Discipline	LEARNING PRACTICE - PART 2	code: 18	winter semester
Specialty	Computer Systems and Technologies		
ECTS credits: 1	Form of assessment: ongoing assessment		
Lecturer	Ass. Prof. Yulia Garipova Room 305 A E Phone: +359 52 383 619 E-mail: juliq.garipova@gmail.com		
Department	Electronics and Microelectronics		
Faculty	Faculty of Computing and Automation		

Learning objectives:

The discipline provides all special subjects from the curriculum of the specialty. The subject "Learning Practice" (in the second semester) aims at introducing the students from the second course with the main software courses in the subject "Computer Systems and Technologies", their development and perspectives, as well as gave them an idea of some of the disciplines to be taught in the curriculum.

It aims at: acquainting with key programming languages and environments and their practical use; acquiring knowledge and skills for defining and using classes, objects, functions and templates; compilation of "smart and entertaining" programs and projects by using program libraries for working with different data types and forms for presentation of information (textual, audio and visual).

The discipline provides part of the following laboratory exercises and projects in relevant disciplines from the curriculum of the specialty.

CONTENTS:				
Training Area	Hours lectures	Hours seminar exercises		
Program languages: C ++, C #, Java - features and application.		4		
Structure, content and applications of C ++ programs. Select a learning project - a practical task for programming		5		
Batch processing and memory management programs and functions. OOP - classes and objects.		4		
Programs and functions for work with arrays and pointers. Programs and functions for processing text information.		4		
Input-output streams and manipulators. File processing programs.		4		
Programs and functions for working with audio and audio information. Programs and functions for working with graphic primitives and graphics.		5		
Programs for modeling "logical" games (puzzles, sudoku, chess, etc.) with text, graphics, audio and video effects. Programs for console (desktop) video game modeling.		4		
TOTAL: 60 h	30	30		