

Annex 2

《Course Design Table》

Course Title	Operations Research	College		School of Mechanical and Electronic Engineering
Course Director	Cunrong Li	Tel		13797026270
Chapter	Topics of Discussion	Content & Duration (hours)		Video Type
Chapter 1 (Day 1)	1.1 Introduction to optimization	1	1.5	Seminar
	1.2 Vector Spaces & Convexity	2	1.5	Seminar
	1.3 Intro to Linear programming	3	1.5	Seminar
	1.4 Graphical Solution	4	1.5	Seminar
	1.5 Simplex Method	5	2.0	Seminar
	1.6 Maximization and Minimization	6	2.0	Seminar
Chapter 2 (Day 2)	2.1 Matrix version of simplex method	7	2.0	Seminar
	2.2 Matrix approach of simplex meth	8	2.0	Seminar
	2.3 Post-optimality analysis	9	1.5	Seminar
	2.4 Sensitivity analysis	10	1.5	Seminar
Chapter 3 (Day 3)	3.1 Function of single variable	11	1.5	Seminar
	3.2 Function of single variable	12	1.5	Seminar
	3.3 Function of several variable	13	1.5	Seminar
	3.4 Function of several variable	14	1.5	Seminar
Chapter 4 (Day 4)	4.1 Constrained Optimization	15	1.5	Seminar
	4.2 Constraint Direct Search	16	1.5	Seminar
	4.3 Direction-based method	17	1.5	Seminar
	4.4 Direction-based method	18	1.5	Seminar
Chapter 5 (Day 5)	5.1 Mixed-Integer Programming	19	2.0	Seminar
	5.2 Integer Programming	20	2.0	Seminar
	5.3 Computation Complexity	21	1.5	Seminar
	5.4 Measure of Performances	22	1.5	Seminar
Sub-total		-	36 hours	

■Note: Request of Resource Sharing Courses:

1. <Video Type>: You can choice form **Appearance/Non-Appearance/Seminar**.

•Appearance: You can explain the lesson through recorded video.

•Non-appearance: Teachers needn't be recorded video when explain the lesson.

•Seminar: Teachers and students to discuss the lesson together.

2.<Duration>: Video length is recommended not to exceed 20 minutes.