Course Syllabus - IT-203 - Aeronautical Infrastructure Engineering Program

Aeronautics Institute of Technology

Semester 2025.2 Revision Date: August 3, 2025

1 Identification

• Course: IT-203 - Airports

• Credits: up to 3

• Air Transport Department

• Instructor(s): Evandro José da Silva

• Schedule: Mondays, 09:00 - 12:00

• Location: Civil Engineering Division of ITA

1.1 Course Description

Recommended prerequisite: None. Required prerequisite: None. Weekly hours: 3-0-0-6. Airport planning: master plans. Airside geometry: runways and aprons. Markings. Landside geometry. Passenger terminal: concepts, flows, sizing and capacity. Functional schemes. Heliports. Security and facilitation. Evaluation of an airport project.

Schedule

Below is the planning. The real-time updated schedule can be found here: **Click** here to access the schedule.

Note: The schedule may undergo minor changes agreed with the class throughout the semester

| Week | Date | Activity |
|------|------------|---|
| 1 | 08/04/2025 | Airports and Cities |
| 2 | 08/11/2025 | Assgn.1 Presentations. Discussion on 'Geospatial Evolution of Airport |
| | | Vicinities Over Time: Evidence from Brazil' |
| 3 | 08/18/2025 | Airside Geometry: The Runway System |
| 4 | 08/25/2025 | Airside Geometry: The Taxiway System |
| 5 | 09/01/2025 | Assgn.3 Presentations. Article Discussion. |
| 6 | 09/08/2025 | Runway System Capacity |
| 7 | 09/15/2025 | Heliport Designs |
| S | 09/22/2025 | Semaninha |
| 1 | 09/29/2025 | Airport Operations and Safety |
| 2 | 10/06/2025 | Airport Management |
| 3 | 10/13/2025 | Introduction to simulation models |
| 4 | 10/20/2025 | In-class activity on simulation |
| 5 | 10/27/2025 | Goodness-of-fit tests. Type I and Type II errors |
| 6 | 11/03/2025 | Pedestrian dynamics |
| 7 | 11/10/2025 | Exercise: sizing of circulation facilities |
| 8 | 11/17/2025 | Safety Seminar (Exame) |

Table 2: Course Schedule

2 Assessment

The course assessment will consist of the following elements:

N1: Best (n-1) assignments

N1 will be composed by the average of the best (n-1) assignments completed during the first bimester.

N2: Best (n-1) assignments

N2 will be composed by the average of the best (n-1) assignments completed during the second bimester.

N3: Group Project

This assignment will be presented according to the class schedule, and all students must contribute equally. You may work in pairs or in groups of up to three students, and you should follow the guidelines in the Project Specifications document.





Final Grade

The final grade will be calculated as: (N1 + N2 + N3)/3

Note: Submissions made after the established deadline will not be considered.

3 Declaration of Use of Generative AI and AI-Assisted Technologies in the Writing Process

In all activities, it is mandatory to declare all generative AI tools used.

EXAMPLE DECLARATION:

The author used ChatGPT versions 3.5 and 4 to improve grammar and enhance the overall readability of the text. After using these AI tools, the author reviewed and edited the content as necessary to maintain full authorial control over the substance of the work.

References

Ashford, N. and P. Wright (2011). Airport Engineering. 4th. Wiley. Horonjeff, R. et al. (2010). Planning and design of airports. 5th. McGraw-Hill. ICAO (2022). Aerodromes. Part I. Tech. rep. Montreal: ICAO.



