

State Final Examinations	Academic Year: 2019/2020
Master's Degree Studies Program:	Engineering Informatics
Study Branch:	Security Technologies, Systems and Management
Study Focus:	Management

Security Engineering Management

Compulsory Subject

1. The State Integrated Rescue System, (IRS) - Tasks, structures, scopes of the Fire Brigade, Police and Medical Rescue Services; rescue and clean-up work methods and procedures management; typological IRS activities.
2. The Crisis Management System in the Czech Republic - Threats and risks, the competence of crisis management entities, crisis plans, emergency plans, flood plans.
3. Population Protection - Objectives and tasks, population protection areas, warnings and notifications, population evacuation, emergency survival, sheltering, individual and collective protection.
4. Theoretical concept of security. Security problem and its analysis. Postulates of security theory, their content and use in the analysis of security problems. Types of security, definition, causes, classification.
5. Security measures, their classification. Preventive and repressive measures. Security assurance models, their classification and principle. Example of barrier model and reactive security model.
6. Types and the Creation of Organisational Structures - Optimal organisation size, stability, the dynamics and problems of organisational structures, the organisational structures of security agencies in the Czech Republic and abroad, organisational structures for the 21st Century (paradigms of new types).
7. Competitive Competence of Firms in Relation to Security Policy – The enterprise as a Living Entity, the Individuality of Thinking, The innovation of thought and business, Innovation Managers and Knowledge Managers.
8. Managerial Profiles - Competency, style and relationship of a manager to subordinates, the qualification profile of managers for the 21st Century - knowledge, skills, habits, moral characteristics, corporate culture.
9. Risk Management – The risk concept and its classification, risk identification and its factors, the determination of their significance, risk reduction measures, risk and uncertainty decisions, data management.
10. Strategic Management - Its importance for security agency management, strategic management methods, their types and effectiveness, the typology of strategies, the use of methods and types of strategies in security agencies.
11. The "Economic Measures for Crisis Situations Concept" Definition - its basic division, the distinction between the emergency economy and economic mobilisation.
12. The Definition of Critical Infrastructures - The critical infrastructure of the Czech Republic and the European critical infrastructure, basic sectors, the identification process, cross-cutting and sectoral criteria, designation.
13. The State of Risk Analysis in Relation to Safety/Security Documentation - Characteristics of the nature and purpose of selected risk analysis methods, (KARS, FTA, ETA, HAZOP, What - If, etc.).

14. Modelling in Crisis Management - Possibilities of its utilisation, the TEREX instrument - specifications, architecture, and usage in the context of Act No. 224/2015 Coll., On Major Accident Prevention.
15. The Security Strategy of the Czech Republic – Its structure and objectives, link to security policy, security interests, security environment and the Czech Republic's security system.
16. Futurology, Security Futurology - Definitions, meanings, subjects, application environments, national authors and their security forecasts, historical sources of futurology; Security Studies - Meaning, content and historical development.
17. Security Prognosis - Conditions and principles of creation, a description of the basic factors Forecast Classification, creation process, types of access to prediction of the future and basic views of the future.
18. Security Models from the Futurology Point-of-view - Solution areas and examples, Security Models by George Friedman, Francis Fukuyama, Z. Brzezinski, S. Huntington and A. Toffler.
19. An Overview and Application of Universal, Structural and Prognostic Process Methods - Meaning and procedure of methods - Participatory methods, the future wheel, the future cycle, cross-interaction, morphological analysis.
20. Content of Security Futurology, dimension of security. Military, political, social, economic and environmental security - definition and threats. The Copenhagen School of security studies - description of the concept of security perception.