

# Chemical and chemical-toxicological forensic analysis: a professional Master course

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Since A.Y. 2012-2013, the professional Master course in *Chemical and Chemical-Toxicological Forensic Analysis* has been active at the University of Bologna (director: Prof. S. Girotti) under the supervision of a Scientific Council and a Proponent Committee.

The Master is open to graduates in chemical-pharmaceutical sciences to become experts in forensic chemistry and analysis, to support investigations and judicial rulings or to assist suitors in civil litigations. This highly-marketable professional profile is not yet fully acknowledged in Italy but is needed in many legal cases. The professional trained by the Master will interface with judiciary offices, public security forces, advisors and companies. In these frameworks, scientifically sound data must be produced, described to non-experts and turned into legally valid documents. Master students receive training in the areas of forensic and analytical chemistry and chemical toxicology. The analysis of xenobiotics and contaminants for environmental protection, food and workplace safety and pharmaceutical purposes are also addressed. The areas of legal intervention are mainly those of security, criminal law, insurance and patent litigation. A large part of teaching activity is directed to laboratory and field practice. At the end of the Master, the trained students will obtain a solid professional experience thanks to advanced practical internship programs also abroad.

Until now, more than 100 students completed the Master. Moreover, some teaching courses include didactic materials developed within the framework of the TOX-OER Erasmus<sup>+</sup> project, a massive open online course (MOOC) for the learning of toxicology, developed in collaboration with international experts ([www.tox-oer.com](http://www.tox-oer.com)).



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