# Studien- und Prüfungsordnung für den Bachelor-Studiengang Maschinenbau, B.Eng.

**Bachelor-Studiengang Maschinenbau, B.Eng.**

**Studienform dual, ausbildungsintegrierend**

gültig ab WS 2016/17

FBR 07.03.2016

| Module | | | | | | | WS | | | SS | | | WS | | | SS | | | WS | | | SS | | | WS | | | SS | | | WS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | ges. | 1. Sem. | | | 2. Sem. | | | 3. Sem. | | | 4. Sem. | | | 5. Sem. | | | 6. Sem. | | | 7. Sem. | | | 8. Sem. | | | 9. Sem. | | |
| | V | Ü | L | P | S | | SWS | PF | CP | SWS | PF | CP | SWS | PF | CP | SWS | PF | CP | SWS | PF | CP | SWS | PF | CP | SWS | PF | CP | SWS | PF | CP | SWS | PF | CP |
| **Mathematisch-naturwissenschaftliche Grundlagen** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mathematik I | 4 | 2 | 0 | 0 | 0 | 6 | 6 | FMP | 6 | | | | | | | | | | | | | | | | | | | | | | | |
| Mathematik II | 2 | 2 | 0 | 0 | 0 | 4 | | | | 4 | FMP | 4 | | | | | | | | | | | | | | | | | | | | |
| Statistik | 1 | 1 | 0 | 0 | 0 | 2 | | | | | | | | | | | | | 2 | FMP | 3 | | | | | | | | | | | |
| Physik I | 2 | 0 | 2 | 0 | 0 | 4 | 2 | SMP | 2 | 2 | SMP | 2 | | | | | | | | | | | | | | | | | | | | |
| Chemische Grundlagen | 2 | 0 | 0 | 0 | 0 | 2 | | | | 2 | FMP | 2 | | | | | | | | | | | | | | | | | | | | |
| Informatik I | 2 | 0 | 2 | 0 | 0 | 4 | 4 | SMP | 4 | | | | | | | | | | | | | | | | | | | | | | | |
| Informatik II | 2 | 0 | 2 | 0 | 0 | 4 | | | | 4 | SMP | 4 | | | | | | | | | | | | | | | | | | | | |
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| **Ingenieurwissenschaftliche Grundlagen** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Werkstofftechnik | 4 | 0 | 2 | 0 | 0 | 6 | | | | | | | 4 | FMP | 4 | 2 | SMP | 2 | | | | | | | | | | | | | | |
| Konstruktionsgrundlagen I / Technisches Zeichnen | 1 | 0 | 2 | 0 | 0 | 3 | | | | | | | 3 | SMP | 4 | | | | | | | | | | | | | | | | | |
| Konstruktionsgrundlagen II / CAD | 1 | 0 | 1 | 0 | 0 | 2 | | | | | | | | | | 2 | SMP | 3 | | | | | | | | | | | | | | |
| Fertigungsverfahren I | 2 | 0 | 1 | 0 | 0 | 3 | | | | | | | 3 | FMP | 3 | | | | | | | | | | | | | | | | | |
| Fertigungsverfahren II | 2 | 0 | 2 | 0 | 0 | 4 | | | | | | | | | | 4 | KMP | 4 | | | | | | | | | | | | | | |
| Statik | 2 | 2 | 0 | 0 | 0 | 4 | | | | | | | 4 | FMP | 5 | | | | | | | | | | | | | | | | | |
| Festigkeitslehre | 2 | 2 | 0 | 0 | 0 | 4 | | | | | | | | | | 4 | FMP | 5 | | | | | | | | | | | | | | |
| Elektrotechnik / Elektronik / Antriebstechnik I | 2 | 0 | 0 | 0 | 0 | 2 | | | | | | | 2 | FMP | 2 | | | | | | | | | | | | | | | | | |
| Elektrotechnik / Elektronik / Antriebstechnik II | 2 | 1 | 1 | 0 | 0 | 4 | | | | | | | | | | 4 | KMP | 4 | | | | | | | | | | | | | | |
| Regelungstechnik / Sensorik | 2 | 2 | 0 | 0 | 0 | 4 | | | | | | | | | | | | | 4 | FMP | 4 | | | | | | | | | | | |
| Automatisierungstechnik | 2 | 0 | 2 | 0 | 0 | 4 | | | | | | | | | | | | | | | | 4 | KMP | 4 | | | | | | | | |
| Thermodynamik/Wärmeübertragung | 3 | 1 | 0 | 0 | 0 | 4 | | | | | | | | | | | | | 4 | FMP | 5 | | | | | | | | | | | |
| Strömungslehre | 3 | 1 | 0 | 0 | 0 | 4 | | | | | | | | | | | | | | | | 4 | FMP | 5 | | | | | | | | |
| Qualitätsmanagement | 2 | 1 | 1 | 0 | 0 | 4 | | | | | | | | | | | | | | | | 4 | KMP | 4 | | | | | | | | |
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| **Fachspezifische Vertiefungen** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kinematik / Kinetik | 2 | 2 | 0 | 0 | 0 | 4 | | | | | | | | | | | | | 4 | FMP | 5 | | | | | | | | | | | |
| Maschinenelemente I | 2 | 2 | 0 | 0 | 0 | 4 | | | | | | | | | | | | | 4 | SMP | 5 | | | | | | | | | | | |
| Maschinenelemente II | 2 | 2 | 0 | 0 | 0 | 4 | | | | | | | | | | | | | | | | 4 | FMP | 5 | | | | | | | | |
| Produktentwicklung | 2 | 2 | 0 | 0 | 0 | 4 | | | | | | | | | | | | | | | | | | | 4 | FMP | 5 | | | | | |
| Werkzeugmaschinen und CNC-Programmierung | 2 | 0 | 2 | 0 | 0 | 4 | | | | | | | | | | | | | | | | 4 | SMP | 5 | | | | | | | | |
| Produktionsvorbereitung | 2 | 0 | 2 | 0 | 0 | 4 | | | | | | | | | | | | | | | | | | | 4 | SMP | 5 | | | | | |
| Fertigungsmeßtechnik | 2 | 0 | 2 | 0 | 0 | 4 | | | | | | | | | | | | | 4 | SMP | 5 | | | | | | | | | | | |
| Maschinenbauinformatik | 2 | 2 | 0 | 0 | 0 | 4 | | | | | | | | | | | | | | | | 4 | FMP | 5 | | | | | | | | |
| Hydraulik/Pneumatik | 2 | 2 | 0 | 0 | 0 | 4 | | | | | | | | | | | | | | | | | | | 4 | FMP | 5 | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Profilbildung** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wahlpflichtmodul I | 2 | 2 | 0 | 0 | 0 | 4 | | | | | | | | | | | | | | | | | | | 4 | SMP | 5 | | | | | |
| Wahlpflichtmodul II | 2 | 2 | 0 | 0 | 0 | 4 | | | | | | | | | | | | | | | | | | | 4 | SMP | 5 | | | | | |
| Wahlpflichtmodul III | 2 | 2 | 0 | 0 | 0 | 4 | | | | | | | | | | | | | | | | | | | | | | 4 | SMP | 5 | | |
| Wahlpflichtmodul IV | 2 | 2 | 0 | 0 | 0 | 4 | | | | | | | | | | | | | | | | | | | | | | 4 | SMP | 5 | | |
| Profilspezifisches Projekt | 0 | 0 | 0 | 4 | 0 | 4 | | | | | | | | | | | | | | | | | | | | | | 4 | SMP | 5 | | |
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| **Module im Profil "Leichtbau"** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CAD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Werkstoffe und Verfahren | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Verbundwerkstoffe | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| **Module im Profil "Smart Production"** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CAD/CAM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Schweißtechnik | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Werkzeugkonstruktion | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PPS & Logistik | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| **Module im Profil "Prozesstechnik"** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Grundlagen der mechanischen Verfahrenstechnik | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Entwurf Apparatebau | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Numerische Simulation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wärmeübertrager / Strömungsmaschinen | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| **Fachübergreifende Inhalte** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Arbeits- & Präsentationstechnik | 1 | 1 | 0 | | | 2 | | | | | | | | | | | | | 2 | SMP | 3 | | | | | | | | | | | |
| Projektmanagement | 1 | 1 | 0 | | | 2 | | | | | | | | | | | | | | | | 2 | SMP | 2 | | | | | | | | |
| Betriebswirtschaft und Recht | 2 | 2 | 0 | | | 4 | | | | | | | | | | | | | | | | | | | 4 | FMP | 5 | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Summe der Semesterwochenstunden** | **75** | **39** | **24** | **4** | **0** | **142** | **12** | | | **12** | | | **16** | | | **16** | | | **24** | | | **26** | | | **24** | | | **12** | | | **0** | | |
| **Summe Credits Lehre** | | | | | | **165** | | | **12** | | | **12** | | | **18** | | | **18** | | | **30** | | | **30** | | | **30** | | **15** | | | **0** |
| **Credits f. prakt. Studienabschnitte** | | | | | | **30** | | | | | | | | | | | | | | | | | | | | | | | | **15** | | **15** |
| **Credits f. Bachelorarbeit** | | | | | | **12** | | | | | | | | | | | | | | | | | | | | | | | | | | **12** |
| **Credits f. Kolloquium** | | | | | | **3** | | | | | | | | | | | | | | | | | | | | | | | | | | **3** |
| **Summe Credits** | | | | | | **210** | | | **12** | | | **12** | | | **18** | | | **18** | | | **30** | | | **30** | | | **30** | | **30** | | | **30** |

V Vorlesung
Ü Übung
L Labor
P Projekt
S Seminar

WS Wintersemester
SS Sommersemester
SWS Semesterwochenstunden
PF Prüfungsform
CP Creditpoints

FMP Feste Modulprüfung
SMP Studienbegl. Modulprüfung
KMP Kombination der Prüfungsleistungen