## Module Overview B.Sc. Mathematics - Field of Study Mathematics with Economics (9 Semesters)

Degree Programm Guidelines as per 01.10.2018, Version 01.10.2018
The degree programm consists of 180 Credit Points (CP) in total:

## Mandatory Area in Mathematics:

Mathematical Seminar/Project:
Elective Subjects Area:

- Additional Courses in Mathematics:
- Minor Courses in Economics:
- Minor Courses in Computer Science:

91 CP Interdisciplinary Electives/Studium Generale 17-20 CP
5 CP $\quad$ Mandatory Interdisciplinary Area: 9 CP
52-55 CP $\quad$ Interdisciplinary Electives:
9-15 CP
25-31 CP
15-21 CP

- Studium Generale:

Bachelor-Thesis:

5-8 CP 3-6 CP 12 CP

## Language of Tuition: GERMAN <br> Certificates required

This leads to the following possible semester course schedule:

| 1. Semester | 2. Semester | 3. Semester | 4. Semester | 5. Semester | 6. Semester | 7. Semester | 8. Semester | 9. Semester |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Linear Algebra I bili } \\ & \text { (9 CP) } \end{aligned}$ | Lineare Algebra II ${ }^{\text {bili }}$ <br> (9 CP) | Ordinary Differential Equations (5 CP) | Integration Theory (9 CP) | Introduction to Numerical Analysis (9 CP) | Introduction to Stochastics (9 CP) | Introduction to Optimisation (9 CP) |  |  |
| $\begin{aligned} & \text { Analysis I bili } \\ & (9 \mathrm{CP}) \end{aligned}$ | Analysis II ${ }^{\text {bili }}$ (9 CP) |  |  |  | Algorithmic Discrete Mathematics (5 CP) | $\begin{aligned} & \text { Probability } \\ & \text { Theory }{ }^{\text {bili }} \\ & \text { (9 CP) } \end{aligned}$ |  | Bachelor-Thesis (12 CP) |
| Introduction to Programming I (3 CP) | Introduction to Programming II (3 CP) | Introductionary Seminar ${ }^{\text {bili }}$ (3 CP) |  |  |  | Seminar <br> Optimisat | oject ${ }^{\text {bili }}$ <br> ochastics |  |
|  |  |  |  | Additional Courses in Mathematics (9-15 CP)* |  |  |  |  |
|  |  | Interdisciplinary Electives (5-8 CP) |  |  |  |  |  |  |
|  |  | Studium Generale (3-6 CP)** |  |  |  |  |  |  |
|  |  | Minor Courses in Economics (25-31 CP)*** |  |  |  |  |  |  |
|  |  | Minor Courses in Computer Science (15-21 CP)**** |  |  |  |  |  |  |
| 21 CP | 21 CP | 18 CP | 20 CP | 20 CP | 20 CP | 20 CP | 20 CP | 20 CP |

 submitted to the examination board.
** Complete catalogue of all modules of the TU Darmstadt, except for courses of the Faculty of Mathematics and the minor subject.
*** Out of the Programms B.Sc. Business Information Systems, B.Sc. Business Administration/Industrial Engineering -specialising in Mechanical Engineering
**** Out of the Programm B.Sc. Computer Science

