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| <b>Module title</b>   |                          | <b>Abbreviation</b>                         |
| Introduction to the Physics of Functional Materials   |                          | 11-TMS-152-m01                              |
| <b>Module coordinator</b>   |                          | <b>Module offered by</b>                    |
| Managing Director of the Institute of Applied Physics   |                          | Faculty of Physics and Astronomy            |
| <b>ECTS</b>   | <b>Method of grading</b> | <b>Only after succ. compl. of module(s)</b> |
| 5   | numerical grade          | --  |
| <b>Duration</b>   | <b>Module level</b>      | <b>Other prerequisites</b>                  |
| 1 semester  | undergraduate            | --  |
| <b>Contents</b>   |                          |   |
| Theoretical and practical principles of physical material properties and semiconductor process technology, dielectrics, metals and oxides. Principles of structuring technology, growth and coating procedures.   |                          |   |
| <b>Intended learning outcomes</b>   |                          |   |
| The students have knowledge of the theoretical and practical principles of physical material properties and technology for material synthesis.  |                          |   |
| <b>Courses</b> (type, number of weekly contact hours, language — if other than German)  |                          |   |
| V (3) + R (1)<br>Module taught in: German or English  |                          |   |
| <b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)  |                          |   |
| <p>a) written examination (approx. 90 to 120 minutes) or<br/> b) oral examination of one candidate each (approx. 30 minutes) or<br/> c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or<br/> d) project report (approx. 8 to 10 pages) or<br/> e) presentation/talk (approx. 30 minutes).</p> <p>If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.</p> <p>Language of assessment: German and/or English<br/> Assessment offered: Once a year, summer semester</p> |                          |   |
| <b>Allocation of places</b>   |                          |   |
| --  |                          |   |
| <b>Additional information</b>   |                          |   |
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| <b>Workload</b>   |                          |   |
| 150 h   |                          |   |
| <b>Teaching cycle</b>   |                          |   |
| --  |                          |   |
| <b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)  |                          |   |
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| <b>Module appears in</b>  |                          |   |
| Bachelor's degree (1 major) Functional Materials (2015)   |                          |   |