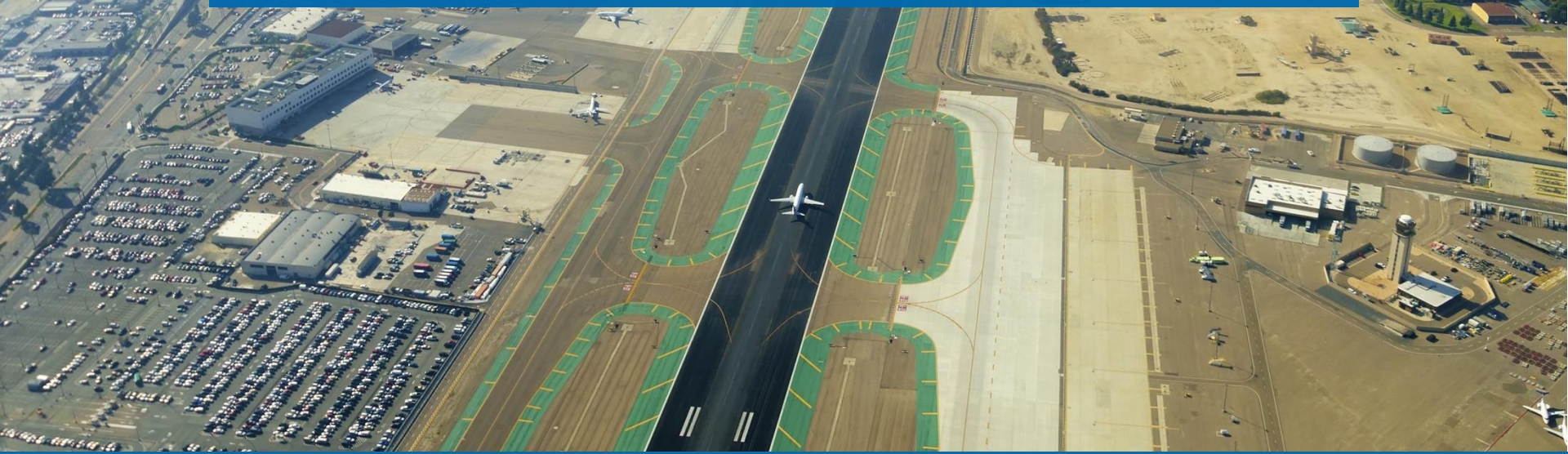


Preparing the Next Generation of Airport Industry Professionals

October 19, 2022



Today's Learning Objectives

- **Identify gaps between the workforce needs of the airport industry and existing academic offerings**
- **Explain how members of industry and academia may work towards enhancing airport academic programming**

American Association of Airport Executives (AAAE)

**1.0 Continuing Education Units (CEUs)
are available to Accredited Airport
Executives (A.A.E.)**

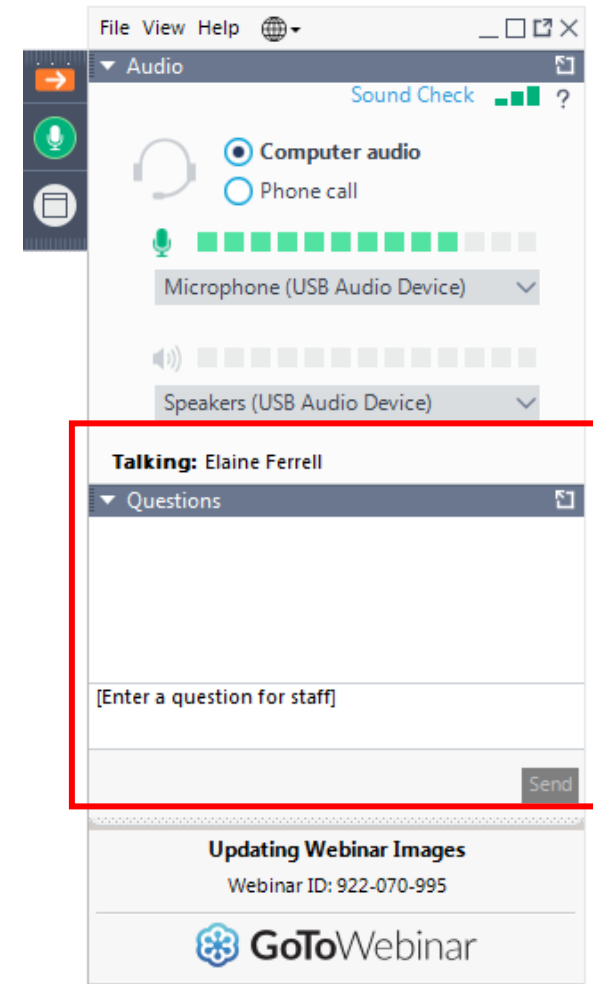
**Report your CEUs:
www.aaae.org/ceu**

Questions and Answers

Please type your questions into
your webinar control panel

We will read your questions out
loud, and answer as many as
time allows

#TRBwebinar



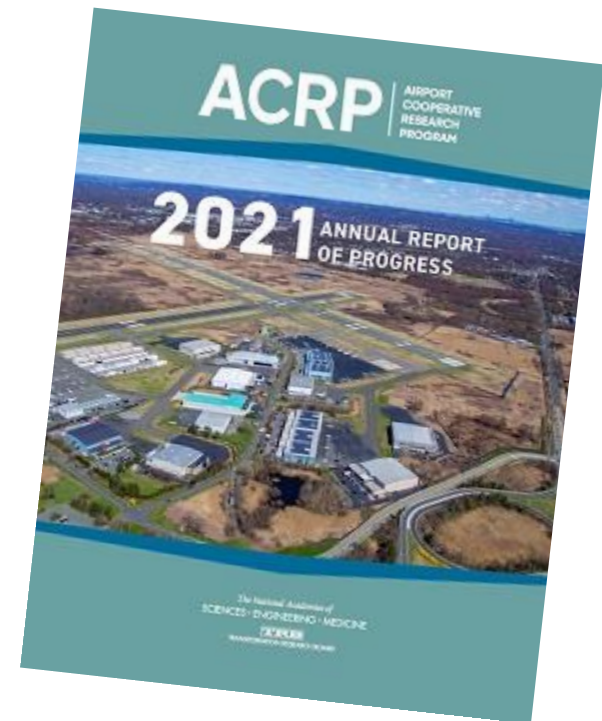
Today's Moderator

- Daniel Bartholomew, AICP, ACE, A.A.E.
- Airport Director at Aspen/Pitkin County Airport
- Chair of the ACRP Project Panel on Integrated Contingency Planning for Small and Non-Hub Airports
- Member of the ACRP Project Panel on ACRP Policy and Planning Product Updates



ACRP is an Industry-Driven Program

- Managed by TRB and sponsored by the Federal Aviation Administration (FAA).
- Seeks out the latest issues facing the airport industry.
- Conducts research to find solutions.
- Publishes and disseminates research results through free publications and webinars.



Today's Speakers



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PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

Findings from ACRP 06-07: Report 230
Enhancing Academic Programs to Prepare Future Airport Professionals

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October 19, 2022

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TO PREPARE FUTURE AIRPORT PROFESSIONALS



ACRP Report 230 Oversight Panel

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Aspen-Pitken County Airport

Meredith Alt
Wisconsin Department of Transportation

Alice Bimrose
City of Phoenix Dept. of Aviation

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Gwyn and Associates

Enrique Sanabria
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Christine Gerencher, **TRB Liaison**
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TO PREPARE FUTURE AIRPORT PROFESSIONALS



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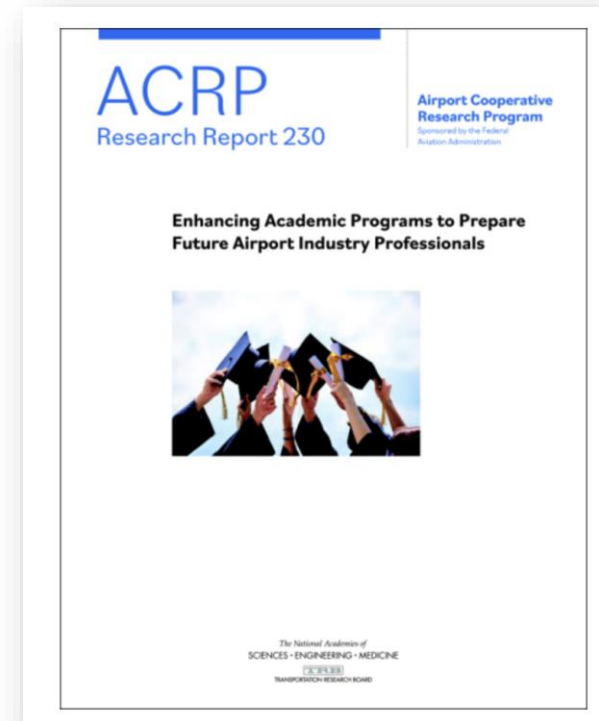
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PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

1. Reviewing the Workforce Needs of the Airport Industry
2. Assessing the State of Airport Academic Programming
3. Guidance for Enhancing Academic Offerings



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PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

1. The Workforce Needs of the Airport Industry



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PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

1. The Workforce Needs of the Airport Industry

- **The airport environment is constantly evolving** in response to the global demands associated with business and personal air travel.
- **Airports must react to advancements** in technology, evolving passenger-experience preferences, and changing business models.
- **Airport industry leaders are concerned about the lack of talent available in the labor market**, at a time when more than half of airport executive staff are estimated to be retirement eligible and the labor pool of workers available to fill these roles is shrinking.
- Other trends which have implications for the airport workforce include the **rapid emergence of new technologies**, increased **financial and commercial pressures**, **political sensitivities**, new **regulatory requirements**, **challenges recruiting in local job markets**, and a growing shortage of **skilled trade workers**

Ref: ACRP Research Report 186, (2018)

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PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

1. The Workforce Needs of the Airport Industry

Eight Mission Critical Occupations for the Airport Industry

- Airport Business Development
- Airport Operations
- Airport Security
- Electrician
- Engineering (Civil, Electrical, Mechanical)
- Financial Analysis and Planning
- Information Technology
- Project Planning

Additional education and development opportunities are needed to adequately equip the workforce for these specific responsibilities.

Ref: ACRP Web-Only Document 28, (2016)

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PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

1. The Workforce Needs of the Airport Industry

Ensuring Recent Graduates Have Appropriate Skills for the Workplace

Three important areas which are critical for recent graduates entering the workforce:

- Knowledge of airports
- Technological skills
- Personal effectiveness and professional skills

Goal: Meet industry's needs with enhanced academic programming



PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

2. The State of Airport Academic Programming



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NATIONAL
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PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

2. The State of Airport Academic Programming

- **Airport academic programming is found within a small subset of the nation's colleges and universities**, mostly within traditional “aviation,” undergraduate programs. They are typically four-year undergraduate, Baccalaureate programs with roots in collegiate flight education.
- **A handful of curricula offering airport content exists in engineering programs.** These programs tend to focus on “airport planning and design.”
- Few programs offer more than two airport-specific courses. The most common courses offered are introductory ones in **airport operations, management, and planning & design.**

Less than 3% of the nation's 6,000+ institutions of higher education offer courses in aviation, and only a subset of these institutions offer courses specific to airports.

PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

2. The State of Airport Academic Programming

- Only 5% of the credit hours in the typical aviation curriculum are focused on airport-specific content.
- Less than 30% of programs offering airport content report to have formal relationships with airport industry professional organizations such as AAAE or participate in regionally- or nationally-sponsored airport academic endeavors such as the ACRP Airport Design Competition for Universities.
- Less than 30% of programs offering airport content are accredited by the Aviation Accreditation Board International (AABI), which focuses its accreditation on flight and aviation management—not specifically on airport curricula.
- Less than 20% of the programs offering airport content have fulltime faculty who have any formal education in airports, are industry accredited, or have significant practical airport industry experience.

Airport-specific courses comprise on average 5% of the total credit hours offered within typical aviation management degree programs.

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TO PREPARE FUTURE AIRPORT PROFESSIONALS



PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

2. The State of Airport Academic Programming

Depth of Program Subject Areas

- **Airport management** and **airport operations** courses provide students with a **basic background** in a variety of areas that are essential for a career in aviation
- Most programs do not go **in-depth** in any particular topics (e.g., landside operation), safety, or trades (e.g., electrical skills).

Coursework that is currently developed at universities is not detailed enough in any area for a new employee to be able to hit the ground running practically.

– Manager, Airport Operations and Facilities

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PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

2. The State of Airport Academic Programming

Breadth of Curricula

- Students **lack exposure** to fields of study that fall **outside of traditional aviation management** programs, including:
 - Finance
 - Project Management
 - Property Management
 - Engineering
 - Marketing
 - Communications
- Courses should optimally be **airport-focused**, or at least incorporate airport specific content.



PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

2. The State of Airport Academic Programming

Extracurricular Offerings

- Airport professionals believe it is integral for students to experience **practical applications** of what they are learning in class, while also learning new skills.
- Students **lack adequate internship opportunities** (e.g., lack of established airport internship programs).
- Many students graduate **without** having participated in any type of internship or co-op opportunity – **placing them at a disadvantage** when entering their first job

21.6% of airport survey respondents and 23.6% of professional firm respondents offer internships, co-ops, or seasonal positions that they fill with college/university students.

Over 71% of airport respondents and 81% of professional firm respondents did not participate in an internship or co-op at an airport / airport-related professional service firm while enrolled in their own program of study.



PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

2. The State of Airport Academic Programming

Partnerships between Airports and Academia

- Need **increased outreach and collaboration** between airport industry and academia – both formal partnerships and informal connections.
- Improve connections with students **within the classroom** (e.g., guest speakers, use real-world problems for class case studies).
- Connect with students **outside of the classroom** (e.g., student clubs or sponsored events, university industry nights).



PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

2. The State of Airport Academic Programming

Academic Programming

Ample opportunities exist to enhance airport-oriented academic programming by:

- Creating deeper and broader course curricula
- Increasing extra-curricular and experiential learning opportunities
- **Adding airport content** to programs at colleges and universities that do not currently offer such content
- Enhancing faculty supply
- Creating deeper and broader interactions between academia and airport industry professionals

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PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

3. Enhancing Airport Curricula



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PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

3. Enhancing Airport Curricula

Airport academic programming may be enhanced by:

- **Increasing the depth and breadth of existing course curricula** through **offering fundamental and cross cutting courses**, and **advanced courses** in:
 - Airport operations & maintenance
 - Airport business & administration
 - Airport planning, design, & engineering
- **Increasing experiential learning opportunities**
 - Capstone courses,
 - Internships,
 - Site visits to industry
 - Participation at industry conferences and meetings
 - Research opportunities, and
 - Program sponsored symposia and guest lectures.

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PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

3. Enhancing Airport Curricula

Airport academic programming may also be enhanced by:

- **Expanding airport education to additional colleges and universities** that do not currently offer airport content through the addition of fundamental airport courses and adding airport content to existing course curricula in relevant programs such as business, engineering, and technology programs
- **Modernizing course delivery methods** using online learning management systems and associated digital platforms.
- **Enhancing interaction with industry** through guest lecture opportunities, adjunct faculty appointments, capstone and research project mentorship, and participation on academic program advisory boards.

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PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

3. Enhancing Airport Curricula

Building Blocks for an enhanced airport academic program

- **Introducing airport content** into a curriculum with introductory subject matter
- **Broadening** curriculum with fundamentals courses
- **Deepening** curriculum with airport focus tracks with core courses, and technical electives
- **Supporting** curriculum with enhanced delivery methods, internships, and extracurricular offerings
- **Championing** the program with faculty leadership and industry partnerships

Championing the program with faculty leadership and industry partnerships

- Faculty champion
- Adjunct faculty appointments
- Industry bridge / pipeline programs
- Promoting the program to industry

Supporting curriculum with enhanced delivery methods and real-world experiences

- Online and blended curriculum delivery
- Internships and co-ops
- Extracurricular offerings

Broadening curriculum with fundamentals courses

- Fundamentals of Business
- Fundamentals of Public Policy
- Fundamentals of Engineering Technology
- Introduction to Data Analytics
- Professional Development & Communications

Deepening curriculum with airport focus tracks including core courses, technical electives, and culminating experiences

- Airport Operations & Maintenance track
- Airport Business & Administration track
- Airport Planning, Design, & Engineering track
- Technical Electives
- Capstone Courses

Introducing airport content into a curriculum with introductory subject matter

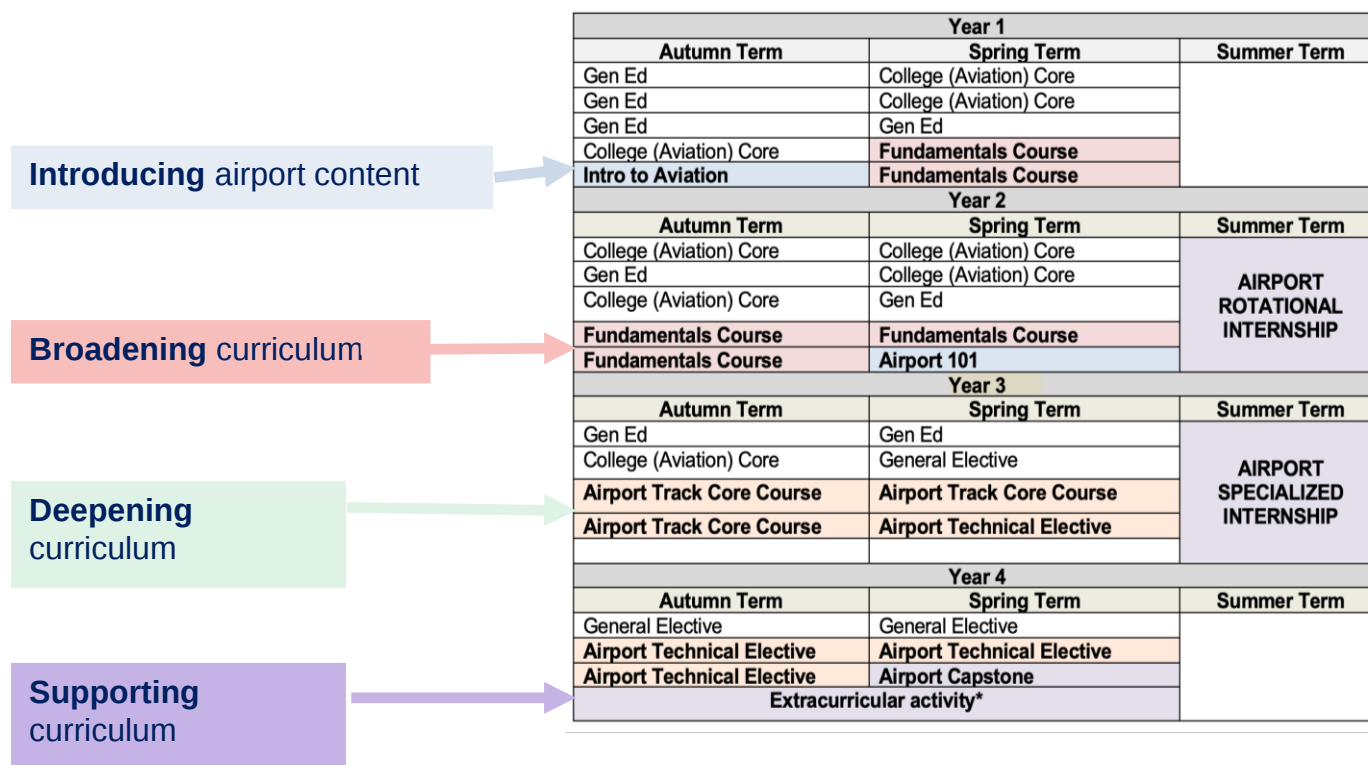
- Intro to Aviation course
- Airport 101 course
- Add airport examples into existing courses

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PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

3. Enhancing Airport Curricula

Content placed within existing curriculum structures



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PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

3. Enhancing Airport Curricula

Introducing airport content into a curriculum with introductory subject matter

Intro to Aviation course

Airport 101 course

Add airport examples into existing courses

Introducing Airport Content

For programs seeking to enter into airport-oriented programming

- ***Intro to Aviation:*** An overview of the aviation industry, to include an understanding of all sectors, including government structures (FAA, National Airspace System, Air Traffic Control, etc.), civil users (commercial airlines, cargo, charter and corporate aviation, general aviation, aeromedical, agricultural aviation, future users of UAS, and, of course, airports.
- ***Airports 101:*** An introduction to the airport industry, to include understanding of the types of airports that exist, their roles within the national airspace system, their roles within a community, the customers they serve, the organizational structures that they fit in, and operational components. The course would also provide introductory material of the topics covered more in depth in advanced courses in a deeper curriculum, including airport operations, finance & administration, marketing & air service development, maintenance, and planning & design.
- **Adding Airport Examples into Existing Courses**
The airport environment has applications to nearly all areas of study in academia. Simply adding airport examples into existing classes can provide both airport education and motivation for further study.

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ENHANCING ACADEMIC PROGRAMS

TO PREPARE FUTURE AIRPORT PROFESSIONALS

PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

3. Enhancing Airport Curricula

Broadening Curriculum with fundamentals courses

For programs seeking to expand from aviation-oriented focus

- **Fundamentals of Business:** An introduction to the elements of a business environment, to include intro to economics, finance, accounting, marketing, communications, organizational structures, operations, customer service, human resources management, and the nature of professionalism in industry. *Example airport exercise: Become familiar with an airport's strategic plan and annual report*
- **Fundamentals of Public Policy:** An introduction to how public policy operates, to include high level education on federal, state, and local government levels, laws and regulations, and governmental procedures. *Example airport exercise: Attend a local airport town hall meeting or government meeting where the airport is on the agenda.*
- **Fundamentals of Engineering Technology:** An introduction to engineering principles with a focus on properties of mechanics, aerodynamics, and electrical systems, information technology, and an overview of engineering specializations to include mechanical, civil, and electrical engineering, as well as information technology. *Example airport exercises: Study the operational performance of an aircraft that commonly uses a nearby airport, take a site visit to an airport and tour the airfield, study the runway configuration, pavement construction, and electrical lighting systems.*

Broadening curriculum with fundamentals courses

- Fundamentals of Business
- Fundamentals of Public Policy
- Fundamentals of Engineering Technology
- Introduction to Data Analytics
- Professional Development and Communications



PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

3. Enhancing Airport Curricula

Broadening Curriculum with fundamentals courses For programs seeking to expand from aviation-oriented focus

- **Introduction to Data Analytics:** Introduction and application of data analytics tools, methods, and purposes. Apply data analytics software tools (spreadsheets, visualization tools, programming packages) to airport data with the goal of seeking business and operational insights. *Example airport exercise: Review and analyze historical airport operations data, create charts and illustrate possible future demand levels.*
- **Professional Development & Communications:** A course focusing on developing professional skills needed for success in the airport industry, to include the development of oral, written, and presentation communications skills, project planning, time management, and an understanding of professional culture. *Example airport exercise: Create a short professional presentation about an airport, discussing one of its challenges.*

Broadening curriculum with fundamentals courses

- Fundamentals of Business
- Fundamentals of Public Policy
- Fundamentals of Engineering Technology
- Introduction to Data Analytics
- Professional Development and Communications

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ENHANCING ACADEMIC PROGRAMS

TO PREPARE FUTURE AIRPORT PROFESSIONALS

PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

3. Enhancing Airport Curricula

Deepening Curriculum with focus tracks
For programs seeking to specialize in deeper study



Airport Operations & Maintenance



Airport Business & Administration



Airport Planning, Design, & Engineering

Deepening curriculum with airport focus tracks
with core courses, and technical electives

- Airport Operations & Maintenance track
 - Airport Airside Operations
 - Airport Terminal and Landside Operations
 - Airport Safety and Security
- Airport Business & Administration track
 - Airport Accounting and Finance
 - Airport Policy and Administration
 - Airport Marketing and Communications
- Airport Planning, Design, & Engineering track
 - Airport Design
 - Airport Master Planning
 - Airport Land Use Compatibility Planning
- Technical Electives
- Capstone Courses

Each track includes recommended core (required) courses and technical elective courses.

PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

3. Enhancing Airport Curricula



Airport Operations & Maintenance

Core Courses for this track include:

- **Airport Certification:** A comprehensive study of the requirements for an airport to achieve FAA certification to accommodate commercial service aircraft, covering more than 30 key items in the Airport Certification Manual, per 14 CFR Part 139.
- **Airport Terminal and Landside Operations:** A comprehensive study of the issues concerning the effective management of airport terminals and landside facilities.
- **Airport Safety and Security:** A comprehensive study of the the essential elements of airport operational safety and security.

Deepening curriculum with airport focus tracks with core courses, and technical electives

- Airport Operations & Maintenance track
 - Airport Airside Operations
 - Airport Terminal and Landside Operations
 - Airport Safety and Security
- Airport Business & Administration track
 - Airport Accounting and Finance
 - Airport Policy and Administration
 - Airport Marketing and Communications
- Airport Planning, Design, & Engineering track
 - Airport Design
 - Airport Master Planning
 - Airport Land Use Compatibility Planning
- Technical Electives
- Capstone Courses

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PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

3. Enhancing Airport Curricula



Airport Operations & Maintenance

Technical Electives for this track include:

- Obstruction Evaluation / Airport Airspace Analysis
- Pavement and Infrastructure Maintenance
- Operational Safety and SMS
- Airfield lighting, signage, markings and electrical systems
- Airport Security
- Airport Winter Operations
- Environmental and Wildlife Hazard Management
- Management of Operations During Airfield Construction
- Commercial Terminal Airline Tenant Operations
- Curbside and Parking Operations
- Terminal Facilities Maintenance
- Operation of Surface Roads and Transit Systems
- Management of Irregular Operations
- General Aviation Airport Operations
- Airport Information Technology

Airport Operations and Maintenance Track

Year 1		
Autumn Term	Spring Term	Summer Term
Gen Ed	College (Aviation) Core	
Gen Ed	College (Aviation) Core	
Gen Ed	Gen Ed	
College (Aviation) Core	Fundamentals of Business	
Intro to Aviation	Fundamentals of Engineering Technology	
Year 2		
Autumn Term	Spring Term	Summer Term
College (Aviation) Core	College (Aviation) Core	AIRPORT ROTATIONAL INTERNSHIP
Gen Ed	College (Aviation) Core	
College (Aviation) Core	Gen Ed	
Professional Development and Communications	Fundamentals of Public Policy	
Data Analytics	Airport 101	
Year 3		
Autumn Term	Spring Term	Summer Term
Gen Ed	Gen Ed	AIRPORT OPERATIONS INTERNSHIP
College (Aviation) Core	General Elective	
Airport Safety and Security	Airport Terminal and Landside Operations	
Airport Certification	Airport Electrical Systems	
Year 4		
Autumn Term	Spring Term	Summer Term
General Elective	General Elective	
Wildlife Hazard Management	Airport Winter Operations	
Irregular Operations	Airport Capstone	
Extracurricular activity		

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ENHANCING ACADEMIC PROGRAMS

TO PREPARE FUTURE AIRPORT PROFESSIONALS

PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

3. Enhancing Airport Curricula



Airport Business & Administration

Core Courses for this track include:

- **Airport Accounting and Finance:** An in-depth investigation of the accounting and finance strategies used by airports for the day-to-day financial management and long-term capital needs of the airport.
- **Airport Policy and Administration:** An in-depth investigation of the administrative practices and policy strategies of airports, to include airport governing structures, interaction with local, state, and federal governmental agencies.
- **Airport Marketing and Communications:** An in-depth investigation of how airports market and communicate with their customers and community partners. Topics include air service development, social media communications, etc.

Deepening curriculum with airport focus tracks with core courses, and technical electives

- Airport Operations & Maintenance track
 - Airport Airside Operations
 - Airport Terminal and Landside Operations
 - Airport Safety and Security
- Airport Business & Administration track
 - Airport Accounting and Finance
 - Airport Policy and Administration
 - Airport Marketing and Communications
- Airport Planning, Design, & Engineering track
 - Airport Design
 - Airport Master Planning
 - Airport Land Use Compatibility Planning
- Technical Electives
- Capstone Courses

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ENHANCING ACADEMIC PROGRAMS
TO PREPARE FUTURE AIRPORT PROFESSIONALS

PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

3. Enhancing Airport Curricula



Airport Business & Administration

Technical Electives for this track include:

- Airport Properties Management
- Airport Concessions Management
- Airport Consulting
- Air Service Development
- Community Engagement
- Social Media Strategies
- Airport Business Analytics
- Airport Communications Under Irregular Operations
- Global Airport Systems

Airport Business & Administration Track

Year 1		
Autumn Term	Spring Term	Summer Term
Gen Ed	College (Aviation) Core	
Gen Ed	College (Aviation) Core	
Gen Ed	Gen Ed	
College (Aviation) Core	Fundamentals of Business	
Intro to Aviation	Fundamentals of Engineering Technology	
Year 2		
Autumn Term	Spring Term	Summer Term
College (Aviation) Core	College (Aviation) Core	AIRPORT ROTATIONAL INTERNSHIP
Gen Ed	College (Aviation) Core	
College (Aviation) Core	Gen Ed	
Professional Development and Communications	Fundamentals of Public Policy	
Data Analytics	Airport 101	
Year 3		
Autumn Term	Spring Term	Summer Term
Gen Ed	Gen Ed	AIRPORT MARKETING INTERNSHIP
College (Aviation) Core	General Elective	
Airport Accounting and Finance	Airport Administration and Policy	
Airport Marketing and Communications	Airport Properties Management	
Year 4		
Autumn Term	Spring Term	Summer Term
General Elective	General Elective	
Social Media Strategies	Community Engagement	
Air Service Development	Airport Capstone	
Extracurricular activity		

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ENHANCING ACADEMIC PROGRAMS

TO PREPARE FUTURE AIRPORT PROFESSIONALS

PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

3. Enhancing Airport Curricula



Airport Planning, Design, & Engineering

Core Courses for this track include:

- **Airport Design:** A comprehensive overview of the elements of airport design. Elements include geometric design of the runways, taxiways, and safety areas, placement of airfield signs, lights, and markings, runway orientation analysis, pavement design, airport capacity analysis and terminal and landside facilities design.
- **Airport Master Planning:** A comprehensive overview of the elements of airport master planning. Elements include community participation, goal setting, facilities assessment, forecasting, and capital planning.
- **Airport Land Use Compatibility Planning:** An introduction to the physical elements of consideration with respect to airports and surrounding land uses. Elements include obstruction evaluation / airport airspace analysis, noise impact modeling, water and air quality assessments, and traffic impacts on areas surrounding the airport.

Deepening curriculum with airport focus tracks with core courses, and technical electives

- Airport Operations & Maintenance track
 - Airport Airside Operations
 - Airport Terminal and Landside Operations
 - Airport Safety and Security
- Airport Business & Administration track
 - Airport Accounting and Finance
 - Airport Policy and Administration
 - Airport Marketing and Communications
- Airport Planning, Design, & Engineering track
 - Airport Design
 - Airport Master Planning
 - Airport Land Use Compatibility Planning
- Technical Electives
- Capstone Courses



PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

3. Enhancing Airport Curricula



Airport Planning, Design, & Engineering

Technical Electives for this track include:

- Engineering Design of Airports
- Electrical Systems Design
- Pavement Design
- Airport System Planning
- Airport Construction & Project Planning
- Airport Noise Modeling
- Land Use Planning
- Capacity and Delay Analysis
- Terminal Design
- Design of Parking and Ground Access Systems
- Computer Automated Design (CAD)
- Geographic Information Systems (GIS)

Airport Planning, Design, & Engineering Track

Year 1		
Autumn Term	Spring Term	Summer Term
Gen Ed	College (Aviation) Core	
Gen Ed	College (Aviation) Core	
Gen Ed	Gen Ed	
College (Aviation) Core	Fundamentals of Business	
Intro to Aviation	Fundamentals of Engineering Technology	
Year 2		
Autumn Term	Spring Term	Summer Term
College (Aviation) Core	College (Aviation) Core	AIRPORT ROTATIONAL INTERNSHIP
Gen Ed	College (Aviation) Core	
College (Aviation) Core	Gen Ed	
Professional Development and Communications	Fundamentals of Public Policy	
Data Analytics	Airport 101	
Year 3		
Autumn Term	Spring Term	Summer Term
Gen Ed	Gen Ed	AIRPORT PLANNING INTERNSHIP
College (Aviation) Core	General Elective	
Airport Design	Airport Land Use Compatibility Planning	
Airport Master Planning	Electrical Systems Design	
Year 4		
Autumn Term	Spring Term	Summer Term
General Elective	General Elective	
Airport Noise Modeling	Terminal Design	
Capacity & Delay Analysis	Airport Capstone	
Extracurricular activity		

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ENHANCING ACADEMIC PROGRAMS
TO PREPARE FUTURE AIRPORT PROFESSIONALS

PREPARING THE NEXT GENERATION OF AIRPORT INDUSTRY PROFESSIONALS

3. Enhancing Airport Curricula



Supporting enhanced curricula with real-world experiences

Supporting curriculum with

enhanced delivery methods, internships, and extracurricular offerings

- Internships and co-ops
- Extracurricular offerings
- Online and Blended curriculum delivery

Internships and co-op opportunities

- Airport-related internships are designed to provide opportunities for students or recent graduates to gain valuable experience in airport management, prior to entering into full-time entry-level employment.
 - **Rotational Internships**
 - **Project-based Internships**

Capstone Courses

- Some of the most productive components of enhanced curricula are courses that allow students to apply what they've learned in their studies to a real-world issue over the course of an entire term. These courses are typically known as capstone or culminating experience courses.

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3. Enhancing Airport Curricula



Championing a program with faculty and industry partnerships

Championing the program with faculty leadership and industry partnerships

- Faculty champion
- Adjunct Faculty Appointments
- Industry bridge / pipeline programs
- Promoting the program to industry

Because aviation is a small, diverse, and dynamic industry, aviation programs often find it difficult to recruit and retain qualified faculty with the appropriate academic credentials and experience to teach.

- **Developing existing faculty**
- **Recruiting and preparing future faculty**
- **Industry Professionals as adjunct faculty**

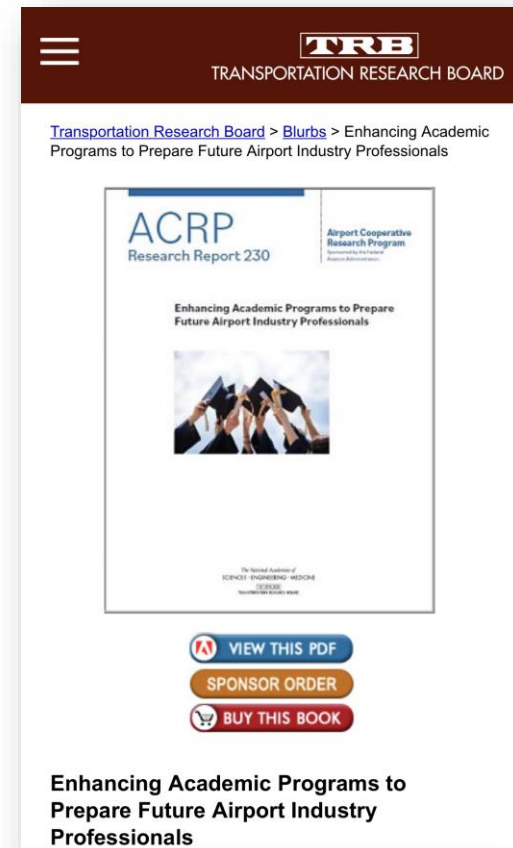


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Report and Guidebook Includes:

- Structures of Enhanced curricula
- Sample Syllabi for a portfolio of courses
- External Resources for Technical Content
- Delivery platform descriptions



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Thank you.

Questions Welcomed

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November 8, 2022

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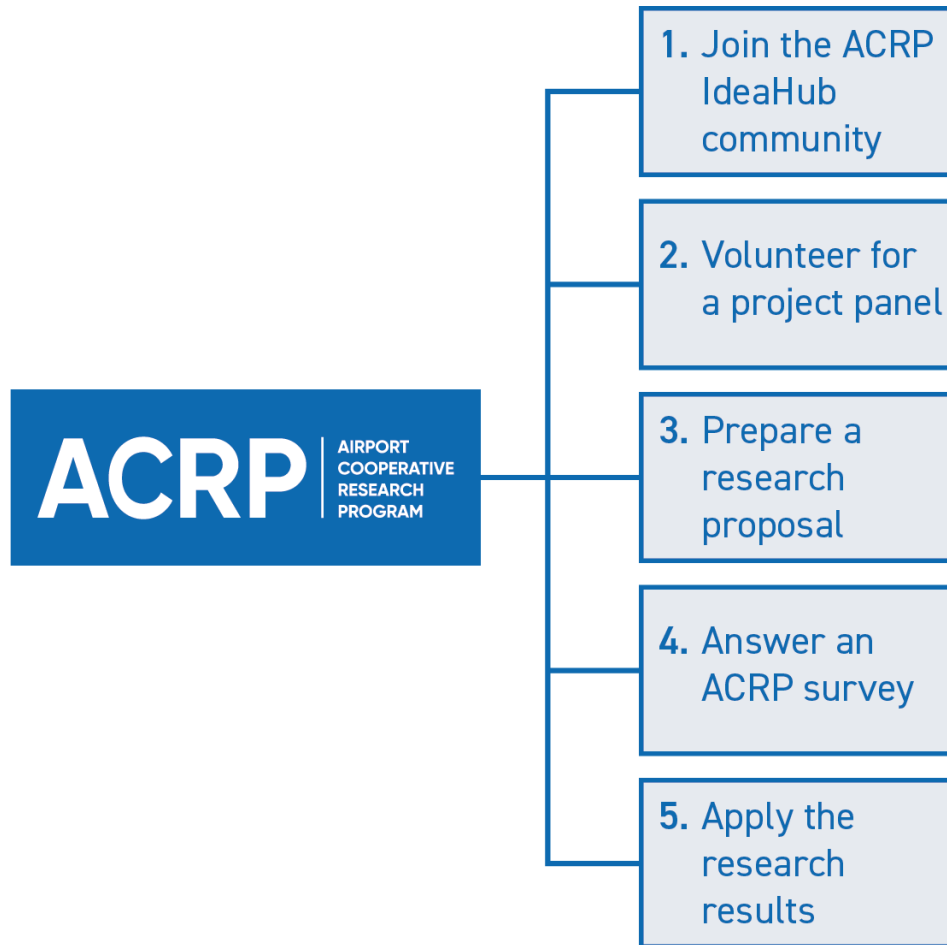
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