Faculty: FACULTY OF TELECOMMUNICATIONS AND MANAGEMENT
Department: GENERAL ENGINEERING
Professional Field: 5.13. GENERAL ENGINEERING
Specialty: DIGITAL ENTREPRENEURSHIP AND HIGH TECHNOLOGY
Educational-qualification degree: BACHELOR

LEARNING COURSE DESCRIPTION

1. Course title: *PROJECT OF ENGINEERING – I*
2. Course code: B.45.026.1
3. Type of the course: *Compulsory*
4. Level: *Bachelor*
5. Year of study: *Second*
6. Semester: *Third*
7. Number of credits: *3*
8. Name of the lecturer: *Assoc. Prof. Siyka Dimitrova Demirova, PhD*
9. Course learning outcomes:

The aim of the course is to give students a logical basic knowledge in the field of engineering design. After successful completion of this course, students will acquire:

Basic knowledge steps of the design process.

Practical skills to determine the site / design problem, to select the best solution and to develop & complete project.

Competencies: Upon successful completion of this course, students will master the entire sequence of stages in engineering design.

10. Teachingmethods:

The teaching method is in practice and discussion form, according to the specifics of the subject matter. Emphasis is given for the fundamental issues of design, using multimedia in the classroom.

11. Prerequisites:

Students should have a thorough knowledge of the Fundamentals of engineering design, Enterprise economy, Production management, Fundamentals of digital entrepreneurship.

Courses using the discipline are Engineering logistics, Engineering - II, Cyberphysical production systems, Innovation management systems in highly automated production, Production logistics, Innovation management of high technologies.

12. Course contents:

The course deals with current topics related to the design of a product that meets certain criteria and / or performs a specific task. Different stages of design are considered and final report is prepared, which describes each step of the project.

13. Bibliography

Basic literature:

1. **Братанов П., Василев Г.,** Основи на компютърното проектиране, изд. ТУ-Варна, 2013.
2. **Даков И.,** Производствен инженеринг, изд. Люрен, 2003.
3. **Даков И., Ениманев К.,** Индустриален инженеринг**,** изд. Софттрейд, 2006.
4. **Дамянов Д.,** Конкурентен инженеринг, изд. Примакс Русе, 2000.
5. **Ениманев К.,** Производствен инженеринг, изд. Софттрейд, 2003.
6. **Khan M.,** Industrial Engineering, Publi.: New Age International Pvt Ltd, 2009.

Additional literature:

1. **Ганева Н. и кол.,** Основи на инженерното проектиране, изд. Софттрейд, 2008.
2. **Лепаров М. и кол.,** Основи на инженерното проектиране, изд. Софттрейд, 2011.
3. **Лефтерова Т.,** Ръководство по инженеринг, изд. Софттрейд, 2006.
4. **Lloyd C., Frazier J.,** Engineering, e-book, 2016.

14. Assessment methods and criteria:

Successful completion of this course ends with the development of a *project.* The individual work of the student during the semester is taken into account.

1. Requirements for the assessment of the six-point system

The grade for the course is formed by a point system, the maximum number of points that students can receive is 100 (see Table 1). They are formed by an ongoing inspection of the implementation of the task and control of the completion of the various stages of the project. With the assessment, which is formed by the obtained sum of the two stages, ie. with current control, the student is formed according to pre-announced criteria.

2. Formation of the final mark

The formation of an ongoing assessment in the training course is based on the points received and their arrangement according to the six-point system given in Table 1.

Table 1.

Number of points	**Assessment According to the 6-point Scale System**
0 – 20	Fail 2 **(**F)
20 – 39	Fail 2 (FX)
40 – 49	Satisfactory 3.00 (E)
50 – 59	Satisfactory 3.00 (D)
60 – 69	Good 4.00 (C)
70 – 84	Very good 5.00 (B)
85 – 100	Excellent 6.00 (A)

15. Language of instruction: *Bulgarian*