

Aviation Management (AVMG)

AVMG 501 Aviation Law and Regulation 3 Credits (3,0)

In-depth analysis of international and domestic aviation laws; historical development, global impact; airspace sovereignty, liability, environmental regulations, legal framework governing international air travel.

Course Offered at: Worldwide

AVMG 502 Airline Management 3 Credits (3,0)

Management aspects of commercial airlines; challenges of the industry, hierarchy of decisions, business models, network structure, performance measures, demand forecasting, market competition, schedule development, fleet assignment, crew scheduling, maintenance routing, revenue and pricing management, marketing, sales initiatives, and irregular operations management.

Course Offered at: Worldwide

AVMG 503 Aviation Technology and Innovation 3 Credits (3,0)

Cutting-edge aviation technologies shaping the industry's future; AI in flight operations, blockchain security, sustainable aviation fuels, electric aircraft, autonomous operations.

Course Offered at: Worldwide

AVMG 504 Customer Experience 3 Credits (3,0)

Passenger experience management in the airline industry; analysis of factors influencing customer preferences and loyalty; case studies of global airlines for best practices.

Course Offered at: Worldwide

AVMG 505 Human Resource Management and Labor Relations 3 Credits (3,0)

Advanced HR management and labor relations in aviation; labor negotiations, employee development, law, organizational culture, talent management, workforce diversity, union roles.

Course Offered at: Worldwide

AVMG 599 Special Topics in Aviation Management 1-6 Credit (1-6,0)

Individual, independent, or directed studies of selected topics in aviation management.

Course Offered at: Daytona Beach, Prescott, Worldwide

AVMG 600 Commercial Spaceport Planning and Operations 3 Credits (3,0)

Holistic view of commercial spaceport planning and operations; technological drivers, policies, regulations, infrastructure, environmental forces, business models, and financial management models for spaceports; strategic planning and operational analysis.

Course Offered at: Daytona Beach

AVMG 601 Evolution of Airports 3 Credits (3,0)

Historical development of airports; transformation into modern transportation hubs; airport operations, post-9/11 security, global aviation network roles, airside/landside operations, airline-airport relationships.

Course Offered at: Worldwide

AVMG 603 Airport Operations 3 Credits (3,0)

Day-to-day airport operations; ground handling, airside operations, safety regulations, security protocols, emergency management; passenger flow management, departmental coordination, peak traffic challenges.

Course Offered at: Worldwide

AVMG 605 Airport Planning and Development 3 Credits (3,0)

Strategic, environmental, operational aspects of airport development; master planning, environmental impact assessments, stakeholder engagement strategies.

Course Offered at: Worldwide

AVMG 607 Airport Funding and Revenue Management 3 Credits (3,0)

Infrastructure funding mechanisms, public-private partnerships, revenue streams; financial forecasting, budgeting, revenue optimization strategies.

Course Offered at: Worldwide

AVMG 609 Airport Sustainability and Resilience 3 Credits (3,0)

Strategies for environmental responsibility and operational resilience; waste management, energy efficiency, carbon reduction, sustainable infrastructure, resilience to natural and manmade disruptions.

Course Offered at: Worldwide

AVMG 610 Airline Operations and Management 3 Credits (3,0)

Integrated study of airline operations and functions; regulation of air carriers, industry structure, economics, marketing, pricing, revenue management, fleet planning, scheduling, maintenance, labor relations, and strategic planning in domestic and international contexts.

Prerequisites: SCLM 511

Course Offered at: Daytona Beach

AVMG 612 Airline Operations 3 Credits (3,0)

Major air carrier organizational structure; operations department relationships with marketing, maintenance, safety; corporate issues, FAR Part 121 regulations, market structure, certification, mergers, international topics; flight operations employment policies, operating specifications, types of services, training, decision-making, communications.

Course Offered at: Worldwide

AVMG 614 Technical Operations and MROs 3 Credits (3,0)

Technical operations crucial to airline success; economics of technical operations, project/fleet planning, predictive maintenance, regulatory compliance.

Course Offered at: Worldwide

AVMG 616 Airline Fleet, Network, and Route Planning 3 Credits (3,0)

Strategic aspects of airline operations; environmental impact, capacity optimization, network/fleet planning solutions; financial, environmental, competitive factors, codeshares.

Course Offered at: Worldwide

AVMG 618 Airline Pricing and Revenue Management 3 Credits (3,0)

Advanced data analytics, pricing models for airline profitability; dynamic pricing, ancillary revenue, personalized offers, sustainable airline revenue models.

Course Offered at: Worldwide

AVMG 620 Airline Sustainability and Operational Resilience 3 Credits (3,0)

Sustainability practices and operational resilience in airlines; sustainable supply chain management; crisis communication strategies; disruption management; advanced risk assessment techniques.

Course Offered at: Worldwide

AVMG 630 Aviation/Aerospace Systems Analysis 3 Credits (3,0)

Study of systems theory and its relationship to aviation/aerospace systems management; system life cycle, system design, support, reliability, maintainability, availability, customer support, product improvement, cost-effectiveness analysis, and simulation models.

Course Offered at: Daytona Beach, Worldwide

AVMG 645 Airport Operations and Management 3 Credits (3,0)

Management and operation of public-use airports, including traffic forecasting, revenue sources, terminal management, ground handling, ground access systems, FAA regulations, environmental impact, land-use planning, airport capacity, public relations, finance, privatization, liability, and economic impact.

Course Offered at: Daytona Beach

AVMG 650 Airline/Airport Relations 3 Credits (3,0)

Examination of the relationship between airline and airport management; understanding current issues, financial practices, rates, and charges, use and lease agreements, air service development, and future challenges.

Prerequisites: AVMG 610 or AVMG 645

Course Offered at: Daytona Beach

AVMG 651 Strategic Airport Planning 3 Credits (3,0)

Advanced study of airport operations and management from a strategic perspective; introduction of management tools and software applications for strategic airport planning.

Prerequisites: AVMG 610 or AVMG 645 or AVMG 650

Course Offered at: Daytona Beach

AVMG 699 Special Topics in Aviation Management 1-6 Credit (1-6,0)

Individual, independent, or directed studies of selected topics in aviation management.

Course Offered at: Daytona Beach, Prescott, Worldwide

AVMG 830 Doctoral Seminar in Airline Management 3 Credits (3,0)

Research seminars exploring the latest research in airline management.

Course Offered at: Daytona Beach

AVMG 850 Doctoral Seminar in Airport Management 3 Credits (3,0)

Examination of domestic and international regulations, operations, infrastructure development, safety, security, customer services, and relationships with airlines and other stakeholders; provision of commercial services and airport competition.

Course Offered at: Daytona Beach

AVMG 865 Doctoral Seminar in Globalization in Aviation and Aerospace 3 Credits (3,0)

Research and scholarly activity in global aviation, including alliances, liberalization, operational activity, and challenges.

Course Offered at: Daytona Beach