

國立清華大學工業工程與工程管理學系

NATIONAL TSING HUA UNIVERSITY, DEPARTMENT OF INDUSTRIAL ENGINEERING AND ENGINEERING MANAGEMENT

第四十六期 推廣教育碩士學分班

(108.2-108.6)

課程簡介

課程名稱	機率與統計應用		課程編號	IEEM1070204	學分數	3																																						
上課時間	每週四 晚上 6:30~9:20		教室	R827	人數	30 位																																						
授課教師	桑慧敏 教授	學歷	美國普渡大學工業工程博士																																									
		專長	資料分析、機率統計與模擬理論與應用、太陽能製程品管與可靠度																																									
課程大綱	<table border="1"> <thead> <tr> <th colspan="2">課程進度</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Introduction to probabilistic and statistical model, including but not being limited to: I. Why does intuition cannot provide the correct answer? II. What probability and statistical models can do for us?</td> </tr> <tr> <td>2</td> <td><u>單元 1:</u> Basic Concept of Probability Models (Ch. 2)</td> </tr> <tr> <td>3</td> <td><u>單元 1:</u> Univariate Probability Models (Ch. 3)</td> </tr> <tr> <td>4</td> <td><u>單元 1:</u> Discrete Probability Models (Ch. 4)</td> </tr> <tr> <td>5</td> <td><u>單元 1:</u> Continuous Probability Models (Ch. 5)</td> </tr> <tr> <td>6</td> <td><u>單元 1:</u> 機率統計軟體, 上機練習</td> </tr> <tr> <td>7</td> <td><u>單元 2:</u> Sampling distributions, estimation, testing hypothesis (Ch. 8)</td> </tr> <tr> <td>8</td> <td><u>單元 2:</u> Estimation (Ch. 9)</td> </tr> <tr> <td>9</td> <td><u>單元 2:</u> Testing hypothesis (Ch. 10)</td> </tr> <tr> <td>10</td> <td><u>單元 3:</u> (迴歸) Regression</td> </tr> <tr> <td>11</td> <td><u>單元 3:</u> (迴歸) Regression</td> </tr> <tr> <td>12</td> <td>期中考 Mid-term exam</td> </tr> <tr> <td>13</td> <td>Term Project 1</td> </tr> <tr> <td>14</td> <td><u>單元 4:</u> (實驗設計) Design of experiments</td> </tr> <tr> <td>15</td> <td><u>單元 4:</u> (實驗設計) Design of experiments</td> </tr> <tr> <td>16</td> <td><u>單元 4:</u> (實驗設計) Design of experiments</td> </tr> <tr> <td>17</td> <td>Term Project 2</td> </tr> <tr> <td>18</td> <td>期末檢討</td> </tr> </tbody> </table>						課程進度		1	Introduction to probabilistic and statistical model, including but not being limited to: I. Why does intuition cannot provide the correct answer? II. What probability and statistical models can do for us?	2	<u>單元 1:</u> Basic Concept of Probability Models (Ch. 2)	3	<u>單元 1:</u> Univariate Probability Models (Ch. 3)	4	<u>單元 1:</u> Discrete Probability Models (Ch. 4)	5	<u>單元 1:</u> Continuous Probability Models (Ch. 5)	6	<u>單元 1:</u> 機率統計軟體, 上機練習	7	<u>單元 2:</u> Sampling distributions, estimation, testing hypothesis (Ch. 8)	8	<u>單元 2:</u> Estimation (Ch. 9)	9	<u>單元 2:</u> Testing hypothesis (Ch. 10)	10	<u>單元 3:</u> (迴歸) Regression	11	<u>單元 3:</u> (迴歸) Regression	12	期中考 Mid-term exam	13	Term Project 1	14	<u>單元 4:</u> (實驗設計) Design of experiments	15	<u>單元 4:</u> (實驗設計) Design of experiments	16	<u>單元 4:</u> (實驗設計) Design of experiments	17	Term Project 2	18	期末檢討
	課程進度																																											
	1	Introduction to probabilistic and statistical model, including but not being limited to: I. Why does intuition cannot provide the correct answer? II. What probability and statistical models can do for us?																																										
	2	<u>單元 1:</u> Basic Concept of Probability Models (Ch. 2)																																										
	3	<u>單元 1:</u> Univariate Probability Models (Ch. 3)																																										
	4	<u>單元 1:</u> Discrete Probability Models (Ch. 4)																																										
	5	<u>單元 1:</u> Continuous Probability Models (Ch. 5)																																										
	6	<u>單元 1:</u> 機率統計軟體, 上機練習																																										
	7	<u>單元 2:</u> Sampling distributions, estimation, testing hypothesis (Ch. 8)																																										
	8	<u>單元 2:</u> Estimation (Ch. 9)																																										
	9	<u>單元 2:</u> Testing hypothesis (Ch. 10)																																										
	10	<u>單元 3:</u> (迴歸) Regression																																										
	11	<u>單元 3:</u> (迴歸) Regression																																										
	12	期中考 Mid-term exam																																										
	13	Term Project 1																																										
	14	<u>單元 4:</u> (實驗設計) Design of experiments																																										
	15	<u>單元 4:</u> (實驗設計) Design of experiments																																										
	16	<u>單元 4:</u> (實驗設計) Design of experiments																																										
17	Term Project 2																																											
18	期末檢討																																											