

Summer school Healthcare Operations Research

July 21-25, 2017, University of Twente

The healthcare Operations Research / Operations Management domain has in recent years gained much interest from the scientific community. This summer school is of the lecture type (2 EC). It targets PhD students within this domain, who want to improve their OR skills, learn about engaging practice and making an impact, and meet other PhD students.

The summer school is organized and hosted by the CHOIR research center of University of Twente. The summer school is conveniently planned (July 21-25) to immediately precede the [INFORMS Healthcare Conference](#) in Rotterdam (July 26-28) and [EURO-ORAHS Bath](#) (July 30-Aug 4). Participants can travel to Rotterdam by an easy train connection from Twente on the afternoon of the 25th.

The summer school is taught by renowned professors from all over the world. Topics covered are (not in this specific order):

Title	Description	Total time (approx.)
You're wanted!	We look back at the history of OR in Healthcare, and what has and has not been accomplished so far. Also, we outline the great challenges that current and near future healthcare faces	0.5 day
Update your toolbox	We lecture various techniques from Operations Research that are indispensable for the healthcare domain. These include (<i>topics under reservation</i>): <ul style="list-style-type: none">• Robust optimization• Multi-criteria Decision Making• Stochastic programming• Advanced topics in queuing theory and Markov decision making• (Meta)heuristics• Business Analytics workshop	2 days
Making an impact?!	We address how to engage practice, how to organize your research to maximize impact. We also address the tension between consultancy and research, "easy solutions" and "fancy (but too complex for practice) OR".	0.5 day
Game on!	We challenge the participants to team up, and design a (prototype) serious game that demonstrates a healthcare OM/OR concept to healthcare professionals / clinicians / administrators. The result is presented on the final day.	1 day

Participants

The summer school is targeted at PhD students within the field of Healthcare Operations Research / Operations Management. Participants are expected to have a MSc level background in (stochastic and deterministic) Operations Research.

Background

CHOIR (www.utwente.nl/choir), the Center for Healthcare Operations Improvement & Research, is a research center of the University of Twente in the Netherlands. CHOIR aims to improve healthcare

operations by developing tailored operations research models for healthcare optimization problems from practice. CHOIR closely collaborates with various hospitals and other healthcare providers throughout the Netherlands. In addition to research, CHOIR has developed courses and lectures both for healthcare professionals and academics at all levels (BSc, MSc and PhD). CHOIR currently has 8 PhD students and an additional 4 vacancies for PhD students. Its professors are Derya Demirtas, Richard Boucherie and Erwin Hans.

The University of Twente ([UT](#)) is a research university which focuses on the development of technology and its impact on people and society. UT is a campus university, which is beautifully located and offers great sports facilities (incl. indoor and outdoor pool), and all amenities needed.