The XtAI Lab 1 provides knowledge about the most important steps and tools for the design and development of an XtAI application. Knowledge such as common data handling and processing techniques, libraries and connection to extended reality applications are taught in theoretical or practical form. In group work, concepts, planning, design, creation, evaluation and refinement of a comprehensive XtAI application prototype are learned. Lectures are used to teach the basic scientific questions of XtAI and current design and solution approaches.

**Intended learning outcomes**

At the end of XtAI Lab 1, students will be able to handle the entire development process of an XtAI application. They will have basic knowledge in the following areas: Design, design decisions, development and scientific evaluation of XtAI applications.

**Courses**

- R (3)
  - Module taught in: English

**Method of assessment**

- Project: report (approx. 20 pages) with presentation (30 to 45 minutes) and subsequent discussion on the topic
- Language of assessment: English
- Creditable for bonus

**Allocation of places**

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**Additional information**

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**Workload**

150 h

**Teaching cycle**

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**Referred to in LPO I**

(examination regulations for teaching-degree programmes)

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**Module appears in**

Master’s degree (1 major) eXtended Artificial Intelligence (xtAI) (2020)