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|---|--------------------------|--|
| <b>Module title</b>   |                          | <b>Abbreviation</b>  |
| Modeling and Simulation for Technological Systems   |                          | 99-MST-161-m01   |
| <b>Module coordinator</b>   |                          | <b>Module offered by</b>                                   |
| Dean of the Faculty of Mechanical Engineering at the University of Applied Sciences Würzburg-Schweinfurt  |                          | University of Applied Sciences Würzburg-Schweinfurt (FHWS) |
| <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  | graduate                 | --   |
| <b>Contents</b>   |                          |  |
| Theoretical foundations and practical application of the theory of linear and non-linear dynamic systems in electrical engineering and beyond.  |                          |  |
| <b>Intended learning outcomes</b>   |                          |  |
| The student has basic knowledge of dynamic and nonlinear systems and can describe them with the help of modelling and analyse their behaviour by simulation.  |                          |  |
| <b>Courses</b> (type, number of weekly contact hours, language – if other than German)  |                          |  |
| V (2) + Ü (2)   |                          |  |
| <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)  |                          |  |
| written examination (approx. 90 minutes) and practical examination (modelling assignment, approx. 40 hours)<br>Assessment offered: Once a year, winter semester<br>Language of assessment: German and/or English<br>Ü: creditable for bonus |                          |  |
| <b>Allocation of places</b>   |                          |  |
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| <b>Additional information</b>   |                          |  |
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| <b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)  |                          |  |
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| <b>Module appears in</b>  |                          |  |
| Master's degree (1 major) Functional Materials (2016)   |                          |  |