COURSE SYLLABUS

University	UNIVERSITY OF ORADEA
Faculty	FACULTY OF ENERGY ENGINEERING AND INDUSTRIAL MANAGEMENT
Study program*	INDUSTRIAL ECONOMICS ENGINEERING

I. Course Name: PRODUCT ANALYSIS

II. Course Details

No of hours/week						
Code	Semester	Credits	Lecture	Seminar	Laboratory	Project
IEMI-0769	VIII	3	2	-	1	-

III. Course coordinator (title, name, surname, e-mail): As. Prof. Simina-Tteodora HORA, horasimina@gmail.com

IV. Course objectives

• Familiarizing students with the specific notions of product analysis, with the processes, means, instruments and procedures for the design, creation, implementation, maintenance and development of products, capable of efficiently responding to the multitude of requirements imposed by environmental transformations.

V. Course content	No. of hours
V.1. Lecture (chapters/subchapters and paragraphs)	
Defining the product and differentiating its levels; classifying products.	
Identifying the stages of development of a new product; describing and analyzing the stages of	2
a product life cycle; defining a product brand.	2
Brand.	
Product strategies	2
Analysis of physical production. Analysis of the implementation of the manufacturing program by assortment and by the entire enterprise	2
Analysis of the production structure	4
Phases of Product Analysis. Action orientation. Information search	2
Analysis of product quality. Analysis of products differentiated by quality classes	2
Functional and cost analysis	2
Conceptual approaches to the profitability of the enterprise. Profit analysis	2
Analysis of profitability rates	2
Analysis of profitability based on the critical point (breakeven point). Analysis of the	2
breakeven point in the case of a homogeneous activity (a single product). Analysis of the	4
breakeven point in the case of different activities (several types of products)	
V.2. Laboratory/Seminar/Project:	
Product analysis: product description, identification of the system it is part of, establishment	2
of the fundamental need	2
Identification of the external environments of the product and its functions	2
Ordering the functions and establishing the relationships between them	2
Characterization of functions according to qualitative and quantitative criteria	2
Ranking the product functions in order to establish priorities	2
Technical analysis of the functions	2
Writing the functional specifications	

VI. Bibliography

1. Bazele tehnologiei confectiilor textile-Mitu S.,1998
2. Armstrong, G; Kotler, Ph. – Introduction to Marketing, 12th Edition, Pearson/Educational Centre, Bucharest, 2015
3.Anghel, D-C., Rizea, A. D. Product Design – Guide, University of Piteşti Publishing House, 2009
4. Anghel I., (Coord.), Negescu M., Popescu A.M., Anica Popa A, Enterprise Evaluation, Economica, 2011
5. Balaure, V. (coordinator), Marketing, Uranus Publishing House, Bucharest, 2006
6. Gherghel S., Indrie L. – Fundamentals and Engineering of Production Systems, 2nd Ed., Univ. of Oradea Publishing House, 2007
7. Onofrei. M., Financial Management, Second Edition, C.H.BECK Publishing House, Bucharest, 2007.

8. Andreescu, N.A., Product Analysis, course notes, document available on the UO platform, 2023

VII. Grading criteria

Activities	Assesment	% of final grade
Exam	Written exam: Knowledge of concepts used in product analysis Ability to appropriately use the acquired concepts	70
Seminar/Laboratory/Project	The ability to operate with the concepts specific to the subject studied; Criteria targeting attitudinal aspects: seriousness, interest in individual study;	30

VIII. Learning outcomes:

• The student/graduate identifies and describes principles of economic and managerial engineering, characteristics of software packages to assist activities in the field.
The student/graduate explains and interprets technical, economic and managerial documentation for the development of projects and processes specific to the field.

Course coordinator,
Simina-Teodora HORA