

Aviation and Aerospace Sustainability (AASI)

AASI 600 Sustainable Aviation and Aerospace Perspectives 3 Credits (3,0)

Sustainability fundamentals in aviation-aerospace; environmental effects; ICAO CORSIA, ISO 14001; environmental risk assessment; CSR and social sustainability; new technologies.

Course Offered at: Daytona Beach, Worldwide, Asia

AASI 605 Aviation and Aerospace Sustainable Organizations 3 Credits (3,0)

Sustainable operations in aviation-aerospace organizations; strategies for sustainability; industry-specific characteristics and stakeholder interactions.

Course Offered at: Worldwide, Asia

AASI 607 Airport Sustainability Operations 3 Credits (3,0)

Sustainability in airport operations; net zero emission schemes; energy efficiency; renewable technologies; noise, waste, and water management; economic and social sustainability.

Course Offered at: Worldwide, Asia

AASI 611 Sustainable Aviation Fuels and Carbon Offsetting 3 Credits (3,0)

Role of Sustainable Aviation Fuels (SAF); economic, social, environmental benefits; environmental assessment; market trends; supply chain challenges; SAF in carbon offsetting.

Course Offered at: Worldwide, Asia

AASI 613 Sustainable Air Traffic Management 3 Credits (3,0)

Sustainable processes in Air Traffic Management (ATM); SESAR, DREAMS, and PBN technologies; sustainability principles in existing and new ATM operations.

Course Offered at: Worldwide, Asia

AASI 625 Sustainability Policy in Aviation and Aerospace 3 Credits (3,0)

Applicable sustainability policies; national and international agencies' goals; ICAO guidelines; Paris Agreement; Pathways to Net Zero; global aviation-aerospace sustainability.

Course Offered at: Worldwide, Asia

AASI 629 Sustainable Air Vehicles; Design and Propulsion 3 Credits (3,0)

Design and development of sustainable aviation technologies; electric vehicles, hydrogen fuel cells, drones, Urban Air Mobility; aerodynamic designs; noise and emission reduction.

Course Offered at: Worldwide, Asia

AASI 635 Sustainable Aviation Techniques and Tools 3 Credits (3,0)

Sustainability techniques and tools in aviation-aerospace operations; Lean management, Six Sigma, ISO standards; risk management and quality tools for sustainable systems.

Course Offered at: Worldwide, Asia

AASI 637 Aircraft Decommissioning and Circular Economy 3 Credits (3,0)

Aircraft decommissioning stages; reuse of spare parts; recycling and waste management; environmental and social impacts; role in aviation's economic circularity.

Course Offered at: Worldwide, Asia

AASI 639 Aviation Corporate Sustainability Management 3 Credits (3,0)

Components of corporate sustainability management in aviation; indicators for measuring sustainability; leadership factors; creation of corporate sustainability strategies.

Course Offered at: Worldwide, Asia