



11 - 13 November 2019  
Hall in Tirol, Austria

3-DAY CERTIFIED UNIVERSITY COURSE

## Registration Fee

– Course fee academic/public ..... Euro 1,150  
Early booking fee until 15 September 2019 Euro 850

– Course fee commercial ..... Euro 1,950  
Early booking fee until 15 September 2019 Euro 1,550

### – Discounts

#### **Group Registrations – Save 15%**

Register with three or more colleagues and save!

#### **Alumni – Save 20%**

UMIT Alumni or if you have previously participated in a Continuing Education Program Course on HTADS, you are eligible for a discount on this course.

Course fee includes course materials, course certificate, snacks and lunch, but not travelling and accommodation. Certificates will be provided to all participants. You can earn 5 ECTS credits if you successfully complete an assignment and actively participate during the attendance period of the course.

**Registration for this course can be made online.**  
**Payment details and cancellation policy are available on [www.umat.at/htads](http://www.umat.at/htads)**

## Contact & Course Location

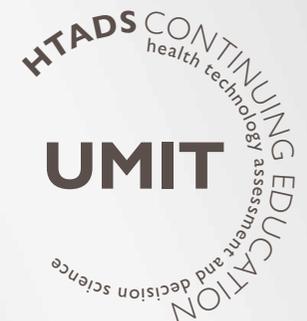
Continuing Education Program on  
HTA & Decision Sciences (HTADS)

**Institute of Public Health, Medical Decision  
Making and HTA**

**UMIT – University for Health Sciences,  
Medical Informatics and Technology**

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[www.umat.at/htads](http://www.umat.at/htads)

Introduction to Statistics -  
An Applied 3-Day  
Hands-On Workshop  
with R



# What is the Continuing Education Program on Health Technology Assessment & Decision Sciences (HTADS)?

Prof. Uwe Siebert, MD, MPH, MSc, ScD  
HTADS Program Director

## Health Technology Assessment (HTA)

has been defined by the International Network of Agencies for HTA (INAHTA) as “a multidisciplinary field of policy analysis studying the medical, economic, social, and ethical implications of development, diffusion and use of health technologies (e. g., drugs, devices, surgical procedures, prevention techniques)”. In conducting HTA, the discipline of decision sciences has become increasingly relevant.

## Decision Science (DS)

is the application of explicit and quantitative methods to analyze decisions under conditions of uncertainty (e. g., meta-analysis, decision-analytic modeling, cost-effectiveness analysis). In recent years, HTA and DS have become very important to health care policymakers. In order to keep pace with these developments, the UMIT – HTADS Program was designed to provide excellent quality education and comprehensive training in the key issues of HTA and DS for anyone involved in the health sector. The course faculty is drawn from leading international experts from universities, industry, HTA agencies and representatives from other relevant areas who are committed to provide independent teaching of state-of-the-art principles.

## Further HTADS Courses

### Modeling Approaches for HTA

A Practical Hands-on Workshop,  
3-Day Certified University Course, 5-7 February 2020

### Winter School in Clinical Epidemiology

5-Day Certified University Course, 17-21 February 2020

### Causal Inference for Assessing Effectiveness in Real World Data and Clinical Trials

A Practical Hands-on Workshop,  
5-Day Certified University Course, 16-20 March 2020



### Introduction to Health Technology Assessment

4-Day Certified University Course, 2020

### Scientific Reporting and Writing

3-Day Certified University Course, 7-9 November 2019

### Big Data Science

planned for 2020/21

## Course Faculty

### Michael Schomaker, Dr.rer.nat, Dipl.Stat.

Senior Scientist,  
Institute of Public Health, Medical Decision Making and Health  
Technology Assessment at UMIT – University for Health Sciences,  
Medical Informatics and Technology in Hall i.T., Austria,  
Honorary Lecturer, University of Cape Town, Centre for Infectious  
Disease Epidemiology and Research, South Africa

### Christopher Marquardt, MSc.

Teaching Assistant, Junior Scientist  
Institute of Public Health, Medical Decision Making and Health  
Technology Assessment at UMIT – University for Health Sciences,  
Medical Informatics and Technology in Hall i.T., Austria

## What is R?



The success of the open-source statistical software R has made a significant impact on the teaching and research of statistics in the last decade. R is a free software environment for statistical computing and graphics. As opposed to some other statistical software programs it "speaks statistics" and allows flexible approaches to data visualization and analyses. Those who are equipped with basic computing knowledge in R are rewarded with flexible approaches to data visualization and analyses, simple implementation of Monte-Carlo simulations and the possibility to easily automatize analysis procedures.

## Target Audience

The 3-day course is aimed at attendees with a basic knowledge of introductory statistics and prior exposure to statistical software. The course is suitable for PhD, medical and master students.

## Course Description

This interactive course gives an introduction on how to use the statistical software R. It is a "hands-on" workshop and contains both lectures and practical exercises. Participants learn about the structure of the language R, the creation of professional graphs and how to do basic introductory statistics. To overcome common challenges, a lot of practical advice are given.

### By the end of the course, participants:

- \_ understand how R thinks and operates
- \_ can read data into R and manipulate it
- \_ are able to produce a variety of graphs, both for standard descriptive analyses and more general questions
- \_ are able to produce graphs that are suitable for publication
- \_ are able to implement and work with basic statistical methods, such as (selected) hypothesis tests and linear regression
- \_ understand the basic idea of Monte-Carlo simulations

Course language is English. Both native and non-native English speakers are welcome.