

Educational Programme	Forensic Chemistry
Degree Awarded	Master in Chemistry
Standard Length of Studies (Number of ECTS Credits)	2 years – 4 semesters – 120 ECTS
Type of Study	Full-time
Higher Education Institution	Babeş-Bolyai University
Faculty / Department	Faculty of Chemistry and Chemical Engineering
Contact Person	Assoc. Prof. Claudia Cimpoiu PhD
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Profile of the Degree Programme	Forensic Chemistry degree program
Target Group / Addressees	Graduates in Chemistry, Chemical Engineering, Environmental Science, Physics, Biology, Law, Medicine
Entrance Conditions	Entrance is done based on the weighted average calculated as 75 % of the overall undergraduate average and 25% of the average graduation exam. <i>Additional Criterion:</i> Candidates have to present a Linguistic Proficiency Certificate for a foreign.
Further Education Possibilities	The master's programme aims at providing students with the appropriate tools for further doctoral studies and to become professional experts in the field.
Description of Study	The master's program in Forensic Chemistry allows students to acquire fundamental knowledge and expertise in a multidisciplinary area, including chemistry, biochemistry, environmental science. <i>Core courses:</i> Advance analytical chemistry, Organic compounds from biological systems, Advance biochemistry, Sampling and sample preparation, Inorganic and organometallic chemistry to biological implications, Molecular and cellular medicine using imaging by AFM and STM, Hyphenated chromatographic techniques, Legal and illegal drugs, Research methodology, Electroanalytical methods used in the clinical and forensic laboratories, Electrochemical sensors and biosensors, Chemometry, Genetic fingerprinting
Purposes of the Programme	The program provides theoretical and experimental training in the area of the forensic chemistry, aiming to prepare specialists in a multidisciplinary domain involving analytical chemistry, biochemistry, chemical imaging, electrochemistry, equipment used in forensic and anti-doping laboratories.
Specialization / Area of Expertise	The curriculum of this program provides basic training in the area of forensic chemistry, both theoretical and especially practical, namely, in the field of forensic chemistry, modern analytical methods, biochemistry, basic information in the forensic legislation and accreditation

	requirements of forensic and anti-doping laboratories, advanced techniques and instrumentation used in automated analysis.
Extra Peculiarities	-
Practical Training	Throughout the course students are required to undertake the research work at Babeş-Bolyai University, laboratories of chemical analysis, forensic and anti-doping laboratories in the country or abroad.
Final Examinations	Research master thesis
Gained Abilities and Skills	<ul style="list-style-type: none"> - Acquiring main analytical methods used in forensic and anti-doping control - Knowledge of important issues of anatomical, clinical and pharmaceutical nature - Deep knowledge of main methods and techniques used in forensic analysis - Becoming familiar with some aspects regarding modern analysis - Specific concepts ensuring good collaboration between analytical chemists and other specialists involved in the forensic and doping control - Skills of theoretical modeling and complex analysis systems, interpretation of their properties, obtained by different analysis
Job Placement, Potential Field of Professional Activity	<p>The course is designed to equip students with the skills required for a career in research and in institutions with concerns about forensic and antidoping.</p> <p>Job Placement</p> <p>Laboratories for forensic and doping analysis</p> <p>Research laboratories in the forensic analysis</p> <p>Anti-doping agencies</p> <p>Public health institutes</p> <p>Companies for production or distribution of specialized equipment and devices.</p> <p>On condition of promoting The Program of Psycho-Pedagogical Studies 2nd Level, the holder of this certificate can work as a teacher in the educational system.</p>

Date:24.10.2010

Signature: Assoc. Prof. Claudia Cimpoi PhD