

# INTELLIGENT & ADAPTIVE SYSTEMS

## LEVEL OF COURSE UNIT

Master

## LEARNING OUTCOMES OF COURSE UNIT

The students know different concepts to make software systems adaptive. They can develop corresponding system architectures and implement them in simple prototypical examples.

## COURSE CONTENTS

- Fundamentals of Adaptive Systems: Understanding the core principles and concepts behind adaptive systems.
- System Architectures: Design and development of architectures that support adaptability.
- Algorithms and Data Structures: Use of specific algorithms and data structures for adaptive systems.
- Machine Learning and Artificial Intelligence: Utilization of ML and AI to enhance the adaptability of software.
- User-Centered Design Approaches: Development of systems that adapt to the needs and preferences of users.
- Implementation and Testing: Practical implementation of adaptive systems and their testing procedures.

## LANGUAGE OF INSTRUCTION

English

## NUMBER OF ECTS CREDITS ALLOCATED

6