

Core Subject	PRINCIPLES OF FORENSIC SCIENCE
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
	Advanced Diploma of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	1 <sup>st</sup> Year (Semester 1)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Program entry
Nominal Hours	110 per week) <span style="float: right;">urs (7 hours</span>

## Subject Purpose

This subject provides an introduction to the general knowledge, attitudes and skills of forensic investigation that will be further developed in later subjects. Students will be introduced to the organisational structures and disciplines of forensic science, and the guiding principles, approaches, methods and evidential value of these disciplines. An overview of physical evidence types and methods for examination and analysis is provided. The student will begin developing the practical skills of crime scene investigation, including basic skills in forensic photography. This subject also provides an introduction to the Australian legal system and sources of law. Students will be introduced to the court systems, the judiciary and the principles of judicial decision making, and will become acquainted with the participants and their roles in the legal profession, with an emphasis on the law that applies to the collection of forensic evidence. The subject develops knowledge of the principles of ethics and quality assurance, and their applications to forensic investigations.

Core Subject	BIOLOGY 1 (GENERAL BIOLOGY)
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
	Advanced Diploma of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	1 <sup>st</sup> Year (Semester 1)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Program entry
Nominal Hours	110 hours (7 hours per week)

## Subject Purpose

The purpose of this subject is to introduce the participant to the basic concepts in biology, including cellular structures and processes, classification, human genetics and inheritance, and ecology, and to develop the principles and skills needed to investigate a crime scene and retrieved items from a biological perspective. From a solid foundation of biological science, students will develop skills in identifying and preserving biological materials, and will be introduced to the potential significance of biological materials located at crime/incident scenes. The subject will also develop the student's skills in the operation of the various microscopic and macroscopic techniques.

Core Subject	CHEMISTRY 1 (GENERAL CHEMISTRY)
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
	Advanced Diploma of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	1 <sup>st</sup> Year (Semester 1)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Program entry
Nominal Hours	110 hours (7 hours per week)

## Subject Purpose

This subject will provide the student with the concepts and principles that explain the nature of chemical reactions and the skills required to perform experiments in chemistry. Emphasis is placed on providing the participant with the ability to visualise and discuss models of chemistry including the molecular nature of matter and the process of chemical reactions. Students are encouraged to develop a logical, methodical approach to problem solving in science and to apply their knowledge of chemistry to real world situations, including (but not limited to) simple applications of chemistry to forensic science. Practical laboratory skills gained in this subject will provide an important foundation for further subjects including *Chemistry 2 (Analytical and Organic Chemistry)*, *Biochemistry*, *Criminalistics 1* and *Criminalistics 2*.

Core Subject	MATHS AND PHYSICS FOR FORENSIC INVESTIGATIONS
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
	Advanced Diploma of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	1 <sup>st</sup> Year (Semester 1)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Program entry
Nominal Hours	110 hours (7 hours per week)

## Subject Purpose

This subject will provide the student with the skills required to solve mathematical problems in forensic science, and introduce concepts and skills from the discipline of physics which will have applications in forensic investigations. Students will develop the mathematical skills necessary to process and analyse data, and an understanding of the processes required to obtain reliable information using data. Emphasis is placed on concepts and principles that explain the uses and pitfalls of scientific data and on the development of the knowledge and skills required for the treatment of scientific data in the physical and biological sciences, including basic scientific computing (spreadsheet) and computer-based data analysis skills. This subject also introduces the student to the important concepts in Newtonian motion, optics, electricity and electronics, mechanics, heat and nuclear physics as they apply to various specialist disciplines in forensic science.

Core Subject	PRINCIPLES OF FORENSIC INVESTIGATION
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
	Advanced Diploma of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	1 <sup>st</sup> Year (Semester 2)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Principles of Forensic Science (P)
Nominal Hours	110 hours (7 hours per week)

## Subject Purpose

This subject provides students with an opportunity to extend and consolidate the general knowledge, attitudes and skills of forensic investigation that were introduced in *Principles of Forensic Science* with an emphasis on practical examination skills and procedures. A more detailed overview of physical evidence types and methods for examination and analysis is provided, including an introduction to scene and investigation management considerations. Students will further develop photographic skills (including video and photogrammetry) to accurately and effectively produce digital photographs of crime scenes and record relevant physical evidence material under a variety of conditions to an acceptable standard for presentation before various courts, inquiries and commissions. On completion of this subject, students will be able to apply their theoretical knowledge to produce complex two-dimensional and three-dimensional comparative physical evidence photographs using advanced lighting and optical techniques. Emphasis is placed upon recording of comparative physical evidence, and skills are developed which will be useful in later stage subjects.

Core Subject	ANATOMY AND PHYSIOLOGY FOR FORENSIC SCIENCE
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
	Advanced Diploma of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	1 <sup>st</sup> Year (Semester 2)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Biology 1 (General Biology) (P)
Nominal Hours	110 hours (7 hours per week)

## Subject Purpose

This subject is designed to provide students with the concepts and principles related to major anatomical structures at the macroscopic and microscopic level, and the general physiological processes related to various anatomical structures and body systems. This subject provides the student with the underpinning knowledge of mammalian anatomy and physiology related to the development of an anatomy and physiology vocabulary for use in the workplace; the structural organisation of the body from whole organism to cellular level; and the specific systemic processes involved in a number of body systems. This subject provides a foundation for learning in *Biochemistry*, *Criminalistics 1* and *Criminalistics 2*.

Core Subject	CHEMISTRY 2 (ORGANIC AND ANALYTICAL CHEMISTRY)
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
	Advanced Diploma of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	1 <sup>st</sup> Year (Semester 2)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Chemistry 1 (General Chemistry) (P) Maths and Physics for Forensic Investigations (P)
Nominal Hours	110 hours (7 hours per week)

## Subject Purpose

This subject aims to introduce students to the fundamental concepts and skills in organic and analytical chemistry. Concepts introduced in *Chemistry 1 (General Chemistry)* are extended in relation to organic molecules and reactions, and to principles involved in the separation and identification sciences and instrumental analysis. Emphasis is placed on the description of the scientific principles that underpin the examination, analysis and identification techniques commonly utilised in forensic examinations and the importance of sound analytical principles and methodology.

Core Subject	COMMUNICATION IN FORENSIC SCIENCE
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
	Advanced Diploma of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	1 <sup>st</sup> Year (Semester 2)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Program entry
Nominal Hours	110 hours (7 hours per week)

## Subject Purpose

This subject develops an awareness of the processes involved in planning, researching, writing, presenting and reviewing reports in technical, scientific, legal and other professional contexts. Emphasis is placed on enabling the student to produce and present both oral and written report types appropriate to investigative, scientific and legal communities. The subject introduces the skills needed to communicate effectively in a variety of situations that are commonly encountered in the workplace by forensic personnel. The development of constructive communication skills and strategies for dealing with workplace situations realistic for forensic practitioners are discussed.

Core Subject	CRIME SCENE INVESTIGATION 1 (VOLUME CRIME)
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
	Advanced Diploma of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	2 <sup>nd</sup> Year (Semester 1)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Principles of Forensic Investigation (P) Communication in Forensic Science (P)
Nominal Hours	110 hours (7 hours per week)

## Subject Purpose

This subject aims to develop crime scene examination skills introduced in previous subjects with an emphasis on the forensic examination of volume crime incidents. Focus is placed on scenario-based learning activities which provide the participant with the opportunity to develop and consolidate their procedures for scene assessment, control and examination, evidence interpretation, scene and evidence recording, exhibit collection and case management. Students gain a detailed understanding of the importance of Standard Operating Procedures (SOPs) for volume crime investigation and an appreciation of basic file management and exhibit management procedures. The subject also develops the participant's awareness and skills for dealing with victims of volume crime incidents, and introduces the student to the concept of client service in the context of the investigation of volume crime by developing skills for effective communication with colleagues, supervisors, police investigators, legal practitioners and other stakeholders.

Core Subject	BIOCHEMISTRY
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
	Advanced Diploma of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	Semester 1 (2 <sup>nd</sup> Year)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Chemistry 1 (General Chemistry) (P) Biology 1 (General Biology) (P)
Nominal Hours	110 hours (7 hours per week)

## Subject Purpose

The purpose of this subject is to provide students with knowledge of the structure and function of biologically significant molecules, their cellular metabolism and the regulation of these metabolic processes. There is an emphasis on the ways in which the properties of molecules can be exploited in qualitative and quantitative analysis and on the recurring themes involved in the mechanisms and regulation of biochemical processes. The practical component of the subject focuses on the development of skills in quantitative and qualitative analytical techniques used in the assay of compounds of biological significance.

Core Subject	COURT PROCEDURES AND PROTOCOLS
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
	Advanced Diploma of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	2 <sup>nd</sup> Year (Semester 1)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Principles of Forensic Investigation (P) Communication in Forensic Science (P) Comparative Analysis (C)
Nominal Hours	110 hours (7 hours per week)

## Subject Purpose

The purpose of this subject is to develop skills in the preparation and presentation of evidence according to established legal and ethical standards. Students will prepare reports, statements, photographs, charts and other techniques for presenting technical evidence before courts, commissions and other tribunals. An understanding of the rules of evidence and skills in delivering evidence during examination-in-chief, cross-examination and re-examination will be developed. Emphasis is placed on appreciating and complying with courtroom protocols and procedures. This subject provides the foundation for later stage subjects which deal with the presentation of expert and opinion evidence, and for subjects such as *Comparative Analysis* (normally undertaken concurrently), *Crime Scene Investigation 2 (Serious Crime)*, *Crime Scene Investigation 3 (Major Incidents)* and *Professional Practices in Forensic Science*, which rely on mock court-based assessment instruments.

Core Subject	COMPARATIVE ANALYSIS
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
	Advanced Diploma of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	2 <sup>nd</sup> Year (Semester 1)
Nominal Hours	110 hours (7 hours per week)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Principles of Forensic Investigation (P) Communication in Forensic Science (P) Court Procedures and Protocols (C)

## Subject Purpose

The purpose of this subject is to develop the knowledge of physical comparison applications and the skills required to prepare and present physical matching evidence. The subject will provide the student with the knowledge and skills to carry out examinations of footwear and tyre evidence, fingermark evidence, toolmarks, firearm evidence and other two- and three-dimensional impression evidence. Emphasis is placed on developing skills for the preparation and presentation of comparative evidence before courts and other legal tribunals.



Core Subject	CRIME SCENE INVESTIGATION 2 (SERIOUS CRIME)
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
	Advanced Diploma of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	2 <sup>nd</sup> Year (Semester 2)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Crime Scene Investigation 1 (Volume Crime) (P) Court Procedures and Protocols (P) Comparative Analysis (P)
Nominal Hours	110 hours (7 hours per week)

## Subject Purpose

This subject aims to further develop the crime scene examination skills introduced in previous subjects with an emphasis on the forensic examination of serious crime incidents. Scenario-based learning activities provide the participant with the opportunity to develop and consolidate their scene assessment, control and examination, evidence interpretation, scene and evidence recording, exhibit collection and case management procedures relevant to serious crimes. The subject introduces advanced procedures for detection and enhancement of physical evidence at the scene of serious crime, and the importance of scene management and appropriate sequencing of examinations is emphasised. Students will develop a detailed understanding of Standard Operating Procedures (SOPs) for serious crime investigation and will further develop their knowledge and skills relating to file management and exhibit management procedures and skills for effective communication with fellow investigators and specialist forensic personnel.

Core Subject	SPECIALIST FORENSIC DISCIPLINES
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
	Advanced Diploma of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	2 <sup>nd</sup> Year (Semester 2)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Anatomy and Physiology for Forensic Science (P) Crime Scene Investigation 2 (Serious Crime) (P)
Nominal Hours	110 hours (7 hours per week)

## Subject Purpose

This subject provides an overview of the role of specialist practitioners and disciplines in forensic investigations. Participants will gain an understanding of the principles, procedures and analyses involved in disciplines such as forensic pathology, clinical forensic medicine, toxicology, anthropology and archaeology, odontology, entomology and forensic psychology. The subject provides basic skills in identifying and interpreting evidence associated with these specialist disciplines; however emphasis is placed on the role of the forensic science practitioner in requesting, coordinating and assisting the involvement of specialist practitioners, and on the potential value of evidence provided by discipline specialists.

Core Subject	CRIMINALISTICS 1
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
	Advanced Diploma of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	2 <sup>nd</sup> Year (Semester 2)
Nominal Hours	110 hours (7 hours per week)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Chemistry 2 (Organic and Analytical Chemistry) (P) Biochemistry (P) Crime Scene Investigation 2 (Serious Crime) (P)

## Subject Purpose

This subject develops and contextualises the scientific principles discussed in *Chemistry 2 (Organic and Analytical Chemistry)* and *Biochemistry*, with a focus on the field-based examination and analysis of chemical and biological evidence. Emphasis is placed on appropriate techniques for the general examination and assessment of a range of physical evidence in order to provide participants with the knowledge and skills required to develop and implement effective sequencing and triage procedures. Various optical, physical and chemical techniques for the development and enhancement of fingerprints are discussed. The subject also introduces participants to the range of techniques and portable analytical instrumentation available for the field-based examination of chemical and biological evidence and to the advantages and limitations of field-based analysis.

<b>Core Subject</b>	<b>CRIME SCENE INVESTIGATION 3 (MAJOR INCIDENTS)</b>
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	3 <sup>rd</sup> Year (Semester 1)
Nominal Hours	110 hours (7 hours per week)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Crime Scene Investigation 2 (Serious Crime) (P) Specialist Forensic Disciplines (P)

## Subject Purpose

Students in this capstone subject will develop their ability to investigate and case manage a simulated complex incident scene. The skills and knowledge developed in previous science, statistics and forensic discipline subjects are extended in order to enable the student to apply the principles of crime scene investigation and case management to scenes involving greater physical and/or conceptual complexity. Scenario-based learning activities involving multiple scenes, plausible alternative hypotheses, fire and explosion scenes and Disaster Victim Identification (DVI) scenarios are used to instruct the participant in the appropriate scene investigation procedures, management approaches and scientific methodology required for the investigation of complex scenes. On completion of the subject, students will have developed sound analytical, critical thinking and reflective skills to evaluate forensic investigation problems within a scene management context and justify their decisions.

Core Subject	FORENSIC RESEARCH PROJECT 1
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	3 <sup>rd</sup> Year (Semester 1)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Statistics for Forensic Science (P) Criminalistics 2 (P) Crime Scene Investigation 3 (Major Incidents) (P)
Nominal Hours	110 hours (7 hours per week)

## Subject Purpose

The purpose of this subject is to develop the student's ability to design, plan and review scientific research in the context of forensic science. Students will develop skills in the use of research terminology and research design and will be able to logically explain and justify courses of action which may be taken in the research process. Emphasis will be placed on the importance of providing a balanced, well considered argument for conclusions drawn from research findings. Students will be able to apply these skills in *Forensic Research Project 2* and *Professional Practices in Forensic Science*.

<b>Core Subject</b>	<b>CRIMINALISTICS 2</b>
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	3 <sup>rd</sup> Year (Semester 1)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Crime Scene Investigation 2 (Serious Crime) (P) Criminalistics 1 (P)
Nominal Hours	110 hours (7 hours per week)

## Subject Purpose

This subject develops and contextualises the scientific principles discussed in *Chemistry 2 (Organic and Analytical Chemistry)*, *Biochemistry* and *Criminalistics 1* with a focus on the laboratory-based examination and analysis of chemical and biological evidence.

Participants will develop an appreciation of the evidential value of chemical and biological evidence through knowledge of the chemistry and composition of common physical evidence types. The participants understanding of the scope and limitations of separation and identification sciences discussed in *Chemistry 2 (Organic and Analytical Chemistry)* and *Criminalistics 1* are extended through the development of practical skills in DNA extraction, quantitation, amplification and profiling of forensic biological samples, chromatographic and spectroscopic analysis of chemical evidence, and the subsequent interpretation of such evidence.

Core Subject	STATISTICS FOR FORENSIC SCIENCE
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	3 <sup>rd</sup> Year (Semester 1)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Maths and Physics for Forensic Investigations (P)
Nominal Hours	110 hours (7 hours per week)

## Subject Purpose

The purpose of this subject is to develop theoretical knowledge of the statistical and probabilistic evaluation of scientific evidence for forensic investigators. The theoretical and practical applications of probability determinations are critically assessed, including the use of Bayesian analysis to evaluate the weight that should be given to particular forensic evidence. The statistics of sampling and quality assurance are considered in terms of designing sampling plans, estimating population statistics and comparing samples. Case studies are used to illustrate appropriate and inappropriate use of statistics in forensic casework.

Core Subject	PROFESSIONAL PRACTICES IN FORENSIC SCIENCE
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	3 <sup>rd</sup> Year (Semester 2)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Crime Scene Investigation 3 (Major Incidents) (P) Criminalistics 2 (P) Forensic Research Project I (P)
Nominal Hours	110 hours (7 hours per week)

## Subject Purpose

This subject emphasises the management dimension of professional practices and requires the student to evaluate and reflect upon the importance of professional conduct to the wider practice of forensic science. Students are encouraged to consider their roles in forensic science, not just in terms of their practices and behaviours at the crime scene, laboratory or in the courtroom, but also in terms of their contribution to the forensic profession through the application and extension of their learning to all aspects of professional endeavour. Students will gain an understanding of the role of forensic service providers in the investigative and legal systems, develop their knowledge of upper management and peak professional bodies within the forensic science community nationally and internationally, and will further develop their knowledge of the principles of ethics, quality assurance and management and their applications to forensic investigations.

Core Subject	FORENSIC RESEARCH PROJECT 2
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	3 <sup>rd</sup> Year (Semester 2)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Forensic Research Project 1 (P)
Nominal Hours	110 hours (7 hours per week)

### Subject Purpose

The purpose of this subject is to develop the student's ability to apply the knowledge and skills gained in all previous subjects to a novel or specialist area of forensic science. Students are required to execute, evaluate and report on a research-based project which was designed in *Forensic Research Project 1*. Student learning will be focussed on rigorous scientific methodology, sound interpretation, judgement and evaluation of research outcomes, and applying a suitable style of reporting which follows the conventions for scientific publications.

Elective Subject	BLOODSTAIN PATTERN ANALYSIS
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
	Advanced Diploma of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	2 <sup>nd</sup> OR 3 <sup>rd</sup> Year (Semester 2)
Nominal Hours	110 hours (7 hours per week)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Maths and Physics for Forensic Investigations (P) Anatomy and Physiology for Forensic Science (P) Crime Scene Investigation 2 (Serious Crime) (P)

## Subject Purpose

This subject is intended to develop a fundamental knowledge of the discipline of Bloodstain Pattern Analysis (BPA). Participants will develop an understanding of the basic principles of BPA and skills in the practical application of the discipline to actual casework. The subject has been designed for investigators, crime scene technicians and others involved in criminal and medico-legal investigations and crime scene analysis. Emphasis is placed on appropriate use of bloodstain pattern analysis terminology, consideration of occupational health and safety concerns, an understanding of the properties of blood and bloodstain principles, and on scene and item analysis including mathematical applications in bloodstain examinations and collection of evidence from scenes, suspects, victims and third parties.

Elective Subject	PRINCIPLES OF BALLISTICS AND FIREARMS EXAMINATION
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
	Advanced Diploma of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	2 <sup>nd</sup> OR 3 <sup>rd</sup> Year (Semester 2)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Maths and Physics for Forensic Investigations (P) Comparative Analysis (P) Crime Scene Investigation 2 (Serious Crime) (P)
Nominal Hours	110 hours (7 hours per week)

## Subject Purpose

The purpose of this subject is to provide the student with basic skills in the field of firearm identification based upon examination of the class and individual characteristics left on projectiles and cartridge cases during discharge of a firearm. In addition, the student will develop the knowledge and skills necessary to explain the phenomena associated with the propulsion, flight and impact of small arms projectiles, and to calculate projectile trajectories using ballistics software. Students will use and extend skills developed in *Comparative Analysis* and the theoretical principles introduced in *Maths and Physics for Forensic Investigations* for the assessment, examination, interpretation and reconstruction of shooting incident scenes, and will develop the knowledge and skills required to report on the examination of shooting incident scenes using appropriate terminology and techniques.

Elective Subject	PRINCIPLES OF FORENSIC DOCUMENT EXAMINATION
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
	Advanced Diploma of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	2 <sup>nd</sup> OR 3 <sup>rd</sup> Year (Semester 2)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Comparative Analysis (P) Criminalistics 1 (P)
Nominal Hours	110 hours (7 hours per week)

## Subject Purpose

This subject explores the underlying scientific principles and techniques of the specialist areas of forensic science associated with document examination. The study of documents considers the forensic analysis of handwritten and machine generated documents, as well as the physical and chemical properties of paper, inks and toners. Students will develop the knowledge and skills required to appropriately collect, preserve and restore document evidence for forensic examination. Case studies emphasise critical evaluation of the evidential value of the data produced in these areas of forensic science.

Elective Subject	PRINCIPLES OF VEHICLE EXAMINATION
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
	Advanced Diploma of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	2 <sup>nd</sup> OR 3 <sup>rd</sup> Year (Semester 2)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Crime Scene Investigation 2 (Serious Crime) (P) Criminalistics 1 (P)
Nominal Hours	110 hours (7 hours per week)

### Subject Purpose

This elective subject aims to develop the knowledge and skills required for the examination of suspect stolen and re-identified vehicles and components. Emphasis is placed on the procedures employed for the restoration of obliterated identification markings.

Elective Subject	PRINCIPLES OF RIDGEOLOGY AND FINGERPRINT COMPARISONS
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
	Advanced Diploma of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	2 <sup>nd</sup> OR 3 <sup>rd</sup> Year (Semester 2)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Crime Scene Investigation 1 (Volume Crime) (P) Comparative Analysis (P)

## Subject Purpose

This subject will introduce the participant to the knowledge and skills required to evaluate and compare friction ridge detail located on the volar surfaces of human skin by using applied science techniques. An understanding of the various identification sciences that form the basis of Ridgeology methodology is emphasised, and the philosophies and standards for identification currently being used by local, national and international forensic agencies are discussed.

Elective Subject	PRINCIPLES OF FIRE SCENE INVESTIGATION
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	3 <sup>rd</sup> Year (Semester 2)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Crime Scene Investigation 3 (Major Incidents) (P) Criminalistics 2 (P)
Nominal Hours	110 hours (7 hours per week)

## Subject Purpose

This elective subject consolidates learning in both professional practice and science profiles in the context of the investigation of fires. Participants will develop investigation skills to determine the cause and origin in structural (building), vehicle and bush fires (wildfire) through scene investigation, interpretation of burn patterns and analysis of evidence. Skills developed and applied in *Crime Scene Investigation 2 (Serious Crime)* are extended to the more complex situations typical of fires, and are integrated with scientific principles and techniques introduced in *Criminalistics 1* for the analysis of chemical evidence of significance from fire scenes. The scientific basis of combustion and explosions is discussed, and used to determine and support conclusions drawn from scene examinations as to the cause, origin and development of fires. Occupational health and safety issues and aspects of professional practice (including presenting expert evidence at court) are emphasised.

Elective Subject	BIOLOGICAL CRIMINALISTICS (NON-HUMAN APPLICATIONS)
Associated Higher Education Award(s)	Bachelor of Forensic Science (Crime Scene Examination)
Duration	One semester
Level	3 <sup>rd</sup> Year (Semester 2)
Subject/Course Credit Points	3/72
Prerequisites/Corequisites	Criminalistics 2 (P)
Nominal Hours	110 hours (7 hours per week)

### Subject Purpose

The purpose of this subject is to provide students with an understanding of the scientific principles that underpin the recognition, examination, analysis and identification of non-human biological evidence. The subject builds upon concepts introduced in *Criminalistics 1* and *Criminalistics 2* and develops the student's understanding of these concepts to the application of biological screening, morphological, chemical and DNA analysis techniques commonly utilised in forensic examinations for biological evidence of non-human origin.