Module Name
Visual Analytics

Type of Module	**Module Code**
Advanced Module	AM-VA

Identification Number	**Workload**	**Credit Points**	**Term**	**Offered Every**	**Start**	**Duration**
MSc-I-VA	270 Hours	9 CP	1. – 3. Semester	SuSe	Summer term only	1 Semester

1	**Course Types**	**Contact Time**	**Private Study**	**Planned Group Size**
	a) Lecture b) Exercise	60 h 30 h	120 h 60 h	25

2 Module Objectives and Skills to be Acquired

understand advanced, specialized theories / methods in the field of visual analytics

analyze real issues and challenges in the field of visual analytics

collect and analyze data using quantitative / qualitative methods for selected scientific questions.

justify and defend (independently developed) positions or solutions to problems.

3 Module Content

The lecture deals with the visual analysis of large and complex data sets. In the lecture, selected topics from the areas of visualization, interaction, human perception, data analysis and their combination for solving application-oriented problems are dealt with. Basic methods and their practical examples as well as applications and current research approaches will be presented.

Visual analysis can be used for exploration, analysis and communication of in reports, presentations, or online. Applications include finance, economics, geosciences, meteorology, medicine, biology, transportation, or sports.

In the exercises to the lecture the lecture material is deepened. Exercises are discussed under the guidance of a tutor. In addition to deepening the subject knowledge, the exercises can also serve to acquire communication and presentation skills.

4 Teaching Methods

Lecture, Exercise

5 Prerequisites (for the Module)

Formally: None

Regarding the contents: Visualization, Software Engineering, Statistics

6 Type of Examination

Exam, e-Exam

7 Credits Awarded

Passing the final exam

8 Compatibility with other Curricula

Wirtschaftsinformatik, Wirtschaftsmathematik, Mathematik

9	**Proportion of Final Grade** 9/114
10	**Module Coordinator** Prof. Dr.-Ing. Tatiana Landesberger von Antburg
11	**Further Information**