## **Information sheet for the course Introduction to Programming II**

University: Alexander Dubček University of Trenčín

**Faculty:** Faculty of Industrial Technologies in Púchov

Course unit code: PP-PV-3 Course unit title: Introduction to Programming

II

Type of course unit: optional

Planned types, learning activities and teaching methods:

Lecture: Seminar:

Laboratory tutorial: 2 hours weekly/26 per semester of study; face to face

Number of credits: 2

**Recommended semester:** 2<sup>nd</sup> semester in the 1<sup>st</sup> year full-time

2<sup>nd</sup> semester in the 1<sup>st</sup> year part-time

**Degree of study:** the 1<sup>st</sup> degree of study (Bachelor's degree)

**Course prerequisites:** none

**Assessment methods:** *Laboratory tutorial* 

## Learning outcomes of the course unit:

The student can use MATLAB to practical problems related to the statistical processing of data and tasks relating to numerical mathematics.

## **Course contents:**

Statistics and Data Analysis. Solving differential equations. Algorithm development and programming of M-files. Chains and multi-dimensional arrays, solution of numerical problems, optimization in MATLAB simulation.

## **Recommended of required reading:**

Bartko, R., Miller, M.: MATLAB I – algoritmizácia a riešenie úloh. Digital Graphic Trenčín. 2004

Kaukič, M., Kříž, F.: MATLAB – šlabikár, VŠDS Žilina

Matlab – The Language of Technical Computing, Getting Started with MATLAB version .5.1 The Math Work Natick, Massacusetss 1997

Stuchlý, J.: Matematika IV- návod k cvičeniam z teórie pravdepodobnosti a matematickej štatistiky, skriptá VŠDS, alfa Bratislava

Language: Slovak

Remarks:

**Evaluation history:** 

Evaluation his					
A	В	С	D	Е	FX

Lecturers: doc. RNDr. Ladislav Matejíčka, CSc.									
	Last modification: 31.03.2015								
	Supervisor: doc. Ing. Ján Vavro, PhD.								