



# Università degli Studi di Roma "Tor Vergata"

**INDUSTRIAL ENGINEERING DEPARTMENT  
AND  
SCHOOL OF MEDICINE AND SURGERY**

**1ST-LEVEL MASTER COURSE  
IN  
"PROTECTION AGAINST CBRNe EVENTS"  
(Master Course for the First Responders) 120 ECTS**

**Academic Year 2014/2015- Academic Year 2015/2016**

**Coordinator: Prof. Pasquale Gaudio**

The 2014/2015 1st-Level Master Course in "Protection against CBRNe Events" is hereby officially announced. The Master Course is organised by the Industrial Engineering Department and the School of Medicine and Surgery of University of Rome Tor Vergata.

## **AIMS**

This Master Course – which will be held in English by international subject-matter experts and lecturers – aims at standardising First Responder education and training – at least in Europe – by providing state-of-the-art training in the following areas:

- CBRNe (Chemical, Biological, Radiological, Nuclear, explosive-related) Risk;
- Analysis of CBRNe Agents;
- The Effects of CBRNe Agents
- Software Applications
- General Operating Principles and Practical Use of CBRNe Detectors
- Protection and Decontamination of Personnel/Equipment and Infrastructure after CBRNe Events: Practical Exercises and Case Studies;
- The International Response System to CBRNe Events: First Responders' Action
- Medical Emergency Response
- Investigating CBRNe Events and Communication about the Events, complemented with Practical Exercises carried out at International CBRNe Training Facilities.

Hence, this Master Course aims at providing Participants with the technical, theoretical, and operational tools required to take action in the new, 21st-Century CBRNe Risk scenario.

The Master Course takes place under the formal agreements and with the cooperation of:

- The Prime Minister's Office;
- The Italian Ministry of Defence;
- The Italian Ministry of the Interior;
- The Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA)

- The National Institute for Geophysics and Vulcanology;
- The National Health Institute (ISS);
- Crati scrl;
- Scire scrl;
- Maris scrl;

and with the support of outstanding companies operating in the safety and security fields (for more information, please refer to the relevant page of this web site).

## **STRUCTURE**

The Master Course consists of Modules and Internships, for a total duration of two academic years. However, depending on each individual's plan, it could last up to three years.

The overall educational and training activities will account for 120 ECTS points, that is, a total of 3,000 hours that each student shall devote to classes (580 hours) – which are the same for all participants – and practical training (180 hours) at International specialised facilities.

Moreover, each student shall devote at least:

- 50 hours to operational laboratory activities, supported by teachers of University of Rome Tor Vergata and external experts and tutors;
- 50 hours workshops, held by University of Rome Tor Vergata and external subject-matter experts.

Furthermore, each student shall carry out an internship at one of the supporting organisations and companies, under the supervision of a personal tutor. Besides, all students shall write and defend a Master Thesis.

## **ADMISSION CRITERIA**

This Master Course targets people with at least a 3-year Bachelor's Degree in technical-scientific disciplines, or any title considered as equivalent for admission purposes by the Board of Industrial Engineering Department. It also targets people with a Bachelor's Degree in other disciplines, to be authorised by the Master's Steering Committee.

The Master's Steering Committee might also recognise other vocational certified training and practical activities carried out by applicants after obtaining the Degree allowing them to participate in the Master Course (including individual courses attended in the framework of wider educational programmes), if they are consistent with the subject matters of the Master Course. Such activities might be attributed a number of ECTS points – up to a maximum of- 40 – which the relevant student could use to obtain the final Degree of the Master course.

The CBRNe Master Course shall have a maximum of 40 and a minimum of 16 participants.

Applicants that wish to register for this Master Course cannot be simultaneously attending any other university course.

## **APPLICATIONS**

Candidates shall be admitted based on the assessment of their CVs by the Master's Steering Committee.

A maximum of 40 and a minimum of 16 people can participate in each Master Course.

Applicants are requested to pre-register online by February 16<sup>th</sup>, 2015, by filling in the attached application file and sending it to the mail address: [info@mastercbrn.com](mailto:info@mastercbrn.com) together with the following records:

- CV;
- Bachelor's Degree self certification, showing the marks obtained for each exam and the final grade;

**After receiving the application file, the secretariat of the Master course will send to each candidate the detailed information for the payment of the € 30.00 pre-registration fee by bank transfer to the administration of the University of Rome Tor Vergata.**

**The list of admitted applicants** shall be published on February 23rd 2015, on the <http://www.uniroma2.it> and [www.mastercbrn.com](http://www.mastercbrn.com) web sites together with the instructions for the tuition fee payment.

## **FEES AND CHARGES**

The overall tuition fee and charges amount to € 15,146.00, which shall be paid as follows:

- € 3,896.00 upon registration, by March 13<sup>th</sup> 2015 (this amount also includes € 16.00 tax and € 130.00 charge).
- € 3,750.00 by June 23<sup>rd</sup>, 2015
- € 3,750.00 by March 13<sup>th</sup>, 2016
- € 3,750.00 by June 22<sup>nd</sup>, 2016

Should a student's personal plan last longer than two academic years, the student under consideration shall pay an additional € 2,016.00 fee (including all charges).

Students can attend single modules of the course. The tuition fees for the application to the single module are the following:

<b>Module</b>	<b>Tuition Fee</b>
Introduction to Cbrne Risks-The Point of view of a First Responder	1.000 euro
The analysis of the CBRNe agents	1.000 euro
The effects of the CBRNe agents	1.000 euro
DSS Software	1.000 euro
Equipment and instrumentation	1.000 euro
Protection and decontamination in case of CBRNe event	1.000 euro
International response in case of CBRNe event	1.000 euro
First Medical aid	1.000 euro
Investigation and communication in case of CBRNe event	1.000 euro
Stage with practical training in Chernobyl	2.000 euro
Stage with practical training in Seiesdorf	2.000 euro
Stage with practical training in VOP	2.000 euro
Stage with practical training in Rieti	1.400 euro

**For the application to a single module the deadline is 13/03/2015**

## **SPECIAL TERMS**

Students with at least 66% certified and documented disability shall only pay € 896, that is, 5% of the overall fees and charges.

People who meet the aforesaid requirements, shall include the relevant information in their Applications.

After being communicated their admission, they shall then hand in the records attesting their disability to the Master Course Secretariat.

The Faculty Board may – in compliance with the provisions of the Internal Rules – grant special financial terms to individual students.

## **START**

Classes of the Master Course in Protection against CBRNe Events shall start on **March 16<sup>th</sup> 2015**.

## **ATTENDANCE AND FINAL DEGREE**

Students shall attend at least 80% of all classes, lectures and activities.

The final Degree shall only be obtained by students who have attended at least 80% of all classes, lectures and activities and passed the Module-related and final exams. At the end of the Master Course, all students who have attended at least 80% of all classes, lectures and activities, have passed the Module-related exams as well as the final exam (with Thesis and dissertation), and have duly paid all fees and charges, shall obtain the educational qualification “**1<sup>st</sup> level University Master Course in Protection against CBRNe Events (120 ECTS)**” (*Master Universitario di I livello in Protezione da Eventi CBRNe under the Italian Law*)”.

All students shall defence the Thesis within the last session of the second Academic Year following the latest registration year. After that, it will not be possible to obtain the Degree.

## **INFORMATION**

For information, please contact:

- **Teaching Activity Coordinator: Mr. Andrea Malizia ([malizia@ing.uniroma2.it](mailto:malizia@ing.uniroma2.it)).**
- **Master Course Secretariat: Ms. Colomba Russo ([info@masterCBRN.it](mailto:info@masterCBRN.it)). Telephone: +39 0672597201 (Monday through Friday from 9.00 a.m. to 1:00 p.m.)**

Rome,

The Director General  
Mr. Ernesto Nicolai

The Rector  
Prof. Giuseppe Novelli