**Topics of seminar papers - Informatics for economists 2021/2022**

1. Information system and its essence (characterize the information system and its role, describe the difference between data, information and knowledge and give specific examples)

2. Computer hardware and software (list at least 5 hardware components of the computer and their characteristics, list and characterize at least 5 software tools that you use in your life)

3. Computer networks and their types (describe the basic types of computer networks - LAN, MAN, WAN, PAN and state the division of computer networks according to their topology)

4. ISO / OSI model and its layers (characterize the layers of the ISO / OSI model)

5. Basic commands for working with a computer (state and characterize basic commands for working with a computer - PING, TRACERT, PATHPING, IPCONFIG, NETSTAT, NET)

6. Operating systems Windows, UNIX, Linux, OS X (characterize individual operating systems)

7. Application software (describe MS Office and MATLAB application software)

8. Mobile devices (characterize the role of mobile devices and their operating systems)

9. Ergonomics of work with a computer (state the principles for proper work with a computer, describe the possible risks of non-compliance with these principles)

10. Security in the field of digital technologies (characterize the role of cyber security in the field of digital technologies, list and describe at least 5 cyber threats, state the possibilities of protection against cyber threats)

The seminar paper should have the usual structure, i.e. introductory page, content, description of the selected topic (including pictures), sources used. The scope of work is recommended in the range of 6 to 10 pages. The deadline for submitting the seminar paper is **December 20, 2021**.

The presentation of the seminar paper should be for 5 to 8 minutes. The recommended structure of the presentation is an introductory slide (topic name, your name, field of study, year), content of the presentation, description and presentation of the topic, thanks. The presentation of seminar papers will take place in the week from **December 20 to December 23, 2021**.