

Module number	Module name	Professor in charge
	Statistics	Prof. Franz
Contents and qualification aims	Aims of the course are the development of knowledge and abilities for applied work with statistical methods and procedures (by use of fitted software). For the contents: descriptive statistics, discrete and continuous probability distributions, parameter estimation, confidence intervals, hypothesis testing and nonparametric hypothesis tests (for example goodness-of-fit tests), correlation and regression methods.	
Teaching form	2 hours a week, lectures, 1 hour a week, seminar	
Pre-requisite of attendance	Basic knowledge of mathematics for engineers, in particular solving of equation systems, differential and integration calculus and probability methods Literature: Anderson, C.W., Loynes, R.M. (1993): The teaching of practical statistics. Wiley New York. Brown, Ch.E. (1998): Applied multivariate statistics in geohydrology and related sciences. Springer Berlin-New York. Rees, D.G. (2001): Essential statistics (4 th ed.).Chapman-Hall, London-New York.	
Usage	The module is a mandatory module. Skills corresponding to the module could be used for practical work, for instance for project works	
Pre-requisite to achieve credit points	The successful students have to pass the module exam. It consists of a written exam (90 minutes).	
Credit points and marks	The module earns 5 cr.	
Frequency of the module	The module is offered each winter semester.	
Work load	The student's work load is 150 hours.	
Duration of the module	The module is finished in one semester.	