Course title	*Machine Learning in Python*
Course code	*IP 302*
Module coordinator	*Cordelia Makartsev*
Lecturer	*Salma Aziz*
Level of course	*Bachelor*
Recommended prerequisites	*Basic programming and strongly advise taking IP 301 alongside*
Type of course	*Lecture*
Weekly lecture hours (SWS)	*2*
ECTS credits	*2 ECTS*
Workload	*In total 60 h, 30 h course attendance, 30 h self-study*
Assessment (grading; pass/fail)	*graded*
Regular cycle	*Each semester*
Language of instruction	*English*
Contents:	*In this class, you will delve into the fundamentals of Python programming and gain the practical know-how for applying Machine Learning in Python to solve problems in diverse areas.* *This course provides an overview of machine learning via Python:* • *The basics of Python programming.* • *Data Analysis and Visualisations.* • *Implementation of machine learning models, in both supervised and unsupervised contexts.*
Learning outcome (competencies):	*After having successfully completed the course, the students should:* • *Understand the fundamentals of Python programming, focusing on data science libraries.* • *Be comfortable exploring and visualizing datasets.* • *Be able to apply some machine learning techniques in the Python environment to solve specific problems.* • *Be willing to explore advanced topics and applications in machine learning using Python.*
Teaching methods	*☒Lecture ☐Group work* *☒Exercises ☐Simulation* *☐Video feedback ☐Others: Please click here for inserting text*
Assessment methods	*Project work with oral exam*
Recommended reading	*A. Géron, "Hands-on Machine Learning with Scikit-Learn, Keras & TensorFlow", O'Reilly Media, 2nd Edition, 2019*
Additional information	
Recognition of credits	