



1. Subject name	Development philosophies II. project and competence development				
2. Subject name in Hungarian	Development philosophies II. project and competence development				
3. Code	BMEKOV RD005	4. Evaluation type	exam grade	5. Credits	4
6. Weekly contact hours	2 (0) Lecture	2 (0) Practice	0 (0) Lab		
7. Curriculum	PhD Programme	8. Role	Basic course		
9. Working hours for fulfilling the requirements of the subject					120
Contact hours	56	Preparation for seminars	20	Homework	10
Reading written materials	10	Midterm preparation	0	Exam preparation	24
10. Department	Department of Aeronautics and Naval Architectures				
11. Responsible lecturer	Dr. Rohács József				
12. Lecturers	Dr. Rohács József				
13. Prerequisites					
14. Description of lectures					
C.) Projects. NASA classification of the project life. Life cycle of the projects. Technology and product lives. General process of development. Development spiral. Evaluation of the science and technology development. Market needs and requirements analyses. Operational concept development. Conceptual design. Preliminary and detailed design. Product development and engineering. Influences of the market needs on the development. Goodness factor. Functional and economic goodness factors. Development philosophies: leader and follower developments, parallel developments. Interactions of market and developments. Success of technology, product and company developments. Identification, evaluation and selection of the new technologies. Technology readiness level, technology impact, technology compatibility, morphological, decision, etc. matrices. Impact analysis, total life cycle costs. D.) Project and competence developments: Analyses of calls and tenders. Development and evaluation of the ideas. EU project support. Project initiating. Team completion. Preliminary works. Definition of goals and objectives. Description of methodology, dependences on other projects. Impacts. Development of the contents of technical, financial and other required parts (like ethics dissemination). Developing the work packages system. Description of team competences. Contribution of the proposal. Negotiation contracting. Project management. Definition of the competences. Knowledge development. Role of tacit knowledge. Competence development. Research competence developments. Writing the report, conference and journal articles.					
15. Description of practices					
Systematic consultancy and working individually on proposal or contribution an article.					
16. Description of laboratory practices					
As it required for performing the practical works.					
17. Learning outcomes					
A. Knowledge Study the project development, increasing the knowledge and competences in design process management, understanding the design philosophies, developing the practical competences in project management and result dissemination. B. Skills C. Attitudes D. Autonomy and Responsibility					
18. Requirements, way to determine a grade (obtain a signature)					
19. Opportunity for repeat/retake and delayed completion					
20. Learning materials					

Effective date	27 November 2019	This Subject Datasheet is valid for	Inactive courses
----------------	------------------	-------------------------------------	------------------