



**SUBJECT DATA SHEET AND REQUIREMENTS**

last modified: 18<sup>th</sup> May 2016

**MANUFACTURING PROCESS PLANNING I.**

**GYÁRTÁSI FOLYAMATOK TERVEZÉSE I.**

1	Code	Semester nr. or fall/spring	Contact hours/week (lect.+semin.+lab.)	Requirements p / e / s	Credit	Language
	<b>BMEGEGT0003</b>	<b>fall/spring</b>	<b>2+0+0</b>	<b>e</b>	<b>3</b>	<b>English</b>

**2. Subject's responsible:**

Name:	Title:	Affiliation (Department):
Dr. Tibor Szalay	Associate professor	Department of Manufacturing Science and Engineering

**3. Lecturer:**

Name:	Title:	Affiliation (Department):
Dr. Tibor Szalay	Associate professor	Department of Manufacturing Science and Engineering

**4. Thematic background of the subject:**

Basic knowledge of manufacturing engineering.

**5. Compulsory / suggested prerequisites:**

There is no special prerequisite for this subject.

**6. Main aims and objectives, learning outcomes of the subject:**

Optimization of cutting parameters for manufacturing operations. Process time and cost of production. Control and programming of different manufacturing equipment.

**7. Method of education:**

Lecture 2 h/w

**8. Detailed thematic description of the subject:**

Week	Lecture
1.	Manufacturing operation and unit operation systems.
2.	Determination, optimization of cutting conditions.
3-6.	Mathematical models of structural and parametric optimizations. Optimum searching.
7.	Advances of computer aided CNC programming systems.
8-9.	Process time and cost calculation.
10-11.	Adaptive control of manufacturing equipment.
12.	Planning characteristics of ultraprecision machining.
13-14.	Control and programming of parallel robots.

## 9. Requirements and grading

### a) in term-period

N.A.

### b) in examination period

Oral exam.

### c) Disciplinary Measures Against the Application of Unauthorized Means at Mid-Terms, Term-End Exams and Homework

The following students are subject to disciplinary measures.

1. Those students who apply unauthorized means (book, lecture notes, infocommunication means, tools for storing and forwarding electronic information, etc.), different from those listed in the course requirements or adopted by the lecturer in charge of the course assessment, in the written *mid-term exams* taken, or invite or accept any assistance of fellow students, with the exception of borrowing authorized means, will be disqualified from taking further mid-term exams in the very semester as a consequence of their action. Further to this, all of their results gained in the very semester will be void, can get no term-end signatures, and will have no access to Late Submission option. Final term-end results in courses with practical mark will automatically become Fail (1), the ones with exam requirements will be labelled Refused Admission to Exams.
2. Those students whose *homework* verifiably proves to be of foreign extraction, or alternatively, evident results or work of a third party, are referred to as their own, will be disqualified from taking further assessment sessions in the very semester as a consequence of their action. Further to this, all of their results gained in the very semester will be void, can get no term-end signatures, and will have no access to Late Submission options. Final term-end results in courses with practical mark will automatically become Fail (1), ones with exam requirements will be labelled Refused Admission to Exams.
3. Those students who apply unauthorized means (books, lecture notes, infocommunication means, tools for storing and forwarding electronic information, etc.), different from those listed in the course requirements or adopted by the lecturer in charge of the course assessment, in the written *term-end exams* taken, or invite or accept any assistance of fellow students, with the exception of borrowing authorized means, will immediately be disqualified from taking the term-end exam any further as a consequence of their action, and will be inhibited with an automatic Fail (1) in the exam. No further options to sit for the same exam can be accessed in the respective exam period.
4. Those students who alter, or make an attempt to alter the already corrected, evaluated, and distributed test or exercise/problem,
  - i. as a consequence of their action, will be disqualified from further assessments in the respective semester. Further to this, all of their results gained in the very semester will be void, can get no term-end signatures, and will have no access to Late Submission options. Final term-end results in courses with practical mark will automatically become Fail (1), ones with exam requirements will be labelled Refused Admission to Exams;
  - ii. and will immediately be inhibited with an automatic Fail (1) in the exam. No further options to sit for the same exam can be accessed in the very same exam period.

## 10. Retake and repeat

N.A.

## 11. Consulting opportunities:

1 hr/week upon appointment by e-mail

## 12. Reference literature (recommended):

## 13. Home study required to pass the subject:

Contact hours	28	h/semester
Home study for the courses	14	h/semester
Home study for the exam	48	h/semester
<b>Total:</b>	<b>90</b>	<b>h/semester</b>

## 14. The data sheet and the requirements are prepared by:

Name:	Title:	Affiliation (Department):
Dr. Tibor Szalay	Associate professor	Department of Manufacturing Science and Engineering