prior     |
| Quartile/ Code                            | Coursename                                       | Exam         | EC                                    | Specialization    | Orientation       | electives     | knowledge |
| 1.1, sept                                 |  |              |                                       |                   |                   |               |           |
| 201700020                                 | IEM Research Orientation                         | PSS          | 5                                     | F/P/H             |                   |               |           |
| 191506103                                 | Statistics and probability (+)                   | S            | 5                                     |                   | F                 | P/H           |           |
| 191860651                                 | Micro Economics                                  | S            | 5                                     |                   | F                 |               |           |
| 191820200                                 | Discrete Optimization of Business Processes (1)  | PSS          | 2,5                                   | P/H               |                   |               |           |
| 191820210                                 | Simulation (1)                                   | PSS          | 2,5                                   | P/H               |                   |               |           |
| 1.2, nov                                  |  |              |                                       |                   |                   |               |           |
| 201300060                                 | Mathematical Finance                             | S            | 5                                     | F                 |                   |               |           |
| 191515101                                 | Introduction to Risk Theory                      | S            | 5                                     | F                 |                   |               |           |
| 201400174                                 | Data Science                                     | PSS          | 5                                     | F/P/H             |                   |               |           |
| 191820210                                 | Simulation (2)                                   | PSS          | 2,5                                   | P/H               |                   |               |           |
| 191820200                                 | Discrete Optimization of Business Processes (2)  | PSS          | 2,5                                   | P/H               |                   |               |           |
| 191820180                                 | Reverse Logistics & re-manufacturing             | PSS          | 5                                     |                   | s/t/m             |               |           |
| 201600032                                 | Quality Management in Healthcare                 |              | 5                                     |                   | H                 | hl            |           |
| 1.3, febr                                 |  |              |                                       |                   |                   |               |           |
| 191860181                                 | Risk Management                                  | PSS          | 5                                     |                   | F                 |               |           |
| 201300062                                 | Structured Products                              | S            | 5                                     |                   | F                 |               |           |
| 191820190                                 | Supply Chain - & Transport Management            | PSS          | 5                                     |                   | t                 | s/m/hl        |           |
| 191852630                                 | Reliability Engineering & Maintenance Management | PSS          | 5                                     |                   | s                 | t/m/hl        |           |
| 201700196                                 | Advanced Health Economic Modeling                |              |                                       |                   | H                 | hl            |           |

|                    |   |      |      |   |                                 |          |                        |
|--------------------|---|------|------|---|---------------------------------|----------|------------------------|
| 194121020          | Optimization of Healthcare Processes                        | S    | 5    |   | hl                              | P/H      |                        |
| 201600015          | Strategic technology management and Innovation              | PSS  | 5    |   |                                 | F/P/H    |                        |
| 192340101          | Implementation of IT in organizations                       | PSM  | 5    |   |                                 | F/P/H    |                        |
| 1.4, apr           |   |      |      |   |                                 |          |                        |
| 201000202          | Management Control for Financial Institutions               | PSS  | 5    |   | F                               |          |                        |
| 201100162          | Management of Technology for FEM                            | PSS  | 5    |   | F                               |          |                        |
| 194105070          | Information Systems for the Financial Services Industry     | PSS  | 5    |   |                                 | F        |                        |
| 191852620          | Advanced Production Planning                                | S    | 5    |   | m/hl                            | s/t/H    |                        |
| 191820120          | Warehousing   | PSS  | 5    |   | m                               | s/t/hl/H |                        |
| 194122030          | New Production Concepts                                     | PSS  | 5    |   |                                 | P        |                        |
| 201700197          | Decision Making in Health Care                              |      | 5    |   | H                               | hl       |                        |
| 192360501          | E-Health Strategies   | S    | 5    |   |                                 | hl/H     |                        |
| 1.3, sept 2018     | <b>Preliminary programme 2018-2019 (under construction)</b> |      |      |   |                                 |          |                        |
| <b>second year</b> |   |      |      |   |                                 |          | <b>Prior knowlegde</b> |
| 2.1 sept 2018      |   |      |      |   | <b>elective or study abroad</b> |          |                        |
| 191521800          | Game Theory   | S    | 5    |   |                                 | F        |                        |
| 191506103          | Statistics and probability (+)                              | S    | 5    |   |                                 | P/H      |                        |
| 191820160          | Purchasing  | PSS  | 5    |   |                                 | P        |                        |
| NEW                | Health Care Finance   |      | 5    |   | hl/H                            |          |                        |
| 201700089          | Sustainable Business Development                            |      |      |   |                                 | F/P/H    |                        |
| 201200146          | Maintenance Engineering and Management                      |      |      |   |                                 | s/t/m    |                        |
| MEW                | Statistical learning in health care                         |      | 5    |   | H                               | hl       |                        |
|                    | Research Elective   |      | 5-10 |   |                                 | F/P/H    |                        |
| 2.2, nov           |   |      |      |   |                                 |          |                        |
| 201200127          | Preparation thesis PLM                                      | BAHL | 5    | P |                                 |          |                        |
| 201200128          | Preparation thesis FEM                                      | BAHL | 5    | F |                                 |          |                        |
| 201200130          | Preparation thesis HCTM                                     | BAHL | 5    | H |                                 |          |                        |
| 201200138          | Special Topics in Financial Engineering **                  | S    | 5    |   |                                 | F        |                        |
| 201400244          | Cost Management and Engineering                             | PSS  | 5    |   |                                 | F/P/H    |                        |
| 195800200          | Project Management  | PSS  | 7,5  |   |                                 | F/P/H    |                        |
|                    | Research Elective   |      | 5-10 |   |                                 | F/P/H    |                        |

|           |               |  |    |       |  |  |                                |
|-----------|---------------|--|----|-------|--|--|--------------------------------|
| 2.3 + 2.4 |               |  |    |       |  |  |                                |
| 194100060 | Master thesis |  | 30 | F/P/H |  |  | 80 EC incl. preparation course |

(+) Students who already finished this MSc course before the master, have to contact the specialization coordinator

\*\* Students who study abroad during the second years first semester, are exempted from this obligatory course.

**Contact your specialization coordinator for approval of your study program**

**WARNING** If you consider going abroad for a semester mandatory courses should be planned carefully.

**How to plan your program**

All students join mandatory courses . During this first quartile you discuss your ideas about your individual program with your specialization coordinator. Draft your plan:

1 Write down your mandatory courses

2 Complete your IEM study program up to 120 EC with:

*Elective (i.e. equalizatio) to discuss with the specialization coordinator*

a) other technical UT master courses (i.c. IEM)

b) master courses from other (inter)national technical Master program's

3 Discuss your complete study program (and your personal motivation) with your study counselor

4 Get a final approval from your specialization coordinator

Implementation of non-technical or (inter)national courses need approval from the specialization coordinator and the exam committee.