

ab Jahrgang 2019  
Bachelor of Engineering - Fachrichtung Mechatronik

| Semester  | Grundlagenbereich |          |           |           |           |           |           |          |           | Kernbereich |           |            |            |          |            |            |          |            | Bachelorprüfung |          |            |            |    |
|---|-------------------|----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-------------|-----------|------------|------------|----------|------------|------------|----------|------------|-----------------|----------|------------|------------|----|
|   | 1                 |          |           | 2         |           |           | 3         |          |           | 4           |           |            | 5          |          |            | 6          |          |            |                 | 7        |            |            |    |
| Modul   | SWS               | PL       | CP        | SWS       | PL        | CP        | SWS       | PL       | CP        | SWS         | PL        | CP         | SWS        | PL       | CP         | SWS        | PL       | CP         | SWS             | PL       | CP         | CP         |    |
| Physik  | 6                 | PL       | 6         |           |           |           |           |          |           |             |           |            |            |          |            |            |          |            |                 |          |            |            |    |
| Informationstechnik                                   | 6                 | PL       | 6         |           |           |           |           |          |           |             |           |            |            |          |            |            |          |            |                 |          |            |            |    |
| Mathematik I, II, III                                 | 6                 | PL       | 6         | 6         | PL        | 6         | 6         | PL       | 6         |             |           |            |            |          |            |            |          |            |                 |          |            |            |    |
| Elektrotechnik I, II, III                             | 6                 | PL       | 6         | 5         | PL        | 5         | 5         | PL       | 5         |             |           |            |            |          |            |            |          |            |                 |          |            |            |    |
| Computer Aided Engineering                            | 4                 | PL       | 4         |           |           |           |           |          |           |             |           |            |            |          |            |            |          |            |                 |          |            |            |    |
| Digitaltechnik  |                   |          |           | 5         | PL        | 5         |           |          |           |             |           |            |            |          |            |            |          |            |                 |          |            |            |    |
| Objektorientierte Programmierung                      |                   |          |           | 6         | PL        | 6         |           |          |           |             |           |            |            |          |            |            |          |            |                 |          |            |            |    |
| Software Engineering                                  |                   |          |           |           |           |           | 6         | PL       | 6         |             |           |            |            |          |            |            |          |            |                 |          |            |            |    |
| Messtechnik und Sensorik                              |                   |          |           |           |           |           | 5         | PL       | 5         |             |           |            |            |          |            |            |          |            |                 |          |            |            |    |
| Werkstofftechnik                                      |                   |          |           |           |           |           | 5         | PL       | 5         |             |           |            |            |          |            |            |          |            |                 |          |            |            |    |
| Präsentation und Rhetorik                             |                   |          |           | 2         | PL(T)     | 2         |           |          |           |             |           |            |            |          |            |            |          |            |                 |          |            |            |    |
| Englisch I,II   |                   |          |           | 2         | PL        | 2         |           |          |           | 4           | PL        | 4          |            |          |            |            |          |            |                 |          |            |            |    |
| <b>Kernbereich</b>                                    |                   |          |           |           |           |           |           |          |           |             |           |            |            |          |            |            |          |            |                 |          |            |            |    |
| Elektronik I  |                   |          |           |           |           |           | 6         | PL       | 6         |             |           |            |            |          |            |            |          |            |                 |          |            |            |    |
| Mikrorechnertechnik                                   |                   |          |           |           |           |           | 4         |          | 4         | 2           | PL        | 2          |            |          |            |            |          |            |                 |          |            |            |    |
| Statik und Festigkeitslehre                           |                   |          |           |           |           |           | 5         | PL       | 5         |             |           |            |            |          |            |            |          |            |                 |          |            |            |    |
| Organisation, Zeit- und Projektmanagement             |                   |          |           |           |           |           | 3         | PL       | 3         |             |           |            |            |          |            |            |          |            |                 |          |            |            |    |
| Regelungstechnik I                                    |                   |          |           |           |           |           |           |          |           | 5           | PL        | 5          |            |          |            |            |          |            |                 |          |            |            |    |
| Automatisierungstechnik I                             |                   |          |           |           |           |           |           |          |           | 5           | PL        | 5          |            |          |            |            |          |            |                 |          |            |            |    |
| Elektr. Maschinen u. Antriebe                         |                   |          |           |           |           |           |           |          |           | 5           | PL        | 5          |            |          |            |            |          |            |                 |          |            |            |    |
| BWL   |                   |          |           |           |           |           |           |          |           |             |           |            |            |          |            |            |          |            | 4               | PL       | 4          |            |    |
| Konstruktionslehre                                    |                   |          |           |           |           |           | 5         | PL       | 5         |             |           |            |            |          |            |            |          |            |                 |          |            |            |    |
| Maschinenelemente                                     |                   |          |           |           |           |           |           |          |           | 5           | PL        | 5          |            |          |            |            |          |            |                 |          |            |            |    |
| Mechatronischer Entwurf I, II                         |                   |          |           |           |           |           |           |          |           |             |           |            | 5          | PL       | 5          | 5          | PL       | 5          |                 |          |            |            |    |
| Strömungsmechanik und Thermodynamik                   |                   |          |           |           |           |           |           |          |           |             |           |            | 4          | PL       | 4          |            |          |            |                 |          |            |            |    |
| Wahlpflichtfach I                                     |                   |          |           |           |           |           |           |          |           |             |           |            | 4          | PL       | 4          |            |          |            |                 |          |            |            |    |
| Wahlpflichtfach II                                    |                   |          |           |           |           |           |           |          |           |             |           |            |            |          |            | 4          | PL       | 4          |                 |          |            |            |    |
| <b>Vertiefung</b>                                     |                   |          |           |           |           |           |           |          |           |             |           |            |            |          |            |            |          |            |                 |          |            |            |    |
| Vertiefungsmodul I                                    |                   |          |           |           |           |           |           |          |           |             |           |            | 4          | PL       | 4          |            |          |            |                 |          |            |            |    |
| Vertiefungsmodul II                                   |                   |          |           |           |           |           |           |          |           |             |           |            |            |          |            | 4          | PL       | 4          |                 |          |            |            |    |
| Vertiefungsmodul III                                  |                   |          |           |           |           |           |           |          |           |             |           |            |            |          |            | 4          | PL       | 4          |                 |          |            |            |    |
| <b>Beispiel Vertiefung Automatisierungstechnik</b>    |                   |          |           |           |           |           |           |          |           |             |           |            |            |          |            |            |          |            |                 |          |            |            |    |
| Regelung elektrischer Antriebe                        |                   |          |           |           |           |           |           |          |           |             |           |            | 4          | PL       | 4          |            |          |            |                 |          |            |            |    |
| Automatisierungstechnik II                            |                   |          |           |           |           |           |           |          |           |             |           |            |            |          |            | 4          | PL       | 4          |                 |          |            |            |    |
| Simulationstechnik                                    |                   |          |           |           |           |           |           |          |           |             |           |            |            |          |            | 4          | PL       | 4          |                 |          |            |            |    |
| <b>Beispiel Vertiefung Antriebstechnik</b>            |                   |          |           |           |           |           |           |          |           |             |           |            |            |          |            |            |          |            |                 |          |            |            |    |
| Regelung elektrischer Antriebe                        |                   |          |           |           |           |           |           |          |           |             |           |            | 4          | PL       | 4          |            |          |            |                 |          |            |            |    |
| Leistungselektronik                                   |                   |          |           |           |           |           |           |          |           |             |           |            |            |          |            | 4          | PL       | 4          |                 |          |            |            |    |
| Simulationstechnik                                    |                   |          |           |           |           |           |           |          |           |             |           |            |            |          |            | 4          | PL       | 4          |                 |          |            |            |    |
| <b>Beispiel Vertiefung Lebensmittelprozesstechnik</b> |                   |          |           |           |           |           |           |          |           |             |           |            |            |          |            |            |          |            |                 |          |            |            |    |
| Lebensmittelprozesstechnik I,II                       |                   |          |           |           |           |           |           |          |           |             |           |            | 4          | PL       | 4          | 4          | PL       | 4          |                 |          |            |            |    |
| Physikalische Chemie                                  |                   |          |           |           |           |           |           |          |           |             |           |            |            |          |            | 4          | PL       | 4          |                 |          |            |            |    |
| <b>Beispiel Vertiefung Mikrosysteme</b>               |                   |          |           |           |           |           |           |          |           |             |           |            |            |          |            |            |          |            |                 |          |            |            |    |
| Mikrosysteme  |                   |          |           |           |           |           |           |          |           |             |           |            | 4          | PL       | 4          |            |          |            |                 |          |            |            |    |
| Elektronik II   |                   |          |           |           |           |           |           |          |           |             |           |            |            |          |            | 4          | PL       | 4          |                 |          |            |            |    |
| Aufbau- und Verbindungstechnik                        |                   |          |           |           |           |           |           |          |           |             |           |            |            |          |            | 4          | PL       | 4          |                 |          |            |            |    |
| <b>Beispiel Vertiefung Softwaretechnik</b>            |                   |          |           |           |           |           |           |          |           |             |           |            |            |          |            |            |          |            |                 |          |            |            |    |
| Datenbanken   |                   |          |           |           |           |           |           |          |           |             |           |            | 4          | PL       | 4          |            |          |            |                 |          |            |            |    |
| Software Engineering II                               |                   |          |           |           |           |           |           |          |           |             |           |            |            |          |            | 4          | PL       | 4          |                 |          |            |            |    |
| Rechnernetze  |                   |          |           |           |           |           |           |          |           |             |           |            |            |          |            | 4          | PL       | 4          |                 |          |            |            |    |
| <b>Weitere Wahlpflichtfächer</b>                      |                   |          |           |           |           |           |           |          |           |             |           |            |            |          |            |            |          |            |                 |          |            |            |    |
| Aktorik   |                   |          |           |           |           |           |           |          |           |             |           |            | 4          | PL       | 4          |            |          |            |                 |          |            |            |    |
| Energietechnik  |                   |          |           |           |           |           |           |          |           |             |           |            | 4          | PL       | 4          |            |          |            |                 |          |            |            |    |
| IT-Sicherheit   |                   |          |           |           |           |           |           |          |           |             |           |            |            |          |            | 4          | PL       | 4          |                 |          |            |            |    |
| Regelungstechnik II                                   |                   |          |           |           |           |           |           |          |           |             |           |            |            |          |            | 4          | PL       | 4          |                 |          |            |            |    |
| Projekt   |                   |          |           |           |           |           |           |          |           | 6           |           |            | 6          | PL       | 6          | 3          | PL       | 3          |                 |          |            |            |    |
| Praxistransferbericht mit wissenschaftl. Arbeiten*    |                   |          |           |           |           |           |           |          | 1         |             | 6         | T          | 6          |          |            |            |          |            |                 |          |            |            |    |
| Bachelorarbeit (Thesis)                               |                   |          |           |           |           |           |           |          |           |             |           |            |            |          |            |            |          |            |                 |          |            |            | 12 |
| Kolloquium  |                   |          |           |           |           |           |           |          |           |             |           |            |            |          |            |            |          |            |                 |          |            |            | 3  |
| <b>Semestersumme</b>                                  | <b>28</b>         | <b>5</b> | <b>28</b> | <b>26</b> | <b>6</b>  | <b>26</b> | <b>27</b> | <b>5</b> | <b>27</b> | <b>28</b>   | <b>5</b>  | <b>33</b>  | <b>28</b>  | <b>6</b> | <b>34</b>  | <b>23</b>  | <b>5</b> | <b>23</b>  | <b>24</b>       | <b>6</b> | <b>24</b>  | <b>15</b>  |    |
| <b>Summe SWS</b>                                      | <b>28</b>         |          |           | <b>54</b> |           |           | <b>81</b> |          |           | <b>109</b>  |           |            | <b>137</b> |          |            | <b>160</b> |          |            | <b>184</b>      |          |            |            |    |
| <b>Summe CP</b>                                       |                   |          | <b>28</b> |           |           | <b>54</b> |           |          | <b>81</b> |             |           | <b>114</b> |            |          | <b>148</b> |            |          | <b>171</b> |                 |          | <b>195</b> | <b>210</b> |    |
| <b>Summe PL</b>                                       |                   | <b>6</b> |           |           | <b>12</b> |           | <b>17</b> |          |           |             | <b>22</b> |            | <b>28</b>  |          |            | <b>33</b>  |          |            | <b>39</b>       |          |            |            |    |

**Erläuterungen**

- K2 2-stündige Klausur
- mP mündliche Prüfung
- E Entwurf
- R Referat
- RP Erstellung und Dokumentation eines Rechnerprogramms
- eA experimentelle Arbeit
- PTB Praxistransferbericht
- PL Prüfungsleistung (K2, mP, HA, E, R, RP oder eA)
- T Testat, Bewertung der PL mit "bestanden" oder "nicht bestanden", keine Benotung
- \* der Praxistransferbericht wird während der betrieblichen Arbeitszeit in der Praxisphase zwischen den Theoriephasen des 4. und 5. Semesters erstellt.