

## V Field of specialization 12: Photonics

Exemplary curriculum:<sup>9</sup>

|  | WS  |           | SS  |           |
|--|-----|-----------|-----|-----------|
|  | SWS | LP        | SWS | LP        |
| <b>Basic Modules of Specialization (BMS)</b>         |     |           |     |           |
| Advanced Communications Engineering                  | 3+1 | 6         |     |           |
| Integrated Photonics                                 | 2+2 | 6         |     |           |
| <b>Compulsory Modules of Specialization (CMS)</b>    |     |           |     |           |
| Radio-Frequency Electronics                          | 3+1 | 6         |     |           |
| Optical Networks and Systems                         | 3+1 | 6         |     |           |
| Photonic Integrated Circuit Design and Applications  |     |           | 2+2 | 6         |
| Electromagnetics and Numerical Calculation of Fields | 2+1 | 4         |     |           |
| Nonlinear Optics                                     |     |           | 2+2 | 6         |
| Optical Transmitters and Receivers                   | 2+2 | 6         |     |           |
| Photonics and Communications Lab                     |     |           | 4   | 6         |
| <b>Sum (BMS+CMS)</b>                                 |     | <b>34</b> |     | <b>18</b> |

|   | WS  |    | SS  |    |
|---|-----|----|-----|----|
|   | SWS | LP | SWS | LP |
| <b>Elective Modules of Specialization (EMS)</b> |     |    |     |    |
| Recommended electives, see next page            |     |    |     |    |
| ...   |     |    |     |    |
| <b>Sum (see below)</b>                          |     |    |     |    |

|   | WS  |    | SS  |    |
|---|-----|----|-----|----|
|   | SWS | LP | SWS | LP |
| <b>Interdisciplinary Qualifications</b> |     |    |     |    |
| see Module M-ETIT-105803                |     |    |     |    |
| ...                                     |     |    |     |    |
| <b>Sum (in total 6 LP)</b>              |     |    |     |    |

|                        | LP |
|------------------------|----|
| <b>Master's Thesis</b> |    |
| Master's Thesis        | 30 |

|  | LP         |
|--|------------|
| <b>Summary</b>                             |            |
| Basic Modules of Specialization (BMS)      | 12         |
| Compulsory Modules of Specialization (CMS) | 40         |
| Elective Modules of Specialization (EMS)   | 32         |
| Interdisciplinary Qualifications           | 6          |
| Master's Thesis                            | 30         |
| <b>Sum</b>                                 | <b>120</b> |

<sup>9</sup> If modules are listed in both semesters, only one must be selected. (D) means the lecture is in German, (E) – in English.