

A VM343 Airport Design and Planning

Level: 3

Credit Units: 5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY JULY

Synopsis:

The airport industry plays a key role in global economic development. An airport is a complex system of facilities and forms an essential part of the air transport system. LOG343 Airport Design and Planning covers essential elements in designing and planning airports. The main topics include airport planning, airport design including runways, taxiways, aprons, and passenger terminals, airport capacity planning and management, visual and radio navigation aids, and airport safety and emergency management systems. The course will also cover airport economics, finance, and marketing, airport cities, and will conclude with discussing the impacts of Industry 4.0 on the airport industry as well as the best practices in the airport industry.

Topics:

- Introduction to the Airport Industry
- Airport Planning
- Designing Airfield Components
- Airport Design: Passenger Terminals
- Airport Capacity Planning and Management
- Visual and Radio Navigation Aids
- Airport Safety Management Systems
- Airport Emergency Management Systems
- Airport Economics, Finance and Marketing
- Airport Cities
- Industry 4.0 and the Airport Industry
- Best Practices in the Airport Industry

Learning Outcome:

- Appraise airport safety and emergency management systems.
- Illustrate the application of Industry 4.0 technologies and best practices in managing the airport industry.
- Examine airport economics, finance, and marketing and the factors impacting the development of airport cities.
- Determine the processes and factors involved in airport planning studies.
- Analyse the design concepts for airfield components and passenger terminals.
- Verify the concepts of capacity planning, and various visual and radio navigation aids in airports.

Assessment Strategies - Regular Semester (Evening Class):

Components	Description	Weightage Allocation (%)
Overall Continuous Assessment	PARTICIPATION 1	10

Overall Continuous Assessment	TUTOR-MARKED ASSIGNMENT 1	20
	GROUP BASED ASSIGNMENT 1	20
Overall Examinable Components	ECA	50
Total		100

*The information listed is subject to review and change.