

The Rhine-Waal University of Applied Sciences in Kleve and Kamp-Lintfort offers an innovative, international environment combined with first-rate teaching in interdisciplinary Bachelor and Master's degree courses, taught mainly in English. It is strong in conducting research in disciplines such as technology, natural sciences and social sciences. More than 7,000 students have already enrolled at the Rhine-Waal University of Applied Sciences.

The University of Applied Sciences has to award for the faculty Life Sciences in the Bachelor's degree courses Agribusiness, B.A. at the campus in Kleve in the summer semester 2021 the following

Lectureship

within the meaning of Section 43 of the Law regarding the Universities in the State of North Rhine-Westphalia (HG NRW):

Reference number 03/LA/21

Subject area/Module: „Bioinformatics“

The lecturer shall take over the lecture in the amount of 4 lecturing hours in the module "Bioinformatics" (4th semester) of the bachelor course Bioengineering, B.Sc.. The lectures shall be held in English.

Contents

Basics of programming (data types; decision making; operators, loops, functions, databases management); Database search algorithms such as regular expressions; Algorithms for sequence analysis and genomics: Introduction to web-based algorithms (speed, reliability); image analysis (segmentation, size estimators, classification); analysis of spectral data (feature extraction, database search)

Project: In the project, students will apply their knowledge to solve a bioinformatics question using Matlab or an AI system.

Learning objectives

On successful completion of this module, students should

- understand¹ and provide quantitative and visual summaries on data sets
- have learnt basics of programming
- be able to search algorithms e.g. finding scientific papers
- be able to analyse images and spectral data

Requirements:

The lecturer shall have a corresponding university degree and have practical experience. Didactic skill and the ability to hold the course with an international group of students in the English language are required (the language level shall be C1 according to the European reference framework).

The Rhine-Waal University of Applied Sciences offers lectures a systematic networking with the university as well as the opportunity of a specific training development to ensure a sustainable skill improvement, a closely link between theory and practice and a support for the personal development of lectures.

It is asked to send in just copies of documents as these cannot be returned.

Please send your application via e-mail **stating the reference number and the module title** addressed to

Contact person:

Title Prof. Dr. Frank Platte

E-mail: frank.platte@hochschule-rhein-waal.de

For questions and further information please contact the mentioned contact person above.