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| Modulname<br>Modulname   | <b>EL Simulation driven design (SDD)</b>   |   |
| Modulverantwortlicher/<br>Modulverantwortliche<br>Module responsibility                      | Prof. Dr.-Ing. Andreas Dietzel (Modulverantwortung)  |   |
| Qualifikationsziele<br>Qualification goals   | Basic knowledge of 3D CAD software, Fundamentals of Engineering Mechanics  |   |
| Modulinhalte<br>Module contents  | <p>This course provides the basics and advantages of Live-Simulation (designrelated simulation), a method for using CAE-technologies directly inside of the design process/by the design engineer, to test ideas for their feasibility and compare concepts/variants of parts and assemblies objectively. The development process can thus be made faster and more reliable by eliminating uncertainties during the early designphase.</p> <p>The software systems PTC CREO Parametric and CREO SIMULATE resp. ANSYS Workbench are used in the course. Previous knowledge of the programmes mentioned is advantageous, but not required.</p> |   |
| Lehrformen<br>Forms of teaching  | Vorlesung (2 SWS)<br>Praktikum (2 SWS)   |   |
| Voraussetzungen für die<br>Teilnahme<br>Requirements for participation                       | vacant   |   |
| Literatur/multimediale Lehr- und<br>Lernprogramme<br>Further readings/Learning<br>programmes | vacant   |   |
| Lehrbriefautor<br>Textbook author  | keiner   |   |
| Verwendbarkeit<br>Usability  | Pool International (English Lectures for Contact students) F MB PI   |   |
| Arbeitsaufwand/Gesamtworkload<br>Workload/Total workload                                     | Präsenzzeit 60 h + Vorbereitung 90 h = 150 Stunden = 5.0 Credit Punkte<br>presence 60 h + preparation 90 h = 150 hours = 5.0 credit points   |   |
| ECTS und Gewichtung der Note<br>in der Gesamtnote<br>ECTS and weighting in overall grade     | 5.00   | 1 |
| Leistungsnachweis<br>Performance record  | written examination 120 min  |   |
| Semester   | 2  |   |
| Häufigkeit des Angebots<br>Frequency of the offer  | summer term  |   |

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| Dauer<br>Duration                           | 1 Semester             |
| Art der Lehrveranstaltung<br>Type of course | anually in summer term |
| Besonderes<br>Peculiarity                   |                        |

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