

BMEN6367 - Artificial Intelligence in Biomedical Engineering

[BMEN 6367](#) Artificial Intelligence in Biomedical Engineering (3 semester credit hours) This course covers the basic principles of artificial intelligence (AI) and its biological and medical applications. With recent progress in digitized data acquisition, machine learning, and computing infrastructure, AI is increasingly used in various fields of life. New breakthroughs and technologies are emerging from technology companies and research institutes at a rapid pace. Medicine is identified as one of the most promising application areas, and AI is changing the landscape of healthcare and biomedical research. This course will provide the basic principles of AI technologies, outline recent breakthroughs and their applications, and identify the challenges for further progress in medical AI systems. The course will also be featured by invited guest speakers who have real-world AI application experiences. All students should have extensive experience in computer programming and be familiar with Python programming. (3-0) Y