

Course Outline



BSc (Hons) in Forensic Sciences and Criminal Investigation

YEAR 1: Modules	ECTS	Compulsory / Elective	Teaching	Assessment
History of Forensic Sciences & International Police Organizations	4	C	Online Classroom	Final Exam (75%), Research Assignment (25%)
Techniques of Investigation and Intelligence	10	C	Online & In-person Classroom, Laboratory	Final Exam (75%), Research Assignment (25%)
Research Methods and Professional Ethics	4	C	Online Classroom	Research Assignment (100%)
Crime Scene Investigation and Documentation	12	C	Online & In-person Classroom, Laboratory	Final Exam (75%), Laboratory Report (25%)
Forensic Chemistry	12	C	Online & In-person Classroom, Laboratory	Final Exam (50%), Research Assignment (25%), Lab Report (25%)
Forensic Light Sources	6	E	Online & In-person Classroom, Laboratory	Final Exam (75%), Laboratory Report (25%)
Forensic Psychology	6	E	Online Classroom	Final Exam (100%)
Forensic Biology	12	C	Online & In-person Classroom, Laboratory	Final Exam (75%), Laboratory Report (25%)

YEAR 2: Modules	ECTS	Compulsory / Elective	Teaching	Assessment
Evidence Collection and Trace Analysis	12	C	Online & In-person Classroom, Laboratory	Final Exam (75%), Laboratory Report (25%)
European and International Criminal Law	10	C	Online Classroom	Final Exam (75%), Research Assignment (25%)
Fingerprint Development and Analysis	8	C	Online & In-person Classroom, Laboratory	Final Exam (75%), Laboratory Report (25%)
Forensic Document Examination	10	C	Online & In-person Classroom, Laboratory	Final Exam (75%), Laboratory Report (25%)
Computer Forensics	10	C	Online & In-person Classroom, Laboratory	Final Exam (75%), Laboratory Report (25%)
Mobile Forensics and Cell Site Analysis	10	C	Online & In-person Classroom, Laboratory	Final Exam (75%), Laboratory Report (25%)

Course Outline



BSc (Hons) in Forensic Sciences and Criminal Investigation

YEAR 3: Modules	ECTS	Compulsory / Elective	Teaching	Assessment
Web and Open Source Intelligence	8	C	Online Classroom	Final Exam (75%), Research Assignment (25%)
From Crime Scene to Court - Expert Witness	8	C	Online Classroom	Final Exam (75%), Research Assignment (25%)
Product Counterfeiting	6	E	Online Classroom	Final Exam (70%), Research Assignment (30%)
Fire and Explosion Investigation	10	C	Online & In-person Classroom, Laboratory	Final Exam (75%), Laboratory Report (25%)
Road Accident Investigation	8	C	Online Classroom	Final Exam (75%), Research Assignment (25%)
Ballistics and Firearms	8	C	Online & In-person Classroom, Laboratory	Final Exam (75%), Laboratory Report (25%)
Forensic Criminology	6	E	Online Classroom	Final Exam (75%), Research Assignment (25%)
Final Dissertation	6	C	Online Classroom	Final Thesis on Research Area; 15-20 pages (100%)
Practical Work Experience (Internship)	6	C	On-the-job Learning	On-the-job Performance and Feedback from supervisor (100%)

Course Summary	Entry Requirements		
European Qualification Framework	EQF Level 6	Minimum Qualification	EQF Level 4 (eg: A-levels, Abitur, Maturità, Lyceum or equivalent)
European Credit Transfer System (ECTS Points)	180 ECTS	Language Requirement	English B1 CEFR or equivalent
Course Duration	3 Academic Years	Academic Background	Basic Math and Science education useful and preferable
Course Commencement	October every year	Laboratory Sessions	Availability to travel to Malta at least twice a year

WEB
www.eufor.eu

ADDRESS
Malta Life Sciences Park

MFHEA LICENCE
Higher Education Institution 2018-014

EMAIL
info@eufor.eu

1. **Official Qualification - Educational Programme/s:**

BSc (Hons) in Forensic Sciences and Criminal Investigation. Full-time

2. **Higher Education Provider:** European Forensic Institute

3. **Accredited status:** Accredited by the Malta Further and Higher Education Authority (MFHEA) – Higher Education Institution, License n. 2018-014

4. **Level of qualification:** Level 6 MQF and Level 6 EQF

5. **Type of Course/s**

Qualifications:

- a. BSc (Hons) in Forensic Sciences and Criminal Investigation
- b. Higher Diploma in Forensic Sciences and Criminal Investigation
- c. Diploma in Forensic Sciences and Criminal Investigation
- d. Certificate in Forensic Sciences and Criminal Investigation

Awards: in individual modules (more information available in Course Outline)

6. **Delivery Method:** Blended. Online sessions, in-person laboratory sessions (if applicable), in-person sessions and assessments at the Malta Life Sciences Park

7. **Hours of total learning:** 4.500 hours (contact hours, self-study hours, supervised placement, practice hours and assessment hours). Please refer to Course Outline for details

8. **Total credits:** 180 ECTS

9. **Attendance:** Full-time

10. **Programme Duration:** 3 Academic Years Full-Time

11. **Target audience & group**

Students: 18-30

Professionals: 21-65+

12. **Language:** English or Italian [programme will run if we meet the minimum student number]

13. **Entry requirements:** Maltese Matriculation Certification or international equivalent at EQF Level 4 [including Mathematics or science]; Minimum Language qualification threshold of B1 in accordance to the Central European Framework for Languages (CEFR) or its equivalent in programme language of delivery. Two pure science subjects in Maltese or international equivalent high school (MQF/EQF Level 3).

Learning Outcomes

14. The learner will be able to:

- a. use technical language correctly, to present complex concepts and information in a clear and concise manner, both orally and in writing, and the ability to interact and communicate effectively within a wide range of professional environments
- b. present and explain complex concepts and information in a clear and concise manner, both orally and in writing, to non-professionals
- c. use IT systems effectively to access, analyse and present complex data, research findings and the evidence base for forensic and investigative science
- d. work effectively and independently both within and/or lead an expert team
- e. use written and oral legal language for the courts

The learner will acquire, in the following categories:

- Scientific Knowledge: detailed knowledge and understanding of selected aspects of chemistry, biology, physics, mathematics and statistics that are central to Forensic and Investigative science
- Legal Knowledge: a familiarity with the justice system (locally, EU Wide and internationally) and an appreciation of the importance of the continuity of evidence from crime scene to court
- Interpretation, Evaluation and Presentation of Evidence: - knowledge of how to record, manage, interpret, critically evaluate and present complex evidence and experimental results; - sound knowledge of prevailing legal standards and legislation applicable to the recovery, storage, retention, analysis and disposal of evidence
- Crime Scene Investigation: - detailed knowledge of the principles and effective application of the relevant techniques needed for the formulation of crime scene examination strategies; - clear understanding of the responsibilities, roles and liabilities of the individuals and agencies involved in a crime scene, and of information exchange between them
- Use of modern technology: - detailed and up to date knowledge of modern technology used for investigations in fields such as engineering and anti-counterfeiting

- Research Skills: - hands-on experience on leading and conducting a research piece in relevant fields; - investigative and analytical skills, including the ability to formulate problems clearly, identify key issues, carry out a substantial independent investigation using multiple information sources and apply critical judgement to construct logical arguments
- Laboratory Analysis: detailed knowledge of the theory, application and limitations of the principal laboratory methods used routinely in forensic and other investigative sciences, and competence in the selection and use of such methods
- Autonomous learning and development: students will be intellectually stimulated and encouraged to critically challenge and question all areas of Forensics and Investigative sciences with an open mind
- Responsible Ethical Standards: students will be taught and encouraged to demonstrate the highest standards of professional and ethical conduct and to take into consideration the public interest

15. **Teaching, learning and assessment procedures**: Online sessions delivered through our Institutional platform (MS Teams), access to study material on MS Teams and our Digital Library for independent study, in-presence sessions and laboratories (if applicable) under the guidelines provided by lecturers and their assistants. Assessments are in-presence or online depending on the type of assessment.

16. **Type of Assessment**: Written examination, laboratory report and research assignment (Teaching and learning methodologies available in the Course outlines)

17. **Registration Method**: Online on EFI Admission Portal

18. **Next Intake**: October every Academic Year

19. **Pass Rate**: > 40% (EFI grading system)

20. Grading system

Learning Outcome Score	Percentage Equivalent	Description	Honours Degree Classification	Other Award Classification	Qualitative Description
10	100	Pass	First	High Distinction	Student has achieved the learning outcome with no issues noted
7 - 9	70 - 99	Pass	First	Distinction	Student has achieved the learning outcome with minimal and/or negligible issues
6	60 - 69	Pass	Upper Second	Ment	Student has achieved the learning outcome with minor but non-negligible issues
5	50 - 59	Pass	Lower Second	Pass	Student has achieved the learning outcome with non-negligible issues
4	40 - 49	Pass	Third	Pass	Student has achieved the learning outcome with significant non-negligible issues
1 - 3	1 - 39	Fail	Fail	Fail	Student has NOT achieved the learning outcome with significant issues noted
0	0	Fail	Fail	Fail	Student did not answer question

21. **Registration:** admission process, a step-by-step-guide and other information are available on our website - <https://www.eufor.eu/education/admission/>
22. Identity Malta's VISA requirement for third country nationals:
<https://www.identitymalta.com/unit/central-visa-unit/>
23. Contact Details: available on our website (<https://www.eufor.eu/contact-us/>)
24. Address: Malta Life Sciences Park, Sir Temi Zammit Buildings – SGN 3000, San Gwann

History of Forensic Sciences and International Police Organizations

Competences – at the end of the module/unit the learner will have acquired the responsibility and autonomy to:

- a) Define the forensic science and list its main disciplines.
- b) Identify the origins of the forensic sciences and their evolution up to these days.

Knowledge – at the end of the module/unit the learner will have been exposed to the following:

- a) Lessons in contact with the lecturer to know the scientists involved in the field of forensic science, their contribution to the evolution of forensic science and the origin and purpose of international police organizations committed to the fight against national and international crime.
- b) Student's personal study of books and documents suggested by the lecturer
- c) Personal research activity assigned and discussed with the lecturer, also analyzing some of the most famous criminal cases in history.

Skills – at the end of the module/unit the learner will have acquired the following skills:

Applying knowledge and understanding. The learner will be able to:

- a) Understand the evolution of Criminalistics in the past 40 years.
- b) Identify the purpose of the different components of forensic laboratory.
- c) Determine when the evidence is admissible.
- d) Recognize the contribution of the pioneers of Criminalistics.

Judgment Skills and Critical Abilities

The learner will be able to:

- a) Recognize the several national and international organizations working in the field of forensic sciences.
- b) Discern the structural conformation of Interpol.

Module-Specific Communication Skills

The learner will be able to:

- a) Collaborate with the appropriate Police units, nationally and internationally, depending on their specific work field.

Module-Specific Learner Skills

The learner will be able to:

- a) Organize the personal programme of education and cultural and professional training with a multidisciplinary approach.
- b) Acquire knowledge useful to understand the scientific evolution of the different fields of the forensic sciences, the elements they share and the prospect of new developments and the extension of the forensic sciences to new scientific fields.

Module-Specific Digital Skills and Competences

The learner will be able to:

- a) Conduct web research through historical archives and other sources of information available through the internet.

Techniques of Investigation and Intelligence

Competences – at the end of the module/unit the learner will have acquired the responsibility and autonomy to:

- a) Develop a simple model of forensic intelligence.
- b) Structurally develop an investigation in the forensic field.
- c) Choose an investigative team suitable for the activity.

Knowledge – at the end of the module/unit the learner will have been exposed to the following:

- a) Lessons in contact with the lecturer to learn the fundamentals of investigative criminology, investigative techniques, methods of establishment of an investigative team, management of an investigative activity and the techniques and models of forensic intelligence.
- b) Student's personal study of books and documents suggested by the lecturer.
- c) Personal research activity assigned and discussed with the lecturer.

Skills – at the end of the module/unit the learner will have acquired the following skills:

Applying knowledge and understanding

The learner will be able to:

- a) Understand the requirements of an investigative activity.
- b) Identify the appropriate investigative team for the investigative activity.
- c) Create a management model of the investigation.
- d) Understand and use a model of forensic intelligence.

Judgment Skills and Critical Abilities

The learner will be able to:

- a) Recognize the investigative requirement, the correct investigative model and the expert team.
- b) Evaluate the quality of the activities carried out by an investigative team.
- c) Consider which corrections to apply to improve the investigative activity.
- d) Efficiently manage a system of forensic intelligence.

Module-Specific Communication Skills

The learner will be able to:

- a) Work with appropriate Police units, nationally and internationally, depending on their specific operational field.

Module-Specific Learner Skills

The learner will be able to:

- a) Begin to organize and manage a system of forensic intelligence.
- b) Manage a simple and mid-level investigation with a team including some members.
- c) Use techniques and technologies useful in the investigative field.
- d) Write a descriptive report of the activity carried out.
- e) Conduct a criminological analysis of the criminal event.

Module-Specific Digital Skills and Competences

The learner will be able to:

- a) Conduct web research on specific topics through the internet.
- b) Use software useful to create a forensic intelligence model.
- c) Prepare reports using editing software.

Crime Scene Investigation and Documentation

Competences – at the end of the module/unit the learner will have acquired the responsibility and autonomy to:

- a) Manage the activities on the crime scene and on the collected evidence until delivered to the custody place. E.g., Setting the outer and inner cordon and protecting the scene including creating risk assessments where appropriate.
- b) Correctly choose the procedures of collection of what is found on the crime scene making appropriate choices in sequentially dealing with different forms of evidence.

Knowledge – at the end of the module/unit the learner will have been exposed to the following:

- a) Lessons in contact with the lecturer to learn the instrumental techniques of evidence collection, used for the compositional, structural and morphological characterization of samples/evidence available in small amounts and/or concentration in complex and/or latent matrixes.
- b) Student's personal study of books and documents suggested by the lecturer.
- c) Personal research activities assigned and discussed with the lecturer.
- d) Discussion and analysis of real cases with the lecturer during the lessons.
- e) Practical laboratory and field activities to learn how to work appropriately on the crime scene, being able to preserve and document the scene and to collect the relevant evidence.

Skills – at the end of the module/unit the learner will have acquired the following skills:

Applying knowledge and understanding. The learner will be able to:

- a) Choose and use identification techniques for tangible and latent evidence and its classification and documentation through chemical and physical procedures.
- b) Choose and use techniques of physical evidence collection and sampling.
- c) Independently conduct an analysis of a complex crime scene, from the first access to the reporting with complete collection of the material present on the scene.

Judgment Skills and Critical Abilities - The learner will be able to:

- a) Perform the role of expert witness or consultant in legal proceedings, reaching conclusions, which are autonomous, concrete and not depending on the role performed for the Parties and which take into consideration the complex of circumstantial information and scientific implications, often interdisciplinary.
- b) Evaluate with balance the probative value of a technical implication, also considering the measurement uncertainty.

Module-Specific Communication Skills - The learner will be able to:

- a) Effectively cooperate with professionals belonging to different fields, especially with Judicial Police Officers, lawyers and consultants.
- b) Write technical-scientific reports for Judges and Lawyers, understandable to non-professional figures, but complying with technical-scientific argumentation.
- c) Orally express the technical-scientific procedures conducted, their meanings and the conclusions coming from such interpretation, in a concise, coherent and well-focused way, also relying on audiovisual systems and dynamics reconstruction programmes.

Module-Specific Learner Skills -The learner will be able to:

- a) Organize the personal programme of education and cultural and professional training with a multidisciplinary approach.
- b) Gain competences on emerging scientific fields, new forensic instrumental developments and innovative research topics, through the learning from highly complex technical-scientific books, monographs and scientific periodicals.

Module-Specific Digital Skills and Competences - The learner will be able to:

- a) Write a report using computer and editing software.
- b) Operate with digital imaging and videos.
- c) Conduct web research on standards and materials.

Research Methods and Professional Ethics

Competences - at the end of the module/unit the learner will have acquired the responsibility and autonomy to:

- a) Identify, select and apply appropriate statistical methods for analytical data interpretation.
- b) Analyse data using numerical and analytical skills
- c) Present research findings using appropriate channels
- d) Identify and conduct themselves in accordance to professional ethical standards
- e) Appreciate the importance of professional ethics

Knowledge - at the end of the module/unit the learner will have been exposed to the following:

- a) Types of research
- b) Statistical methods and data management
- c) Channels to present research findings – publication or presentation
- d) Professional Ethical Standards

Skills - at the end of the module/unit the learner will have acquired the following skills:

Applying knowledge and understanding. The learner will be able to:

- a) Understand the importance of critical analysis in analytical research and data presentation.
- b) Apply numerical and analytical skills to interpret data
- c) Present findings of research
- d) Conduct themselves ethically and professionally

Judgment Skills and Critical Abilities

The learner will be able to:

- a) Apply numerical and analytical skills to form a conclusion on interpreted data
- b) Identify when ethical standards could be compromised and take steps to prevent it when possible.

Module-Specific Communication Skills

The learner will be able to:

- a) Identify the appropriate channel to communicate findings of a research – written publication or oral presentation
- b) Present the findings of a research
- c) Raise red flags and report breach of ethical standards to the relevant authority or supervisory body

Module-Specific Learner Skills

The learner will be able to:

- a) Assesses own professional conduct

Module-Specific Digital Skills and Competences

The learner will be able to:

- a) Effectively use a statistical software to analyse data

Forensic Chemistry

Competences – at the end of the module/unit the learner will have acquired the responsibility and autonomy to:

- a) Understand logical models to deal with complex problems, based on circumstantial information and appropriate experimentation, in terms of efficiency and economy.
- b) Manage activities of analysis of evidence from the crime scene.
- c) Use professional devices and with suitable techniques.

Knowledge – at the end of the module/unit the learner will have been exposed to the following:

- a) Lessons in contact with the lecturer to learn the instrumental techniques of evidence collection, used for the compositional, structural and morphological characterization of samples/evidence available in small amounts and/or concentration.
- b) Student's personal study of books and documents suggested by the lecturer.
- c) Personal research activities assigned and discussed with the lecturer.
- d) Discussion and analysis of real cases with the lecturer during the lessons.
- e) Practical laboratory activities to learn to work with the most common procedures of particles and microparticles characterization and comparison, such as gunshot residue, glass, soil, paper, hair, textile fibres, paint and ink.
- f) Practical laboratory activities to learn to use the most common analytical methods of screening and confirmation of drugs and doping agents in blood, urine, hair, saliva.

Skills – at the end of the module/unit the learner will have acquired the following skills:

Applying knowledge and understanding. The learner will be able to:

- a) Face complex problems in the forensic field, by collecting the relevant documentation, organizing the known information, choosing the experimental strategy, planning the procedures to adopt, personally conducting or assigning to the suitable professionals the experimental evidence and finally rationalizing the results.
- b) Efficiently select the most suitable methodological and instrumental approach for the characterization of a material and/or determination of an analyte.
- c) Securely treat biological samples and evidence (blood, urine, organs), avoiding biological and chemical risks.

Judgment Skills and Critical Abilities - The learner will be able to:

- a) Perform the role of expert witness and consultant, coming to autonomous and independent conclusions.
- b) Evaluate with balance the probative value of a technical result, also considering the measurement uncertainty.
- c) Identify the source of potential systematic errors in chemical-clinical procedures, through the planning of an internal evaluative inspection.
- d) Highlight doubts or suggest further investigation, even if risking a confutation, when the chemical-clinical results are not clear and convincing.

Module-Specific Communication Skills - The learner will be able to:

- a) Cooperate with professionals belonging to different fields and especially with Judicial Police Officers, Forensic Pathologists, Biologists, Toxicologists, Pharmacologists, Epidemiologists, Clinical Pathologists.
- b) Write technical-scientific reports understandable to professionals belonging to a different field, but complying with the technical argumentation.
- c) Create clear and efficient forms for formalized communications related to the chemical and toxicological activity, in order to avoid misinterpretations of the sample collection, processing and documentation.
- d) Orally express the technical-scientific procedures conducted, their meanings and the conclusions coming from such interpretation, in a concise, coherent and well-focused way.

Module-Specific Learner Skills - The learner will be able to:

- a) Organize the personal programme of education and cultural and professional training with a multidisciplinary approach.
- b) Gain competences on emerging scientific fields, new forensic instrumental developments and innovative research topics, through the learning from highly complex technical-scientific books, monographs and scientific periodicals.

Module-Specific Digital Skills and Competences - The learner will be able to:

- a) Write a report using computer and editing software.
- b) Operate with digital imaging and videos.
- c) Conduct web research on standards and materials.

Forensic Light Sources

Competences – at the end of the module/unit the learner will have acquired the responsibility and autonomy to:

- a) Understand logical models to deal with complex problems, based on circumstantial information and appropriate experimentation, in terms of efficiency and economy.
- b) Choose the suitable forensic lights depending on the material to enhance.
- c) Use forensic lights and enhancement and protection devices connected to them.

Knowledge – at the end of the module/unit the learner will have been exposed to the following:

- a) Lessons in contact with the lecturer to learn complex instrumental techniques, used to enhance latent or hidden evidence available in small amounts and/or concentration, the correct collection and conservation of evidence, depending on risk and epidemiology.
- b) Student's personal study of books and documents suggested by the lecturer.
- c) Personal research activities assigned and discussed with the lecturer.
- d) Discussion and analysis of real cases with the lecturer during the lessons.
- e) Practical laboratory activities to learn the use of common procedures of enhancement of inorganic or biological evidence, such as sperm, blood, urine, etc.

Skills – at the end of the module/unit the learner will have acquired the following skills:

Applying knowledge and understanding. The learner will be able to:

- a) Face complex problems in the forensic field, by collecting the relevant documentation, organizing the known information, choosing the experimental strategy, planning the procedures to adopt, personally conducting or assigning to the suitable professionals the experimental evidence and finally rationalizing the results.
- b) Efficiently select the most suitable methodological and instrumental approach for the characterization of a material and/or determination of an analyte.

Judgment Skills and Critical Abilities - The learner will be able to:

- a) Perform the role of expert witness and consultant, coming to autonomous and independent conclusions.
- b) Evaluate with balance the probative value of a technical result, also considering the measurement uncertainty.
- c) Identify the source of potential systematic errors in chemical-clinical procedures, through the planning of an internal evaluative inspection.
- d) Highlight doubts or suggest further investigation, even if risking a confutation, when the chemical-clinical results are not clear and convincing.

Module-Specific Communication Skills - The learner will be able to:

- a) Cooperate with professionals belonging to different fields and especially with Judicial Police Officers, Forensic Pathologists, Biologists, Toxicologists, Pharmacologists, Epidemiologists, Clinical Pathologists.
- b) Write technical-scientific reports understandable to professionals belonging to a different field, but complying with the technical argumentation.
- c) Create clear and efficient forms for formalized communications related to the chemical and toxicological activity, in order to avoid misinterpretations of the sample collection, processing and documentation.
- d) Orally express the technical-scientific procedures conducted, their meanings and the conclusions coming from such interpretation, in a concise, coherent and well-focused way.

Module-Specific Learner Skills - The learner will be able to:

- a) Learn from the scientific literature related to chemistry the information relevant to the solution of new cases and acquire from the scientific literature of connected fields the essential elements of information, useful to contextualize the personal professional activity.
- b) Gain competences on emerging scientific fields, new forensic instrumental developments and innovative research topics, through the learning from highly complex technical-scientific books, monographs and scientific periodicals.

Module-Specific Digital Skills and Competences - The learner will be able to:

- a) Write a report using computer and editing software.
- b) Operate with digital imaging and videos.
- c) Conduct web research on standards and materials.

Forensic Psychology

Competences – at the end of the module/unit the learner will have acquired the responsibility and autonomy to:

- a) Assist a forensic psychologist conducting investigative interrogatory techniques.
- b) Recognize verbal and non-verbal signs of lie.
- c) Understand reports written by a forensic psychologist.

Knowledge – at the end of the module/unit the learner will have been exposed to the following:

- a) Lessons in contact with the lecturer to learn the theory and the procedures of this discipline.
- b) Student's personal study of books and documents suggested by the lecturer.
- c) Personal research activities assigned and discussed with the lecturer.
- d) Discussion and analysis of real cases with the lecturer during the lessons.

Skills – at the end of the module/unit the learner will have acquired the following skills:

Applying knowledge and understanding. The learner will be able to:

- a) Deal with complex problems in the forensic field, by optimally collecting and classifying the case documentation and, finally, elaborating the final results.
- b) Adequately communicate both in an oral and written form, organize and submit the material produced using computer technologies.
- c) Write a forensic report.
- d) Cooperate with judges, lawyers, detectives and criminalists.

Judgment Skills and Critical Abilities

The learner will be able to:

- a) Identify the procedures supporting the investigative activities.
- b) Identify the best devices for information collection provided to the forensic psychologist.
- c) Determine the quality of the information collected for the forensic psychologist's work.
- d) Establish the most suitable methods to support the activities of scientific investigation of the forensic psychologist.
- e) Conduct the interview of a suspect, victim or witness with no prejudice.
- f) Choose the appropriate co-workers for the specific assignment.
- g) Critically evaluate the results of the personal activity and of the activity of other professionals involved in a case.

Module-Specific Communication Skills

The learner will be able to:

- a) Communicate personal ideas regarding choices, made or to be made, to colleagues and collaborators.
- b) Explain the chosen analysis and investigation methods and the conclusions reached in a simple and clear way.
- c) Write a forensic report in a correct and clear way, understandable also to people who are not experts of the field.
- d) Support a personal thesis with valid and objective foundations.

Module-Specific Learner Skills

The learner will be able to:

- a) Conduct in-depth analyses and researches on topics regarding the forensic psychology.
- b) Use the acquired concepts of Forensic Psychology and apply them in the field of criminal investigation.
- c) Develop projects of innovative research or in-depth analysis, even experimental, conducted alone or in a team.

Module-Specific Digital Skills and Competences

The learner will be able to:

- a) Write a forensic report through computer devices helpful to the Forensic Psychologist.
- b) Use internet to collect information.

Forensic Biology

Competences – at the end of the module/unit the learner will have acquired the responsibility and autonomy to:

- a) Analyze the crime scene to identify, document and collect biological evidence.
- b) Collect and document the evidence and guarantee the chain of custody.
- c) Practically interact with the laboratory of forensic biology.

Knowledge – at the end of the module/unit the learner will have been exposed to the following:

- a) Lessons in contact with the lecturer to learn the theory and the procedural aspects of the discipline, aiming also to correctly interpret the results and report the activity carried out.
- b) Student's personal study of books and documents suggested by the lecturer.
- c) Personal research activities assigned and discussed with the lecturer.
- d) Discussion and analysis of real cases with the lecturer during theoretical and practical lessons.
- e) Practical laboratory activities.

Skills – at the end of the module/unit the learner will have acquired the following skills:

Applying knowledge and understanding

The learner will be able to:

- a) Work autonomously or in group on the crime scene.
- b) Obtain the necessary information from the crime scene.
- c) Correctly collect the pieces of evidence.
- d) Know the techniques of evidence analysis.
- e) Work in a biological laboratory.
- f) Ask the appropriate information to the authorities.
- g) Write a forensic report.
- h) Express the conclusions in an appropriate way.

Judgment Skills and Critical Abilities

The learner will be able to:

- a) Perform the role of expert witness or consultant in legal proceedings, reaching conclusions, which are autonomous, concrete and not depending on the role performed for the Parties and which take into consideration the complex of circumstantial information and scientific implications, often interdisciplinary.
- b) Evaluate with balance the probative value of a technical result, also considering the measurement uncertainty.

Module-Specific Communication Skills

The learner will be able to:

- a. Effectively cooperate with professionals belonging to different fields, especially with Judicial Police Officers, lawyers and consultants.
- b. Write technical-scientific reports for Judges and Lawyers, understandable to non-professional figures, but complying with technical-scientific argumentation.
- c. Orally express the technical-scientific procedures conducted, their meanings and the conclusions coming from such interpretation, in a concise, coherent and well-focused way, also relying on audiovisual systems and dynamics reconstruction programmes.

Module-Specific Learner Skills

The learner will be able to:

- a) Use DNA databases for European and international investigations.
- b) Know the biomolecular instrumentation of forensic biology.

Module-Specific Digital Skills and Competences

The learner will be able to

- a) Write a report using computer and editing software.
- b) Operate with digital imaging and videos.
- c) Conduct web research on standards and materials.

Evidence Collection & Trace Analysis

Competences – at the end of the module/unit the learner will have acquired the responsibility and autonomy to:

- a) Collect and analyze blood evidence.
- b) Analyze fibres and hair.
- c) Analyze drugs.
- d) Collection of trace evidence and controls of paint, glass, metal traces etc. Awareness of laboratory techniques dealing with different evidence types.
- e) Analyze plastic, metal and glass.
- f) Footwear evidence search for and development / casting of marks/impressions. Imaging, packaging and storage.
- g) Tool marks, recording, coding recovery and casting.

Knowledge – at the end of the module/unit the learner will have been exposed to the following:

- a) Lessons in contact with the lecturer to learn the instrumental techniques of evidence collection, used for the compositional, structural and morphological characterization of samples/evidence available in small amounts and/or concentration in complex and/or latent matrixes.
- b) Student's personal study of books and documents suggested by the lecturer.
- c) Personal research activities assigned and discussed with the lecturer.
- d) Discussion and analysis of real cases with the lecturer during the lessons.
- e) Practical laboratory and field activities to learn how to work appropriately on the crime scene, being able to preserve and document the scene and to collect the relevant evidence.

Skills – at the end of the module/unit the learner will have acquired the following skills:

Applying knowledge and understanding. The learner will be able to:

- a) Analyze blood evidence: - Study of blood stains on the scene (Bloodstain Pattern Analysis). - Estimate of quantity, position and direction. - Blood collection in different scenarios. - Introduction to forensic serology.
- b) Analyze biological liquids: - General collection procedure. - Sperm, saliva and sweat analysis. - Collection methods. - Chemical analysis. - Preliminary and confirmatory evidence.
- c) Study fibres and hair: - Morphology. - The role of hair in the identification. - Differential analysis: animal and human hair identification. - Sex, age, physical features, race, diseases.
- d) Have a sufficient knowledge of forensic genetics: DNA.
- e) Analyze the structure and chemical composition of paint and glass.

Judgment Skills and Critical Abilities - The learner will be able to:

- a) Perform the role of expert witness or consultant in legal proceedings, reaching conclusions, which are autonomous, concrete and not depending on the role performed for the Parties and which take into consideration the complex of circumstantial information and scientific implications, often interdisciplinary.
- b) Evaluate with balance the probative value of a technical implication, also considering the measurement uncertainty.

Module-Specific Communication Skills - The learner will be able to:

- a) Effectively cooperate with professionals belonging to different fields, especially with Judicial Police Officers, lawyers and consultants.
- b) Write technical-scientific reports for Judges and Lawyers, understandable to non-professional figures, but complying with technical-scientific argumentation.
- c) Orally express the technical-scientific procedures conducted, their meanings and the conclusions coming from such interpretation, in a concise, coherent and well-focused way, also relying on audiovisual systems and dynamics reconstruction programmes.

Module-Specific Learner Skills - The learner will be able to:

- a) Organize the personal programme of education and cultural and professional training with a multidisciplinary approach.
- b) Gain competences on emerging scientific fields, new forensic instrumental developments and innovative research topics, through the learning from highly complex technical-scientific books, monographs and scientific periodicals.

Module-Specific Digital Skills and Competences - The learner will be able to

- a) Write a report using computer and editing software.
- b) Operate with digital imaging and videos.
- c) Conduct web research on standards and materials.

European & International Criminal Law

Competences – at the end of the module/unit the learner will have acquired the responsibility and autonomy to:

- a) Recognize the influence of the European law and the jurisprudence of European Courts on the national criminal justice system, referring to the acquired notions regarding the principle of legality in the criminal law.
- b) Recognize the method of reference to political-criminal principles also in the international criminal justice system.

Knowledge – at the end of the module/unit the learner will have been exposed to the following:

- a) Lessons in contact with the lecturer to learn the theory and the procedural aspects of the discipline, aiming to transmit the operational ability necessary to apply the acquired knowledge when the law professionals and workers deal with regulations coming from European and international sources, including the field of criminal law.
- b) Student's personal study of books and documents suggested by the lecturer.
- c) Personal research activity assigned and discussed with the lecturer.
- d) Discussion and analysis of real cases with the lecturer during the lessons.

Skills – at the end of the module/unit the learner will have acquired the following skills:

Applying knowledge and understanding. The learner will be able to:

- a) Explain the basics of the progressive europeanization of criminal law, summarize the results in a concise and complete way and correctly use the technical language.

Judgment Skills and Critical Abilities

The learner will be able to:

- a) Independently evaluate the problems connected with the opening of the criminal justice system to a supranational dimension and identify the consequences due to the limits of international criminal law.

Module-Specific Communication Skills

The learner will be able to:

- a) Update and enlarge the personal knowledge, by autonomously gleaning information from books, scientific articles, documents of the field, in order to correctly identify the guidelines to solve the case.

Module-Specific Learner Skills

The learner will be able to:

- a) Organize the personal programme of education and cultural and professional training with a multidisciplinary approach.
- b) Enrich and integrate the institutional programme with European and international experts in law.

Module-Specific Digital Skills and Competences

The learner will be able to:

- a) Gather information from online sources.

Fingerprints development and analysis

Competences – at the end of the module/unit the learner will have acquired the responsibility and autonomy to:

- a) Identify, collect and document latent fingerprints on the crime scene.
- b) Perform dactyloscopic comparisons in laboratory.
- c) Use all the chemical-physical techniques to identify, enhance and document fingerprints present on a potential crime scene.
- d) Utilise existing databases such as ACE-V and AFIS for fingerprint research and comparison

Knowledge – at the end of the module/unit the learner will have been exposed to the following:

- a) Lessons in contact with the lecturer to learn the theory and procedural aspects of the discipline, referring to chemical and physical techniques for the enhancement and development of latent fingerprints, the use of dactyloscopic powders, chemical agents and the collection materials useful for the development of a dactyloscopic analysis in the forensic field, the analysis of the characteristics of fingerprints and palm prints, aiming to the classification and comparison in the judicial system or to identify a dead body.
- b) Student's personal study of books and documents suggested by the lecturer.
- c) Personal research activity assigned and discussed with the lecturer.
- d) Discussion and analysis of real cases with the lecturer during theoretical and practical lessons.
- e) Practical laboratory activities.

Skills – at the end of the module/unit the learner will have acquired the following skills:

Applying knowledge and understanding. The learner will be able to:

- a) Use chemical and physical techniques and forensic lights to research and identify fingerprints and palm prints on the crime scene.

Judgment Skills and Critical Abilities

The learner will be able to:

- a) Operate as a qualified investigator in the research and analysis of evidence on the crime scene in order to solve judicial cases.
- b) Benefit from several professional opportunities in the judicial field as expert witness.
- c) Start a professional career in the police forces, specifically in the units dedicated to the scientific analysis.

Module-Specific Communication Skills

The learner will be able to:

- a) Understand and develop the specific techniques of dactyloscopic investigations on the crime scene.
- b) Manage the crime scene investigation when a dactyloscopic analysis of fingerprints is requested.

Module-Specific Learner Skills

The learner will be able to:

- a) Use the appropriate techniques for the treatment and solution of dactyloscopic investigations in the forensic field.
- b) Specialize in the use of dactyloscopic powders, forensic lights and chemical procedures, as the use of fumes of cyanoacrylate.

Module-Specific Digital Skills and Competences

The learner will be able to:

- a) Use digital software to map the crime scene and create a two-dimensional and three-dimensional sketch of the planimetry by using appropriate software.

Forensic Document Examination

Competences – at the end of the module/unit the learner will have acquired the responsibility and autonomy to:

- a) Coordinate and carry out the use of the practical application of the contents in the execution of the procedures, in the elaboration of the capacities of investigation, observation, analysis, understanding and critical spirit.
- b) Acquired skill in the handling and use of optical, light and photographic material, and practices of chemical nature - expert.
- c) Make a clear distinction between Adulteration and Forgery writing using comparison techniques.

Knowledge – at the end of the module/unit the learner will have been exposed to the following:

- a) Lessons in contact with the lecturer to teach the theory and the procedural aspects of the discipline, having a working knowledge of how questioned document examination interacts and differs from other forensic science disciplines and other handwriting related fields, having a knowledge of standard evidence rules with respect to the chain of custody, security, preservation, handling, documentation, case organization, storage, and retrieval and having an understanding of research methodology.
- b) Student's personal study of books and documents suggested by the lecturer.
- c) Personal research activity assigned and discussed by the lecturer.
- d) Discussion and analysis of real cases with the lecturer during theoretical and practical lessons.
- e) Practical laboratory activities.

Skills - at the end of the module/unit the learner will have acquired the following skills:

Applying knowledge and understanding. The learner will be able to:

- a) Develop attitudes and strategies to check, demonstrate various documentological expert situations.
- b) Evaluate expertly, through analysis, the components of the graphism and apply the laws of it, recognizing its various modifications of natural and fraudulent nature.
- c) Have a working knowledge concerning the recognition of disguised or distorted handwriting.
- d) Apply standard methodologies for examinations.

Judgment Skills and Critical Abilities - The learner will be able to:

- a) Recognize the elements of handwriting, such as speed, slant, linequality, variation and skill level.
- b) Differentiate types of forgeries, how they are produced, and their unique characteristics.
- c) Have a working knowledge of differentiating and genuine signatures and forgeries.
- d) Have an understanding of techniques and common solutions used to restore and preserve documents.

Module-Specific Communication Skills - The learner will be able to:

- a) Communicate to colleagues and co-workers personal ideas regarding procedural choices, made or to be made, for the analysis and reconstruction of the event.
- b) Explain in a clear and simple way the chosen reconstructive procedure and the reached conclusions.
- c) Write a report in a correct and clear way, understandable also to non-expert people.
- d) Support personal thesis with valid and objective fundaments.

Module-Specific Learner Skills - The learner will have:

- a) A working knowledge of the fundamentals of printer comparisons.
- b) A working knowledge of the common individual characteristics of photocopiers.
- c) A knowledge of writing instrument characteristics.
- d) An understanding of destructive analyses of ink, such as thin layer chromatography.

Module-Specific Digital Skills and Competences - The learner will be able to:

- a) Write a report using computer and editing software.
- b) Operate with digital imaging and videos.
- c) Conduct web research on standards and materials.

Computer Forensics

Competences – at the end of the module/unit the learner will have acquired the responsibility and autonomy to:

- a) Acquire digital evidence.
- b) Analyze digital evidence, RAW searches and virtualization.
- c) Create the final report and present it to the Court.

Knowledge – at the end of the module/unit the learner will have been exposed to the following:

- a) Lessons in contact with the lecturer to learn the theory and the procedural aspects of the discipline, specifically referring to the basics of informatics and the structure of simple and complex informatic systems, the management of the analyzed device, the creation of digital forensic images and HASH codes and evidence analysis techniques.
- b) Student's personal study of books and documents suggested by the lecturer.
- c) Personal research activity assigned and discussed with the lecturer.
- d) Discussion and analysis of real cases with the lecturer during the lessons.
- e) Practical laboratory and field activities aiming to teach how to operate on the analyzed devices, create a digital forensic image, extract the HASH codes, work with different types of file formats and test their search methodologies, analyze computer filesystems and hardware, understand how to provide first response.

Skills – at the end of the module/unit the learner will have acquired the following skills:

Applying knowledge and understanding. The learner will be able to:

- a) Handle evidence on the scene
- b) Acquire digital evidence (physical acquisition, network acquisition, live acquisition)
- c) Export results
- d) Write a report

Judgment Skills and Critical Abilities

The learner will be able to:

- a) Check a digital forensic image.
- b) Perform a digital forensic analysis.
- c) Document all the steps of a digital forensic analysis.
- d) Evaluate the documentation and the devices submitted for the forensic analysis.
- e) Ask the appropriate information to authorities and clients.
- f) Evaluate the digital forensic analysis carried out by other experts.
- g) Choose the appropriate hardware and software instrumentation for the job.

Module-Specific Communication Skills

The learner will be able to:

- a) Communicate personal ideas regarding the procedural analysis choices, made or to be made, to colleagues and co-workers.
- b) Simply and clearly explain the chosen method and the reached conclusions also in Court.
- c) Write a report in a correct and clear way, understandable also to non-expert people.
- d) Support the personal thesis with valid and objective foundations.

Module-Specific Learner Skills

The learner will be able to:

- a) Develop innovative research or in-depth study projects, also experimental, carried out alone or in a team.

Module-Specific Digital Skills and Competences

The learner will be able to:

- a) Write a report using computer and editing software.
- b) Operate with specific digital forensics software.

Mobile Forensics and Cell Site Analysis

Competences – at the end of the module/unit the learner will have acquired the responsibility and autonomy to:

- a) Perform a forensic acquisition of a mobile device.
- b) Perform a forensic acquisition of CDR and check the real cell towers coverage.
- c) Correlate mobile extraction and CSA analysis for a trustworthy report.

Knowledge – at the end of the module/unit the learner will have been exposed to the following:

- a) Lessons in contact with the lecturer to learn the theory and the procedural aspects of the discipline, including the basics of informatics, mobile devices and telecommunications, management of the analyzed device, difference between mobile extraction and computer acquisition, to understand how a Mobile network works and how a BTS works.
- b) Student's personal study of books and documents suggested by the lecturer.
- c) Personal research activity assigned and discussed with the lecturer.
- d) Discussion and analysis of real cases with the lecturer during the theoretical and practical lessons.
- e) Practical laboratory and field activities to learn how to operate on the analyzed devices and apply the theory learnt during the lessons.

Skills – at the end of the module/unit the learner will have acquired the following skills:

Applying knowledge and understanding. The learner will be able to:

- a) Perform a forensic acquisition and analysis of a mobile device.
- b) Perform a forensic analysis of CDR files and BTS data.
- c) Create a report that involves multiple sources of data.

Judgment Skills and Critical Abilities

The learner will be able to:

- a) Check a digital forensic image.
- b) Perform a digital forensic analysis.
- c) Document all the steps of a digital forensic analysis.
- d) Evaluate the documentation and objects submitted for the forensic analysis.
- e) Ask appropriate information to authorities and clients.
- f) Evaluate the digital forensic analysis carried out by other experts.
- g) Choose the appropriate hardware and software instrumentation for the activity.

Module-Specific Communication Skills

The learner will be able to:

- a) Communicate to colleagues and co-workers personal ideas regarding procedural choices, made or to be made, for the analysis and reconstruction of the event.
- b) Explain in a clear and simple way the chosen reconstructive procedure and the reached conclusions.
- c) Write a report in a correct and clear way, understandable also to non-expert people.
- d) Support personal thesis with valid and objective fundamentals.

Module-Specific Learner Skills

The learner will be able to

- a) Develop projects of innovative research or in-depth learning, also experimental, conducted alone or in a team.

Module-Specific Digital Skills and Competences

The learner will be able to

- a) Write a report using computer and editing software.
- b) Operate with specific digital, mobile and cell site analysis forensic software.

Web and Open Source Intelligence

Competences - at the end of the module/unit the learner will have acquired the responsibility and autonomy to:

- a) Implement the Intelligence Cycle in relation to OSINT and SOCMINT.
- b) Conduct advanced internet research.
- c) Answer specific information requests.

Knowledge – at the end of the module/unit the learner will have been exposed to the following:

- a) Lessons in contact with the lecturer to learn the general theory of the discipline and understand the principles of the Intelligence Cycle and the characteristics of OSINT and SOCMINT.
- b) Student's personal study of books and documents suggested by the lecturer.
- c) Personal research activity assigned and discussed with the lecturer.

Skills – at the end of the module/unit the learner will have acquired the following skills:

Applying knowledge and understanding. The learner will be able to:

- a) Evaluate the reliability of sources, collected data and information.
- b) Synthetise information from a wide range of sources.
- c) Work as security and OSINT analyst in a team.

Judgment Skills and Critical Abilities

The learner will be able to:

- a) Establish the most appropriate research technique to reach the goal.
- b) Critically evaluate the different types of approach to data collection.
- c) Evaluate the quality of the information available and collected.
- d) Choose the co-workers accordingly to the necessity of the assignment.
- e) Critically evaluate the results of the personal reconstructive activity and of the activity of other professionals.

Module-Specific Communication Skills

The learner will be able to:

- a) Communicate, to colleagues and collaborators, personal ideas related to information research choices, made or to be made.
- b) Explain the results of the analysis.
- c) Write a final report in a correct and efficient way.

Module-Specific Learner Skills

The learner will be able to:

- a) Conduct an in-depth study and research on specific topics related to the discipline.
- b) Carry out information research autonomously.
- c) Develop projects of innovative research or in-depth study, also experimental, conducted alone or in a team.

Module-Specific Digital Skills and Competences

The learner will be able to:

- a) Perform advanced browsing.
- b) Structure collected data.
- c) Use a wide range of web Intelligence Open Source tools.

From Crime Scene to Court - Expert Witness

Competences – at the end of the module/unit the learner will have acquired the responsibility and autonomy to:

- a) Apply the acquired knowledge in the different forms requested to an expert witness, especially referring to evidence admissibility criteria.
- b) Deal with complex forensic problems, by collecting the related documentation, organizing information and choosing the experimental strategy accordingly to the parameters.
- c) Apply the most appropriate approach to the new scientific evidence accordingly to the standards of the American model.

Knowledge – at the end of the module/unit the learner will have been exposed to the following:

- a) Lessons in contact with the lecturer to learn the theory and procedural aspects of the discipline.
- b) Student's personal study of books and documents suggested by the lecturer, also present online.
- c) Personal research activity assigned and discussed with the lecturer.
- d) Discussion and analysis of real cases with the lecturer during the lessons.

Skills – at the end of the module/unit the learner will have acquired the following skills:

Applying knowledge and understanding

The learner will be able to:

- a) Perform the role of consultant or expert witness in judicial proceedings, reaching autonomous conclusions, respecting the admissibility standards.

Judgment Skills and Critical Abilities

The learner will be able to:

- a) Independently evaluate the problems of analysis, collection and conservation of atypical evidence, respecting the criteria of standardization.
- b) Understand the implications due to the limits of the analysis and evaluation of atypical evidence.
- c) Autonomously evaluate the admissibility criteria of a procedure of acquisition of atypical evidence in the Italian and Anglo-Saxon criminal proceeding.
- d) Confute methods and results in the dialectic of judicial proceedings.
- e) Update and enlarge personal knowledge, by independently gleaning information from scientific articles and documents of the field, in order to identify the guidelines to solve the problem.

Module-Specific Communication Skills

The learner will be able to:

- a) Explain in Court the evidence collection and selection parameters accordingly to internationally recognized standards through a mock court examination
- b) Correctly use technical language in written reports and in Court.
- c) Write reports admissible to Court such as witness statements and court reports.

Module-Specific Learner Skills

The learner will be able to:

- a) Recognize the influence of scientific evidence in criminal proceedings, referring to the Jurisprudence of the United States of America and the European Court.
- b) Apply the correct method to any type of atypical evidence complying with standardized criteria.
- c) Distinguish the scientific evidence in criminal proceedings and in the countries belonging to the Common Law.

Module-Specific Digital Skills and Competences

The learner will be able to

- a) Gather information from online sources.
- b) Write a report using computer and editing software.

Product Counterfeiting

Competences – at the end of the module/unit the learner will have acquired the responsibility and autonomy to:

- a) Appropriately and efficiently analyze the counterfeit product.
- b) Develop an in-depth study of the discipline in specialized sectors not directly covered during the course, also involving types of product different from the ones already analyzed.
- c) Choose useful instrumentation and work techniques, which enable to reach a satisfying analysis result.

Knowledge – at the end of the module/unit the learner will have been exposed to the following:

- a) Lessons in contact with the lecturer to learn the theory and procedural aspects of the discipline.
 - b) Student's personal study of books and documents suggested by the lecturer, also present online.
 - c) Personal research activity assigned and discussed with the lecturer.
- Discussion and analysis of real cases with the lecturer during the lessons.

Skills – at the end of the module/unit the learner will have acquired the following skills:

Applying knowledge and understanding. The learner will be able to:

- a) Work autonomously or in a team on the analysis of one or more counterfeit products.
- b) Obtain the necessary information from the product analysis.
- c) Obtain the necessary information by asking to authorities and consulting international databases.
- d) Use appropriate procedures of product analysis.
- e) Write a technical report.
- f) Appropriately express personal conclusions.
- g) Give information for the protection of products and brands.

Judgment Skills and Critical Abilities - The learner will be able to:

- a) Evaluate the right procedure of investigation of a counterfeiting case.
- b) Make adequate technical and scientific analysis.
- c) Interpret correctly the needs of the client.
- d) Appropriately prepare an investigation report.

Module-Specific Communication Skills - The learner will be able to:

- a) Communicate to colleagues and co-workers personal ideas regarding procedural choices, made or to be made.
- b) Explain in a clear and simple way the chosen reconstructive procedure and the reached conclusions.
- c) Write a report in a correct and clear way, understandable also to non-expert.
- d) Support personal thesis with valid and objective fundamentals.
- e) Establish relevant relationship with Authorities, Police and Judges.
- f) Present results to clients and in a Court.

Module-Specific Learner Skills - The learner will be able to:

- a) Conduct in-depth study and research on specific topics connected with the phenomenon of counterfeiting and the used techniques.
- b) Develop projects of innovative research or in-depth study, be it experimental, conducted alone or in a team.

Module-Specific Digital Skills and Competences - The learner will be able to:

- a) Write a report using computer and editing software.
- b) Operate with digital imaging and videos.
- c) Gather information from online sources.

Fire and Explosion Investigation

Competences – at the end of the module/unit the learner will have acquired the responsibility and autonomy to:

- a) Work in a team of experts and conduct the operations on the fire scene and during the analysis, documentation and collection of evidence.
- b) Develop an in-depth study of the discipline in specialized sectors not directly covered in the course and in the use of computer simulation systems for the reconstruction of the dynamics of the fire.
- c) Choose the useful instrumentation and evidence analysis and collection techniques to solve low, mid and high-level problems.

Knowledge – at the end of the module/unit the learner will have been exposed to the following:

- a) Lessons in contact with the lecturer to learn the theory and the procedural aspects of the discipline.
- b) Student's personal study of books and documents suggested by the lecturer.
- c) Personal research activity assigned and discussed by the lecturer.
- d) Discussion and analysis of real cases with the lecturer during theoretical and practical lessons.
- e) Practical laboratory and field activities.

Skills – at the end of the module/unit the learner will have acquired the following skills:

Applying knowledge and understanding. The learner will be able to:

- a) Work autonomously or in a team on a fire or explosion scene.
- b) Obtain the necessary information from the analysis carried out.
- c) Correctly collect pieces of evidence.
- d) Know the techniques of evidence analysis.
- e) Ask the necessary information to the authorities.
- f) Use appropriate calculation and modelling procedures for the reconstruction of the event.
- g) Graphically represent the scene.
- h) Write a technical report on the fire or explosion.
- i) Express the conclusions in an appropriate way.

Judgment Skills and Critical Abilities - The learner will be able to:

- a) Choose the methods and instrumentation useful for the scene analysis.
- b) Evaluate and judge the quality of the activity carried out by other people on the scene.
- c) Evaluate the appropriate procedures for the event reconstruction.
- d) Evaluate the documentation provided for the case.
- e) Choose the co-workers accordingly to the necessity of the case.
- f) Critically evaluate the results of the personal activity and of the activity carried out by other professionals.

Module-Specific Communication Skills - The learner will be able to:

- a) Communicate to colleagues and co-workers personal ideas regarding procedural choices, made or to be made, for the analysis and reconstruction of the event.
- b) Explain in a clear and simple way the chosen reconstructive procedure and the reached conclusions.
- c) Write a report in a correct and clear way, understandable also to non-experts.
- d) Support personal thesis with valid and objective fundamentals.

Module-Specific Learner Skills - The learner will be able to:

- a) Conduct an in-depth study and research on specific themes related to fires and explosions, their analysis and reconstruction.
- b) Develop projects of innovative research and in-depth study, be it experimental, conducted alone or in a team.

Module-Specific Digital Skills and Competences - The learner will be able to:

- a) Write a report using computer and editing software.
- b) Operate with digital imaging and videos.
- c) Conduct web research on standards and materials.

Road Accident Investigation

Competences – at the end of the module/unit the learner will have acquired the responsibility and autonomy to:

- a) Work in an expert team and lead the operations on the scene of the road accident, during the calculations and the graphic representation of the accident.
- b) Develop an in-depth study of the discipline in specialized sectors not directly covered in the course and in the use of computer simulation systems useful to reconstruct the road accident.
- c) Choose useful instrumentation and calculation and representation techniques to solve low, mid and high-level problems.

Knowledge – at the end of the module/unit the learner will have been exposed to the following:

- a) Lessons in contact with the lecturer to learn the theory and procedural aspects of the discipline.
- b) Student's personal study of books and documents suggested by the lecturer, also present online.
- c) Personal research activity assigned and discussed with the lecturer.
- d) Discussion and analysis of real cases with the lecturer during the lessons.

Skills – at the end of the module/unit the learner will have acquired the following skills:

Applying knowledge and understanding. The learner will be able to:

- a) Work autonomously or in a team on the scene of a road accident following a correct analysis procedure
- b) Obtain the necessary information from the analysis of the scene of the accident.
- c) Ask the necessary information to the authorities.
- d) Use appropriate calculation methods for the reconstruction of the road accident.
- e) Graphically represent the scene of the accident, its previous phases and the impact area.
- f) Write a technical and reconstructive report of the accident.
- g) Appropriately express personal conclusions.

Judgment Skills and Critical Abilities - The learner will be able to:

- a) Choose the useful procedures and instrumentation for the analysis of the accident.
- b) Evaluate and judge the quality of the analysis of the accident performed by other experts present on the scene.
- c) Choose the correct calculation method for the reconstruction of the road accident.
- d) Evaluate the documentation acquired for the assignment.
- e) Choose the co-workers accordingly to the necessity of the assignment.
- f) Critically evaluate the results of the personal activity and of the activity carried out by other professionals.

Module-Specific Communication Skills - The learner will be able to:

- a) Communicate to colleagues and co-workers personal ideas regarding procedural choices, made or to be made, for the analysis and reconstruction of the event.
- b) Explain in a clear and simple way the chosen reconstructive procedure and the reached conclusions.
- c) Write a report in a correct and clear way, understandable also to non-experts.
- d) Support personal thesis with valid and objective fundamentals.

Module-Specific Learner Skills - The learner will be able to:

- a) Conduct in-depth study and research on specific topics related to road accidents, their analysis and reconstruction.
- b) Develop projects of innovative research or in-depth study, be it experimental, conducted alone or in a team.

Module-Specific Digital Skills and Competences - The learner will be able to:

- a) Write a report using computer and editing software.
- b) Operate with digital imaging and videos.
- c) Prepare calculation sheets with Excel.
- d) Use Computer Aided Design (CAD) softwares in 2D, 3D and for animation.

Ballistics and firearms

Competences - at the end of the module/unit the learner will have acquired the responsibility and autonomy to:

- a) Operate in strict respect of the dictates of mathematics and physics of forensic ballistic cases.
- b) Recognize correctly the firearms typologies and the related offensive characteristics.
- c) Recognize correctly the specimen of shot usable in the forensic/security field.

Knowledge - at the end of the module/unit the learner will have been exposed to the following:

- a) Lessons in contact with the lecturer to learn the theory and the procedural aspects of the discipline.
- b) Student's personal study of books and documents suggested by the teacher.
- c) Personal research activity assigned and discussed with the lecturer.
- d) Discussion and analysis of real cases with the lecturer during theoretical and practical lessons.
- e) Practical laboratory and field activities.

Skills – at the end of the module/unit the learner will have acquired the following skills:

Applying knowledge and understanding. The learner will be able to:

- a) Work in a team to deal with a case of forensic ballistics, explosives or security.
- b) Obtain the necessary information from the analysis carried out.
- c) Correctly collect pieces of evidence.
- d) Evaluate risk situations in the security field.
- e) Know the techniques of evidence analysis.
- f) Ask the necessary information to the authorities.
- g) Use appropriate calculation and modelling procedures for the reconstruction of the event.
- h) Suggest precautionary measures in the security field.
- i) Write a technical report of the analyzed event.
- j) Express the conclusions in an appropriate way.

Judgment Skills and Critical Abilities - The learner will be able to:

- a) Establish the methods of precautionary analysis and of the analysis after the event, in the field of security and forensic ballistics.
- b) Choose the appropriate procedures for the reconstruction of the event analyzed.
- c) Evaluate the quality of the information available to conduct the analysis.
- d) Choose the co-workers accordingly to the necessity of the assignment.
- e) Critically evaluate the results of the personal activity of reconstruction and of the activity of other professionals.

Module-Specific Communication Skills - The learner will be able to:

- a) Communicate to colleagues and co-workers personal ideas regarding procedural choices, made or to be made, for the analysis and reconstruction of the event.
- b) Explain in a clear and simple way the chosen reconstructive procedure and the reached conclusions.
- c) Write a report in a correct and clear way, understandable also to non-experts.
- d) Support personal thesis with valid and objective fundamentals.

Module-Specific Learner Skills - The learner will be able to:

- a) Conduct in-depth study and research on specific themes related to forensic ballistics.
- b) Apply the learnt concepts of forensic ballistics and explosives to the precautionary field of security.
- c) Develop projects of innovative research or in-depth study, be it experimental, conducted alone or in a team.

Module-Specific Digital Skills and Competences - The learner will be able to:

- a) Write a report using computer and editing software.
- b) Use ballistic software.
- c) Conduct web research on standards and materials.

Forensic Criminology

Competences - at the end of the module/unit the learner will have acquired the responsibility and autonomy to:

- a) Develop and apply strategies useful to prevent deviance, crime and victimization phenomena.
- b) Create the conditions for a better observation and an appropriate analysis of criminal events and their protagonists, authors and victims.
- c) Develop and apply strategies for prisoners' social reintegration and for the psychological and social recovery of victims.
- d) Conduct interviews and interrogatories.
- e) Elaborate a criminal profile.
- f) Carry out investigative activities and socio-criminological and psychological analysis, also from a neuroscientific point of view.
- g) Relate to all the protagonists of the judicial investigation, such as judges, lawyers, investigators and criminalists.
- h) Write a forensic report.

Knowledge - at the end of the module/unit the learner will have been exposed to the following:

- a) Lessons in contact with the lecturer to learn the theory and procedural aspects of the discipline.
- b) Student's personal study of books and documents suggested by the lecturer, also present online.
- c) Personal research activity assigned and discussed with the lecturer.
- d) Discussion and analysis of real cases with the lecturer during the lessons.

Skills - at the end of the module/unit the learner will have acquired the following skills:

Applying knowledge and understanding. The learner will be able to:

- a) Deal with complex forensic problems, by optimally collecting and classifying the documentation of cases and, finally, elaborating the results.
- b) Appropriately communicate, in a written and oral form, catalogue and present the produced material using informatic technologies.
- c) Write a forensic report.
- d) Cooperate with judges, lawyers, investigators and criminalists.

Judgment Skills and Critical Abilities - The learner will be able to:

- a) Critically investigate criminal phenomena and their consequences on society.
- b) Define the support procedures to the prevention of deviant and criminal phenomena.
- c) Determine the quality of the information available for the analysis of a specific crime.
- d) Identify the best instruments for the analysis of a case.
- e) Establish the most appropriate support procedures to criminal investigation.
- f) Conduct with no prejudice the interview of a crime suspect, victim or witness.
- g) Choose the co-workers accordingly to the necessity of the assignment.
- h) Critically evaluate the results of the personal analysis and of the analysis of other experts involved in the case.

Module-Specific Communication Skills - The learner will be able to:

- a) Communicate to colleagues and co-workers personal ideas regarding procedural choices, made or to be made.
- b) Explain in a clear and simple way the chosen reconstructive procedure and the reached conclusions.
- c) Write a report in a correct and clear way, understandable also to non-experts.
- d) Support personal thesis with valid and objective fundamentals.

Module-Specific Learner Skills - The learner will be able to:

- a) Conduct in-depth study and research on specific topics related to Forensic Criminology.
- b) Use the learnt concepts of Forensic Criminology and apply them in the fields of crime prevention, criminal investigation and prisoners' rehabilitation.
- c) Develop projects of innovative research or in-depth study, be it experimental, conducted alone or in a team.

Module-Specific Digital Skills and Competences - The learner will be able to:

- a) Write a forensic report using informatic instruments.
- b) Use internet to find information.

Forensic Medicine and Toxicology

Competences – at the end of the module/unit the learner will have acquired the responsibility and autonomy to:

- a) Interpret the sense and meaning of Forensic Medicine in relation to sciences studying crime and deviance;
- b) Study morphological data of Forensic Medicine;
- c) Autonomously reach conclusions regarding the results of research conducted on the topics covered in this module;
- d) Sustain conversations about the topics of this module using a correct scientific terminology;
- e) Correctly interpret scientific texts regarding criminological and criminalistic sciences;
- f) Conduct in-depth research on the topics covered in this module.

Knowledge – at the end of the module/unit the learner will have been exposed to the following:

- a) Self-study of the teaching material developed by the lecturer and of the recommended textbook;
- b) Personal research activity assigned by the lecturer and discussed with the lecturer;
- c) Discussion and analysis of real cases;
- d) The interaction with the lecturer will be through digital communication channels (e-mail, virtual meetings, etc.).

Skills – at the end of the module/unit the learner will have acquired the following skills:

Applying knowledge and understanding - The learner will be able to:

- a) Use the gained knowledge to understand the descriptive, evaluative and interpretative methodology of Forensic Medicine and Toxicology;
- b) Analyse the real relevance of Forensic Medicine in individual and peculiar legal cases;
- c) Explore the “criminological dimension” of Forensic Medicine to get to understand how morphological data can actually help the broad study of criminal phenomena.

Judgment Skills and Critical Abilities - The learner will be able to:

- a) Critically analyse legal cases related to forensic biomedical disciplines;
- b) Interpret traumatic lesions and post-mortem thanatological phenomena;
- c) Understand the condition of imputability and the reasons excluding it;
- d) Conduct a basic research activity in the field of Forensic Medicine based on a rigorous scientific method.

Module-Specific Communication Skills - The learner will be able to:

- a) Communicate personal ideas to colleagues regarding chosen procedures already applied or to be applied;
- b) Express in a clear and simple way the chosen control procedures and the reached conclusions;
- c) Write a report in a clear and scientifically correct way, using a language understandable also to non-experts;
- d) Support personal theses with valid and objective evidence.

Module-Specific Learner Skills - The learner will be able to:

- a) Conduct basic studies and research related to Forensic Medicine;
- b) Use the concepts learnt during the course for an in-depth study of specific disciplines regarding Forensic Medicine and Toxicology;
- c) Develop basic criminological research projects individually or in a team.

Module-Specific Digital Skills and Competences - The learner will be able to:

- a) Write a psychological report using informatic instruments;
- b) Appropriately use sources to obtain information, such as through specialist databases and online sites (eg: CSoFS journals and publications, national/international evidence databases) and be able to judge the quality of information obtained.

Geographical Profiling

Competences – at the end of the module/unit the learner will have acquired the responsibility and autonomy to:

- a) Assist investigators and crime analysts by providing evidence of crime scene linkage and the significance of this information, not only as court evidence but in the early stages of an investigation to identify suspects.
- b) Recognize crime patterns by spatial distribution, behaviours and forensic retrievals. They will learn to recognise that identification of forensic marks is just one aspect of crime scene information and that closely located crimes with similar behavioural traits will support the forensic retrievals, ultimately aiding the investigation.
- c) Understand the importance of multiple facets of a crime scene, not only forensic retrievals, but the spatial distribution of scenes and the behaviours exhibited by an offender, such as taking food or particular property types, method of entry/exit, tools used, etc.

Knowledge – at the end of the module/unit the learner will have been exposed to the following:

- a) Lessons in contact with the lecturer to learn the theory and the procedures of this discipline.
- b) Student's personal study of books and documents suggested by the lecturer.
- c) Personal research activities assigned and discussed with the lecturer.
- d) Discussion and analysis of real cases with the lecturer during the lessons.

Skills – at the end of the module/unit the learner will have acquired the following skills:

Applying knowledge and understanding. The learner will be able to:

- a) Deal with complex problems in the forensic field, by optimally collecting and classifying the case documentation and, finally, elaborating the final results.
- b) Adequately communicate both in an oral and written form, organize and submit the material produced using computer technologies.
- c) Write a forensic report.
- d) Cooperate with judges, lawyers, detectives and criminalists.

Judgment Skills and Critical Abilities - The learner will be able to:

- a) Identify the procedures supporting the investigative activities.
- b) Identify the best devices for information collection provided to the forensic psychologist.
- c) Determine the quality of the information collected for the forensic psychologist's work.
- d) Establish the most suitable methods to support the activities of scientific investigation of the forensic psychologist.
- e) Conduct the interview of a suspect, victim or witness with no prejudice.
- f) Choose the appropriate co-workers for the specific assignment.
- g) Critically evaluate the results of the personal activity and of the activity of other professionals involved in a case.

Module-Specific Communication Skills - The learner will be able to:

- a) Communicate personal ideas regarding choices, made or to be made, to colleagues and collaborators.
- b) Explain the chosen analysis and investigation methods and the conclusions reached in a simple and clear way.
- c) Write a forensic report in a correct and clear way, understandable also to people who are not experts of the field.
- d) Support a personal thesis with valid and objective foundations.

Module-Specific Learner Skills - The learner will be able to:

- a) Conduct in-depth analyses and researches on topics regarding the linking of crime scenes through multiple disciplines of forensic science, geo-spatial analysis and behavioural aspects of offending.
- b) Use the acquired concepts of Geographical Profiling to support investigators and analysts in all stages of an investigation
- c) Develop projects of innovative research or in-depth analysis, even experimental, conducted alone or in a team.

Module-Specific Digital Skills and Competences - The learner will be able to:

- a) Write a forensic report through computer devices helpful to the investigation team, including the Senior Investigating Officer (SIO), investigative detectives and support staff, such as crime analysts.
- b) Reports will have to be rigorous in terms of accuracy, integrity and fact, as well as be capable of explanation in laymen terms to a jury.
- c) They will have to be of sufficient calibre to support a prosecution and provide compelling evidence to rebut defence challenges.
- d) The module relating to building a profiling model will require competence in mathematical equations and the use of MS Excel software.
- e) Use internet to collect information.

Video Forensics

Competences – at the end of the module/unit the learner will have acquired the responsibility and autonomy to:

- a) Acquire images and videos.
- b) Identify technical and quality issues.
- c) Perform an authenticity assessment.
- d) Enhance, process and analyse the material.

Knowledge – at the end of the module/unit the learner will have been exposed to the following:

- a) Lessons in contact with the lecturer to learn the theory and the procedural aspects of the discipline, specifically referring to the basics of image processing, the problems and the challenges found in the acquisition of videos and pictures from different sources.
- b) Student's personal study of documents suggested by the lecturer.
- c) Personal research activity assigned and discussed with the lecturer.
- d) Discussion and analysis of cases with the lecturer during the lessons.
- e) Practical laboratory and field activities aiming to teach how to operate to enhance images and videos, create a digital forensic image, extract the hash codes, work with different types of file formats and test their search methodologies, disprove the authenticity of pictures acquired with digital devices, understand how to provide first response.

Skills – at the end of the module/unit the learner will have acquired the following skills:

Applying knowledge and understanding. The learner will be able to:

- a) Properly acquire images and videos
- b) Enhance and reconstruct not clear features in images and videos
- c) Understand when to get something clearer
- d) Export results
- e) Write a report

Judgment Skills and Critical Abilities - The learner will be able to:

- a) Check a digital forensic image.
- b) Perform a digital forensic analysis.
- c) Document all the steps of a digital forensic analysis.
- d) Evaluate the documentation and the devices submitted for the forensic analysis.
- e) Ask the appropriate information to authorities and clients.
- f) Evaluate the digital forensic analysis carried out by other experts.
- g) Choose the appropriate hardware and software instrumentation for the job.

Module-Specific Communication Skills - The learner will be able to:

- a) Communicate personal ideas regarding the procedural analysis choices, made or to be made, to colleagues and co-workers.
- b) Simply and clearly explain the chosen method and the reached conclusions also in Court.
- c) Write a report in a correct and clear way, understandable also to non-expert people.
- d) Support the personal thesis with valid and objective foundations.

Module-Specific Learner Skills - The learner will be able to:

- a) Develop innovative research or in-depth study projects, also experimental, carried out alone or in a team.

Module-Specific Digital Skills and Competences - The learner will be able to:

- a) Write a report using computer and editing software.
- b) Manage digital image and video evidence to preserve its quality and its value as evidence
- c) Operate with specific video forensics software.

Final Dissertation

Competences - at the end of the module/unit the learner will have acquired the responsibility and autonomy to:

- a) Demonstrate administrative design for original content of research
- b) Be responsible for work and study contexts that are unpredictable and require that complex problems are solved
- c) Undertake further studies with a high degree of autonomy including searching for and studying existing research papers on relevant field and appropriately citing the source

Knowledge - at the end of the module/unit the learner will have been exposed to the following:

- a) Cross-disciplinary knowledge that includes some aspects that will be at the forefront of this field
- b) Detailed theoretical and practical knowledge involving critical understanding of theories and principles in chosen field of research
- c) Understanding of methods and tools available including most recent innovation in the field

Skills - at the end of the module/unit the learner will have acquired the following skills:

Applying knowledge and understanding. The learner will be able to:

- a) Apply cross-disciplinary knowledge and understanding acquired throughout the programme in a professional manner
- b) Communicate ideas, problems and solutions using a range of techniques involving qualitative and quantitative information in a written report suitable for a professional in the field
- c) Devise and sustain arguments to solve problems
- d) Continuously evaluates own learning and identifies learning needs

Judgment Skills and Critical Abilities - The learner will be able to:

- a) Gather and critically investigate relevant data to inform judgements that include reflection on social, scientific and/or ethical issues
- b) Critically evaluate and interpret the results of the personal analysis and of the analysis of other experts involved in the research
- c) Investigate and analyse, including the ability to formulate problems clearly, identify key issues, carry out a substantial independent investigation using multiple information sources and apply critical judgement to construct logical arguments

Module-Specific Communication Skills - The learner will be able to:

- a) Communicate to colleagues and co-workers personal ideas regarding procedural choices, made or to be made.
- b) Explain in a clear and simple way the chosen procedure and the reached conclusions.
- c) Write a report in a correct and clear way, relevant and understandable to professionals in the field
- d) Present his/her findings professionally to a panel and confidently discuss any questions raised

Module-Specific Learner Skills - The learner will be able to:

- a) Conduct in-depth study and research on chosen field using cross-disciplinary knowledge acquired throughout the programme
- b) Develop projects of innovative research or in-depth study, be it experimental, conducted alone or in a team.

Module-Specific Digital Skills and Competences - The learner will be able to:

- a) Write a 20-30 pages long dissertation using IT instruments
- b) Use internet to find information
- c) Where relevant, use applicable software for different needs throughout stages of research

Practical Work Experience (Internship)

Competences - at the end of the module/unit the learner will have acquired the responsibility and autonomy to:

- a) Search and apply for jobs which fits their interest and abilities
- b) Independently perform tasks assigned to them as part of working in a team
- c) Conduct and present themselves responsibly as a working professional

Knowledge - at the end of the module/unit the learner will have been exposed to the following:

- a) Practical knowledge of the job market
- b) Introduction to best practice and practical knowledge in the industry
- c) The real world

Skills - at the end of the module/unit the learner will have acquired the following skills:

Applying knowledge and understanding. The learner will be able to:

- a) Apply the knowledge and skills gained throughout their formal education in a practical manner on-the-job
- b) Assess the best methods to resolve issues arising on the job including devising and sustaining arguments to solve problems
- c) Independently identify problems and come up with possible solutions

Judgment Skills and Critical Abilities - The learner will be able to:

- a) Make judgement based on relevant social and ethical issues that arise in field of work
- b) Critically evaluate problems and solutions arising at work
- c) Follow set procedures but critically assess their suitability and appropriateness and is confident in voicing their doubts, if any

Module-Specific Communication Skills - The learner will be able to:

- a) Communicate ideas, problems and solutions to both specialist and non-specialist audiences using a range of techniques involving qualitative and quantitative information
- b) Conduct and present themselves with language suitable of a working professional
- c) Effectively and constructively communicate ideas, solutions, problems and disagreements where they arise

Module-Specific Learner Skills - The learner will be able to:

- a) Consistently evaluate own learning and identify learning needs
- b) Identify and assess own ability and skills to determine suitability in job/role
- c) Assesses own learning and can specialize in one more key competences for further learning

Module-Specific Digital Skills and Competences - The learner will be able to:

- a) Effectively use practical digital tools required by the job