

CV4114 Airport Engineering

[Lectures: 26 hrs; Tutorials: 13 hr; Lab: 0 hrs; Pre-requisite: CV3014; Academic Units: 3]

Learning Objective :

To develop an understanding of the aviation system, its functions, and the airport planning process, as well as to impart knowledge and techniques on the conduct of the various elements of master planning and the design of basic airport facilities.

Course Content :

Airport master planning. Aircraft performance characteristics and their effects on airport design. Determination of runway length. Aids to navigation. Airport capacity and delay. Airport configuration. Design of airport pavements. Aircraft noise.

Course Outline :

S/N	Topic
1	Airport Master Planning
2	Aircraft Characteristics and Airport Design
3	Aids to Navigation
4	Airport Capacity and Delay
5	Airfield Configuration
6	Airport Pavements
7	Aircraft Noise

Learning Outcome :

Upon completion of the course, students should be able to:

- (a) understand the aviation system and its functions
- (b) know the airport planning process
- (c) conduct studies for the various elements of an airport master plan
- (d) plan and design basic airport facilities such as runways, taxiways, etc.

Textbooks :

Horonjeff, R. and McKelvey, F. Planning & Design of Airports, 4th edition, McGraw- Hill, Inc. 1994

References :

International Civil Aviation Organization, Aerodrome Design Manual Parts 1 and 3.