

M.S. in Aeronautics

ERAU Asia Institute Program Requirements

Core Requirements	21
Area of Concentration	9
Total Credits	30

Program Details

Note: Asia campus students follow Worldwide prerequisite requirements unless otherwise specified.

Core Requirements

ASCI 602	The Air Transportation System	3
ASCI 604	Human Factors in the Aviation/Aerospace Industry	3
RSCH 665	Statistical Analysis	3
ASCI 674	Project Management in Aviation/Aerospace	3
ASCI 516	Applications in Crew Resource Management	3
ASCI 645	Airport Operations and Management	3
ASCI 693	Current Research Problems in Aviation/Aerospace	3
Total Credits		21

Areas of Concentration

Aviation Maintenance

AMNT 601	Leadership in Global Aviation Maintenance Organizations	3
AMNT 605	Global Maintenance Resource Management	3
AMNT 615	Strategic Management of Global Maintenance, Repair and Overhaul (MRO) Operations	3
Total Credits		9

Aviation Safety

MSAV 608	Aviation/Aerospace Accident Investigation and Analysis	3
AVSF 611	Aviation/Aerospace System Safety	3
MSAV 621	Aviation/Aerospace Safety Program Management	3
Total Credits		9

Small Uncrewed Aircraft Systems (sUAS) Operations

UNSY 515	sUAS Operation Fundamentals	3
UNSY 520	sUAS Practical Application and Assessment	3
UNSY 620	sUAS Operational Planning and Safety Management	3
Total Credits		9

Singapore Aviation Academy Program Requirements

Core Requirements	21
Specialization	9
Total Credits	30

Core Requirements

Core Credits		
ASCI 602	The Air Transportation System	3
ASCI 604	Human Factors in the Aviation/Aerospace Industry	3

ASCI 674	Project Management in Aviation/Aerospace	3
ASCI 516	Applications in Crew Resource Management	3
ASCI 645	Airport Operations and Management	3
ASCI 693	Current Research Problems in Aviation/Aerospace	3
RSCH 665	Statistical Analysis	3
Total Credits		21

Specializations

Aviation and Aerospace Sustainability

AASI 600	Sustainable Aviation and Aerospace Perspectives	3
AASI 625	Sustainability Policy in Aviation and Aerospace	3
AASI 629	Sustainable Air Vehicles; Design and Propulsion	3
Total Credits		9

Small Uncrewed Aircraft Systems (sUAS) Operations

UNSY 515	sUAS Operation Fundamentals	3
UNSY 520	sUAS Practical Application and Assessment	3
UNSY 620	sUAS Operational Planning and Safety Management	3
Total Credits		9

Research

RSCH 670	Research Methods	3
RSCH 700A	Graduate Thesis I	3
RSCH 700B	Graduate Thesis II	3
Total Credits		9

Human Factors

HFCT 606	Human Cognition	3
HFCT 612	Human Performance, Limitation, and Error	3
HFCT 624	Ergonomics and Biomechanics	3
Total Credits		9

Aviation Maintenance

AMNT 601	Leadership in Global Aviation Maintenance Organizations	3
AMNT 605	Global Maintenance Resource Management	3
AMNT 615	Strategic Management of Global Maintenance, Repair and Overhaul (MRO) Operations	3
Total Credits		9

Aviation Cybersecurity

CYAV 515	Foundations of Aviation Cybersecurity	3
CYAV 520	Aviation Cybersecurity Threats, Actors, Tools, and Techniques	3
CYAV 525	Aviation Cybersecurity Risk Management and Resilience	3
Total Credits		9

Aviation Safety

MSAV 608	Aviation/Aerospace Accident Investigation and Analysis	3
AVSF 611	Aviation/Aerospace System Safety	3
MSAV 621	Aviation/Aerospace Safety Program Management	3
Total Credits		9

Space Operations

SPAC 514	Commercial and Governmental Space Infrastructure	3
SPAC 511	Geospatial Analytics	3
SPAC 512	Human Spaceflight Industry	3
Total Credits		9

Uncrewed and Autonomous Systems

UNSY 504	Application of Uncrewed and Autonomous Systems	3
UNSY 503	Legal and Regulatory Issues in Uncrewed and Autonomous Systems	3
UNSY 603	Uncrewed and Autonomous Systems Operational Configuration	3
Total Credits		9

Suggested Plans of Study

Part Time

Year One

Requirements	Credits
ASCI 602 - The Air Transportation System	3
ASCI 604 - Human Factors in the Aviation/Aerospace Industry	3
Semester Hours	6

Requirements	Credits
ASCI 674 - Project Management in Aviation/Aerospace	3
ASCI 516 - Applications in Crew Resource Management	3
Semester Hours	6

Requirements	Credits
ASCI 645 - Airport Operations and Management	3
RSCH 665 - Statistical Analysis	3
Semester Hours	6

Requirements	Credits
Specialization Course 1	3
Specialization Course 2	3
Semester Hours	6

Total Credits

Total Hours for All Requirements: 24

Year Two

Requirements	Credits
Specialization Course 3	3
ASCI 693 - Current Research Problems in Aviation/Aerospace	3
Semester Hours	6

Total Credits

Total Hours for All Requirements: 6

Full Time

Year One

Requirements	Credits
ASCI 602 - The Air Transportation System	3
ASCI 604 - Human Factors in the Aviation/Aerospace Industry	3
Semester Hours	6

Requirements	Credits
ASCI 674 - Project Management in Aviation/Aerospace	3
ASCI 516 - Applications in Crew Resource Management	3
ASCI 645 - Airport Operations and Management	3
Semester Hours	9

Requirements	Credits
RSCH 665 - Statistical Analysis	3
Specialization Course 1	3
Specialization Course 2	3
Semester Hours	9

Requirements	Credits
Specialization Course 3	3
ASCI 693 - Current Research Problems in Aviation/Aerospace	3
Semester Hours	6

Total Credits

Total Hours for All Requirements: 30