

课程大纲 COURSE SYLLABUS

1.	课程代码/名称 Course Code/Title	INO5008 整合与创新设计 Design Integration & Innovation
2.	课程性质 Compulsory/Elective	专业选修
3.	课程学分/学时 Course Credit/Hours	总学时： 32 课程学分： 2
4.	授课语言 Teaching Language	中英双语
5.	授课教师、所属学系、联系方式（如属团队授课，请列明其他授课教师） Instructor(s), Affiliation & Contact (For team teaching, please list all instructors)	叶智荣， 国际知名产品设计师、香港设计商会主席、红杉资本HKX导师、香港版权仲裁处成员、曾任香港设计师协会主席、香港理工大学客席讲师等 祝渊， 创新创业学院研究副教授
6.	先修要求 Pre-requisites	无
7.	教学目标 Course Objectives	
	Introduce concepts to engineering students including: design thinking, problem solving, aesthetic appreciation, Eco design, form follow function, user friendliness. Inspire students to learn how to create new ideas and products through product case studies in different market segments with design and innovation theories. The teaching outcome is let students learn how to utilize different innovative technologies and make good use of industrial design to transform and transcend good solutions and create good products to fill in the different market needs. How to start from the basic structure to a finish product; from inside out, with a capable team structure.	
8.	教学方法 Teaching Methods	
	Through lectures and some simple workshops	
9.	教学内容 Course Contents	
	Section1	Introduction to design profession
	Section 2	Introduction and history of industrial design
	Section 3	Product aesthetic appreciation
	Section 4	Form languages

Section 5	Form study workshop
Section 6	Design thinking, AI design
Section 7	Product innovation
Section 8	Brand images, logo and trade mark workshop
Section 9	Design and function integrations
Section 10	Product manager and the product innovation team
Section 11	Material applications in product design
Section 12	Ergonomics and user friendliness
Section 13	Production process in product design
Section 14	Product CMF (colour, material & finish)
Section 15	International design award
Section 16	Innovative Design VS profitability
10.	课程考核 Course Assessment
	Attendance 30% Class performance 20% Overall knowledge 20% Assignment 30%
11.	教材及其它参考资料 Textbook and Supplementary Readings
	A John Heskett Reader, Design, History Economics, by John Heskett Design History, Theory and practice of product Design, by Bernhard E. Burdek 《整合与创新设计》 陈纯、应放天著，华中科技大学出版社， 《Creating Breakthrough Products》 Jonathan·Cagan 著，机械工业出版社，2003，