



Australian Government
Australian Transport Safety Bureau

ATSB

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ATSB Strategic Partnership with RMIT University

Presented by
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- Since 2019, ATSB has partnered with RMIT University on Transport Safety Investigation qualifications.
- Covers aviation, marine and rail.
- The partnership provides access to high quality, ATSB sponsored training in transport safety investigation.
- Two qualifications:
 - Graduate Certificate
 - Graduate Diploma.



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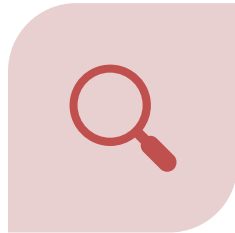
RMIT
UNIVERSITY

Graduate Certificate in Transport Safety Investigation



Unit 1

Investigation Readiness



Unit 2

Accident Investigation
Fundamentals



Unit 3

Human Factors for
Investigators



Unit 4

Analysis and Analytical
Writing Techniques.

Unit 1 – Investigation Readiness

- Principles underlying the incident/accident investigation framework, providing specialised expertise in areas needed by transport safety professionals
- Regulatory framework underpinning the investigation process. Fundamentals of safety organisation functions and its articulation with the investigation process
- Human interface techniques, providing various tools to support the investigation process from a cultural, mental health and Work, Health and Safety (WHS) perspective. Includes study of: no-blame and just cultures, critical incident stress management, on-site safety and management of blood borne pathogens
- Learn and apply cognitive interviewing techniques and communication skills to utilise during the investigation process.

Unit 2 – Accident Investigation Fundamentals

- Develop competencies to initiate an accident investigation process. Emphasis on fundamentals aspects necessary to carry out an investigation at the accident site. Specialised knowledge on aviation, rail and marine accident investigation principles
- Initiate an investigation into an accident, conduct initial assessments on site, control site integrity to preserve evidence, examine the scene, collect evidence and formulate preliminary hypothesis on the contributory factors
- Develop knowledge to recognise potential health and safety risks and take action to eliminate or control risks at accident sites
- Specialised module on forensic photography, learning basic photographic techniques enabling the collection of photographic evidence at the accident site.

Unit 3 - Human Factors for Investigators

- Principles and application of Human Factors in the multi-disciplinary science that applies knowledge about the capabilities and limitations of human performance to all aspects of the design, operation, and maintenance of products and systems
- Understanding of the impact of Human Factors in ensuring safe operations. The human element is a contributing factor in almost all accidents and incidents. Human Factors can contribute positively and negatively to an organisations safety success
- Cover a range of Human Factors topics, including human error, perception, memory, attention, fatigue, workload, stress, ergonomics, decision making, communication, and safety culture, with particular reference to the transportation industry
- Enables participants to identify, assess, and develop strategies to manage the impact of Human Factors on the safety of operations.

Unit 4 - Investigation Analysis and Analytical Writing

- Develop knowledge and skills to analyse the evidence collected as part of an investigation. Including identifying significant contributing factors and formulating appropriate recommendations and safety actions
- Focus on knowledge and skills to perform incident/accident analysis including safety concepts, reasoning concepts, data interpretation, safety factors analysis, risk analysis, and safety actions development
- Focus on skills to develop an investigation report.

Graduate Diploma in Transport Safety Investigation



Unit 5

Specialist Engineering
Techniques in Transport
Safety Investigations



Unit 6

Safety Management
Systems in Transport
Organisations



Unit 7

Advanced Accident
Investigation



Unit 8
Elective

- Intelligent Systems
- Research Methods in Engineering
- Advanced Transport Infrastructure
- Railway Infrastructure
- Radar Systems
- Applied Analytics

How the course is delivered

- Each unit is offered in intensive one - week blocks beginning in February each year by attending the RMIT campus in Melbourne
- Primarily delivered by experienced ATSB investigators
- Applications are open now for Graduate Certificate.
- Enrol in one or all units.



Thankyou

