

Postgraduate programs in
Aviation

**SWIN
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SWINBURNE
UNIVERSITY OF
TECHNOLOGY

NEED AN UPGRADE TO YOUR AVIATION CAREER?



swinburne.edu.au/postgrad

POSTGRADUATE PROGRAMS IN AVIATION

Swinburne's postgraduate aviation programs have been developed with direction from major players in the industry to ensure the content reflects the dynamics of this rapidly changing area. The contribution of industry professionals and specialists to the course content ensures graduates gain an advanced understanding of the industry to achieve and sustain a competitive advantage in their career.

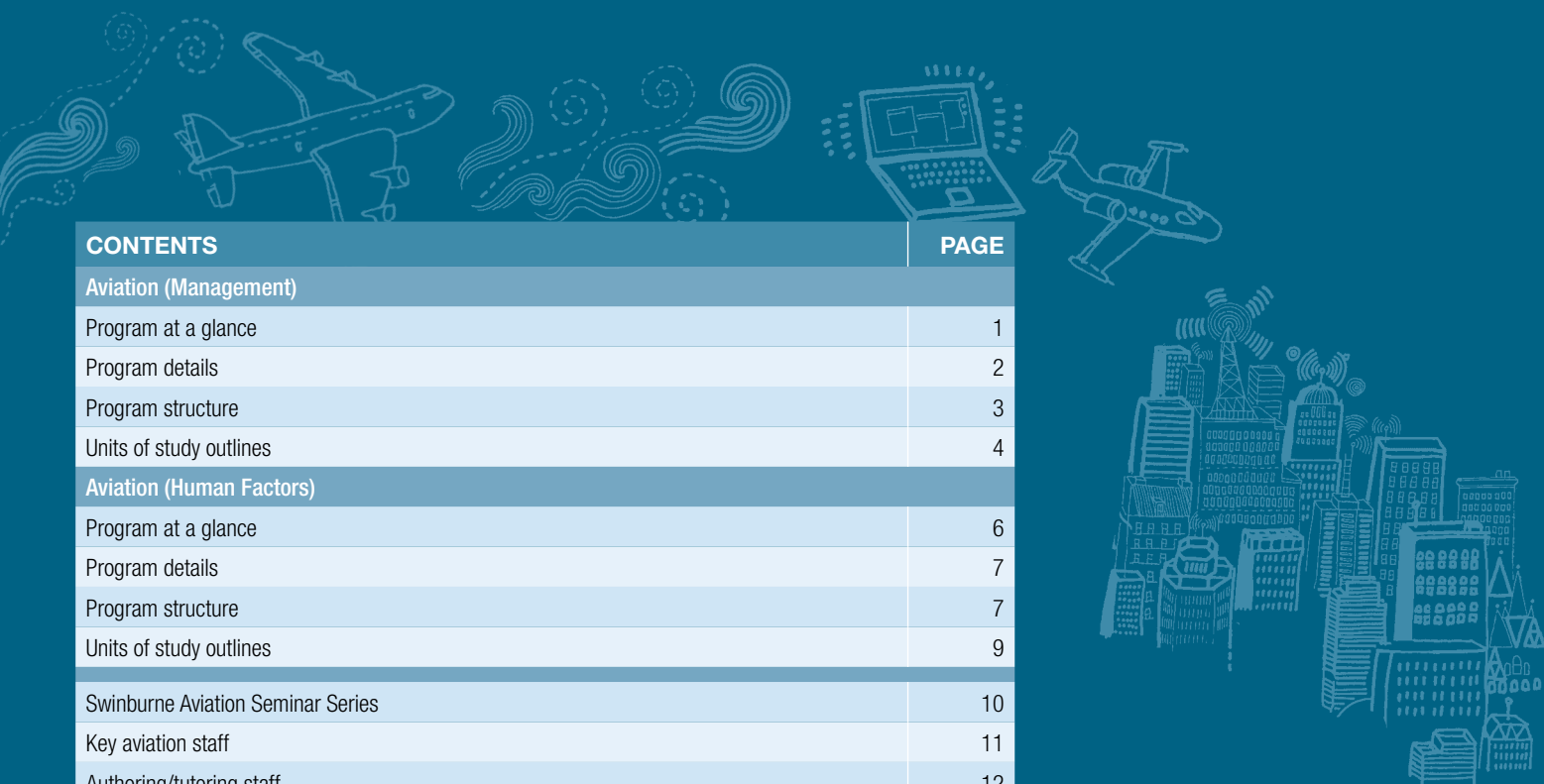
The Aviation (Management) program is designed to support those whose ambition is to assume senior management roles in organisations.

The Aviation (Human Factors) program is designed to further enhance skills and abilities of graduates who wish to implement human factors programs within the aviation industry.

These programs are delivered through distance learning, which allows the flexibility to study anytime and anywhere in the world. Graduates also have the opportunity to pursue studies to PhD level, upon completion of the Master program undertaken with a minor thesis.

If you wish to study at one of the leading universities delivering aviation studies, look no further than Swinburne.

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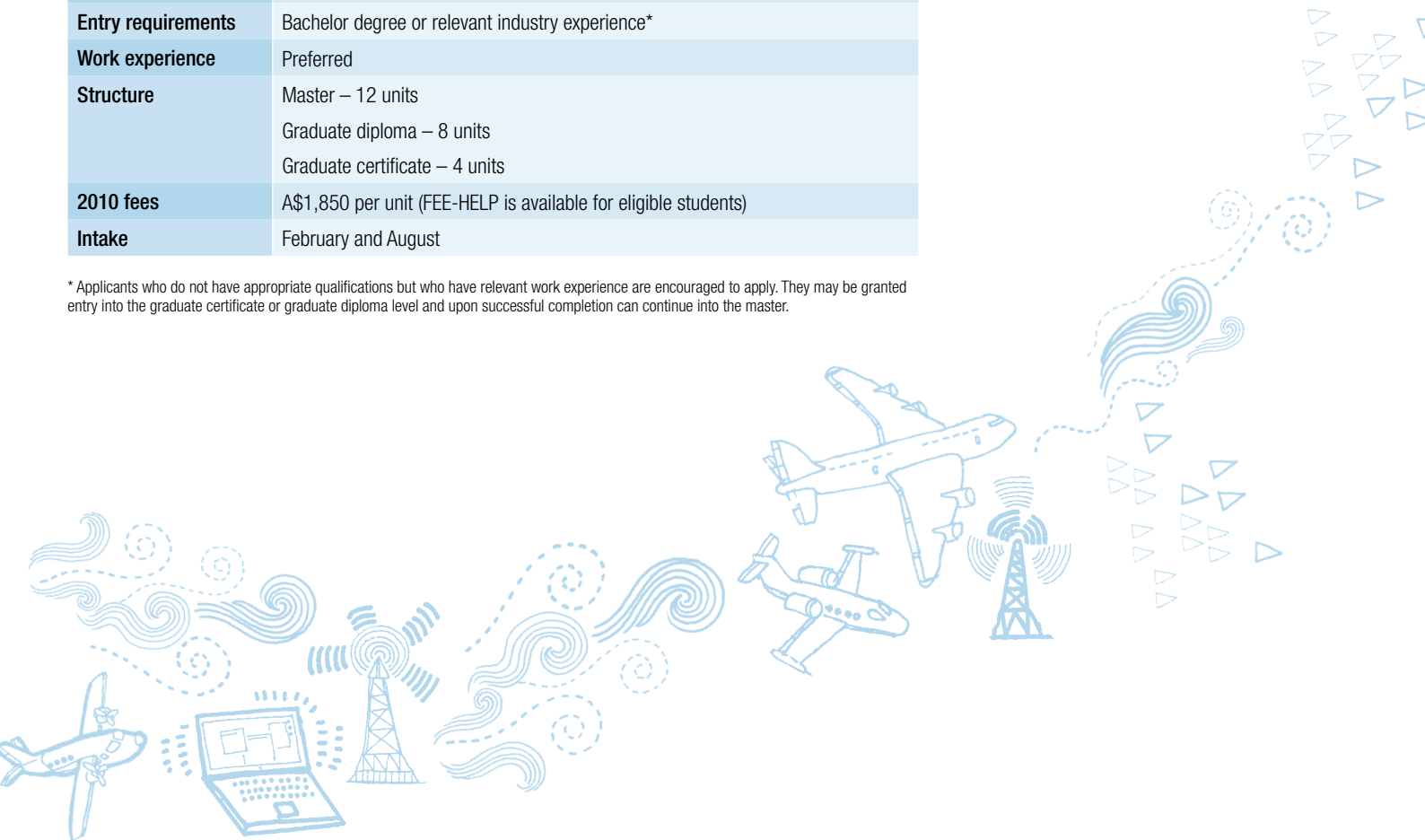


AVIATION (MANAGEMENT)

Program at a glance

AVIATION (MANAGEMENT)	
Award	Master of Aviation (Management) Graduate Diploma of Aviation (Management) Graduate Certificate of Aviation (Management)
Focus	The air transportation industry and its environment Implementation of aviation management within a company environment Applied aviation management research
Suitable for	People currently employed in the air transport, airport and related industries or university graduates
Average duration	Master – 1.5 years full-time or 3 years part-time Graduate diploma – 1 year full-time or 2 years part-time Graduate certificate – 6 months full-time or 1 year part-time
Location	Off-campus: distance learning
Entry requirements	Bachelor degree or relevant industry experience*
Work experience	Preferred
Structure	Master – 12 units Graduate diploma – 8 units Graduate certificate – 4 units
2010 fees	A\$1,850 per unit (FEE-HELP is available for eligible students)
Intake	February and August

* Applicants who do not have appropriate qualifications but who have relevant work experience are encouraged to apply. They may be granted entry into the graduate certificate or graduate diploma level and upon successful completion can continue into the master.



AVIATION (MANAGEMENT)

Program details

MASTER OF AVIATION (MANAGEMENT)

GRADUATE DIPLOMA OF AVIATION (MANAGEMENT)

GRADUATE CERTIFICATE OF AVIATION (MANAGEMENT)

Swinburne's postgraduate programs in Aviation (Management) are designed to further develop your understanding and approach to the multi-organisational aspects of commercial aircraft operation by providing insight into the management of the air transportation industry.

Aviation (Management) encompasses multi-discipline management covering organisational, regulatory, technical and business contexts. Within an operational environment, you will develop skills and understanding in:

- the principles and complexities of the air transportation industry
- the implementation of aviation management within a company environment
- applied aviation management research
- proactive achievement and sustaining of a competitive advantage in a rapidly changing global industry

A unique aspect of these programs is that they are developed with direction from major players in the aviation industry to ensure the content accurately reflects the dynamics of this rapidly changing area.

These programs are designed primarily to meet the needs of those currently involved in the aviation industry who wish to upgrade their skills at the tertiary level in the field of aviation management. The content of the programs can also be applied to other aviation-related businesses and services.

Career opportunities

You can apply the skills acquired from these programs to accelerate progress to management levels within areas such as:

- airline and airport management
- aviation consultancy
- aviation regulatory and safety authorities

Admission requirements

Applications are encouraged from those currently employed in the air transport and airport industries or university graduates. The level at which you will be admitted (e.g. graduate certificate, graduate diploma, master) will depend on your level of work experience, knowledge and previous study. We encourage you to apply whether you are located either within Australia or overseas.

Location

These programs are offered off-campus by distance learning. However, you will be required to attend the Aviation Industry Seminars held in Melbourne, Australia.

You will require online access for all Aviation units.

Program length

Graduate certificate: One year part-time or six months full-time

Graduate diploma: Two years part-time or one year full-time

Master: Three years part-time or one-and-a-half years full-time

If you are in employment we strongly recommend you study part-time. The flexibility of the program enables you to vary your study load to accommodate changing employment and personal commitments.

Assessment

Assessment normally consists of several assignments. There are no exams.

Brett Parker

Master of Technology Management (Air Transportation Management)*

"I chose to do the program to gain a greater appreciation of the airline business and further increase my chance of obtaining a career with a major airline. I chose Swinburne over other universities and schools that offered courses in this field of study as Swinburne offered a more specialist program in air transportation management.

The program is well-regarded in the aviation industry and the contribution of industry consultants is highly valuable. The fact that it is so specialised and has many areas that I find very interesting makes it all the more appealing. A wide range of units provides flexibility and the specialist in-depth analysis is an extremely useful learning tool.

By combining distance learning with seminars, the program gives me the flexibility to balance study with work commitments."

** Course renamed to Master of Aviation (Management) from 2009*

Program structure

Swinburne's aviation management programs form a nested suite, offering you the opportunity to exit at the graduate certificate, graduate diploma or master stage. The programs offer great flexibility through a wide choice of discipline-specific units and elective units.

All units of study are valued at 12.5 credit points except for HES7606 Minor Thesis which is valued at 37.5 credit points and HES6699 Aviation Industry Seminars (nil credit points).

Aviation Industry Seminars

The Aviation Industry Seminars unit (HES6699) is a compulsory zero fee, zero credit point unit. These seminars are held in February each year at Swinburne's Hawthorn campus in Melbourne, Australia. Attendance for a total of three days is compulsory in all aviation postgraduate programs. You will only need to complete this unit once – even if you move from a graduate certificate to the master program. If you have significant travel problems and can provide evidence of registration and attendance at an alternative equivalent seminar/course, you may seek approval for exemption.

GRADUATE CERTIFICATE OF AVIATION (MANAGEMENT)

This program requires you to satisfactorily complete four units of study to the value of 50 credit points, which must consist of:

- HES6611 Introduction to Air Transportation
- HES6699 Aviation Industry Seminars[^] (nil credit points) **plus**
- Three Aviation (Management) units of study

GRADUATE DIPLOMA OF AVIATION (MANAGEMENT)

This program requires you to satisfactorily complete eight units of study to the value of 100 credit points, which must consist of the graduate certificate stage plus four additional units.

MASTER OF AVIATION (MANAGEMENT)

This program requires you to complete twelve units of study to the value of 150 credit points which consists of the graduate certificate and diploma stages, plus four additional units. This stage can be completed in either of two ways: coursework only option or coursework plus research option.

[^] See page 10 for more details

Units of study

STAGE 1	
HES6611	Introduction to Air Transportation
HES6699	Aviation Industry Seminars (0 credit points) [#]
Plus three aviation management units of study	

STAGE 2	
One aviation management unit of study	
Plus three units of study from the electives group	

STAGE 3	
You can choose to undertake the master stage by coursework or research project:	
Coursework only option	
Three aviation management units of study	
Plus one unit of study from the electives group	
Coursework + research option	
HES7605	Research Design and Methodology
HES7606	Minor Thesis [*]

^{*} Part-time and full-time option available, however part-time study is recommended. Enrolment in the full-time option requires specific approval from the Postgraduate Program Coordinator.

[#] This unit can be undertaken at Stage 2 or 3 (once only)

AVIATION MANAGEMENT UNITS	
HES6613	Airline Operations Management
HES6615	Aircraft Selection, Acquisition and Contracts
HES6616	Stress and Fatigue Management in Aviation
HES6617	Emergency Planning and Management Part 1
HES6618	Emergency Planning and Management Part 2
HES6619	Aviation Risk Management and Insurance
HES6620	Air Transportation Financial Management ^{**}
HES6623	Regulatory Environment and Business Practice in Air Transport
HES6625	Airline Maintenance ^{**}
HES6630	Airport Planning and Design Part 1
HES6631	Airport Planning and Design Part 2

^{**} Recommended to be taken at the graduate diploma level or higher

ELECTIVE UNITS	
Elective units can be chosen from aviation management (above), aviation human factors (on page 8), risk management (below) or from other disciplines (subject to approval and availability).	
Risk Management	
HES6720	Risk Perception and Analysis
HES6721	Risk Management Principles
HES6722	Quantitative Risk and Modelling
HES6723	Financial Risk Management
HES6724	Risk Management Systems
HBSG500	New Venture Development and Management

AVIATION (MANAGEMENT)

Units of study outlines

HES6611 Introduction to Air Transportation (core unit)

- National importance of air transportation
- Regulatory framework
- ICAO, IATA, Chicago Convention, Annexes to Chicago Convention
- Freedoms of the air
- Transit and air service agreements
- Operations and technical regulation
- Transport economics and commercial aspects of airports
- Organisation and structure of air carriers

HES6613 Airline Operations Management

- International framework for aircraft operation
- Certification of aircraft and organisations/airworthiness
- Extended range operations
- Flight simulation
- Operational control

HES6615 Aircraft Selection, Acquisition and Contracts

- Fuel burn/range payload
- Engine/airframe combination
- Route suitabilities
- Fleet commonality
- Multiple crew endorsements
- Fuel burn retention and guarantees

HES6616 Stress and Fatigue Management in Aviation

- Medical/fatigue issues
- Flight time limitations
- Reports and other studies
- Fatigue in extended long range operations
- Crew patterns
- Crew management
- Crew rest facilities

HES6617 Emergency Planning and Management Part 1

- Emergency, incident, accident
- Emergency planning and management on and off airport
- Search and rescue
- Rescue and fire fighting services
- Airport categorisation
- International rules and obligations

HES6618 Emergency Planning and Management Part 2

- Accident investigation
- Accident prevention
- Coronial inquiry
- Operator obligations, planning and management
- Contingency/crisis management

HES6619 Aviation Risk Management and Insurance

- Risk/defence
- Equipment and counter measures
- Conventions, jurisdiction and punishment
- International and Australian law
- Operational and short-term risk
- Medium and short/long-term risk management
- Insurance of assets and income

HES6620 Air Transportation Financial Management

- IATA guidelines and international accounting practices and standards
- Revenue and frequent flyer programs
- Aircraft asset valuation and depreciation policies
- Asset and expense disclosure
- Finance and operating lease information
- Foreign exchange/contracts earnings and variations

HES6623 Regulatory Environment and Business Practice in Air Transport

- International conventions
- National legislation
- Air service agreements
- Alliances
- Code sharing agreements
- Marketing strategies
- Computerised reservations systems
- Business practice

HES6625 Airline Maintenance

- Approval framework
- Business regulatory dynamics from a JAA/FAA 121 and 145 perspective
- Engineering and maintenance systems, data and inventory management
- Maintenance planning and tracking
- Quality control and risk management
- Aircraft, engine and component leasing

HES6630 Airport Planning and Design Part 1

- Evolving role of airports
- User expectations – operator, commercial, freight, public
- Regulatory bodies
- Standards and recommended practices for airports
- Strategic planning
- Airport master planning
- Traffic growth and demand forecasting
- Passenger terminal design and landside design

HES6631 Airport Planning and Design Part 2

- Airport airside facilities including maintenance and cargo
- Airport support services and facilities
- Landside facilities including road access, transport services and commercial developments
- Airside design parameters including runways, taxiways and aprons
- Obstacle limitations in airspace
- Procedures for Air Navigation Services – Operations (PANS-OPS)
- Environmental factors

Note: Minor variations to the program content may be made in keeping with industry changes and updates.

Note: You may apply for admission into a PhD program upon successful completion of the master program including HES7605 Research Design and Methodology and HES7606 Minor Thesis.



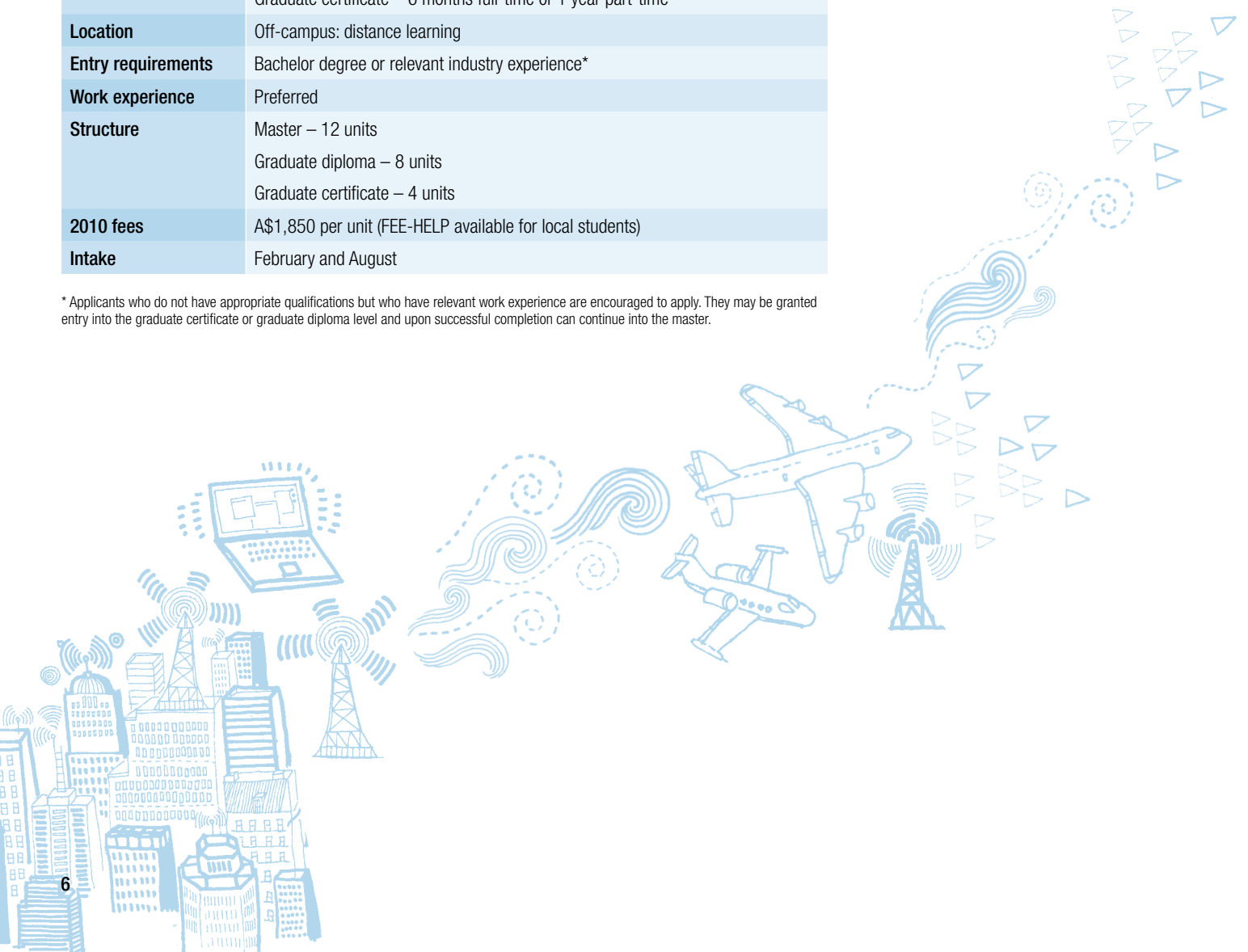


AVIATION (HUMAN FACTORS)

Program at a glance

AVIATION (HUMAN FACTORS)	
Award	Master of Aviation (Human Factors) Graduate Diploma of Aviation (Human Factors) Graduate Certificate of Aviation (Human Factors)
Focus	The principles of human factors Threat and error management Safety management systems Implementation of human factors training programs Applied human factors research
Suitable for	People currently employed in the air transport, airport and related industries or university graduates
Average duration	Master – 1.5 years full-time or 3 years part-time Graduate diploma – 1 year full-time or 2 years part-time Graduate certificate – 6 months full-time or 1 year part-time
Location	Off-campus: distance learning
Entry requirements	Bachelor degree or relevant industry experience*
Work experience	Preferred
Structure	Master – 12 units Graduate diploma – 8 units Graduate certificate – 4 units
2010 fees	A\$1,850 per unit (FEE-HELP available for local students)
Intake	February and August

* Applicants who do not have appropriate qualifications but who have relevant work experience are encouraged to apply. They may be granted entry into the graduate certificate or graduate diploma level and upon successful completion can continue into the master.



MASTER OF AVIATION (HUMAN FACTORS)

GRADUATE DIPLOMA OF AVIATION (HUMAN FACTORS)

GRADUATE CERTIFICATE OF AVIATION (HUMAN FACTORS)

Swinburne's postgraduate programs in Aviation (Human Factors) are designed to further enhance your skills and abilities in implementing human factors programs within the aviation industry. As a student undertaking these programs you can expect a comprehensive and in-depth approach to the following areas:

- the principles of human factors
- threat and error management
- safety management systems
- implementation of human factors training programs
- applied human factors research

A unique aspect of these programs is that they are developed in partnership with the aviation industry to ensure the content accurately reflects the dynamics of this rapidly changing area.

These programs are designed primarily to meet the needs of those currently involved in the aviation industry who wish to upgrade their skills at the tertiary level in the area of human factors. However, the subject matter can also be applied to other industries such as rail, road, shipping, medical, heavy industry, chemical industry and energy production.

Career opportunities

You can apply the skills acquired from these programs to pursue career opportunities in a variety of industries in areas such as:

- safety management systems
- human factors program development
- human factors training
- human factors research

Admission requirements

Applications are encouraged from those currently employed in the air transport and airport industries or university graduates. The level at which you will be admitted (e.g. graduate certificate, graduate diploma, master) will depend on your level of work experience, knowledge and previous tertiary study. We encourage you to apply whether you are located either within Australia or overseas.

Location

These programs are offered off-campus by distance education. However, you will be required to attend the Aviation Industry Seminars held in Melbourne, Australia.

You will require online access for all Aviation units.

Program length

Graduate certificate: One year part-time or six months full-time

Graduate diploma: Two years part-time or one year full-time

Master: Three years part-time or one-and-a-half years full-time

If you are in employment we strongly recommend you study part-time. The flexibility of the program enables you to vary your study load to accommodate changing employment and personal commitments.

Assessment

Assessment normally consists of several assignments. There are no exams.

Program structure

Swinburne's aviation human factors programs form a nested suite, offering you the opportunity to exit at the graduate certificate, graduate diploma or master stage. The programs offer great flexibility through a wide choice of discipline-specific units and elective units.

All units of study are valued at 12.5 credit points except for HES7606 Minor Thesis which is valued at 37.5 credit points and HES6699 Aviation Industry Seminars (nil credit points).

Aviation Industry Seminars

The Aviation Industry Seminars unit (HES6699) is a compulsory zero fee, zero credit point unit. These seminars are held in February each year at Swinburne's Hawthorn campus in Melbourne, Australia. Attendance for a total of three days is compulsory in all aviation postgraduate programs. You will only need to complete this unit once – even if you move from a graduate certificate to the master program. If you have significant travel problems and can provide evidence of registration and attendance at an alternative equivalent seminar/course, you may seek approval for exemption.

GRADUATE CERTIFICATE OF AVIATION (HUMAN FACTORS)

This program requires you to satisfactorily complete four units of study to the value of 50 credit points, which must consist of:

- HES6611 Introduction to Air Transportation
- HES6699 Aviation Industry Seminars[^] (nil credit points) **plus**
- Three Aviation (Human Factors) units of study

GRADUATE DIPLOMA OF AVIATION (HUMAN FACTORS)

This program requires you to satisfactorily complete eight units of study to the value of 100 credit points, which must consist of the graduate certificate stage plus four additional units.

MASTER OF AVIATION (HUMAN FACTORS)

This program requires you to complete twelve units of study to the value of 150 credit points which consist of the graduate certificate and diploma stages plus an additional four units. This stage can be completed in either of two ways: coursework only option or coursework plus research option.

[^] See page 10 for more details

AVIATION (HUMAN FACTORS)

Program details

Units of study

STAGE 1

HES6611	Introduction to Air Transportation
HES6699	Aviation Industry Seminars (0 credit points)#
Plus three aviation human factors units of study	

STAGE 2

One aviation human factors unit of study	
Three units of study from the electives group	

STAGE 3

You can choose to undertake the master stage by coursework or research project:

Coursework only option

Two aviation human factors units of study	
One aviation management unit of study (listed on page 3)	
One unit of study from the electives group	

Coursework + research option

HES7605	Research Design and Methodology
HES7606	Minor Thesis*

* Part-time and full-time option available, however part-time study is recommended. Enrolment in the full-time option requires specific approval from the Postgraduate Program Coordinator.

This unit can be undertaken at Stage 2 or 3 (once only)

AVIATION HUMAN FACTORS UNITS

HES6600	Introductory Human Factors
HES6601	Human Factors in Air Traffic Management
HES6602	CRM and Threat & Error Management
HES6603	Organisational Change in Aviation
HES6604	Advanced Human Factors [^]
HES6605	Human Factors in Maintenance**
HES6606	Human Factors Instruction
HES6607	Safety Management Systems**
HES6616	Stress and Fatigue Management in Aviation

** Recommended to be taken at the Graduate Diploma level or higher

[^] Students are recommended to have completed HES6600 prior to studying HES6604

ELECTIVE UNITS

Elective units can be chosen from aviation human factors (above), aviation management (on page 3), risk management (below) or from other disciplines (subject to approval and availability).

Risk Management

HES6720	Risk Perception and Analysis
HES6721	Risk Management Principles
HES6722	Quantitative Risk and Modelling
HES6723	Financial Risk Management
HES6724	Risk Management Systems
HBSG500	New Venture Development and Management

Emma Prime Graduate Diploma of Technology (Aviation Human Factors)*

"The aviation human factors program offered by Swinburne has a range of specialised units which address issues that are important in today's aviation industry.

The course manuals cover significant human factors topics and provide material that is current within the operational environment. The delivery of the program by distance education also allows me the flexibility to work full-time and pursue other goals.

The program is interesting, well-organised and applicable to so many working environments other than aviation. The tutors are highly experienced professionals from various aviation sectors who provide important advice and guidance. Seminars and workshops held on-campus provide a wealth of knowledge as well as valuable opportunities to network with a range of professionals within the many areas of the aviation industry."

* Course renamed to Graduate Diploma of Aviation (Human Factors) from 2009

HES6611 Introduction to Air Transportation (core unit)

- National importance of air transportation
- Regulatory framework
- ICAO, IATA, Chicago Convention, Annexes to Chicago Convention
- Freedoms of the air
- Transit and air service agreements
- Operations and technical regulation
- Transport economics and commercial aspects of airports
- Organisation and structure of air carriers

HES6600 Introductory Human Factors

- Human factors in aircraft accident investigation
- Systems analysis
- Aviation displays and cockpit automation
- Cockpit crew-systems design integration
- Pilot attention and pilot workload

HES6601 Human Factors in Air Traffic Management

- Human factors in ATC environments
- Assessment of issues
- Developing a safety culture
- Technical advances in ATM
- Training for human factors competence

HES6602 CRM and Threat and Error Management

- Managing risk
- Evolution of CRM
- Cross-cultural perspectives
- CRM course design
- LOS and LOSA
- Multi-modal applications
- TEM Model
- Counter measures to avoid error

HES6603 Organisational Change in Aviation

- The changing aviation context
- Impacts of technological change on the organisation of work
- Computer-supported cooperative work
- Developing organisational systems that support learning
- Organisational culture and organisational change

HES6604 Advanced Human Factors

- Human factors program development
- Organisational safety culture
- Politics and air safety
- Safety maintenance and ground handling
- Advanced accident investigation
- Behaviour analysis in aviation
- Disaster management

HES6605 Human Factors in Maintenance

- The human factors discipline and maintenance
- Human error and human performance
- Incident and accident causation models
- Human factors at the individual and team level
- Hardware, procedures and the environment

HES6606 Human Factors Instruction

- Single pilot IFR operations
- Military operations
- Agricultural operations
- Emergency medical operations
- Flight instruction
- Aviation human factors in different cultures

HES6607 Safety Management Systems

- SMS elements
- Modality of SMS
- Building organisation structures
- Managing violations and discipline
- SMS toolkit
- Business case integration

HES6616 Stress and Fatigue Management in Aviation

- Medical/fatigue issues
- Flight time limitations
- Reports and other studies
- ETOPS
- Crew patterns
- Crew management
- Crew rest facilities

Note: Minor variations in the program content may be made in keeping with industry changes and updates.

Note: You may apply for admission into a PhD program upon successful completion of the master program including HES7605 Research Design and Methodology and HES7606 Minor Thesis.

SWINBURNE AVIATION INDUSTRY SEMINARS

The Aviation Seminar Series is a key event at Swinburne University of Technology. Although originally designed as a major component of our postgraduate programs in aviation (management) and aviation (human factors), we have recognised the potential benefits to those organisations and professionals who wish to broaden their industry knowledge. As a result, we are delighted to offer complimentary places to industry. Attendees need to register for their preferred sessions on our website at www.swinburne.edu.au/aviation/seminars. Capacity limitations may apply.

The seminars facilitate a better understanding of the changing nature of the aviation industry, embracing many facets of contemporary aviation. Topics covered considerably broaden our extensive course material, and include such diverse areas as the design and certification of new aircraft and their introduction into service, latest engine developments, alternative fuels, as well as several presentations and a workshop on human factors issues.

The seminars offer participants the opportunity to interact with presenters and other industry personnel. Our presenters have a great deal of expertise in their respective fields, and as such are drawn exclusively from industry, often from major international organisations. Our postgraduate aviation students who attend the seminars also benefit greatly from meeting authors and tutors of the materials as well as academic staff and fellow students.

Swinburne Aviation

Our aviation program staff have significant industry backgrounds, including experience in international airline executive management, major airline CRM management, flight crew, aerospace engineering, (design/manufacturing/maintenance and regulatory), and ground operations. These levels of experience have enabled us to develop a range of industry focused programs balanced across a range of disciplines.

With the ever-increasing strategic and commercial importance of aviation and air transportation in Australia and across the world, Swinburne aviation continues to expand its range of undergraduate and postgraduate courses, addressing contemporary and future issues in this critical industry. The development of these courses emphasises the guiding principles of safety, legality and compliance, and business profitability.

Industry Advisory Committee

Driving the direction and activities of Swinburne aviation is our Industry Advisory Committee which comprises senior executives from the aviation industry, within Australia and overseas, who meet formally with academic staff to review the content of current undergraduate and postgraduate courses and to provide advice on the accreditation of new courses. The chairperson is elected annually from the external members and, on accreditation matters, reports directly to the academic board of the university. This ensures that the content of all aviation courses is relevant to the changing needs of industry. The program for the Seminar Series has received unanimous endorsement from the advisory committee.

Seminar accommodation and refreshments

There is a range of competitively priced accommodation close to the university, including local hotels and Swinburne's own student residences. Other hotels, of course, are located in the City of Melbourne, only fifteen minutes away.

During the seminars, we are pleased to offer coffee before the sessions commence, and complimentary morning teas and lunches during each day. There is also a wide selection of very good eating places within walking distance.

Seminar Series venue

The Annual Swinburne Aviation Seminar Series is held at Swinburne University of Technology, Hawthorn Campus, Melbourne. The Hawthorn Campus is located about 7kms from the centre of Melbourne, is easily accessible by public transport (Glenferrie Station) and has convenient car parking nearby (Wakefield Street multi-storey car park).

Our audience

The seminars typically attract participants from aviation, including airlines, airports, regulatory authorities, government, defence, training operators, pilots, cabin attendants, air traffic controllers, and ground staff. However, the diverse range of topics especially in relation to our human factors sessions also attracts personnel from rail, road, medicine, and a range of other industries.

Our seminar presenters

We acknowledge the major contribution of our team of international and domestic presenters to the quality and relevance of our seminar topics. Their willingness to make their time available affirms recognition of the importance of our industry driven programs.

All are experts in their particular fields who bring a wealth of industry and academic experience, providing valuable insight into current issues.

Past presenters include representatives from Airbus Industrie, Australian Transport Bureau, jetstar, Qantas, Rolls Royce, Shell Aviation, Thales ATM, V Australia and many more.



Mr Stephen Fankhauser BE(Aero)

Stephen is the discipline leader and undergraduate course coordinator of the aviation courses at Swinburne. He commenced at Swinburne in 1994 having been an aeronautical design engineer at the former Government Aircraft Factories (now Boeing Hawker de Havilland). As well as heading the aviation discipline, Stephen lectures in the area of structures, aircraft design and propulsion. His interests lie in the development of aviation education and training. Stephen is a current member of the CASA Aviation Safety Forum.

Dr Peter Bruce BBus, MBA, PhD

Peter is the Postgraduate Program Coordinator of the Aviation (Human Factors) and (Management) programs, is involved extensively with the annual Aviation Industry Seminars and is a senior lecturer in Aviation at Swinburne. Peter's employment in the aviation industry included over 16 years as an operations controller in the Operations Control department in TAA/Australian Airlines. Peter's PhD from Monash University focused on decision-making processes in airline operations. He also teaches in the undergraduate program mainly with regard to business strategy management, operations management and student research, as well as leading a global Aviation Study Tour every two years.

Dr David Newman MB, BS, DAvMed, PhD, MRAeS, FAICD, FAIM

David is the Head of Research in Aviation at Swinburne. He is an aviation medicine and human factors specialist, and previously served as an aviation medicine specialist in the Royal Australian Air Force. His time in the Air Force included two years as Chief Instructor at the RAAF Institute of Aviation Medicine, where he was responsible for the training of all Australian Defence Force aircrew and medical officers. During his time in the RAAF he completed the USAF Aerospace Medicine Primary Course at Brooks AFB, Texas, and the Diploma in Aviation Medicine from the Royal College of Physicians of London, where he won the Stewart Memorial Prize. He has a medical degree from Monash University and a PhD in Physiology from the University of Newcastle. He is a qualified pilot, and has published over 60 scientific papers and technical reports on a variety of aviation medicine topics.

Mr David Ostler BE(Mech), MSc(Flight Dynamics), MBA

David is a Swinburne lecturer with over 19 years of experience, both fixed and rotary wing, within the Australian Defence Force. He has an extensive operational and management background as well as being a graduate of the Empire Test Pilot's School. As an experimental test pilot, David has been involved in a wide range of developmental testing including systems evaluation, simulator assessment, ship/helicopter interface testing and was the Navy's Seasprite program test pilot. David held the position of chief of flight test with the Navy prior to commencing at Swinburne.

Mr Ken Barnes

Ken commenced his aviation career in 1952 at Qantas. As a ground engineer and later as a flight engineer, Ken has been involved with commercial jet aviation from the B707 and Comet IV to the latest fly-by-wire technology. He was also the deputy director flight operations for Cathay Pacific Airways for a number of years. Ken has been instrumental in the design and development of the postgraduate courses at Swinburne and also teaches in undergraduate programs. In recent years, Ken has been working closely with industry and school-leaver groups in the promotion of careers and opportunities in aviation.

Mr John Bibo MBE, BE(Aero)

John has brought to Swinburne a wealth of experience having enjoyed a distinguished career in the industry. As Assistant General Manager – Technical of Ansett Australia, John had direct responsibility for Fleet Planning, Aircraft Evaluation, Aircraft Specification and Contracts in addition to Engineering, Maintenance and Overhaul, Technical Training and Flight Simulation. In his position as Executive Director of Ansett Transport Industries he served as Director of Engineering of Ansett Worldwide Aviation Services and as a Director of Ansair, Turbine Components Pty Ltd and the British Aerospace – Ansett Flying College. External appointments included a term as Member of the Board of Airservices Australia and Chairman of Aviation Training Australia Incorporated. John is involved extensively with the Aviation Industry Seminars and several other activities with regard to aviation at Swinburne.



Mr Joey Anca BA, GradCert (Int Mgmt), GradCert (Accident Prevention)

With over 20 years of experience in high performance industries, Joey is an internationally recognised human factors specialist in the domains of Operations, Human Resources, Organisational and Learning Development. Joey is a prolific speaker and chair at international transport conferences in Europe, the USA, and Asia-Pacific regions on wide-ranging subjects such as: high performance organisational training and development, Human Factors, Crew Resource Management and Safety. He is the editor of the book "Multimodal Safety Management and Human Factors", Ashgate 2008 and co-editor with Prof Robert Helmreich and Dr Barbara Kanki of the book "Crew Resource Management", Academic Press, 2009.

Dr Christine Boag-Hodgson BA (Hons), PhD

Christine is the principal consultant for Humanology, a consultancy providing Human Factors Psychology training. Humanology specialises in the identification, analysis, mitigation and management of human factors risks. Utilising qualified trainers and assessors, Humanology provides human factors training to large and small groups. The training sessions are renowned for transferring practical knowledge and hands-on skills to participants through the effective use of formal lecture-style presentations, case studies and group workshops.

Dr Alan Hobbs

Alan is currently a senior research associate, San Jose State University Foundation at the NASA Ames Research Centre, California. For over 10 years he was a human performance investigator at the Australian Bureau of Air Safety Investigation. He has investigated aviation, rail and maritime accidents and has advised on safety issues in mining and manufacturing industries.

Mr Victor Hughes FCMA FHKIoD

Victor has held senior management positions as Finance Director and Chief Financial Officer in Cathay Pacific Airways and the Swire Group of Companies. During his career with the Swire Group he worked in a number of its divisions including Industries, Shipping and Aviation and the group's Central Services. He was frequently involved in establishing new commercial operations, financing major capital assets, re-organising operations and disposing of assets and companies. Victor is highly experienced in corporate governance and holds current posts as a supervisory board member of two German financial companies.

Mr Chris Jarvis – Dip Civil Eng

Chris has been involved with large scale multi-modal projects in many countries around the world. As an airport consultant with Airbiz (formerly Airplan), Chris has undertaken a wide range of airport master planning studies. He has both managed multi-disciplinary planning studies and has provided key input to them. The master planning studies have involved preparation of traffic forecasts, identification of appropriate planning criteria and design aircraft, planning of the full range of aviation support facilities, landside road access and parking and utility services requirements. Many Master Plans have also included preparation of staged development plans and budget cost estimates. Major studies undertaken by Chris include Master Plans for Delhi and Mumbai Airports, the Strategic Overview of Major Airport Development (SOMAD) study for Hong Kong International Airport, Second Sydney Airport Master Plan, Master Plans for major airports including Adelaide, Cairns, Calgary, Melbourne, Nadi and Wellington, as well as Master Plans for numerous regional airports in Australia, New Zealand, the Middle East and the Pacific.

Mr John King

John has had more than 20 years airline management experience. He is a practising international consultant in aviation and tourism policy, legislation and practice with specific expertise in air service negotiation across numerous countries. John has been an adviser to government and financial institutions and authored major reports on contemporary aviation issues.

Mr Lindsay Naylor

Lindsay has enjoyed a distinguished career completing 35 years service as a fighter pilot, including squadron commanding officer. He has also completed two separate tours as the Air Force's director of flying safety, and was director of operations and plans at Emergency Management Australia. He has been a member of the International Society of Air Safety Investigators (ISASI) for 12 years, and is currently vice president of the Australian Society and the Australian councillor on ISASI's International Council.

Dr Christine Owen, BA(Hons), BAVE, PhD

Christine is an Associate Professor and researcher from the University of Tasmania. Her areas of specialty include workplace teaching and learning, technological and organisational change and she has a specific interest in collaborative work practice in high-intensity, high-reliability and high-technology organisations. She is a member of several aviation and research groups.

Mr Alan Swann

Alan has completed a long career in senior management of aircraft maintenance and flight operations administration in a major airline. He has experience in training, documentation, flight operations, and component maintenance spanning 41 years in the industry. Alan has enjoyed a career that has covered most of the areas of Aircraft Maintenance Management in a major airline. Starting as an Aircraft Electrical Mechanic he joined the Maintenance Training Centre and over a period of 21 years instructed in both classroom and practical environments on a number of different aircraft types to Aircraft Maintenance Engineers (LAME), Flight Crew and Apprentices. Alan held an AME Examiners Authority in various types current at the time. Later years in this career period were spent in charge of the Training facility and oversight of the introduction training of new aircraft types

Dr Mark Wiggins, BSocSci, BA(Hons), MA(Psychology), PhD

Mark is an Associate Professor at Macquarie University in New South Wales. He is a pilot and a recognised researcher in aviation human factors.

Facilities

As a Swinburne student you will automatically gain access to a range of facilities and services. These include a well-resourced library, computer laboratories, fitness and health facilities, personal and career counselling, housing, employment and financial advice.

Fees

In 2010, tuition fees are based on \$1,850 per 12.5 credit point unit of study, with an annual fee of \$14,800 full-time and an overall program fee of \$22,200. In the event that a unit of study is derived from another program the applicable fee will be that of the other program. All fees are reviewed each year and may increase without notice.

	Units	Fees
Graduate certificate	4	A\$7,400
Graduate diploma	8	A\$14,800
Master	12	A\$22,200

FEE-HELP

FEE-HELP is a government funded loan that helps eligible fee paying students pay their tuition fees.

FEE-HELP is not available to New Zealand citizens and most holders of Australian permanent visas, however is available to Australian citizens and holders of a permanent humanitarian visa.

For further information visit:
www.goingtouni.gov.au

Application procedure

You may lodge your application at anytime, however each of the intake periods has an application submission closing date. Application forms can be obtained by phoning 1300 275 794 or visit www.swinburne.edu.au/postgrad/apply

Applications must be accompanied by a certified copy of your passport or birth certificate, certified copy of academic transcripts and official results and a curriculum vitae.

For the next round of closing dates visit www.swinburne.edu.au/postgrad

International students

If you want to study at Swinburne but are not an Australian resident, telephone Swinburne International on (+61 3) 8676 7002 or 1800 897 973 from within Australia, or visit: www.swinburne.edu.au/international

Recognition of Prior Learning

Recognition of Prior Learning (RPL) allows students to be granted credit or partial credit towards a qualification in recognition of skills and knowledge gained through work experience, tertiary qualifications and/or formal training.

Further information

Telephone: 1300 275 794
Email: postgrad@swinburne.edu.au
Website: www.swinburne.edu.au/aviation

Application closing dates

Semester 1

5 February 2010

Semester 2

16 July 2010

Please note, these dates are correct at the time of printing, but are subject to change. Visit www.swinburne.edu.au/studentoperations/calendar for current semester dates.

INFORMATION SESSIONS

Information sessions are held regularly throughout the year. They are a great opportunity to meet and talk to staff about your postgraduate study options.

The sessions help you understand what your chosen postgraduate program entails – what you can learn and what your study options are and where your qualification may take you.

For session dates visit
www.swinburne.edu.au/postgrad
or call us on 1300 ASK SWIN

Where we are

Hawthorn campus
John Street,
Hawthorn Vic 3122

Lilydale campus
Melba Avenue,
Lilydale Vic 3140

Prahran campus
144 High Street,
Prahran Vic 3181

Questions?

1300 ASK SWIN
(1300 275 794)
www.swinburne.edu.au
postgrad@swin.edu.au

For information on
postgraduate events visit:
www.swinburne.edu.au/postgrad



CRICOS Provider Code: 00111D
The information contained in this course guide was correct at the time of publication, February 2010. The university reserves the right to alter or amend the material contained in this guide. The information in this guide does not apply to international students. For information about courses for international students please go to: www.international.swinburne.edu.au

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