

POSTGRADUATE EDUCATION IN
TECHNICAL MEDICINE



COURSE
**VISUALISATION AND
IMAGE ANALYSIS IN
MEDICAL PRACTICE**

UNIVERSITY OF TWENTE.

COURSE VISUALIZATION AND IMAGE ANALYSIS IN MEDICAL PRACTICE

Imaging techniques are widely used in medical practice. The data produced by these techniques contains abundant information, yet only a fraction is of importance for the treatment of the patient; often a certain aspect needs to be visualized or a certain measurement needs to be performed.

GOAL

The goal of this course is the acquisition of skills and insight in the visualization and analysis of medical data.

SETUP AND DURATION

A central concept during the course is data representation: the way in which for instance a blood vessel is represented. This concept is used to treat subjects like visualization and common image processing operations. Further, we will use (self-made) algorithms to transform one data representation into another that is better suited for its purpose. The course is given in small groups and is practical and interactive in nature; the students will do a lot of programming themselves, enabling the students to quickly apply their newfound knowledge to their own situation.

The course starts with a two-day introduction to programming, data representation and visualization. In the next three project days the course topics are covered in more depth, each day working with data from another organ (and modality).

FOR WHOM

This course is intended for PhD students and young scientists with a background in Biomedical Technology, Technical Medicine and related fields, who have a need for more insight in visualization and analysis of (medical) data. Experience and affinity with programming (e.g. Python or Matlab) is preferred.

ORGANIZATION

This course is organized by the Experimental Centre of Technical Medicine (ECTM) in cooperation with the Signals and Systems group, both from the University of Twente.

For more information and/or registration for this course we refer to our website.

www.utwente.nl/tg/postgraduate



[A] EXAMPLE: STENTED ANEURYSM

WHO ARE WE?

Postgraduate Education by Technical Medicine (PAO-TG) provides high quality training on the cutting edge of technology and medicine in favor of technical physicians, medical specialists, biomedical technologists, physician assistants, paramedics and nurses. PAO-TG makes use of the state-of-the-art facilities of the Experimental Centre for Technical Medicine (ECTM). The ECTM facilities include an operating room, an intensive care unit, and a wide variety of simulators. For more information and registration, please refer to our website.

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