

# MASTER OF SCIENCE IN MEDICINE EXPOSURE SCIENCE

Short Courses 2022



## MASTER OF SCIENCE IN MEDICINE (EXPOSURE SCIENCE) SHORT COURSES FOR 2022

Course Name	Certificate	Course Code	Cost	Course Date	Application Deadline
Exposure Assessment Methods II	Attendance	SPUH0154	R 6 000	4 - 8 Apr 2022	28 Mar 2022
Exposure Assessment Methods II	Competence	SPUH0155	R 6 500	4 - 8 Apr 2022	28 Mar 2022
Computational Exposure Assessment	Attendance	SPUH0152	R 6 000	4 - 8 Jul 2022	6 Jun 2022
Computational Exposure Assessment	Competence	SPUH0153	R 6 500	4 - 8 Jul 2022	6 Jun 2022

## EXPOSURE ASSESSMENT METHODS II

The short course aims to acquaint participants with data analytics and data analysis skills and also address data exploitation and processing. The course covers statistical methods for exposure data analysis, efficacy testing, and compliance testing.

### THE COURSE COVERS THE FOLLOWING TOPICS:

- Integration of high quality and low-quality data in measurements strategies
- Analysis of real-time data, time series and auto correlation
- Exposure variance (within-between worker)
- Introduction to Bayesian statistics and decision making support
- Compliance testing and tools

### CERTIFICATE TYPE: COMPETENCE OR ATTENDANCE

### APPLICATION DEADLINE: 28 MARCH 2022

**Competence:** External applicant R6 500  
Wits staff/student R3 250

**Attendance:** External applicant R6 000  
Wits staff/student R3 000



# COMPUTATIONAL EXPOSURE ASSESSMENT

The short course aims to introduce participants to basic principles of exposure modeling. Participants will be acquainted with health impact models, and a variety of workplace and consumer exposure models, prior to demonstration and hands-on practical sessions.

The strengths and limitations of different exposure models will be explored with practical exercises, as well as their application in evaluating different exposure scenarios.

## THE COURSE COVERS THE FOLLOWING TOPICS:

- Atmospheric dispersion models
- Indoor models (CONTAM)
- Workplace models (mathematical), e.g. IH-mod one/ two box models
- Workplace models (mechanistic-deterministic): Stoffenmanager and Bayesian upgrades (ART) Consumer and residential exposure models: Consexpo
- Practicum models and tools

## CERTIFICATE TYPE: COMPETENCE OR ATTENDANCE

### APPLICATION DEADLINE: 6 JUNE 2022

#### Competence:

External applicants R6 500  
Wits staff/student R3 250

#### Attendance:

External applicants R6 000  
Wits staff/student R3 000



## TO APPLY, CONTACT:

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