

Master

Continuing
Education

part-time



FH Salzburg



PMU | PARACELSUS
MEDIZINISCHE
PRIVATUNIVERSITÄT

Applied AI in Healthcare

Master's Programme



AI

Bright futures
in the making.

Study programme

Artificial Intelligence is fundamentally transforming healthcare. The Master's programme Applied AI in Healthcare equips you to actively shape this transformation at the intersection of technology, medicine, and society.

Interesting facts

The programme provides in-depth expertise in Artificial Intelligence, Data Science, and Machine Learning, always with a strong focus on clinical applications. You will learn how to develop, evaluate, and responsibly integrate data-driven models into real-world healthcare processes.

A key distinguishing feature of the programme is the close collaboration between Salzburg University of Applied Sciences (FH Salzburg) and Paracelsus Medical University (PMU). This unique combination of technological expertise and clinical practice enables you to work on real-world use cases and develop AI solutions directly for the healthcare sector.



Good to know

Continuing Education Master's Programme with the Paracelsus Medical Private University

Designed for working professionals, the programme combines online learning with weekly compact on-campus sessions (blended learning). Project-based learning, interdisciplinary teamwork, and case studies from clinical practice ensure immediate transfer of knowledge into professional settings.



Career Opportunities

This programme prepares you to develop and implement data-driven innovations in healthcare. Possible career paths are:

- Clinical AI Expert
- AI Specialist in Healthcare
- Digital Health / AI Project Manager
- Specialist for Clinical AI Support Systems
- Expert in Medical Data Analysis and Integration
- Interface roles between IT, clinical practice, and management
- Innovation and Transformation Manager in Healthcare
- AI-related positions in hospitals, MedTech companies, research institutions, or healthcare management

FH-Prof. DI (FH) Dr.
Werner Kaltner-Pomwenger, MSc
FH Salzburg - University of Applied Sciences

»The Master's Programme combines cutting-edge artificial intelligence with real-world healthcare expertise. Students learn not only how to develop AI-driven solutions, but also how to apply them responsibly and effectively in clinical and healthcare environments.«



The programme focuses on educating experts who can understand and bridge complex requirements: How can AI models be integrated into existing clinical workflows and decision-making processes?

In addition to technical competencies, the curriculum comprehensively addresses legal, ethical, and societal aspects. Topics such as Trustworthy AI, patient safety, EU regulations, and the European Health Data Space are integral components of the programme.



More Infos
about the programme

Study Plan

	Focus Areas	Goal
1st Semester Technical Foundations, Clinical Context & Regulatory Frameworks In the first semester, you will acquire the methodological and technical foundations for applying AI in healthcare.	• Data Science & Machine Learning fundamentals • Programming and data processing • Building robust data pipelines and model evaluation • Introduction to clinical data, standards, and system integration • Legal frameworks (EU AI Act, MDR, etc.) • Ethics and societal impact of AI • Agile project management in healthcare	Understand how reproducible and safe AI workflows are developed from clinical challenges.
2nd Semester Applications, Use Cases & First Projects In the second semester, the focus shifts to practical application. You will work on concrete healthcare-related problems.	• Applying AI methods to real clinical use cases • Data preparation, model training, and validation • Developing initial AI projects in teams • Explainability and model transparency • Quality assurance and human oversight • Philosophical and societal perspectives on AI • Exchange with experts through lecture series	Bridge the gap between theory and responsible pilot implementation.
3rd Semester Advanced Topics & Clinical Integration In the third semester, you will further deepen the project-based application from the second semester, as well as your knowledge of specific fields of application and AI system integration.	• Medical Imaging & AI (e.g. radiology, diagnostics) • Clinical Decision Support Systems • Practical implementation of regulatory requirements • European Health Data Space and data-driven healthcare • Communication, transformation & change management • Elective modules for individual specialisation • Development of a research design for the Master's thesis	Understand, evaluate, and integrate AI solutions into real clinical processes.
4th Semester Master's Project & Implementation In the final semester, you will complete a comprehensive practical or research-based project.	• Independent Master's project in cooperation with clinics, research institutions, or companies • Applying all acquired competencies to real-world challenges • Working with real healthcare data • Scientific thesis and final presentation • Exchange on current research topics (Reading Groups, Expert Talks)	Develop and implement an AI solution with direct practical relevance.

Study locations

- FH Salzburg, Urstein Campus
Urstein Süd 1, 5412 Puch/Salzburg
- Paracelsus Medicine Private University (PMU)
Strubergasse 21, 5020 Salzburg

Study mode

Part-time, blended learning, project-based learning, interdisciplinary teams and expert input

Lesson times

1st and 2nd semester: weekly on-campus day (Thursday from 1.30 pm) + 1 – 2 Saturdays per month, block week in November or January
3rd and 4th semester: compact on-site phases



Detailed
Study plan

Application & Admission

»Become part of a new generation of experts who make Artificial Intelligence impactful where it matters most – in healthcare.«

Study places/year	20 part-time
Degree awarded	Master of Science (Continuing Education) – MSc (CE)
Length of study	4 semesters (120 ECTS)
Study locations	FH Salzburg, Urstein Campus, 5412 Puch / Salzburg PMU-Paracelsus Medicine Private University, 5020 Salzburg
Language of instruction	English
Tuition	Euro 15.000 for 4 semesters + student union fee
Prerequisites for admission	- Completed subject-relevant degree at Bachelor's level or equivalent, comprising at least 180 ECTS credits - At least two years of relevant professional experience in healthcare, health-related organisations or related sectors - Demonstrated interest in Artificial Intelligence / Machine Learning and its responsible application in healthcare - Proof of English language proficiency at B2 level according to the CEFR
Application procedure	- Online application at https://anmeldung.pmu.ac.at/home - Personal Interview

More details, deadlines and updates can be found on:
www.fh-salzburg.ac.at/aih-master

Urstein Campus



Go to Campus live



PMU Campus



Contact

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