

[Medicinski fakultet u Rijeci]

## Curriculum 2021/2022

[Za kolegij]

# Artificial Intelligence

Study programme: **Medical Studies in English (R)** (elective)  
[Sveučilišni integrirani prijediplomski i diplomski studij]  
Department: **[Centar za biomodeliranje i inovacije u medicini]**  
Course coordinator: **izv. prof. dr. sc. Maričić Sven**

Year of study: **2**  
ECTS: **1.5**  
Incentive ECTS: **0 (0.00%)**  
Foreign language: **Possibility of teaching in a foreign language**

**Course information:**

Overview of the field and development of artificial intelligence (AI). The Turing Test. Importance and perspectives of artificial intelligence in biomedicine. Topology of neural networks. Methods and techniques of artificial intelligence. Basic concept of machine learning. Application of neural networks, genetic algorithm. Robotics and artificial intelligence in the biomedical field. Working with data – assessment of basic parameters through image recording. The perspective of AI in biomedical systems. Application trends and direction of future development.

**List of assigned reading:**

- Russel S., Norvig P.: Artificial Intelligence: A Modern Approach, 2021, ISBN: 978-0134610993
- Topol E.: Deep Medicine: How Artificial Intelligence Can Make Healthcare Human Again, 2019, ISBN: 978-1541644632
- Agah A.: Medical Applications of Artificial Intelligence, CRC Press 2017, ISBN: 978-1138072275

**List of optional reading:**

- Smith B., C.: The Promise of Artificial Intelligence, MIT press 2019, ISBN: 978-0262043045
- Crayton E.D.: Redefining Life Sciences with Artificial Intelligence and Blockchain, 2019, ISBN: 978-1795786737

**Curriculum:****Student obligations:**

Regular attendance of classes, writing of a seminar paper.

**Exam (exam taking, description of the written/oral/practical part of the exam, point distribution, grading criteria):****Other notes (related to the course) important for students:**

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**COURSE HOURS 2021/2022**

Artificial Intelligence

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**List of lectures, seminars and practicals:****EXAM DATES (final exam):**

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