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**Master's Program in Data Science – Interdisciplinary Electives**  
**Weather and Climate Systems**

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Students must decide for **one** specific area within the Interdisciplinary Electives and attend at least two courses worth 8-12 credits within this area.

The course compilation Weather and Climate Systems introduces students to the physical structure and chemical composition of the atmosphere, to atmospheric dynamics, and to the most important physical components of the climate system and their interactions. With this background knowledge, students can follow more advanced courses in the area of “climate change” and “short-term climate variability”.

**Basic Courses (recommendation: 2 courses)**

Number	Title	Credits	Semester	Language
701-0473-00	Wettersysteme	3	autumn	DE
701-0023-00	Atmosphäre	3	autumn	DE
701-0412-00	Klimasysteme	3	spring	DE

Note: the courses above are taught and assessed in German.

**Advanced Courses**

Number	Title	Credits	Semester	Language
701-1251-00	Land-Climate Dynamics	3	autumn	EN
701-1252-00	Climate Change Uncertainty and Risk: From Probabilistic Forecasts to Economics of Climate Adaptation	3	spring	EN
701-1226-00	Inter-annual Phenomena and Their Prediction	2	spring	EN
701-1216-00	Weather and Climate Models	4	spring	EN
701-1270-00	High Performance Computing for Weather and Climate	3	spring	EN