

Preface

This textbook has been created for the needs of the New Bulgarian University and is consistent with the content and requirements of the M.A. program - Cybersecurity. The objective in the development of this textbook is the creation of conditions for thorough preparation and acquisition of the necessary level of knowledge by selecting and presenting in an accessible way of conventional and innovative theoretical concepts in the field of creating and using adequate systems for cybersecurity metrics.

The content of this textbook includes 10 chapters that cover the right amount of knowledge foreseen in the program. Each individual chapter includes elements with the following purpose:

Theoretical part. This part presents the theoretical material of the chapter as the objective is the basic (the commonly accepted) concepts, definitions, principles, rules and dependencies to be outlined and specified. This theoretical part is complemented and explained with the help of appropriate examples from practice.

Students' knowledge verification tests. This part is aimed to test the students' abilities to interpret their new knowledge. This part consists of several types of tasks:

- *Filling in the missing words or phrases* in a predefined text.
- *Choosing TRUE (T) or FALSE (F)*
- *Indicating a single correct answer* to a question with 4 possible answers.
- *Reflection questions.* In this part of the textbook the students will find formulated questions and cases that offer them the opportunity to

check the level of their newly accumulated theoretical knowledge and a chance to show innovation and originality by proposing solutions.

- *Summary of the most important material from the content of the chapter.* In about 8-10 sentences the students have to summarize the most important material from the chapter and this way they will gain abilities to use the terminology and to detect and synthesize essential part of the information included therein.

The current assessment and the semester examination of the course will be a test on the material from the chapters in the textbook. The examination is similar to the tests after each chapter. There are answers at the end of the book to the tests of each chapter.