

# 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 exerciseConstruction 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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