

| | | | |
|-----------------|---|--|--|
| Discipline | COURSE PROJECT - OBJECT-ORIENTED PROGRAMMING FUNDAMENTALS (C++) code: 25a summer semester | | |
| Specialty | Computer Systems and Technologies | | |
| ECTS credits: 2 | Form of assessment: ongoing assessment | | |
| Lecturer | Assoc. Prof. Milena Karova, PhD Room 205 TB Phone: +359 52 383 407 E-mail: mkarova@tu-varna.bg | | |
| Department | Computer Science and Engineering | | |
| Faculty | Faculty of Computing and Automation | | |

Learning objectives:

This course is based on the theoretic and practical knowledge of the students of the previous courses “Object-oriented programming Fundamentals”, “Programming Fundamentals” and “Synthesis and Analysis of Algorithms”.

Design objects are specific individual assignments related to the development of C ++ applications. Design tools are Microsoft Visual Studio 2010 (Microsoft Visual C ++ .NET).

The course project aims at consolidating and expanding the knowledge of the students from the part of the OOP discipline in the third semester. The material covered covers the application of the accumulated knowledge of classes, objects, inheritance and polymorphism, working with different types of data, abstract classes, algorithms and the principles of their realization.

Acquired knowledge and practical skills can be used in the development of course and diploma design and using C ++ as a design tool. All knowledge from other previous and current disciplines concerning the methods and technical means of designing applied software is used.

Form of content delivery:

Each student receives an individual assignment for the course design by the lead lecturer.

The consultations are held weekly within the planned hours.

The results of the project implementation are demonstrated on a computer in the form of a working program and are written in the explanatory note.

The final grade of the course project is formed during the last academic week of the semester based on the submitted written material and an oral question on the content of the project.

CONTENTS:

| Training Area | Hours lectures | Hours seminar exercises |
|-----------------------|----------------|-------------------------|
| Algorithmization | | 8 |
| Structuring | | 8 |
| Logical organization | | 6 |
| Experimental tests | | 6 |
| Program documentation | | 2 |
| TOTAL: 30 h | | 0 30 |