

# **Topics for diploma examination for degree of Master**

## **Engineering Management, second cycle studies, specialization: Managing Enterprise of the Future**

### **Topics in the field of study:**

1. Market mechanism – its' elements and role in the economy.
2. Basic models of the market (Perfect competition, monopolistic competition, oligopoly, monopoly).
3. The role of the state in the economy.
4. The functions of the state budget, the budget deficit.
5. Inflation: causes and methods of fighting, effects of inflation.
6. The essence of the globalization.
7. Macroeconomic measures of the economy (GDP, GNP, gross national income, Consumer Price Index, unemployment rate).
8. Growth factors and of the economic development and the barrier of the economic development.
9. Economic cycle (kinds of cycles, elements and the course of the classical business cycle).
10. The role of money in the economy.
11. The legal system, sources of the law, sectors of the law.
12. Legal and organizational forms of business entity.
13. Taxes in business.
14. The term and functions of the management.
15. The organizational structure – the essence, the classification and conditioning.
16. Levels of management in the organization.
17. Methods and techniques of the organization and management.
18. Styles of management.
19. Theories of motivation in management.
20. Strategic management (strategies, methods of the strategic analysis).
21. Contemporary concepts of management. Lean, agile and virtual enterprise
22. The specificity and the organization of the marketing management.
23. Marketing mix.
24. Human resource management in the organization (theories, models and elements of the system).
25. Financial reports and their analysis.
26. Operational research and statistical methods in management.
27. Methods of economic analysis of investment projects.
28. Financial analysis.
29. The notion, the essence and instruments of the financial market and capital.
30. Internal and external source of capital (finances) of enterprises.

### **Managing Enterprise of the Future:**

1. Business planning. Structure of the annual planning. Functions and the structure of the business plan.
2. The methodology of designing a company management system (structures, processes, and information systems).
3. Technology of Enterprise 4.0 (production and information systems).
4. Supportive processes management in Enterprise 4.0
5. Typical organizational structures of international and global corporations.
6. EU legal system and EU support systems.
7. Aims and methods of the promotion and the system of distribution, and types of behavior of clients in the process of the purchase.
8. SME – the criteria of distinguishing and the specificity of SME, characteristic problems of management in SME. SME's sources of financing.
9. Network and virtual structures. A lean, agile and virtual enterprise.
10. Human capital management in Enterprise 4.0.
11. Enterprise competitiveness.