SD UP LUBLIN 2021/2022	SD_008
Course Title	Statistics
Language of lecture	English
Type of course	Obligatory
Year of study	I
Semester of study	2
Name of lecturer – academic degree	Andrzej Bochniak, PhD, Associate Professor
Department/ scientific discipline	Deparement of Applied Mathematics and Computer Science
	environmental engineering, mining and energy (75%), computer science (25%)
Aim of the course	Acquainting with statistical methods and their use to describe experimental results, formulating research hypotheses and carrying out proper statistical inference.
Course contents	The basic and advanced methods of statistics, necessary in the statistical analysis of experimental results obtained in agricultural research. Definition of basic distributions of continuous random variables with specification of the normal distribution. Examination of the compliance of the distribution of a feature with the normal distribution. Calculation of descriptive statistics and visualization of experimental results. Performing statistical inference based on point and interval estimation and verification of hypotheses about parameters in one or several populations. Proper inference on the basis of calculations in the Statistica program for experimental data obtained from various agricultural experiments. Investigation of relationships between traits in multidimensional populations.
References	<ol> <li>Statistics tutorial, https://www.tutorialspoint.com/statistics/index.htm</li> <li>Tibco Statistica Documentation, https://docs.tibco.com/products/tibco-statistica-14-0-0</li> </ol>
Teaching methods	Presentation, discussion, exercises based on the Statistica program. Classes may be conducted using distance learning methods and techniques.