

Course title: Workpiece- and tool supply of production systems	Neptun code: GEGTT470-a
Course coordinator: Dr. György Kovács, PhD, associate professor	
type of lesson: weekly lecture + seminar hours: 2 + 0	
method of accountability: colloquium	
curriculum location of the subject: autumn and spring	
pre-study conditions: -	
The task and purpose of the subject:	
Introduction of production, production system and sub-systems of the production system. Discussion of the manufacturing process and its supporting activities. Main strategies and methods for workpiece and tool supply of production systems.	
Course description:	
Introduction of production, production system and sub-systems of the production system. Discussion of the manufacturing process and its supporting activities. Introduction of the main manufacturing processes and their tools. Main strategies and methods for workpiece and tool supply of production systems. Types of layouts (location of machines; material flow paths, etc.) of manufacturing plants. Essence of the Computer Integrated Manufacturing (CIM). Characteristics of the Flexible Manufacturing Systems. Sub-systems of the Flexible Manufacturing Systems (workpiece and tool supply; transportation and storage of workpieces and tools). Case studies.	
Required literature:	
<ol style="list-style-type: none"> 1. Li, Jingshan; Meerkov, Semyon M.: Production Systems Engineering. 2009., ISBN: 978-0-387-75578-6, Springer 2. Tullio Tolio: Design of Flexible Production Systems. 2009. ISBN: 978-3-540-85413-5, Springer 	
Recommended literature:	
<ol style="list-style-type: none"> 1. Bellgran, M., Säfsten, E. K.: Production Development. Design and Operation of Production Systems. 2010., ISBN: 978-1-84882-494-2, Springer 2. Hackman, S. T.: Production Economics. 2008. ISBN: 978-3-540-75750-4, Springer 	