



Università degli Studi di Roma "Tor Vergata"

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

**2nd-LEVEL MASTER COURSE
IN
"PROTECTION AGAINST CBRNe EVENTS"
(Executive Course for Advisors of Decision Makers) 60 ECTS**

Academic Year 2015/2016

Coordinator: Prof. Pasquale Gaudio

The 2015/2016 2nd-Level Master Course in "Protection against CBRNe Events" (Executive Course) 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 the education and training of Decision Maker Advisors – 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
- Contaminant spreading and dispersion patterns
- Numerical analyses in planning CBRNe Emergency actions
- CBRNe detection methods, techniques, and equipment
- CBRNe Protection
- CBRNe Decontamination of personnel
- CBRNe Decontamination of environment, equipment, and infrastructure
- The International Response System to CBRNe Events
- Medical emergency action and emergency psychology for CBRNe events
- Critical infrastructure and CBRNe risk
- Preventing, countering, repressing, and investigating cases of involuntary and/or voluntary release of CBRNe agents
- CBRNe event-related communication and information.

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;
- SOGIN

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).

SRUCTURE

This Master Course has a total duration of one academic year, and consists of different Modules.

The overall educational and training activities will account for 60 ECTS points, that is, a total of 1,500 hours, 390 of which shall consist of classes and lectures.

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 a 200 hours 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.

| Module | ECTS |
|---------------------------------------------------------|-------------|
| The CBRNe agents and their risks | 4 |
| The effects of the CBRNe agents | 5 |
| Equipment and instrumentation | 4 |
| DSS software | 5 |
| Decontamination and remediation | 4 |
| International response in case of CBRNe events | 5 |
| Investigation and communication in case of CBRNe events | 4 |
| Training at COE NATO Vyskov | 5 |
| Course at NATO School Oberammergau | 5 |
| Internship | 13 |
| Final Thesis | 16 |
| Total | 60 |

ADMISSION CRITERIA

This Master Course targets people with a MSc Degree or a Bachelor's Degree in technical-scientific disciplines + 2 years 120 ECTS relevant Master course, or any title considered as equivalent for admission purposes by the Board of Industrial Engineering Department. It also targets people with a 3+2 University education 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(s) 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 20 – 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.

An excellent level of English is requested.

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 March 4th 2016, by filling in the attached application file and sending it to the mail address: 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;

The list of admitted applicants shall be published on March 14th 2016, on the <http://www.uniroma2.it> and 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 € 7,146.00, which shall be paid as follows:

- € 3,646.00 upon registration, by March 25th 2016 (this amount also includes € 16.00 tax and € 130.00 charge).
- € 3,500.00 by June 27th, 2016

Students admitted have to register by 25/03/2016.

Should a student's personal plan last longer than one academic year, the student under consideration shall pay an additional € 1.016,00 fee (including all charges) for each additional year after the first one.

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

| Module | Tuition Fee |
|---------------------------------------------------------|--------------------|
| The CBRNe agents and their risks | 1.000 euro |
| The effects of the CBRNe agents | 1.000 euro |
| Equipment and instrumentation | 1.000 euro |
| DSS software | 1.000 euro |
| Decontamination and remediation | 1.000 euro |
| International response in case of CBRNe events | 1.000 euro |
| Investigation and communication in case of CBRNe events | 1.000 euro |
| Training at COE NATO Vyskov | 1.400 euro |
| Course at NATO School Oberammergau | 1.600 euro |

For the application to a single module the deadline is 25/03/2016.

SPECIAL TERMS

Students with at least 66% certified and documented disability shall only pay € 466, 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 21st 2016**.

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 “**2nd level University Master Course in Protection against CBRNe Events (60 ECTS)**” (*Master Universitario di II livello in Protezione da Eventi CBRNe under the Italian Law*)”.

All students shall defend the Thesis within the last session of the first 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).**
- **Master Course Secretariat: Ms. Colomba Russo, Ms. Valentina Gabbarini (info@masterCBRN.it; info@mastermastercbrn.com). Telephone: +39 0672597201 (Monday through Friday from 9.00 a.m. to 1:00 p.m.)**

Rome,

The Director General
Mr. Giuseppe Colpani

The Rector
Prof. Giuseppe Novelli