

ANNEX A

KMUTT Program and Corresponding TAIPEI TECH Program for the Dual Award Master Program

1. Course List

TAIPEI TECH		KMUTT
Choose 2	7305001 Advanced Fluid Mechanics, 3 credits (Fall, Required)	CHE 610 Intermediate Transport Phenomena, 3 credits (Spring)
	7305002 Advanced Heat Transfer, 3 credits (Fall, Required)	
	7305003 Advanced Chemical Engineering Thermodynamics, 3 credits (Fall, Required)	CHE 644 Applied Chemical Engineering Thermodynamics, 3 credits (Fall)
	7305013 Advanced Mass Transfer, 3 credits (Spring, Required)	
	7305014 Advanced Chemical Reaction Engineering, 3 credits (Spring, Required)	CHE 642 Chemical Reaction Engineering, 3 credits (Spring)
7306002 Thesis, 6 credits (Fall + Spring, Required)	CHE 690 Special Research Project, 6 credits (Required)	
7306006 Seminar, 2 Credits (Fall + Spring, Required)	CHE 684 Graduate Seminar (1 credit)	
7305055 Graduate On-Site Research, 3 credits (Fall, Elective)	CHE 691 Intensive Industrial Research Project I, 3 credits (Required)	
6805067 Graduate On-Site Research, 3 credits (Spring, Elective)	CHE 692 Intensive Industrial Research Project II, 3 credits (Required)	
3204012 Process Design, 3 credits (Fall, Required)	CHE 654 Computer Application for Chemical Engineering Practice, 3 credits (Required)	
3201005 Industrial Safety and Hygiene, 2 credits (Fall, Required)	CHE 655 Fundamental of Chemical Engineering Practice, 3 credits (Required)	
3201018 Chemical practice, 2 credits (Spring, Required)		
7305063 Information Technology English, 2 credits/3 hours (Spring, Required)	LNG 601 Foundation English for International Programs, 3 credits (Required)	
7305006 Process Simulation, 3 credits (Fall, Elective)	CHE 656 Process Analysis and Modeling I, 3 credits (Fall)	
7305065 Petroleum Refinery Engineering, 3 credits (Fall, Elective)	CHE 643 Petroleum and Petrochemical Process Chemistry, 3 credits (Fall)	
7305008 Advanced Process Control, 3 credits (Spring, Elective)	CHE 658 Fundamentals of Process Dynamics and Control, 2 credits (Fall)	
7305071 Process Optimization, 3 credits (Spring, Elective)	CHE 659 Optimization of Chemical Processes, 2 credits (Spring)	
7305023 Polymer Synthesis, 3 credits (Spring, Elective)	CHE 510 Polymer Science and Technology, 3 credits	
7305011 Colloid and Interface Science, 3 credits (Fall, Elective)	CHE 514 Surfactant Science and Technology, 3 credits	

7305065 Petroleum Refinery Engineering, 3 credits (Fall, Elective)	CHE 520 Petroleum and Petrochemical Technology, 3 credits
7305059 Biochemical Engineering, 3 credits (Spring, Elective)	CHE 540 Biochemical Engineering, 3 credits
7305024 Industrial Catalyst and Application, 3 credits (Spring, Elective)	CHE 543 Heterogeneous Catalytic Reaction Engineering, 3 credits
7305007 Electrochemistry and Electrochemical Engineering, 3 credits (Spring, Elective)	CHE 545 Electrochemical Engineering, 3 credits

- **CHE 691 / CHE 692 can be recognized as either one of the Graduate On-Site Research courses**
- **CHE 658 + CHE 659 can be recognized as either Advanced Process Control or Process Optimization**

*** Other courses**

KMUTT:

CHE 651 Mathematical Analysis for Chemical Engineering, 3 credits (Fall)

CHE 657 Process Analysis and Modeling II, 3 credits (Spring)

CHE 670 Business Management for Chemical Industry, 3 credits (Spring)