



## THE ORGANISING TEAM

- Dominique Lison, Full Professor at UCL and Academic Advisor
- Perrine Hoet, Professor at UCL
- Philippe Hantson, Full Professor at UCL and Associate Clinic Director at Saint-Luc
- Violaine Verougstraete, guest lecturer at UCL, Environment, Health and Safety, Director at Eurometaux
- Mark Maertens, consultant in preclinical development and toxicology
- Miranda Cornet, toxicologist at UCB and chair of BelTox
- Erik Van Miert, Toxicological and Environmental Risk Assessment Manager at Solvay

## THE UNIVERSITY CERTIFICATE.

Participants who attend the programme and pass the evaluation examination are awarded a "University Certificate in Toxicology" and 13 credits. In addition to the personal development value of the certificate for the attendees' training plan, the credits earned can be used to pursue other academic programmes in Europe, subject to approval by the committees responsible for the programmes for which the participant wishes to register at a later date.

## PRACTICAL INFORMATION

### LOCATION AND SCHEDULE

Courses are organised into one-week modules between January and December 2019. Classes are held in Brussels/Woluwe.

A detailed schedule of the first year of the course is available on the training programme's website.

### REGISTRATION FEES

Registration costs are 2,500 euros for all three modules or 1,000 euros per module.

These fees include tuition, course materials, practical exercises student card, and access to the site and facilities.

### CONDITIONS FOR ADMISSION

- Applicants should have a master's degree in a scientific or biomedical field.
- If this requirement is not met, admission via accreditation of prior learning and work experience.

### REGISTRATION

Applicants must fill in the online registration form which can be found on the website of the course, in which they describe their:

- educational background,
- experience,
- motivations for taking the course.

Applications will be reviewed by the certificate's academic advisor in their order of arrival.

The number of participants will be limited to maintain the quality of training.

### FIND OUT MORE

- 🌐 [www.uclouvain.be/formation-continue-toxicology](http://www.uclouvain.be/formation-continue-toxicology)
- ☎ +32 2 764 53 31
- ✉ [certificat-toxicology@uclouvain.be](mailto:certificat-toxicology@uclouvain.be)

Cover photo: © Shutterstock - Isrock

### REASONS TO COME TO UCL

- to further your career
- to update your knowledge
- to acquire skills in cutting-edge fields

### UCL'S 14 FACULTIES OFFER OVER...

- 100 university certificates
- 20 master's degrees and advanced master's degrees
- 50 qualification-granting programmes

And a range of new programmes each year.

### FOR ADULTS ALREADY ACTIVE IN THE WORKING WORLD



SPONSORED BY UCL'S  
UNIVERSITY INSTITUTE FOR  
CONTINUING EDUCATION  
(IUFC).

Learn more on:  
[www.uclouvain.be/formation-continue-readaptation](http://www.uclouvain.be/formation-continue-readaptation)

UNIVERSITY CERTIFICATE

FORMATION  
CONTINUE



# Toxicology

2019-• Year 1

 [www.uclouvain.be/formation-continue-toxicology](http://www.uclouvain.be/formation-continue-toxicology)

In collaboration with the Belgian  
Society of Toxicology and Ecotoxicology



UNIVERSITY CERTIFICATE (13 ECTS CREDITS)

# Toxicology

## TARGET AUDIENCE

The programme is intended for:

- Medical Doctors
- Pharmacists
- Veterinarians
- Biologists
- Chemists
- Bioengineers
- Individuals active in product safety in : Industry, Regulatory agencies, International organisations, Poison centres, Consulting, NGO's
- Individuals working in the food industry

A TRAINING PROGRAMME ALLOWING YOU TO HONE YOUR KNOWLEDGE AND SKILLS AND EARN RECOGNITION FOR YOUR PROFESSIONAL QUALIFICATIONS IN TOXICOLOGY.



## THE CURRICULUM

The curriculum is organised into modules that combine conceptual basics with evaluation and applicative exercises. Three modules will be organised in 2019, with other modules being offered in the future.

### Module 1 – Introduction to Toxicology

Exposure, **dosage**, **NOAEL**, **BMD**, mixtures, **toxicokinetics**, **in vitro & in vivo experimental tools**, intoxication, ecotoxicology, main principles, chemicals, human risk

### Module 2 – Clinical and Occupational Toxicology

Cardiotoxicity, hepatotoxicity, neurotoxicity, inhalation, metabolic **disorders**, metals, **caustics**, drugs, medicine, acute, chronic, **physiopathogenic**, antidotes.

### Module 2 – Regulatory Toxicology

Identifying **danger**, classification and label, exposure, **risk** evaluation and management, environmental pollutants, allometric scaling, biomonitoring, **Regulatory Toxicology**.

## ADVANTAGES OF THE PROGRAMME

- An English-language programme in Brussels;
- A programme preparing students for professional certification via the European Register of Toxicologists (ERT EUROTOX);
- Active learning through theory, exercises, and case studies;
- All trainers have substantial experience in the application of toxicological sciences in practice.

## OBJECTIVES

The overall aim of the training programme is to acquire theoretical and applied knowledge on the effects of chemical substances on human health.

In 2019, the programme will include three modules, the specific learning outcomes of which are:

### 1. Principles of Toxicology

- Understand the basic principles of toxicology
- Get an overview of all aspects of experimental and clinical toxicology
- Learn to use data sources to retrieve toxicology data
- Get introduced to the analysis of toxicology results

### 2. Clinical Toxicology

- Understand signs and symptoms of important toxic syndromes
- Understand the role of poison information services and systems for the surveillance of poisonings
- Be able to use clinical and laboratory findings in the treatment of acute toxic exposures
- Be able to interpret the results of occupational exposure assessments within the context of safety assessments
- Be able to provide toxicological input into occupational safety assessments

### 3. Regulatory Toxicology

- Understand the application of risk assessment in different regulatory systems
- Be able to perform a basic risk assessment using toxicological and exposure data
- Be able to interpret data submitted for the purpose of registration, classification and labelling of different types of chemical substances and how to use those for risk management
- Be aware of the quality requirements for the conduct of toxicology studies required for regulatory procedures

## PEDAGOGY & EVALUATION

The classroom learning curriculum includes:

- theory;
- demonstrations, practical exercises, and out-of-class work to delve deeper into theoretical knowledge learned and confront participants with the difficulties tied to data;

The final exam consists of a written essay applying and integrating the subject matter of the certificate to a specific topic chosen by the certificate committee, which corresponds to the student's professional setting.



See the detailed programme on our website:  
[www.uclouvain.be/formation-continue-toxicology](http://www.uclouvain.be/formation-continue-toxicology)