

Note:

The following curriculum is a consolidated version. It is legally non-binding and for informational purposes only.

The legally binding versions are found in the University of Innsbruck Bulletins (in German).

Original version published in the University of Innsbruck Bulletin of 3 July 2019, Issue 71, No. 624

**Complementary Subject Area
Digital Science
at the University of Innsbruck**

I. General notes

If the respective curriculum provides the possibility, the Complementary Subject Area in Digital Science covering 30 ECTS-Credits may be selected by degree students of Bachelor's and Master's programmes at the University of Innsbruck.

The complementary subject area can be selected, provided the availability of places.

For courses that are used synergistically, the regulations regarding the procedure for the allocation of places in courses with limited number of participants as well as the examination regulations of the curriculum, the course examination or the module have been taken from, in the respectively valid version, apply.

Only course examinations may be taken which have not yet been passed within the scope of study programmes for which the students are admitted to.

II.**a. Students of a pertinent study programme in Computer Science may not pass the Complementary Subject Area in Digital Science.**

Graduates of the Complementary Subject Area Digital Science will be able to understand basic digital methods in the fields of programming, data analysis and data management and to apply them to solving relevant issues in their field of science, particularly in the humanities, social sciences and economics.

Graduates of the Complementary Subject Area in Digital Science are able

- to understand and create programmes in a programming language suitable for data analysis,
- to model, prepare and manage data,
- to select and apply data analysis procedures in the context of their own field of study,
- to plan and implement data analysis projects in the context of their own field of study.

b. Types of courses and maximum number of participants

- (1) **Lectures with integrated practical elements** (VU) focus on the practical treatment of concrete scientific tasks that are discussed during the lecture parts of the course. Maximum number of participants: 20
- (2) **Project studies** (PJ): promote scientific collaboration of two or more fields through the treatment of multidisciplinary topics and the use of various methods and techniques. Maximum number of participants: 20

c. Allocation of places in courses with a limited number of participants

In courses with a limited number of participants, course places are allocated as follows:

1. Students for whom the study duration would be extended due to the postponement are to be given priority.
2. If the criterium in no. 1 does not suffice to regulate admission, the available places are drawn at random.

d. Module structure

The following modules coverings 30 ECTS-Credits are to be passed as follows:

1.	Module: Introduction to Programming	h	ECTS-Credits
	VU Introduction to Programming	3	5
	Total	3	5
	Learning Outcomes: Having completed this module, students will understand the basics of a programming language used in the field of data analysis. They have acquired the skill to apply the most important sequencers and data structures in the programming language and to develop their own programmes.		
	Prerequisites: none		

2.	Module: Introduction to Data Management	h	ECTS-Credits
	VU Introduction to Data Management	3	5
	Total	3	5
	Learning Outcomes: Having completed this module, students will understand the basics of data management used in data analysis. They are able to systematically deal with data and metadata and have acquired the skills for organising and manipulating data. In addition, they will learn selected aspects of converting, quality assurance, reuse and retention of data.		
	Prerequisites: none		

3.	Module: Data Analysis	h	ECTS-Credits
a.	VU Data Analysis I:	3	5
b.	VU Data Analysis II:	3	5
	Total	6	10
	Learning Outcomes: Having completed this module, students understand the basics of data analysis. They have acquired the skills for applying selected methods of data analysis and are able to interpret data and to present it verbally and visually.		
	Prerequisites: none		

4.	Module: Aspects of Digitalisation	h	ECTS-Credits
	VU Aspects of Digitalisation	3	5
	Total	3	5
	Learning Outcomes: Students learn selected topics that are relevant to the digitisation of their discipline. These topics include, but are not limited to, humanities, social and economic references but also general ethical and legal aspects. They have acquired the skill to apply the methods related to the topics learned in their discipline.		
	Prerequisites: none		

5.	Module: Data Analysis Lab	h	ECTS-Credits
	PJ Data Analysis Lab:	2	5
	Total	2	5
	Learning Outcomes: Students apply learned methods of data analysis as part of a project. They realise a decision-making process, from the question, the data analysis, the data interpretation to the evaluation of the decisions. They are able to work out a similar process themselves.		
	Prerequisites: none		

e. Examination regulations

- (1) Performance of modules is assessed by module examinations. Module examinations are to proof the knowledge and skills acquired in a module. The respective module is completed by positive evaluation of all parts of a module examination.
- (2) Performance of courses of modules is assessed by course examinations. Courses examinations are courses with continuous performance assessment, for which the performance assessment is based on regular written and/or oral contributions of the participants.
- (3) The course lecturer must communicate the objectives, contents and methods of their course as well as the contents, methods and evaluation criteria of the course examinations in a suitable fashion before the start of each semester.