

# MAS IN FUNCTIONAL KINETIC SCIENCE



**The Master of Advanced Studies (MAS) in Functional Kinetic Science hosted by the Faculty of Medicine of the University of Basel is the leading postgraduate education and training program designed for professionals working in the field of functional kinetics. The postgraduate program bridges academic findings with current insights from the therapeutical practice in the field of diagnosis and treatment of movement disorders. The study program covers aspects of orthopaedics, biomechanics of the human locomotor system, sports medicine, scientific training and sports, neurosciences and general medicine. The program promotes an increasing understanding for the analysis of physiological conditions and pathologies in connection with the treatment of diseases of the motor system and sensomotoric performance increase.**

## Participants

The Master of Advanced Studies (MAS) in Functional Kinetic Science is targeted at medical professionals and experts in physiotherapy, ergotherapy, sports scientists, speech therapists who treat patients of all ages suffering from musculo-skeletal problems.

## Time Schedule and Venue

The course has a modular structure. On-site phases take place in medical institutions at Basel/Switzerland usually once a month from Friday to Sunday.

The in-service course lasts two years (four semesters).  
Next start 2018.

## Method

State-of-the-art lectures and updates on diagnostic and therapeutic areas and issues, followed by in-depth panel discussions. Participants will be involved in case studies, interactive learning, independent literature study and written homework. Problems are analysed and discussed together with faculty members.

## Course Language

English

## Certificate

Issued by Advanced Studies, University of Basel,  
90 ECTS credit points

## Course Fee

CHF 18'000 including examination fee

## Contact & Registration

Praxis für Physiotherapie & Ergotherapie  
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[www.advancedstudies.ch](http://www.advancedstudies.ch)

## Topics

- FBL Klein-Vogelbach functional kinetics
- Orthopedic examination and new orthopedic surgery technics
- Differential diagnosis with regard to direct access
- Biomechanics
- Fundamental physiological principles and sport-medical performance diagnosis and examinations
- Training theory and training therapy
- Learning theory, learning strategies, motor learning
- Physiology of connective tissue
- Analysis and treatment of the neuromyofascial system
- Neuroscience (neuroanatomy, neurophysiology)
- Theory and practice of sensomotoric coordination
- Nutrition physiology
- Scientific writing
- Basics of marketing, management, communication skills in interdisciplinary settings

## Admission

Professionals with first academic degree in the field of physiotherapy, ergotherapy, sports science, speech therapy can be admitted to the course. Exceptionally, qualified professionals without a first academic degree can be admitted primarily on the basis of an equivalent level of learning recognized.

## Program Directorate

*Niklaus F. Friederich, MD*

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