

# Module Description/Syllabus

 BE IM  HM  CfPS

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| **Module** | | Product Lifecycle Management and PLM-Systems | | | | | Module- Number | 4,2 |  |
| **Course Title** | | Product Lifecycle Management and PLM-Systems | | | | | Overall grade weighting (in %)  2,4 | | |
| **Recommended alternative modules or courses** | | Nucleus | | | | | | | |
| **Course of Studies** | | Information Management Automotive | | | | | | | |
| **Examination No. (SuP)** | | **valid SER** | | | | | | | |
| **Mode of Study** | | full-time | part-time | |  | | |  |  |
| **Study Cycle** | EQF-Level | Bachelor | Master | |  | | |  |  |
| **Frequency** | | winter term | summer term | | each semester | | |  |  |
| **Language Competence Level and**  **Course code SAP** | |  | | | | | | | |
| **Responsible for the module** | | Prof. Dipl. Ing. Manfred Plechaty | | | | | | | |
| **Lecturer/s** | | Prof. Dipl. Ing. Manfred Plechaty | | | | | | | |
| **Typ of course** | | compulsory | | optional | |  | | | |
| **Mode of delivery** | | lecture, seminaristic lessons, exercises | | | | | | | |
| **Language of instruction** | | English | | German | | **Level of course** | 4th semester | | |
| **Teaching Methods** | | Lectures | | | | **Duration** | 1 semester | | |
| Blended learning, guest lectures, seminars, practical exercises, | | | | | | | |
| **Work parameters**  HNU-Workload-Calculator  **Number of participants min./max.** | | **contact hours in lecture form**  25  **eLearning (hours)** | **exercises (hours)**  20  **examination pre- paration (hours)** | | **self-studies (hours)**  105  **Transfer (hours)** | | **total (hours)**  150  **Units ("UE")** | | |
| 3 | **ECTS-** 05  **Points** | | | (hours per  **Volume** semester week) | |  | 04 |
| **Use for other studies** | | Nucleus | | | | | | | |

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| **Prerequisites/**  **Required competencies** | IMA2 Product creation process |
| **Learning Outcome**   1. **Knowledge** 2. **Skills** 3. **Responsibility and autonomy**   Description eight EQF Levels and Learning Outcome (1-3) | 1. technical and methodological skills    * You have a basic understanding of product lifecycle management in a continuous product lifecycle with integration and supply chain in theory and practice using case study-based, application-oriented, realistic scenarios    * They can reproduce the knowledge they have learned about the development from PDM to PLM and link it to ALM    * You can provide an overview of the organizational and methodological requirements for the PLM / ALM introduction    * You can transfer your knowledge of PLM systems and their application, which you have acquired using practical examples, to “your” company    * You know the basics of construction and can design simple models with CAD (Siemens NX) and produce them as rapid prototyping on a 3D printer   2) personal and methodic skills   * Teamwork in design and production * Teamwork with digital tools   3) Selection, introduction in the company and operation of PLM |
| **Content** | * The product development process is changing * PDM, PLM and ALM * PLM as the backbone of virtual product creation * Organizational and methodological requirements for the PLM introduction * Components and core functions of a PLM solution * Application with different programs   Practical exercise  Construction and 3D printing of a component (e.g. water pump, bearing) |

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| **Particular admission requirements**  **(if applicable)** |  |
| **Curriculum semester, in which the student has to be mandatorily registered for the first attempt of examination** |  |
| **Assessment method(s)** |  |
| **Assessment criteria** |  |
| **Required reading resources** |  |
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| **Additional (module) information** |  |
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