SYLLABUS
for Comprehensive State Exam
Degree: Computer science
Professional qualification: Master degree in “Informatics and Computer Science”
Class: 2021-2022

E-Commerce
2. Electronic commerce – definition, features and technological models. Electronic payment systems, used in e-commerce. Evaluation of electronic shops
4. Introduction to e-marketing. The e-commerce website as a marketing tool. Website promotion and advertising. Web site Search Engine Optimization (SEO).

Literature:

.NET Web Development
1. The .NET platform – .NET Framework, .NET and .NET Core web applications, basic components of the .NET Framework, programming languages and development tools.
2. Web controls, events and interactions.
4. .NET web applications security, authentication and authorization.
5. Working with databases – basic concepts and supported technologies, controls and functions for database access.

Literature:
Online lectures (http://users.ue-varna.bg/vsulov and http://e-learn.ue-varna.bg).
E-Finance
1. Electronic banking. The essence of electronic banking. Types of electronic banking and chronology in its offering
2. Internet banking. Technology and organization of Internet banking. Types of systems for Internet banking. Advantages of Internet banking
3. Security and protection of Internet banking. Potential threats for Internet banking users. Methods for protection and authentication of users
5. Electronic payment systems. Essence of electronic payment systems. Types of electronic payment systems and related payment instruments. Mobile payments

Literature:

Server-Side Web Programming
3. Applications with web interface. PHP. Working with templates in PHP.
4. Web applications working with DBMS. Administration tasks.
5. AJAX technology. Web application security.

Literature:

Business Process Modeling
1. Business processes – elements, management lifecycle, classification
2. Basic concepts of business process modeling.
Literature:

Type of exam: e-test – 80 multiple choice questions covering all disciplines. Each question has one right answer. Each correctly answered question brings 1 or more points, because questions have different weights. Questions answered with a wrong answer do not decrease the total amount of points. The test is done within 3 hours.

22.03.2022
Head of the Department of Informatics:
(Prof. Julian Vasilev, PhD)