# DESCRIPTION OF THE COURSE OF STUDY FOR EXCHANGE STUDENTS

Name of the course in	English	Statistical packages
	Polish	Pakiety obliczeń statystycznych

#### 1. LOCATION OF THE COURSE OF STUDY WITHIN THE SYSTEM OF STUDIES

1.1 Field of study	Mathematics
1.2 Level of study	Undergraduate (BSc)

#### 2. GENERAL CHARACTERISTICS OF THE COURSE OF STUDY

2.1 Language of instruction	English
2.2 Semesters in which the course of study is offered	Winter (5)
2.3 ECTS credits	3

#### 3. DETAILED CHARACTERISTICS OF THE COURSE OF STUDY

3.1. Form of classes	laboratory sessions
3.2. Form of assessment	credit with grade

## 4. OBJECTIVES AND SYLLABUS CONTENT

# 4.1. Course objectives

- C1. Presentation of the possibilities of computer tools supporting statistical analyzes (on the example of the Statistica and R programs).
- C2. Shaping the skills of using computer programs for statistical analysis.
- C3. Developing the student's ability to plan his/her own work and cooperation in the group during the implementation of the project.

## 4.2. Detailed syllabus

Data pre-processing. Overview of tools supporting statistical calculations in Excel. Data analysis and graphics with Statistica. R environment, basic installation and additional packages. Syntax and basic R structures, data loading methods. User-written functions in R. Graphics in R. Descriptive analysis and statistical inference with R.