1. Subject name	**Computer aided manufacturing**				
2. Subject name in Hungarian	Számítógéppel támogatott gyártás (CAM)				
3. Code	**BMEKOGGM618**	4. Evaluation type	mid-term grade	5. Credits	**4**
6. Weekly contact hours	**2 (10) Lecture**	**0 (0) Practice**		**1 (11) Lab**	
7. Curriculum	**Vehicle Engineering MSc (J)**	8. Role	**Mandatory (mc) at Vehicle Engineering MSc (J)**		

9. Working hours for fulfilling the requirements of the subject				**120**	
Contact hours	42	Preparation for seminars	18	Homework	22
Reading written materials	26	Midterm preparation	12	Exam preparation	0

10. Department	**Department of Automotive Technologies**
11. Responsible lecturer	Dr. Pál Zoltán
12. Lecturers	Dr. Markovits Tamás, dr. Pál Zoltán
13. Prerequisites	**strong: KOGGM601 - Advanced materials and technologies** **strong: KOJSM605 - Computer aided design**

14. Description of lectures

Overview the possibilities of Computer Aided Manufacturing systems (CAM). Application of CAM in case of different production processes. Generation of moving paths and determination of technological data. Different manufacturing strategies. CNC technology and programing. Simulation of production. Reverse Engineering. Additive manufacturing.

15. Description of practices

16. Description of labortory practices

Planning the some part of the production in CAM systems. CNC programing. Simulation of manufacturing.

17. Learning outcomes

A. Knowledge
  • Learning the process, the possibilities and limitations of the CAM systems used in the vehicle productions
B. Skills
  • Able to deepen the practice in CAM systems individually
C. Attitudes
  • Openness to the new possibilities of the field
D. Autonomy and Responsibility
  • Participate in individual problem solving

18. Requirements, way to determine a grade (obtain a signature)

During the semester 1 midterm test has to be completed with more the 50% of the maximal points.
The reqirements for obtaining the midterm grade are the taking part on labs, submit the independent task in satisfactory level, completing the midterm test.
The grade is the average of the independent task and the midterm test grades.

19. Opportunity for repeat/retake and delayed completion

The midterm test and the submission of individual task can be retaken once.

20. Learning materials

Slides and presentation notes

Effective date	10 October 2019	This Subject Datasheet is valid for	Inactive courses