

Time Division: 4 hr Theoretical
Semester & Year: First, 2022 / 2023

Course No.: 1
Course Name: Linear Programming
Course Website:

Course Description:

This subject presents the general introduction of linear programming and the methods of solution to find the feasible and optimal solutions such as Graphical Method and Simplex Method.

Course Intended Outcomes:

After studying Linear Programming course, the student is able to study the Applications of Linear Programming.

Course Outline:

Week	Description depends on the Timing table (Theoretical & Practical)
1	Linear Programming Problem (LPP) Formulation
2	Geometric (Graphical) Solution
3	Feasible and Optimal Solutions in LPP
4	Line Segment, Convex Set, Extreme Point
5	Bounded and Unbounded Feasible Region
6	Standard Form of a Maximum Problem in LPP
7	Slack Variables and the Simplex Tableau
8	Matrix Notation
9	The Pivot Operation Selecting the Pivot Row, Column and Element
10	Examples of Simplex Method
11	The Unbound Case of LPP
12	Standard Form of a Minimum Problem in LPP
13	Duality in LPP
14	Some Examples and Theorems in Duality
15	Final Exam