HOW TO BRIDGE THE GAP BETWEEN PROFESSIONAL TRAINING AND ACADEMIC EDUCATION

1/ ENAC PRESENTATION

2/ ADVANCED MASTER AS A SOLUTION FOR POST GRADUATE PROGRAMME

3/ EXAMPLE OF WHAT HAVE BEEN DONE IN THE CASE OF ATCO AND ATSEP TRAINING
Europe’s #1
Aviation University

Accredited by European Higher Education under direct authority of French CAA
Higher Education & Training Areas

Diversity & Complementarities

- Avionics, Embedded Systems
- Air Navigation, GNSS
- System Engineering
- Flight Safety
- Air Traffic Management
- Air Transport Techniques
- Safety management
- Airground
- Economics
- Flight Control, UAVs
- Airport
- Airworthiness
- Human Factors
- Security
- Language and Human Science

- Undergraduate Programs
- Postgraduate Programs
- Continuing Education
- International cooperation
- Research & Development
Aviation Stakeholders & Customers

- Airlines
- Airports
- Air Navigation Service Providers
- Aircraft Manufacturers
- Aeronautical Industry
- Aviation Authorities
KEY Figures

- Creation and setting up in 1948

- **Ab initio**: 4,000 students in higher and professional education per year in 30 training programs worldwide:
  - France, China (Beijing, Tianjing, HK), Indonesia, India, Abu Dhabi, Philippines, Vietnam, Canada, and very soon in Brazil, Sudan, etc.

- **Continuing Training**: 4,500 professional trainees per year

- 860 permanent staff & 1,400 affiliated professors
65% of our students are from all over the world
A global network with longstanding business partnerships
Research and Development

Cross Domains

150 Researchers
A network of **22 000** Alumni around the world:

- **Executive Director**, EASA (European Aviation Safety Agency)
- **Executive Director**, SESAR (Single European Sky ATM Research)
- **Senior Vice Presidents**, Airbus
- **Last two Chinese ATMB Directors**
- **Executive Directors**, Airports of CDG, Changi, Beijing, Kinshasa, etc.
- **Many CAA directors worldwide**
AERONAUTICAL ENGINEERING

MASTER OF ENGINEERING in Aeronautic and Aviation in Toulouse, Beijing, Tianjin, Hong-Kong, Bandung, etc.

8 “MASTERS OF SCIENCE” (MSc)
Air Transportation
Navigation systems, etc.
Advanced Master as the solution for post graduate students:

- Mixing professional and academic training (4 months)
- 6 months Internship or professional thesis.
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• MS ANSEO - Aeronautical Systems Engineering and Operations - Options "Air Traffic Management", "Avionics", "CNS/GNSS"

• SM ASAA – Aviation Safety Aircraft Airworthiness

• SM AO – Airline Operations (IATA – Abu Dhabi)


• SM ALM – Aircraft Life and Maintenance
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- **SM APM** – Aerospace Project Management

- **SM MA** – Airport Management – (China)

- **SM MTA** – Air Transport Management (China, Hong Kong)

- **SM ANSPM** – Air Navigation Service Provider Management (India, Indonesia)
Partnerships

ICAO - Regional Training Centre of Excellence

EASA - EASA Virtual Academy

ACI - Joint Master on Airport Management

IATA - Joint Master on Airlines Operation Management
HOW TO BRIDGE THE GAP BETWEEN PROFESSIONNAL TRAINING AND ACADEMIC EDUCATION – ATCO – ATSEP - PILOT

AIR TRAFFIC CONTROLLER (ATCO) – Master of Science in Air Traffic Management

AIR TRAFFIC SAFETY ELECTRONIC PERSONNEL (ATSEP) - Master of Engineering in Air Navigation Safety Systems

AIRLINE PILOT – Bachelor in Aviation
HOW TO BRIDGE THE GAP BETWEEN PROFESSIONNAL TRAINING AND ACADEMIC EDUCATION – ATCO – ATSEP - PILOT

- Global view on the worldwide Air Transport and Air Traffic systems
- Better analysis competences
- Acquisition of management skills for job evolution
- Better adaptability competences
ATCO – 2011- Master degree of Science in “Air Traffic Management »

• Improving and strengthening some courses :
  – Management - Economics
  – Academic English

• Introduction of high level conferences about ATM systems in operation worldwide.

• Involvement of students into research projects and deliveries of courses by researchers

• Active learning through projects

• Work on professional thesis through internship (Oral defense)

- Improving and strengthening some basic courses such as:
  - Signal processing - Computer science
  - Electromagnetism - System Engineering

- Main part of the lectures in basic courses delivered by ENAC Lab researchers

- Involvement of students into research projects

- On-sites internship within operational centres

- Active learning through technical projects carried out all along the scholarship
Thank you for your attention

Any questions?