

**MASTER SEMINAR OF THE INSTITUTE OF MANAGEMENT FOR MEDICINE AND HEALTH
SCIENCES IN THE WINTER SEMESTER OF 2022/2023**

**Opportunities and challenges of artificial intelligence (AI) in medicine
and healthcare**

REGISTRATION:

- Registration takes place from **Monday, 11.07.2022 (9 am) till Friday, 15.07.2022 (11:59 pm) via CampusOnline**. Once you have registered for the seminar, participation is mandatory.
- The number of participants is restricted to 10 „Health Economics“ students („GÖ“) and 5 „Global Food, Nutrition and Health“ students („GFNH“)

PRELIMINARY MEETING:

The **preliminary meeting** will take place on **Thursday, 21.07.2022 from 2.00-3.00 pm**. You will receive an invitation by email after the registration deadline. Attendance is a prerequisite for participation in the seminar. If attendance is not possible, a substitute must be present instead.

JOURNAL CLUB:

The seminar takes the form of a journal club. In a journal club, the students choose a scientific publication for presentation and prepare a discussion on one of the seminar topics. During the winter semester 2022/2023, two meetings will take place in which the students will give their presentation. For an optimal discussion, every student should read the papers beforehand.

The dates of the seminar session will be announced in the preliminary meeting. The presentations must be sent to the respective contact person one week before the seminar session (12.00 pm).

The final examination consists of a seminar paper (20 pages) at the end of the term. The seminar paper can be handed in either German or English. The presentation is to be held in English. Both presentation and the seminar paper will contribute to your final note.

SUBMISSION:

The seminar papers are handed in as a print and digital copy at the end of the winter semester 2022/2023 (the exact date will be given in the preliminary seminar meeting). The papers are to be addressed to christa.reuth@uni-bayreuth.de

Opportunities and challenges of artificial intelligence (AI) in medicine and healthcare

Artificial Intelligence in healthcare and economics

1. The use of artificial intelligence in the healthcare system – an overview
2. Challenges of the practical implementation of AI in medicine
3. Artificial intelligence and cardiovascular medicine
4. Assessing the economic value of clinical artificial intelligence
5. Overcoming policy barriers – Issues of reimbursement of AI
6. Benefits for different stakeholders

Artificial intelligence and ethical, social and legal issues

7. Ethical principles for use of artificial intelligence in medicine
8. Ethical challenges to use of clinical prediction model
9. Risks and possible biases of machine learning in radiology
10. Change in the patient-doctor relationship
11. The importance of patient preferences

Contact persons:

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