

COMMITTEE ON UNDERGRADUATE STUDIES

Paper for: Discussion/Decision

Title: **Dual Degree Program in Technology and Management: (i) BEng in Aerospace Engineering; and (ii) BSc in Integrative Systems and Design with BBA Programs**

Purpose: The Interdisciplinary Programs Office submits two proposals of the deviation arrangements for two new dual degree programs – BEng in Aerospace Engineering and BSc in Integrative Systems and Design, with BBA in Economics, BBA in Finance, BBA in General Business Management, BBA in Management and BBA in Marketing to take effect from Fall 2021-22 for consideration by the CUS

Submitted by: Interdisciplinary Programs Office

Prepared by: CUS Secretariat

BACKGROUND

1. Under the four-year degree, students will declare their Major under respective schools, while they have also the option to enroll in the dual degree program under which students may earn two different degrees by fulfilling all the requirements of both degree programs.
2. At its 124th CUS meeting in May 2012, CUS approved the deviation arrangements for the first batch of nine BEng and BBA dual degree programs under the four-year degree curriculum. With the demand for more combinations of dual degree program, the Interdisciplinary Programs Office (IPO) has submitted two proposals regarding pre-approved deviation arrangements for two new dual degree programs - BEng in Aerospace Engineering and BBA and BSc in Integrative Systems and Design and BBA.

PROPOSED ARRANGEMENTS

3. The proposed deviation arrangements follow the framework as approved in May 2012 which are summarized as follows:
 - (a) *Minimum 120-credit requirement:* in the attached normative study plans, the total credits students will earn when completing the newly proposed BEng/BSc and BBA dual degree programs range from 182 to 191, and would not be required to complete additional credits.

(b) *University Common Core requirement:* students must complete all the requirements of the University Common Core, and may count this to both degrees.

(c) *University English Language requirement:* The English Language requirements of the dual degree program combine requirements of the University, School of Engineering (SENG) and School of Business and Management (SBM), with the 6-credit University English Core courses being counted towards both degrees (see Attachment C of Appendices 1 and 2).

(d) *Substitution and waiver of courses and requirements for School and major requirements:* Details of the substitution and waiver arrangements are set out in Attachment A of Appendices 1 and 2.

(e) *Additional requirement:* Students in the dual degree program are required to take an additional non-credit bearing course TEMP 1010 *Technology and Management Professional Activities*, in addition to the School and major requirements, with an intention to enhance their academic and/or personal development (see Attachment A of Appendices 1 and 2).

4. The deviation arrangements have been reviewed and agreed by the SENG and SBM.
5. The deviations from curriculum proposed in paragraph 3 could apply to all students enrolled in the two dual degree programs. Any further deviation from the curriculum that may be necessary for individual student, or further curricular changes, will be subject to approval by SENG and SBM, following the current policy and procedures for approving deviations from curriculum.
6. The changes are proposed to take effect from Fall 2021-22, applicable to 2020-21 cohort and beyond.

TOTAL CREDITS AND STUDY PATHWAYS

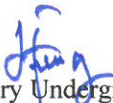
7. For the reference of the Committee, the study pathways for students directly admitted to the Dual Degree Program, as well as those admitted from the Schools of Engineering, and Business and Management are presented in Attachment B of Appendices 1 and 2. Provided that there is sufficient overlap of courses between the Common Core and School/Major Requirements, students may further benefit from reduced requirements of 15 credits.


ACTION SOUGHT

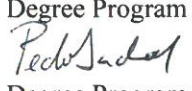
8. CUS is invited to
 - (i) consider and approve as appropriate the proposed deviation arrangements for the dual degree programs under the four-year curriculum set out above in paragraph 3 and in Attachment A of Appendices 1 and 2; and
 - (ii) note for information the total credits needed to complete the proposed dual degree programs, and the students' study pathways as presented in Attachment B of Appendices 1 and 2.

MEMORANDUM

To: CUS Secretariat

via: Prof. Jimmy Fung 
Chair, Interdisciplinary Undergraduate Studies Committee

From: Prof. Kai Lung Hui 
Co-director of Dual Degree Program in Technology & Management

& Prof. Pedro Sander 
Co-director of Dual Degree Program in Technology & Management

Date: 10th February, 2021

Our Ref: 402/DDP

Subject: Proposed 5Y Curriculum of Dual Degree Program in Technology & Management
(BEng in Aerospace Engineering and BBA)

Dual Degree Program in Technology & Management (T&M-DDP) would like to propose the 5-year curriculum for BEng in Aerospace Engineering and BBA with effect from Fall 2021-22. This change will have effect on the 2020-2021 cohort onwards. The new curriculum will include 5 new majors. The program structure is listed below.

Total: 5 new majors	BEng in Aerospace Engineering	and	BBA in Economics
			BBA in Finance
			BBA in General Business Management
			BBA in Management
			BBA in Marketing

Students can admit to T&M-DDP via program-based admission or school-based admission. Program-based admission students will be admitted to T&M-DDP in their first year and school-based admission students will be admitted to T&M-DDP in their second year. Students will declare their major via the Major Selection Exercises (MSE) at the ends of their first year and second year for BEng/BSc degree and BBA degree of T&M-DDP respectively. Pathway templates of all new majors for program-based admission students and two sets of sample pathway for school-based admission students are presented to demonstrate their study progress (*see Attachment B*).

The program requirements of T&M-DDP are devised by combining the requirements of the BEng/BSc program and the BBA program. This will apply in the proposed 5-year curriculum with the following taken into consideration:

1. Deviation from Curriculum

The course substitutions and waivers that are applicable in the existing BEng/BSc&BBA Dual Degree program will continue to apply in the proposed Dual Degree programs of BEng in Aerospace Engineering and BBA (see Attachment A).

2. Additional Dual Degree Requirements

Additional requirements specifically for the Dual Degree Program, including TEMG1010 and TEMG3950 are presented in the pathway templates (see Attachment B) and “Deviation from Curriculum” (see Attachment A).

3. English Language Requirements

The English Language requirements of BEng in Aerospace Engineering and BBA are a combination of the requirements of university, AE, SENG and SBM (see Attachment C).

4. Double Counting of Common Core Requirements

The double-counting policy applicable to existing BEng/BSc&BBA Dual Degree programs, which is to apply double-counting policy to each degree separately will continue to apply in the proposed Dual Degree programs.

For BEng in Aerospace Engineering, students may reuse up to 9 credits of courses to count towards both the School Requirements and the University Common Core Requirements.

For BBA degree in all Dual Degree programs, students may reuse up to 6 credits of courses to count towards both the School Requirements and the University Common Core Requirements.

By combining the two degrees, students can double-count up to 15 credits. The total credits requirements are as follow:

Total Credits Requirements	
Without double-counting of Common Core Requirements	After double-counting of Common Core Requirements is applied
191-182	176-167

Below please find the concurrence obtained from departments/schools in concern,

School/Dept.	Approval	Name	Date
MAE	Yes / No	Prof. Baoling HUANG, UG Coordinator	19 Feb 2021
ECON	Yes / No	Prof. Wooyoung LIM	10 Feb 2021
FINA	Yes / No	Prof. Ekkachai SAENYASIRI	19 Feb 2021
MARK	Yes / No	Prof. Jiewen HONG	16 Feb 2021
MGMT	Yes / No	Prof. Yaping GONG	16 Feb 2021
SENG	Yes / No	Prof. Philip L. T. MOK, Associate Dean of Engineering	18 Feb 2021
SBM	Yes / No	Prof. Allen HUANG, Associate Dean (UG Programs)	19 Feb 2021

For consideration and approval please. Thank you very much.

Encl.

- A. Attachment A – Deviation from Curriculum
- B. Attachment B – Suggested pathways of Dual Degree programs of BEng in Aerospace Engineering and BBA
- C. Attachment C – English language requirements of Dual Degree programs of BEng in Aerospace Engineering and BBA

Deviation from curriculum
for Dual Degree Program

Degree Program 1: *BEng in Aerospace Engineering (AE)*
Degree Program 2: *BBA in Economics (ECON) OR*
BBA in Finance (FINA) OR
BBA in General Business Management (GBM) OR
BBA in Management (MGMT) OR
BBA in Marketing (MARK)

Degree Program	Original requirements specified for the degree program		Substituted/ Waived/ Additional Req't/ Others	Proposed substituted course/ requirement		Remarks
	Course code/ requirement	Credits		Course code/ requirement	Credits	
ECON/FINA/GBM/ MGMT/MARK	SBMT 1111	0	Waived	-	-	DDP students do not need to join this non-credit bearing development course originally designed for Business students
AE	ENGG 1010	0	Substituted	SBMT 1111	0	[For non-SENG year 1 students admitted to T&M-DDP via School-based admission] DDP students do not need to join this non-credit bearing development course originally designed for Engineering students.
AE	-	-	Additional Req't	TEMG 1010	0	DDP students should take this non-credit bearing course to enhance their academic development
ECON/FINA/GBM/ MGMT/MARK	-	-	Additional Req't	TEMG 1010	0	DDP students should take this non-credit bearing course to enhance their academic development
AE	-	-	Additional Req't	TEMG 3950	3	DDP students should take this 3-credit course to enhance their problem-solving skills.
ECON/FINA/GBM/ MGMT/MARK	-	-	Additional Req't	TEMG 3950	3	DDP students should take this 3-credit course to enhance their problem-solving skills.
ECON/FINA/GBM/ MGMT/MARK	ISOM 2010	3	Substituted	COMP 1021 OR COMP 1022P OR COMP 2011	3 OR 4	COMP 1021, COMP 1022P and COMP 2011 are more advanced computing courses as compared to ISOM 2010. Students should take one of these three COMP courses instead of ISOM 2010
ECON/FINA/GBM/ MGMT/MARK	ISOM 2020	1	Substituted	COMP 1021 OR COMP 1029P	1 OR 3	COMP 1021 and COMP 1029P are similar coding courses as compared to ISOM 2020. Students should take one of these two COMP courses instead of ISOM 2020

<< Declaration of BEng major

<< Declaration of BBA major

School:		School of Engineering and School of Business Management			Student's Pathway											
Program:		Dual Degree Program (BEng in Aerospace Engineering and BBA in General Business Management)														Remarks
Course Offering Dept. (course code prefix)	Course Code	Course Title / Courses List	Credits	Year 1 Fall	Year 1 Spring	Year 2 Fall	Year 2 Spring	Year 3 Fall	Year 3 Spring	Year 4 Fall	Year 4 Spring	Year 5 Fall	Year 5 Spring	Sub-total		
BEng in Aerospace Engineering																
Major Requirements																
Engineering Fundamental Courses																
COMP	1021	Note: COMP1021 OR COMP1022P OR COMP2011	3-4													
COMP	1022P	Introduction to Computer Science	3	3										3	This course will also be used to substitute ISOM 2010	
COMP	2011	Introduction to Computing with Java	3													
COMP		Programming with C++	4													
ENGG	1010	Academic Orientation	0	0	0									0		
LANG	2030	Technical Communication I	3						3					3		
MATH	1012	Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020]	4-7													
MATH	1013	Calculus IA	4													
MATH	1014	Calculus IB	3	3	3									6		
MATH	1020	Calculus II	3													
MATH	1023	Accelerated Calculus	4													
MATH	1023	Honors Calculus I	3													
MATH	1024	Honors Calculus II	3													
MATH	2011	Introduction to Multivariable Calculus	3			3								3		
MATH	2111	Note: MATH2111 OR MATH2350 OR MATH2351	3													
MATH	2350	Matrix Algebra and Applications	3				3							3		
MATH	2351	Applied Linear Algebra and Differential Equations	3													
MATH		Introduction to Differential Equations	3													
PHYS	1112	Note: PHYS1112 OR PHYS1312	3		3									3		
PHYS	1312	General Physics I with Calculus	3													
PHYS		Honors General Physics I	3													
CHEM/LIFS/ PHYS		Science 1000-level course (Any 1 course of the subject and level as specified)	3		(3)									0		
Required credits for Engineering Fundamental Courses			22-26											21		
Major Required Courses and Electives																
MECH	1907	Introduction to Aerospace Engineering	3			3								3		
MECH	1990	Industrial Training	0			0*	0^							0		
MECH	2020	Statics and Dynamics	3			3								3		
MECH	2040	Solid Mechanics I	3				3							3		
MECH	2210	Fluid Mechanics	3				3							3		
MECH	2310	Thermodynamics	3			3								3		
MECH	2410	Engineering Materials I	3						3					3		
MECH	3400	Introduction to Composite Materials	3							3				3		
MECH	3610	Control Principles	3					3						3		
MECH	3620	Aircraft Design	3								3			3		
MECH	3640	Aerodynamics	3							3				3		
MECH	3650	Aircraft Structural Analysis	3							3				3		
MECH	3660	Gas Turbines and Jet Propulsion	3								3			3		
MECH	3670	Aircraft Performance and Stability	3							3				3		
MECH	3680	Avionics Systems	3						3					3		
MECH	3690	Aerospace Engineering Laboratory	3								3			3		
MECH	4980	Final Year Aerospace Design Project	6									3	3	6		
ELEC	2420	Basic Electronics	3					3						3		
ENGG	2010	Engineering Seminar Series	0			0	0	0	0					0		
LANG	4034	Technical Communication II for Mechanical and Aerospace Engineering	3								3			3		
MECH		MECH Electives in Aerospace (2 courses from the specified elective list)	6									3	3	6		
Required credits for Major Requirements Courses and Electives			63											63		
BBA in General Business Management																
School Requirements																
ACCT	2010	Principles of Accounting I	3	3										3		
ACCT	2200	Principles of Accounting II	3		3									3		
ECON	2103	Note: ECON 2103 OR ECON 2113	3		3									3		
ECON	2113	Principles of Microeconomics	3													
ECON	2103	Principles of Microeconomics	3													
ECON	2113	Microeconomics	3													
ECON	2123	Note: ECON 2123 OR ECON 3123	3			3								3		
ECON	3123	Macroeconomics	3													
FINA	2303	Macroeconomic Theory I	3													
FINA		Financial Management	3				3							3		
ISOM	2010	Introduction to Information Systems	3	---	---	---	---	---	---	---	---	---	---	0	Substituted by COMP 1021/1022P/2011	
ISOM	2020	Coding for Business	1					1						1		
ISOM	2500	Business Statistics	3	3										3		
ISOM	2600	Introduction to Business Analytics	1					1						1		
ISOM	2700	Operations Management	3						3					3		
MARK	2120	Marketing Management	3				3							3		
MGMT	2010	Business Ethics and the Individual	2				2							2		
MGMT	2110	Organizational Behavior	3				3							3		
MGMT	2130	Business Ethics and Social Responsibility	2						2					2		
SBMT	1111	Business Student Induction	0	---	---	---	---	---	---	---	---	---	---	0	Waived for DDP students	
LABU	2040	Business Case Analyses	3					3						3		
LABU	2060	Effective Communication in Business	3							3				3		
MATH	1003	Note: MATH 1003 OR MATH 1012 OR MATH 1013 OR MATH 1020 OR MATH 1023	3-4													
MATH	1012	Calculus and Linear Algebra	3													
MATH	1013	Calculus IA	4													
MATH	1013	Calculus IB	3	(3)												
MATH	1020	Accelerated Calculus	4													
MATH	1023	Honors Calculus I	3													
Required credits for School Requirements			45-46											39		
Major Requirements																
Major Required Courses and Electives																
SB&M		SB&M Electives (Any 9 courses offered by the departments under SB&M, of which at least 4 courses are of 3000-level or above.)	29					6		3	3	7	10	29		
Required credits for Major Required Courses and Electives			29											29		
Additional Requirements																
Requirements for Dual Degree Program																
Required Courses																
TEMG	1010	Technology and Management Professional Activities	0	0	0	0	0	0	0	0	0	0	0	0		
TEMG	3950	Case-based Problem Solving	3		3									3		
Required credits for Additional Requirements			3											3		
University CORE																
CORE	C3 - C12	U CORE - Others	30	3		6		3	6		3	6	3	30		
CORE	C1 & C2	U CORE - English Language	6	3	3									6		
Sub-total for University CORE			36											36		
Term load (excl. free credits)																
18		18		21		20		20		20		18		18		
191##																

Notes:

() indicates the reuse of the same course to fulfill more than one requirement.
* Courses offered in winter term
^ Courses offered in summer term
--- denotes the course/requirement is either waived or substituted
To graduate, students should complete all requirements as specified for DDP.

**Remarks on course(s):

>> The content of this example is not necessarily equivalent to a complete list of graduation requirements of the program. Students should refer to the Program Catalog/UG Curriculum Handbook for updated graduation requirements. For up-to-date information on course offering and scheduling, students should check it out from respective School and Department.

<< Declaration of
BEng major

<< Declaration of
BBA major

School:		School of Engineering and School of Business Management			Student's Pathway												
Program:		Dual Degree Program (BEng in Aerospace Engineering and BBA in Finance)														Remarks	
Course Offering Dept. (course code prefix)	Course Code	Course Title / Courses List	Credits	Year 1 Fall	Year 1 Spring	Year 2 Fall	Year 2 Spring	Year 3 Fall	Year 3 Spring	Year 4 Fall	Year 4 Spring	Year 5 Fall	Year 5 Spring	Sub-total			
BEng in Aerospace Engineering																	
Major Requirements																	
Engineering Fundamental Courses																	
COMP	1021	Note: COMP1021 OR COMP1022P OR COMP2011	3-4														
COMP	1022P	Introduction to Computer Science	3	3										3			
COMP	2011	Introduction to Computing with Java	4														
ENGG	1010	Academic Orientation	0	0	0									0			
LANG	2030	Technical Communication I	3						3					3			
MATH	1012	Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020]	4-7														
MATH	1013	Calculus IA	4														
MATH	1014	Calculus IB	3	3	3									6			
MATH	1020	Calculus II	3														
MATH	1023	Accelerated Calculus	4														
MATH	1024	Honors Calculus I	3														
MATH	2011	Honors Calculus II	3			3								3			
MATH	2111	Note: MATH2111 OR MATH2350 OR MATH2351	3				3										
MATH	2350	Matrix Algebra and Applications	3											3			
MATH	2351	Applied Linear Algebra and Differential Equations	3														
MATH	2351	Introduction to Differential Equations	3														
PHYS	1112	Note: PHYS1112 OR PHYS1312	3		3									3			
PHYS	1312	General Physics I with Calculus	3														
PHYS	1312	Honors General Physics I	3														
CHEM/LIFS/ PHYS		Science 1000-level course (Any 1 course of the subject and level as specified)	3		(3)									0			
Required credits for Engineering Fundamental Courses			22-26											21			
Major Required Courses and Electives																	
MECH	1907	Introduction to Aerospace Engineering	3			3								3			
MECH	1990	Industrial Training	0			0*	0*							0			
MECH	2020	Statics and Dynamics	3			3								3			
MECH	2040	Solid Mechanics I	3				3							3			
MECH	2210	Fluid Mechanics	3				3							3			
MECH	2310	Thermodynamics	3			3								3			
MECH	2410	Engineering Materials I	3					3						3			
MECH	3400	Introduction to Composite Materials	3							3				3			
MECH	3610	Control Principles	3					3						3			
MECH	3620	Aircraft Design	3								3			3			
MECH	3640	Aerodynamics	3							3				3			
MECH	3650	Aircraft Structural Analysis	3							3				3			
MECH	3660	Gas Turbines and Jet Propulsion	3								3			3			
MECH	3670	Aircraft Performance and Stability	3							3				3			
MECH	3680	Avionics Systems	3					3						3			
MECH	3690	Aerospace Engineering Laboratory	3								3			3			
MECH	4980	Final Year Aerospace Design Project	6									3	3	6			
ELEC	2420	Basic Electronics	3					3						3			
ENGG	2010	Engineering Seminar Series	0			0	0	0	0					0			
LANG	4034	Technical Communication II for Mechanical and Aerospace Engineering	3									3		3			
MECH		MECH Electives in Aerospace (2 courses from the specified elective list)	6									3	3	6			
Required credits for Major Requirements Courses and Electives			63											63			
BBA in Finance																	
School Requirements																	
ACCT	2010	Principles of Accounting I	3	3										3			
ACCT	2200	Principles of Accounting II	3		3									3			
ECON	2103	Note: ECON 2103 OR ECON 2113	3		3									3			
ECON	2113	Principles of Microeconomics	3														
ECON	2113	Microeconomics	3														
ECON	2123	Note: ECON 2123 OR ECON 3123	3			3								3			
ECON	3123	Macroeconomics	3														
ECON	3123	Macroeconomic Theory I	3														
FINA	2303	Financial Management	3				3							3			
FINA	2303	FINA 2303 is a major pre-requisite															
ISOM	2010	Introduction to Information Systems	3	---	---	---	---	---	---	---	---	---	---	0			
ISOM	2020	Coding for Business	1					1						1			
ISOM	2500	Business Statistics	3	3										3			
ISOM	2600	Introduction to Business Analytics	1					1						1			
ISOM	2700	Operations Management	3						3					3			
MARK	2120	Marketing Management	3				3							3			
MGMT	2010	Business Ethics and the Individual	2				2							2			
MGMT	2110	Organizational Behavior	3				3							3			
MGMT	2130	Business Ethics and Social Responsibility	2					2						2			
SBMT	1111	Business Student Induction	0	---	---	---	---	---	---	---	---	---	---	0			
LABU	2040	Business Case Analyses	3					3						3			
LABU	2060	Effective Communication in Business	3									3		3			
MATH	1003	Note: MATH 1003 OR MATH 1012 OR MATH 1013 OR MATH 1020 OR MATH 1023	3-4														
MATH	1012	Calculus and Linear Algebra	3														
MATH	1013	Calculus IA	4	(3)										0			
MATH	1013	Calculus IB	3														
MATH	1020	Accelerated Calculus	4														
MATH	1023	Honors Calculus I	3														
Required credits for School Requirements			45-46											39			
Major Requirements																	
Major Required Courses and Electives																	
FINA	3001	Key Skills for Finance Professionals (A)	1					1						1			
FINA	3103	Intermediate Investments	3					3						3			
FINA	3203	Derivative Securities	3								3			3			
FINA	3303	Intermediate Corporate Finance	3							3				3			
FINA	3810	Bloomberg Market Concepts Certification	0					0						0			
ACCT	3010	Note: (ACCT 3010 AND ACCT 3020) OR ACCT 3030	3-6														
ACCT	3020	Financial Accounting I	3							3				3			
ACCT	3020	Financial Accounting II	3														
ACCT	3030	Intermediate Financial Accounting for Non-Accounting Majors	3														
ISOM	3230	Note: ISOM 3230 OR ISOM 3400	3						3					3			
ISOM	3400	Business Applications Programming	3														
ISOM	3400	Python Programming for Business Analytics	3														
FINA		FINA 3000-level or above Electives (Any 3 courses of the subject and level as specified)	9								3	3	3	9			
Required credits for Major Required Courses and Electives			25-28											25			
Additional Requirements																	
Requirements for Dual Degree Program																	
Required Courses																	
TEMG	1010	Technology and Management Professional Activities	0	0	0	0	0	0	0	0	0	0	0	0			
TEMG	3950	Case-based Problem Solving	3		3									3			
Required credits for Additional Requirements			3											3			
University CORE																	
CORE	C3 - C12	U CORE - Others	30	3		6		3	6			6	6	30			
CORE	C1 & C2	U CORE - English Language	6	3	3									6			
Sub-total for University CORE			36											36			
Term load (excl. free credits)																	
18 18 21 20 20 21 18 18 18 15																	
187##																	
<< Declaration of BEng major																	
<< Declaration of BBA major																	

Notes:

() indicates the reuse of the same course to fulfill more than one requirement.

* Courses offered in winter term

^ Courses offered in summer term

--- denotes the course/requirement is either waived or substituted

To graduate, students should complete all requirements as specified for DDP.

**Remarks on course(s):

>> The content of this example is not necessarily equivalent to a complete list of graduation requirements of the program. Students should refer to the Program Catalog/UG Curriculum Handbook for updated graduation requirements. For up-to-date information on course offering and scheduling, students should check it out from respective School and Department.

<< Declaration of
BEng major

<< Declaration of
BBA major

School:		School of Engineering and School of Business Management			Student's Pathway												
Program:		Dual Degree Program (BEng in Aerospace Engineering and BBA in Economics)															Remarks
Course Offering Dept. (course code prefix)	Course Code	Course Title / Courses List	Credits	Year 1 Fall	Year 1 Spring	Year 2 Fall	Year 2 Spring	Year 3 Fall	Year 3 Spring	Year 4 Fall	Year 4 Spring	Year 5 Fall	Year 5 Spring	Sub-total			
BEng in Aerospace Engineering																	
Major Requirements																	
Engineering Fundamental Courses																	
COMP	1021	Note: COMP1021 OR COMP1022P OR COMP2011	3-4	3										3	This course will also be used to substitute ISOM 2010		
COMP	1022P	Introduction to Computer Science	3														
COMP	2011	Introduction to Computing with Java Programming with C++	4														
ENGG	1010	Academic Orientation	0	0	0									0			
LANG	2030	Technical Communication I	3						3					3			
MATH	1012	Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020]	4-7	3	3									6			
MATH	1013	Calculus IA	4														
MATH	1014	Calculus IB	3														
MATH	1020	Calculus II	3														
MATH	1023	Accelerated Calculus	4														
MATH	1024	Honors Calculus I	3														
MATH	2011	Honors Calculus II	3			3							3				
MATH	2111	Note: MATH2111 OR MATH2350 OR MATH2351	3				3							3			
MATH	2350	Matrix Algebra and Applications	3														
MATH	2351	Applied Linear Algebra and Differential Equations Introduction to Differential Equations	3														
PHYS	1112	Note: PHYS1112 OR PHYS1312	3		3									3			
PHYS	1312	General Physics I with Calculus Honors General Physics I	3														
CHEM/LIFS/ PHYS		Science 1000-level course (Any 1 course of the subject and level as specified)	3		(3)									0			
Required credits for Engineering Fundamental Courses			22-26											21			
Major Required Courses and Electives																	
MECH	1907	Introduction to Aerospace Engineering	3			3								3			
MECH	1990	Industrial Training	0			0*	0^							0			
MECH	2020	Statics and Dynamics	3			3								3			
MECH	2040	Solid Mechanics I	3				3							3			
MECH	2210	Fluid Mechanics	3				3							3			
MECH	2310	Thermodynamics	3			3								3			
MECH	2410	Engineering Materials I	3						3					3			
MECH	3400	Introduction to Composite Materials	3							3				3			
MECH	3610	Control Principles	3					3						3			
MECH	3620	Aircraft Design	3								3			3			
MECH	3640	Aerodynamics	3							3				3			
MECH	3650	Aircraft Structural Analysis	3							3				3			
MECH	3660	Gas Turbines and Jet Propulsion	3								3			3			
MECH	3670	Aircraft Performance and Stability	3							3				3			
MECH	3680	Avionics Systems	3						3					3			
MECH	3690	Aerospace Engineering Laboratory	3								3			3			
MECH	4980	Final Year Aerospace Design Project	6									3	3	6			
ELEC	2420	Basic Electronics	3					3						3			
ENGG	2010	Engineering Seminar Series	0			0	0	0	0					0			
LANG	4034	Technical Communication II for Mechanical and Areospace Engineering	3								3			3			
MECH		MECH Electives in Aerospace (2 courses from the specified elective list)	6									3	3	6			
Required credits for Major Requirements Courses and Electives			63											63			
BBA in Economics																	
School Requirements																	
ACCT	2010	Principles of Accounting I	3	3										3			
ACCT	2200	Principles of Accounting II	3		3									3			
ECON	2103	Note: ECON 2103 OR ECON 2113	3		3									3	ECON 2103/2113/2123 is a major prerequisite		
ECON	2113	Principles of Microeconomics	3														
ECON	2123	Note: ECON 2123 OR ECON 3123	3			3								3			
ECON	3123	Macroeconomics	3														
FINA	2303	Macroeconomic Theory I	3														
FINA	2303	Financial Management	3				3							3			
ISOM	2010	Introduction to Information Systems	3	---	---	---	---	---	---	---	---	---	---	0	Substituted by COMP 1021/1022P/2011		
ISOM	2020	Coding for Business	1					1						1			
ISOM	2500	Business Statistics	3	3										3			
ISOM	2600	Introduction to Business Analytics	1					1						1			
ISOM	2700	Operations Management	3					3						3			
MARK	2120	Marketing Management	3				3							3			
MGMT	2010	Business Ethics and the Individual	2				2							2			
MGMT	2110	Organizational Behavior	3				3							3			
MGMT	2130	Business Ethics and Social Responsibility	2					2						2			
SBMT	1111	Business Student Induction	0	---	---	---	---	---	---	---	---	---	---	0	Waived for DDP students		
LABU	2040	Business Case Analyses	3					3						3			
LABU	2060	Effective Communication in Business	3							3				3			
MATH	1003	Note: MATH 1003 OR MATH 1012 OR MATH 1013 OR MATH 1020 OR MATH 1023	3-4	(3)										0	DDP students should take MATH 1012 or MATH 1013 or MATH 1020 or MATH 1023 to satisfy the requirements of both BEng and BBA degrees		
MATH	1012	Calculus and Linear Algebra	3														
MATH	1013	Calculus IA	4														
MATH	1013	Calculus IB	3														
MATH	1020	Accelerated Calculus	4														
MATH	1023	Honors Calculus I	3														
Required credits for School Requirements			45-46										39				
Major Requirements																	
Major Required Courses and Electives																	
ECON	3014	Managerial Microeconomics	4					4						4			
ECON	3024	Managerial Macroeconomics	4						4					4			
ECON	3334	Introduction to Econometrics	4							4				4			
ECON	4670	Economics Research and Communication	0									0		0			
ECON		ECON 4000-level Electives (Any 3 courses of the subject and level as specified)	11								4	4	3	11			
Required credits for Major Required Courses and Electives			23											23			
Additional Requirements																	
Requirements for Dual Degree Program																	
Required Courses																	
TEMG	1010	Technology and Management Professional Activities	0	0	0	0	0	0	0	0	0	0	0	0			
TEMG	3950	Case-based Problem Solving	3		3									3			
Required credits for Additional Requirements			3											3			
University CORE																	
CORE	C3 - C12	U CORE - Others	30	3		3			6		3	9	6	30			
CORE	C1 & C2	U CORE - English Language	6	3	3									6			
Sub-total for University CORE			36											36			
Term load (excl. free credits)																	
18	18	18	20	20	19	19	19	19	15								
185##																	

<< Declaration of
BEng major

<< Declaration of
BBA major

Notes:

() indicates the reuse of the same course to fulfill more than one requirement.

* Courses offered in winter term

^ Courses offered in summer term

--- denotes the course/requirement is either waived or substituted

To graduate, students should complete all requirements as specified for DDP.

**Remarks on course(s):

>> The content of this example is not necessarily equivalent to a complete list of graduation requirements of the program. Students should refer to the Program Catalog/UG Curriculum Handbook for updated graduation requirements. For up-to-date information on course offering and scheduling, students should check it out from respective School and Department.

Notes:

() indicates the reuse of the same course to fulfill more than one requirement.

* Courses offered in winter term

^ Courses offered in summer term

--- denotes the course/requirement is either waived or substituted

To graduate, students should complete all requirements as specified for DD.

>> The content of this example is not necessarily equivalent to a complete list of graduation requirements of the program. Students should refer to the Program Catalog/UG Curriculum Handbook for updated graduation requirements. For up-to-date information on course offering and scheduling, students should check it out from respective School and Department.

<< Declaration of
BEng major

<< Declaration of
BBA major

School:		School of Engineering and School of Business Management			Student's Pathway												
Program:		Dual Degree Program (BEng in Aerospace Engineering and BBA in Management)															
Course Offering Dept. (course code prefix)	Course Code	Course Title / Courses List	Credits	Year 1 Fall	Year 1 Spring	Year 2 Fall	Year 2 Spring	Year 3 Fall	Year 3 Spring	Year 4 Fall	Year 4 Spring	Year 5 Fall	Year 5 Spring	Sub-total	Remarks		
BEng in Aerospace Engineering																	
Major Requirements																	
Engineering Fundamental Courses																	
COMP	1021	Note: COMP1021 OR COMP1022P OR COMP2011	3-4														
COMP	1022P	Introduction to Computer Science	3	3										3	This course will also be used to substitute ISOM 2010		
COMP	2011	Introduction to Computing with Java	3														
		Programming with C++	4														
ENGG	1010	Academic Orientation	0	0	0									0			
LANG	2030	Technical Communication I	3						3					3			
MATH	1012	Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020]	4-7														
MATH	1013	Calculus IA	4														
MATH	1014	Calculus IB	3	3	3									6			
MATH	1020	Calculus II	3														
MATH	1023	Accelerated Calculus	4														
MATH	1024	Honors Calculus I	3														
MATH	2011	Honors Calculus II	3														
MATH	2111	Introduction to Multivariable Calculus	3			3								3			
MATH	2350	Note: MATH2111 OR MATH2350 OR MATH2351	3				3										
MATH	2351	Matrix Algebra and Applications	3											3			
MATH	2351	Applied Linear Algebra and Differential Equations	3														
MATH	2351	Introduction to Differential Equations	3														
PHYS	1112	Note: PHYS1112 OR PHYS1312	3		3									3			
PHYS	1312	General Physics I with Calculus	3														
PHYS	1312	Honors General Physics I	3														
CHEM/LIFS/ PHYS		Science 1000-level course (Any 1 course of the subject and level as specified)	3		(3)									0			
Required credits for Engineering Fundamental Courses			22-26											21			
Major Required Courses and Electives																	
MECH	1907	Introduction to Aerospace Engineering	3			3								3			
MECH	1990	Industrial Training	0			0*	0*							0			
MECH	2020	Statics and Dynamics	3			3								3			
MECH	2040	Solid Mechanics I	3				3							3			
MECH	2210	Fluid Mechanics	3				3							3			
MECH	2310	Thermodynamics	3			3								3			
MECH	2410	Engineering Materials I	3						3					3			
MECH	3400	Introduction to Composite Materials	3							3				3			
MECH	3610	Control Principles	3					3						3			
MECH	3620	Aircraft Design	3									3		3			
MECH	3640	Aerodynamics	3							3				3			
MECH	3650	Aircraft Structural Analysis	3							3				3			
MECH	3660	Gas Turbines and Jet Propulsion	3									3		3			
MECH	3670	Aircraft Performance and Stability	3							3				3			
MECH	3680	Avionics Systems	3						3					3			
MECH	3690	Aerospace Engineering Laboratory	3									3		3			
MECH	4980	Final Year Aerospace Design Project	6										3	3	6		
ELEC	2420	Basic Electronics	3					3						3			
ENGG	2010	Engineering Seminar Series	0			0	0	0	0					0			
LANG	4034	Technical Communication II for Mechanical and Aerospace Engineering	3									3		3			
MECH		MECH Electives in Aerospace (2 courses from the specified elective list)	6										3	3	6		
Required credits for Major Requirements Courses and Electives			63											63			
BBA in Management																	
School Requirements																	
ACCT	2010	Principles of Accounting I	3	3										3			
ACCT	2200	Principles of Accounting II	3		3									3			
ECON	2103	Note: ECON 2103 OR ECON 2113	3		3									3			
ECON	2113	Principles of Microeconomics	3														
ECON	3123	Microeconomics	3														
ECON	2123	Note: ECON 2123 OR ECON 3123	3			3								3			
ECON	3123	Macroeconomics	3														
ECON	3123	Macroeconomic Theory I	3														
FINA	2303	Financial Management	3				3							3			
ISOM	2010	Introduction to Information Systems	3	---	---	---	---	---	---	---	---	---	---	0	Substituted by COMP 1021/1022P/2011		
ISOM	2020	Coding for Business	1					1						1			
ISOM	2500	Business Statistics	3	3										3			
ISOM	2600	Introduction to Business Analytics	1					1						1			
ISOM	2700	Operations Management	3										3	3			
MARK	2120	Marketing Management	3				3							3			
MGMT	2010	Business Ethics and the Individual	2				2							2			
MGMT	2110	Organizational Behavior	3				3							3	MGMT 2110 is a major pre-requisite		
MGMT	2130	Business Ethics and Social Responsibility	2					2						2			
SBMT	1111	Business Student Induction	0	---	---	---	---	---	---	---	---	---	---	0	Waived for DDP students		
LABU	2040	Business Case Analyses	3					3						3			
LABU	2060	Effective Communication in Business	3									3		3			
MATH	1003	Note: MATH 1003 OR MATH 1012 OR MATH 1013 OR MATH 1020 OR MATH 1023	3-4														
MATH	1012	Calculus and Linear Algebra	3	(3)										0	DDP students should take MATH 1012 or MATH 1013 or MATH 1020 or MATH 1023 to satisfy the requirements of both BEng and BBA degrees		
MATH	1013	Calculus IA	4														
MATH	1013	Calculus IB	4														
MATH	1020	Accelerated Calculus	4														
MATH	1023	Honors Calculus I	3														
Required credits for School Requirements			45-46											39			
Major Requirements																	
Major Required Courses and Electives																	
MGMT	3110	Note: MGMT 3110 OR MGMT 3120 (For students in the Consulting Option, they will use MGMT 3110 to fulfill the Option Requirements and should take MGMT 3120 to fulfill this requirement.)	4						4					4	Students in the Consulting Option must take MGMT 3120		
MGMT	3120	Human Resources Management	4														
MGMT	3130	Managerial Leadership	4														
MGMT	3140	Note: MGMT 3130 OR MGMT 3140 (Students in the Consulting Option must take MGMT 3140 to fulfill this requirement.)	4					4						4	Students in the Consulting Option must take MGMT 3140		
MGMT	3140	Judgement and Decision Making in Organizations	4														
MGMT	3140	Negotiation	4														
MGMT	4210	Note: MGMT 4210 OR MGMT 4220 (Students in the Consulting Option or in the Corporate Social Responsibility and Sustainability Option must take MGMT 4210 to fulfill this requirement.)	3-4							3				3	Students in the Consulting Option must take MGMT 4210		
MGMT	4220	Corporate Strategy	3														
MGMT	4220	Entrepreneurship and Innovation	4														
MGMT		MGMT 3000-level or above Electives (Any 3 courses of the subject and level as specified. Courses taken as Option Required Courses may not be counted towards the elective requirement.)	9							3	3	3		9	Students in the Consulting Option are recommended to take MGMT 4220 and a new course in Simulating Strategy to fulfill the major elective requirement		
Required credits for Major Required Courses and Electives			20-21											20			
Additional Requirements																	
Requirements for Dual Degree Program																	
Required Courses																	
TEMG	1010	Technology and Management Professional Activities	0	0	0	0	0	0	0	0	0	0	0	0			
TEMG	3950	Case-based Problem Solving	3		3									3			
Required credits for Additional Requirements			3											3			
University CORE																	
CORE	C3 - C12	U CORE - Others	30	3		3		3	6			9	6	30			
CORE	C1 & C2	U CORE - English Language	6	3	3									6			
Sub-total for University CORE			36											36			
Term load (excl. free credits)																	
18 18 18 20 20 19 18 18 18 15																	
182##																	
<< Declaration of BEng major																	
<< Declaration of BBA major																	

Notes:
() indicates the reuse of the same course to fulfill more than one requirement.
[] denotes the course is also offered in other terms as indicated and students may take the course in one of these subject to advice by the program office.
* Courses offered in winter term
^ Courses offered in summer term
--- denotes the course/requirement is either waived or substituted
To graduate, students should complete all requirements as specified for DDP.

**Remarks on course(s):

>> The content of this example is not necessarily equivalent to a complete list of graduation requirements of the program. Students should refer to the Program Catalog/UG Curriculum Handbook for updated graduation requirements. For up-to-date information on course offering and scheduling, students should check it out from respective School and Department.

<< Declaration of
BEng major

<< Declaration of
BBA major

School:		School of Engineering and School of Business Management		Student's Pathway												Remarks
Program:		Dual Degree Program (BEng in Aerospace Engineering and BBA in Finance)														
Course Offering Dept. (course code prefix)	Course Code	Course Title / Courses List	Credits	Year 1 Fall	Year 1 Spring	Year 2 Fall	Year 2 Spring	Year 3 Fall	Year 3 Spring	Year 4 Fall	Year 4 Spring	Year 5 Fall	Year 5 Spring	Sub-total		
BEng in Aerospace Engineering																
Major Requirements																
Engineering Fundamental Courses																
COMP	1021	Note: COMP1021 OR COMP1022P OR COMP2011	3-4													
COMP	1022P	Introduction to Computer Science	3	3											3	This course will also be used to substitute ISOM 2010
COMP	2011	Introduction to Computing with Java	4													
ENGG	1010	Academic Orientation	0	0	0										0	
LANG	2030	Technical Communication I	3						3						3	
MATH	1012	Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020]	4-7													
MATH	1013	Calculus IA	4													
MATH	1014	Calculus IB	3													
MATH	1014	Calculus II	3	3	3										6	
MATH	1020	Accelerated Calculus	4													
MATH	1023	Honors Calculus I	3													
MATH	1024	Honors Calculus II	3													
MATH	2011	Introduction to Multivariable Calculus	3				3								3	
MATH	2111	Note: MATH2111 OR MATH2350 OR MATH2351	3													
MATH	2350	Matrix Algebra and Applications	3				3								3	
MATH	2351	Applied Linear Algebra and Differential Equations	3													
MATH	2351	Introduction to Differential Equations	3													
PHYS	1112	Note: PHYS1112 OR PHYS1312	3													
PHYS	1312	General Physics I with Calculus	3		3										3	
PHYS	1312	Honors General Physics I	3													
CHEM/LIFS/ PHYS		Science 1000-level course (Any 1 course of the subject and level as specified)	3		(3)										0	
Required credits for Engineering Fundamental Courses			22-26												21	
Major Required Courses and Electives																
MECH	1907	Introduction to Aerospace Engineering	3				3								3	
MECH	1990	Industrial Training	0				0*	0^							0	
MECH	2020	Statics and Dynamics	3				3								3	
MECH	2040	Solid Mechanics I	3				3								3	
MECH	2210	Fluid Mechanics	3				3								3	
MECH	2310	Thermodynamics	3				3								3	
MECH	2410	Engineering Materials I	3						3						3	
MECH	3400	Introduction to Composite Materials	3							3					3	
MECH	3610	Control Principles	3					3							3	
MECH	3620	Aircraft Design	3								3				3	
MECH	3640	Aerodynamics	3							3					3	
MECH	3650	Aircraft Structural Analysis	3							3					3	
MECH	3660	Gas Turbines and Jet Propulsion	3								3				3	
MECH	3670	Aircraft Performance and Stability	3							3					3	
MECH	3680	Avionics Systems	3						3						3	
MECH	3690	Aerospace Engineering Laboratory	3								3				3	
MECH	4980	Final Year Aerospace Design Project	6									3	3		6	
ELEC	2420	Basic Electronics	3					3							3	
ENGG	2010	Engineering Seminar Series	0			0	0	0	0						0	
LANG	4034	Technical Communication II for Mechanical and Aerospace Engineering	3								3				3	
MECH		MECH Electives in Aerospace (2 courses from the specified elective list)	6									3	3		6	
Required credits for Major Requirements Courses and Electives			51												63	
BBA in Finance																
School Requirements																
ACCT	2010	Principles of Accounting I	3				3								3	
ACCT	2200	Principles of Accounting II	3						3						3	
ECON	2103	Note: ECON 2103 OR ECON 2113	3				3								3	
ECON	2113	Principles of Microeconomics	3													
ECON	2123	Note: ECON 2123 OR ECON 3123	3					3							3	
ECON	3123	Macroeconomics	3													
ECON	3123	Macroeconomic Theory I	3													
FINA	2303	Financial Management	3				3								3	FINA 2303 is a major pre-requisite
ISOM	2010	Introduction to Information Systems	3	---	---	---	---	---	---	---	---	---	---	---	0	Substituted by COMP 1021/1022P/2011
ISOM	2020	Coding for Business	1					1							1	
ISOM	2500	Business Statistics	3				3								3	
ISOM	2600	Introduction to Business Analytics	1					1							1	
ISOM	2700	Operations Management	3						3						3	
MARK	2120	Marketing Management	3				3								3	
MGMT	2010	Business Ethics and the Individual	2					2							2	
MGMT	2110	Organizational Behavior	3				3								3	
MGMT	2130	Business Ethics and Social Responsibility	2						2						2	
SBMT	1111	Business Student Induction	0	---	---	---	---	---	---	---	---	---	---	---	0	Waived for DDP students
LABU	2040	Business Case Analyses	3					3							3	
LABU	2060	Effective Communication in Business	3									3			3	
MATH	1003	Note: MATH 1003 OR MATH 1012 OR MATH 1013 OR MATH 1020 OR MATH 1023	3-4													
MATH	1012	Calculus and Linear Algebra	3													
MATH	1013	Calculus IA	4													
MATH	1013	Calculus IB	4													
MATH	1020	Accelerated Calculus	4													
MATH	1023	Honors Calculus I	3													
Required credits for School Requirements			45-46												39	DDP students should take MATH 1012 or MATH 1013 or MATH 1020 or MATH 1023 to satisfy the requirements of both BEng and BBA degrees
Major Requirements																
Major Required Courses and Electives																
FINA	3001	Key Skills for Finance Professionals (A)	1					1							1	
FINA	3103	Intermediate Investments	3					3							3	
FINA	3203	Derivative Securities	3								3				3	
FINA	3303	Intermediate Corporate Finance	3							3					3	
FINA	3810	Bloomberg Market Concepts Certification	0					0							0	
ACCT	3010	Note: (ACCT 3010 AND ACCT 3020) OR ACCT 3030	3-6							3					3	
ACCT	3020	Financial Accounting I	3													
ACCT	3030	Financial Accounting II	3													
ACCT	3030	Intermediate Financial Accounting for Non-Accounting Majors	3													
ISOM	3230	Note: ISOM 3230 OR ISOM 3400	3						3						3	DDP students who took COMP 1021 in BEng requirements are required to take ISOM 3230
ISOM	3400	Business Applications Programming	3													
ISOM	3400	Python Programming for Business Analytics	3													
FINA		FINA 3000-level or above Electives (Any 3 courses of the subject and level as specified)	9								3	3	3		9	
Required credits for Major Required Courses and Electives			25-28												25	
Additional Requirements																
Requirements for Dual Degree Program																
Required Courses																
TEMG	1010	Technology and Management Professional Activities	0	0	0	0	0	0	0	0	0	0	0	0	0	
TEMG	3950	Case-based Problem Solving	3			3									3	
Required credits for Additional Requirements			3												3	
University CORE																
CORE	C3 - C12	U CORE - Others	30	9	9							6	6		30	
CORE	C1 & C2	U CORE - English Language	6	3	3										6	
Sub-total for University CORE			36												36	
Term load (excl. free credits)																
18 18 21 21 20 20 18 18 18 15																
187##																

<< Declaration of
BEng major

<< Declaration of
BBA major

Notes:
() indicates the reuse of the same course to fulfill more than one requirement.
* Courses offered in winter term
^ Courses offered in summer term
--- denotes the course/requirement is either waived or substituted
To graduate, students should complete all requirements as specified for DDP.

**Remarks on course(s):

>> The content of this example is not necessarily equivalent to a complete list of graduation requirements of the program. Students should refer to the Program Catalog/UG Curriculum Handbook for updated graduation requirements. For up-to-date information on course offering and scheduling, students should check it out from respective School and Department.

<< Declaration of BEng major

<< Declaration of BBA major

School:		School of Engineering and School of Business Management		Student's Pathway												Remarks
Program:		Dual Degree Program (BEng in Aerospace Engineering and BBA in Finance)														
Course Offering Dept. (course code prefix)	Course Code	Course Title / Courses List	Credits	Year 1 Fall	Year 1 Spring	Year 2 Fall	Year 2 Spring	Year 3 Fall	Year 3 Spring	Year 4 Fall	Year 4 Spring	Year 5 Fall	Year 5 Spring	Sub-total		
BEng in Aerospace Engineering																
Major Requirements																
Engineering Fundamental Courses																
COMP	1021	Note: COMP1021 OR COMP1022P OR COMP2011	3-4											0	This course will also be used to substitute ISOM 2010	
COMP	1022P	Introduction to Computer Science	3			3										
COMP	2011	Introduction to Computing with Java Programming with C++	4													
ENGG	1010	Academic Orientation	0	---	---	---	---	---	---	---	---	---	---	0	Substituted by SBMT 1111	
LANG	2030	Technical Communication I	3						3					3		
MATH	1012	Note: [MATH 1012 OR MATH 1013 OR MATH 1023] AND [MATH 1014 OR MATH 1024] OR [MATH 1020]	4-7													
MATH	1013	Calculus IA	4													
MATH	1014	Calculus IB	3													
MATH	1014	Calculus II	3	3	3									6		
MATH	1020	Accelerated Calculus	4													
MATH	1023	Honors Calculus I	3													
MATH	1024	Honors Calculus II	3													
MATH	2011	Introduction to Multivariable Calculus	3			3								3		
MATH	2111	Note: MATH2111 OR MATH2350 OR MATH2351	3													
MATH	2350	Matrix Algebra and Applications	3				3							3		
MATH	2351	Applied Linear Algebra and Differential Equations Introduction to Differential Equations	3													
PHYS	1112	Note: PHYS1112 OR PHYS1312	3			3								3		
PHYS	1312	General Physics I with Calculus Honors General Physics I	3													
CHEM/LIFS/ PHYS		Science 1000-level course (Any 1 course of the subject and level as specified)	3			(3)								0		
Required credits for Engineering Fundamental Courses			22-26											18		
Major Required Courses and Electives																
MECH	1907	Introduction to Aerospace Engineering	3			3								3		
MECH	1990	Industrial Training	0			0*	0^							0		
MECH	2020	Statics and Dynamics	3			3								3		
MECH	2040	Solid Mechanics I	3				3							3		
MECH	2210	Fluid Mechanics	3				3							3		
MECH	2310	Thermodynamics	3			3								3		
MECH	2410	Engineering Materials I	3						3					3		
MECH	3400	Introduction to Composite Materials	3							3				3		
MECH	3610	Control Principles	3					3						3		
MECH	3620	Aircraft Design	3								3			3		
MECH	3640	Aerodynamics	3							3				3		
MECH	3650	Aircraft Structural Analysis	3							3				3		
MECH	3660	Gas Turbines and Jet Propulsion	3								3			3		
MECH	3670	Aircraft Performance and Stability	3							3				3		
MECH	3680	Avionics Systems	3						3					3		
MECH	3690	Aerospace Engineering Laboratory	3								3			3		
MECH	4980	Final Year Aerospace Design Project	6									3	3	6		
ELEC	2420	Basic Electronics	3					3						3		
ENGG	2010	Engineering Seminar Series	0			0	0	0	0					0		
LANG	4034	Technical Communication II for Mechanical and Aerospace Engineering	3								3			3		
MECH		MECH Electives in Aerospace (2 courses from the specified elective list)	6									3	3	6		
Required credits for Major Requirements Courses and Electives			51											63		
BBA in Finance																
School Requirements																
ACCT	2010	Principles of Accounting I	3	3										3		
ACCT	2200	Principles of Accounting II	3						3					3		
ECON	2103	Note: ECON 2103 OR ECON 2113	3				3							3		
ECON	2113	Principles of Microeconomics Microeconomics	3													
ECON	2123	Note: ECON 2123 OR ECON 3123	3					3						3		
ECON	3123	Macroeconomics Macroeconomic Theory I	3													
FINA	2303	Financial Management	3				3							3	FINA 2303 is a major pre-requisite	
ISOM	2010	Introduction to Information Systems	3	---	---	---	---	---	---	---	---	---	---	0	Substituted by COMP 1021/1022P/2011	
ISOM	2020	Coding for Business	1					1						1		
ISOM	2500	Business Statistics	3		3									3		
ISOM	2600	Introduction to Business Analytics	1					1						1		
ISOM	2700	Operations Management	3						3					3		
MARK	2120	Marketing Management	3		3									3		
MGMT	2010	Business Ethics and the Individual	2				2							2		
MGMT	2110	Organizational Behavior	3				3							3		
MGMT	2130	Business Ethics and Social Responsibility	2					2						2		
SBMT	1111	Business Student Induction	0	0	0									0		
LABU	2040	Business Case Analyses	3					3						3		
LABU	2060	Effective Communication in Business	3									3		3		
MATH	1003	Note: MATH 1003 OR MATH 1012 OR MATH 1013 OR MATH 1020 OR MATH 1023	3-4													
MATH	1012	Calculus and Linear Algebra	3													
MATH	1013	Calculus IA	4													
MATH	1013	Calculus IB	3													
MATH	1020	Accelerated Calculus	4													
MATH	1023	Honors Calculus I	4													
Required credits for School Requirements			45-46											39	DDP students should take MATH 1012 or MATH 1013 or MATH 1020 or MATH 1023 to satisfy the requirements of both BEng and BBA degrees	
Major Requirements																
Major Required Courses and Electives																
FINA	3001	Key Skills for Finance Professionals (A)	1					1						1		
FINA	3103	Intermediate Investments	3					3						3		
FINA	3203	Derivative Securities	3								3			3		
FINA	3303	Intermediate Corporate Finance	3							3				3		
FINA	3810	Bloomberg Market Concepts Certification	0					0						0		
ACCT	3010	Note: (ACCT 3010 AND ACCT 3020) OR ACCT 3030	3-6							3				3		
ACCT	3020	Financial Accounting I	3													
ACCT	3030	Financial Accounting II Intermediate Financial Accounting for Non-Accounting Majors	3													
ISOM	3230	Note: ISOM 3230 OR ISOM 3400	3						3					3	DDP students who took COMP 1021 in BEng requirements are required to take ISOM 3230	
ISOM	3400	Business Applications Programming Python Programming for Business Analytics	3													
FINA		FINA 3000-level or above Electives (Any 3 courses of the subject and level as specified)	9								3	3	3	9		
Required credits for Major Required Courses and Electives			25-28											25		
Additional Requirements																
Requirements for Dual Degree Program																
Required Courses																
TEMG	1010	Technology and Management Professional Activities	0	0	0	0	0	0	0	0	0	0	0	0		
TEMG	3950	Case-based Problem Solving	3			3								3		
Required credits for Additional Requirements			3											3		
University CORE																
CORE	C3 - C12	U CORE - Others	30	9	6				3				6	6	30	
CORE	C1 & C2	U CORE - English Language	6	3	3										6	
Sub-total for University CORE			36											36		
Term load (excl. free credits)																
18 18 18 20 20 21 18 18 18 15																
184##																

Notes:
() indicates the reuse of the same course to fulfill more than one requirement.
* Courses offered in winter term
^ Courses offered in summer term
--- denotes the course/requirement is either waived or substituted
To graduate, students should complete all requirements as specified for DDP.

**Remarks on course(s):

>> The content of this example is not necessarily equivalent to a complete list of graduation requirements of the program. Students should refer to the Program Catalog/UG Curriculum Handbook for updated graduation requirements. For up-to-date information on course offering and scheduling, students should check it out from respective School and Department.

English Language Requirements of SENG, SBM and DDP students

4Y

SENG

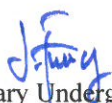
SBM


DDP (AE+ECON/FINA/GBM/MGMT/MARK)

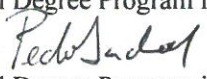
Course code_SENG	Course title_SENG	Credits_SENG	Course code_SBM	Course title_SBM	Credits_SBM	Course code_DDP	Course title_DDP	Credits_DDP	Remarks
U Core	English Language	6	U Core	English Language	6	U Core	English Language	6	university requirement
LANG 2030	Technical Communication I	3	LABU 2040	Business Case Analyses	3	LANG 2030	Technical Communication I	3	SENG requirement
LANG 4034	Technical Communication II for Mechanical and Areospace Engineering	3	LABU 2060	Effective Communication in Business	3	LABU 2040	Business Case Analyses	3	SBM requirement
						LABU 2060	Effective Communication in Business	3	SBM requirement
						LANG 4034	Technical Communication II for Mechanical and Areospace Engineering	3	SENG requirement
	Total	12		Total	12		Total	18	

MEMORANDUM

To: CUS Secretariat

via: Prof. Jimmy Fung 
Chair, Interdisciplinary Undergraduate Studies Committee

From: Prof. Kai Lung Hui 
Co-director of Dual Degree Program in Technology & Management

& Prof. Pedro Sander 
Co-director of Dual Degree Program in Technology & Management

Date: 10th February, 2021

Our Ref: 402/DDP

Subject: Proposed 5Y Curriculum of Dual Degree Program in Technology & Management
(BSc in Integrative System and Design and BBA)

Dual Degree Program in Technology & Management (T&M-DDP) would like to propose the 5-year curriculum for BSc in Integrative System and Design and BBA with effect from Fall 2021-22. This change will have effect on the 2020-2021 cohort onwards. The new curriculum will include 5 new majors. The program structure is listed below.

Total: 5 new majors	BSc in Integrative System and Design	and	BBA in Economics
			BBA in Finance
			BBA in General Business Management
			BBA in Management
			BBA in Marketing

Students can admit to T&M-DDP via program-based admission or school-based admission. Program-based admission students will be admitted to T&M-DDP in their first year and school-based admission students will be admitted to T&M-DDP in their second year. Students will declare their major via the Major Selection Exercises (MSE) at the ends of their first year and second year for BEng/BSc degree and BBA degree of T&M-DDP respectively. Pathway templates of all new majors for program-based admission students and three sets of sample pathway for school-based admission students are presented to demonstrate their study progress (*see Attachment B*).

The program requirements of T&M-DDP are devised by combining the requirements of the BEng/BSc program and the BBA program. This will apply in the proposed 5-year curriculum with the following taken into consideration:

1. Deviation from Curriculum

The course substitutions and waivers that are applicable in the existing BEng/BSc&BBA Dual Degree program will continue to apply in the proposed Dual Degree programs of BSc in Integrative System and Design and BBA (*See attachment A*).

2. Additional Dual Degree Requirements

Additional requirements specifically for the Dual Degree Program, including TEMG1010 and TEMG3950 are presented in the pathway templates (*see attachment B*) and “Deviation from Curriculum” (*see attachment A*).

3. English Language Requirements

The English Language requirements of BSc in Integrative System and Design are a combination of the requirements of university, ISD, SENG and SBM (*see attachment C*).

4. Double Counting of Common Core Requirements

The double-counting policy applicable to existing BEng/BSc&BBA Dual Degree programs, which is to apply double-counting policy to each degree separately will continue to apply in the proposed Dual Degree programs.

For BSc in Integrative System and Design, students may reuse up to 9 credits of courses to count towards both the School Requirements and the University Common Core Requirements.

For BBA degree in all Dual Degree programs, students may reuse up to 6 credits of courses to count towards both the School Requirements and the University Common Core Requirements.

By combining the two degrees, students can double-count up to 15 credits. The total credits requirements are as follow:

Total Credits Requirements	
Without double-counting of Common Core Requirements	After double-counting of Common Core Requirements is applied
191-182	176-167

Below please find the concurrence obtained from departments/schools in concern,

School/Dept.	Approval	Name	Date
ISD	Yes / No	Prof. Chi Ming CHAN	22 Feb 2021
ECON	Yes / No	Prof. Wooyoung LIM	10 Feb 2021
FINA	Yes / No	Prof. Ekkachai SAENYASIRI	19 Feb 2021
MARK	Yes / No	Prof. Jiewen HONG	16 Feb 2021
MGMT	Yes / No	Prof. Yaping GONG	17 Feb 2021
SENG	Yes / No	Prof. Philip L. T. MOK, Associate Dean of Engineering	18 Feb 2021
SBM	Yes / No	Prof. Allen HUANG, Associate Dean (UG Programs)	19 Feb 2021

For consideration and approval please. Thank you very much.

Encl.

- A. Attachment A – Deviation from Curriculum
- B. Attachment B – Suggested pathways of Dual Degree programs of BSc in Integrative System and Design and BBA
- C. Attachment C – English language requirements of Dual Degree programs of BSc in Integrative System and Design and BBA

Deviation from curriculum
for Dual Degree Program

Degree Program 1:

BSc in Integrative Systems and Design (ISD)

Degree Program 2:

BBA in Economics (ECON) OR

BBA in Finance (FINA) OR

BBA in General Business Management (GBM) OR

BBA in Management (MGMT) OR

BBA in Marketing (MARK)

Degree Program	Original requirements specified for the degree program		Substituted/ Waived/ Additional Req't/ Others	Proposed substituted course/ requirement		Remarks
	Course code/ requirement	Credits		Course code/ requirement	Credits	
ECON/FINA/GBM/ MGMT/MARK	SBMT 1111	0	Waived	-	-	DDP students do not need to join this non-credit bearing development course originally designed for Business students
ISD	ENGG 1010	0	Substituted	SBMT 1111	0	[For non-SENG year 1 students admitted to T&M-DDP via School-based admission] DDP students do not need to join this non-credit bearing development course originally designed for Engineering students.
ISD	-	-	Additional Req't	TEMG 1010	0	DDP students should take this non-credit bearing course to enhance their academic development
ECON/FINA/GBM/ MGMT/MARK	-	-	Additional Req't	TEMG 1010	0	DDP students should take this non-credit bearing course to enhance their academic development
ISD	-	-	Additional Req't	TEMG 3950	3	DDP students should take this 3-credit course to enhance their problem-solving skills.
ECON/FINA/GBM/ MGMT/MARK	-	-	Additional Req't	TEMG 3950	3	DDP students should take this 3-credit course to enhance their problem-solving skills.
ECON/FINA/GBM/ MGMT/MARK	ISOM 2010	3	Substituted	COMP 1021 OR COMP 1022P	3	COMP 1021 and COMP 1022P are more advanced computing courses as compared to ISOM 2010. Students should take one of these two COMP courses instead of ISOM 2010
ECON/FINA/GBM/ MGMT/MARK	ISOM 2020	1	Substituted	COMP 1021 OR COMP 1029P	1 OR 3	COMP 1021 and COMP 1029P are similar coding courses as compared to ISOM 2020. Students should take one of these two COMP courses instead of ISOM 2020

<< Declaration of
BSc major

<< Declaration of
BBA major

School:

School of Engineering and School of Business Management

Program:

Dual Degree Program (BSc in Integrative Systems and Design and BBA in General Business Management)

Student's Pathway

Course Offering Dept. (course code prefix)	Course Code	Course Title / Courses List	Credits	Year 1 Fall	Year 1 Spring	Year 2 Fall	Year 2 Spring	Year 3 Fall	Year 3 Spring	Year 4 Fall	Year 4 Spring	Year 5 Fall	Year 5 Spring	Sub-total	Remarks
BSc in Integrative Systems and Design															
Major Requirements															
Engineering Fundamental Courses															
COMP COMP	1021 1022P	Note: COMP1021 OR COMP1022P Introduction to Computer Science Introduction to Computing with Java	3 3	3										3	This course will also be used to substitute ISOM 2010
ENGG	1010	Academic Orientation	0	0	0									0	
LANG	2030	Technical Communication I	3						3					3	
MATH MATH MATH MATH MATH MATH	1012 1013 1014 1020 1023 1024	Note: [MATH 1012 OR MATH 1013 OR MATH 1023] AND [MATH 1014 OR MATH 1024]] OR [MATH 1020] Calculus IA Calculus IB Calculus II Accelerated Calculus Honors Calculus I Honors Calculus II	4-7 4 3 3 4 3 3		3									6	
PHYS PHYS PHYS PHYS	1001 1111 1112 1312	Note: PHYS1001 OR PHYS1111 OR PHYS1112 OR PHYS1312 Physics and the Modern Society General Physics I General Physics I with Calculus Honors General Physics I	3 3 3 3		3									3	
Required credits for Engineering Fundamental Courses			13-16											15	
Major Required Courses and Electives															
ISDN	1002	Redefining Problems for the Real Needs	3			3								3	
ISDN	1004	Sketching	1			1								1	
ISDN	1006	Human-centered Innovation	3				3							3	
ISDN	2001	Second Year Design Project I	1					1						1	
ISDN	2002	Second Year Design Project II	4						4					4	
ISDN	2200	Systems Thinking and Design	3			3								3	
ISDN	2300	Digital Design	3			3								3	
ISDN	2400	Physical Prototyping	3						3					3	
ISDN	3001	Third Year Design Project I	4							4				4	
ISDN	3002	Third Year Design Project II	4								4			4	
ISDN	4001	Final Year Design Project I	5									5		5	
ISDN	4002	Final Year Design Project II	5										5	5	
LANG	4032	Technical Communication II for IEDA and ISDN	3							3				3	
ISDN/ENGG/IEDA ISDN/ENTR/IEDA/SBM ISDN		Design Electives (5 credits from the specified elective list) Product Management and Entrepreneurship Electives (9 credits from the specified elective list) Project-related Electives (22 credits from the specified elective list. Students should seek approval of their advisor for the choices of courses)	36				5	3	3	3	7	3	3	27	DDP students could use FINA 2303, ISOM 2700 and MARK 2120 to satisfy the requirement of Product Management and Entrepreneurship Electives
Required credits for Major Requirements Courses and Electives			78											69	
BBA in General Business Management															
School Requirements															
ACCT	2010	Principles of Accounting I	3			3								3	
ACCT	2200	Principles of Accounting II	3						3					3	
ECON ECON	2103 2113	Note: ECON 2103 OR ECON 2113 Principles of Microeconomics Microeconomics	3 3			3								3	
ECON ECON	2123 3123	Note: ECON 2123 OR ECON 3123 Macroeconomics Macroeconomic Theory I	3 3					3						3	
FINA	2303	Financial Management	3				3							3	This course will also be used to substitute FINA 2203
ISOM	2010	Introduction to Information Systems	3	---	---	---	---	---	---	---	---	---	---	0	Substituted by COMP 1021/1022P
ISOM	2020	Coding for Business	1								1			1	
ISOM	2500	Business Statistics	3			3								3	
ISOM	2600	Introduction to Business Analytics	1								1			1	
ISOM	2700	Operations Management	3						3					3	
MARK	2120	Marketing Management	3				3							3	
MGMT	2010	Business Ethics and the Individual	2			2								2	
MGMT	2110	Organizational Behavior	3				3							3	
MGMT	2130	Business Ethics and Social Responsibility	2					2						2	
SBMT	1111	Business Student Induction	0	---	---	---	---	---	---	---	---	---	---	0	Waived for DDP students
LABU	2040	Business Case Analyses	3					3						3	
LABU	2060	Effective Communication in Business	3							3				3	
MATH MATH MATH MATH MATH	1003 1012 1013 1020 1023	Note: MATH 1003 OR MATH 1012 OR MATH 1013 OR MATH 1020 OR MATH 1023 Calculus and Linear Algebra Calculus IA Calculus IB Accelerated Calculus Honors Calculus I	3-4 3 4 3 4 3	(3)										0	DDP students should take MATH 1012 or MATH 1013 or MATH 1020 or MATH 1023 to satisfy the requirements of both BEng and BBA degrees
Required credits for School Requirements			45-46											39	
Major Requirements															
Major Required Courses and Electives															
SB&M		SB&M Electives (Any 9 courses offered by the departments under SB&M, of which at least 4 courses are of 3000-level or above.)	29					6		3	3	7	10	29	
Required credits for Major Required Courses and Electives			29											29	
Additional Requirements															
Requirements for Dual Degree Program															
Required Courses															
TEMG	1010	Technology and Management Professional Activities	0	0	0	0	0	0	0	0	0	0	0	0	
TEMG	3950	Case-based Problem Solving	3		3									3	
Required credits for Additional Requirements			3											3	
University CORE															
CORE	C3 - C12	U CORE - Others	30	9	6		3	3		3	3	3		30	
CORE	C1 & C2	U CORE - English Language	6	3	3									6	
Sub-total for University CORE			36											36	
Term load (excl. free credits)															
18182120211919191818															
191##															
<div><div><< Declaration of BEng major</div><div><< Declaration of BBA major</div></div>															

Notes:

() indicates the reuse of the same course to fulfill more than one requirement.

* Courses offered in winter term

^ Courses offered in summer term

--- denotes the course/requirement is either waived or substituted

To graduate, students should complete all requirements as specified for DDP.

**Remarks on course(s):

>> The content of this example is not necessarily equivalent to a complete list of graduation requirements of the program. Students should refer to the Program Catalog/UG Curriculum Handbook for updated graduation requirements. For up-to-date information on course offering and scheduling, students should check it out from respective School and Department.

<< Declaration of BSc major << Declaration of BBA major

School:		School of Engineering and School of Business Management			Student's Pathway												
Program:		Dual Degree Program (BSc in Integrative Systems and Design and BBA in Finance)															Remarks
Course Offering Dept. (course code prefix)	Course Code	Course Title / Courses List	Credits	Year 1 Fall	Year 1 Spring	Year 2 Fall	Year 2 Spring	Year 3 Fall	Year 3 Spring	Year 4 Fall	Year 4 Spring	Year 5 Fall	Year 5 Spring	Sub-total			
BSc in Integrative Systems and Design																	
Major Requirements																	
Engineering Fundamental Courses																	
COMP	1021	Note: COMP1021 OR COMP1022P	3	3										3	This course will also be used to substitute ISOM 2010		
COMP	1022P	Introduction to Computer Science	3														
ENGG	1010	Academic Orientation	0	0	0									0			
LANG	2030	Technical Communication I	3						3					3			
MATH	1012	Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020]	4-7												6		
MATH	1013	Calculus IA	4														
MATH	1014	Calculus IB	3	3	3												
MATH	1020	Calculus II	3														
MATH	1023	Accelerated Calculus	4														
MATH	1024	Honors Calculus I	3														
PHYS	1001	Note: PHYS1001 OR PHYS1111 OR PHYS1112 OR PHYS1312	3												3		
PHYS	1111	Physics and the Modern Society	3		3												
PHYS	1112	General Physics I	3														
PHYS	1312	General Physics I with Calculus	3														
Honors General Physics I			3														
Required credits for Engineering Fundamental Courses			13-16											15			
Major Required Courses and Electives																	
ISDN	1002	Redefining Problems for the Real Needs	3			3								3			
ISDN	1004	Sketching	1			1								1			
ISDN	1006	Human-centered Innovation	3				3							3			
ISDN	2001	Second Year Design Project I	1					1						1			
ISDN	2002	Second Year Design Project II	4						4					4			
ISDN	2200	Systems Thinking and Design	3			3								3			
ISDN	2300	Digital Design	3			3								3			
ISDN	2400	Physical Prototyping	3						3					3			
ISDN	3001	Third Year Design Project I	4							4				4			
ISDN	3002	Third Year Design Project II	4								4			4			
ISDN	4001	Final Year Design Project I	5									5		5			
ISDN	4002	Final Year Design Project II	5										5	5			
LANG	4032	Technical Communication II for IEDA and ISDN	3							3				3			
ISDN/ENGG/IEDA		Design Electives (5 credits from the specified elective list)					5	3	3	3	7	3	3	27	DDP students could use FINA 2303, ISOM 2700 and MARK 2120 to satisfy the requirement of Product Management and Entrepreneurship Electives		
ISDN/ENTR/IEDA/SBM		Product Management and Entrepreneurship Electives (9 credits from the specified elective list)	36														
ISDN		Project-related Electives (22 credits from the specified elective list. Students should seek approval of their advisor for the choices of courses)															
Required credits for Major Requirements Courses and Electives			78											69			
BBA in Finance																	
School Requirements																	
ACCT	2010	Principles of Accounting I	3			3								3			
ACCT	2200	Principles of Accounting II	3						3					3			
ECON	2103	Note: ECON 2103 OR ECON 2113	3			3								3			
ECON	2113	Principles of Microeconomics	3														
ECON	2123	Note: ECON 2123 OR ECON 3123	3					3						3			
ECON	3123	Macroeconomics	3														
FINA	2303	Macroeconomic Theory I	3														
FINA	2303	Financial Management	3				3							3	FINA 2303 is a major pre-requisite		
ISOM	2010	Introduction to Information Systems	3	---	---	---	---	---	---	---	---	---	---	0	Substituted by COMP 1021/1022P		
ISOM	2020	Coding for Business	1					1						1			
ISOM	2500	Business Statistics	3			3								3			
ISOM	2600	Introduction to Business Analytics	1					1						1			
ISOM	2700	Operations Management	3									3		3			
MARK	2120	Marketing Management	3				3							3			
MGMT	2010	Business Ethics and the Individual	2				2							2			
MGMT	2110	Organizational Behavior	3				3							3			
MGMT	2130	Business Ethics and Social Responsibility	2					2						2			
SBMT	1111	Business Student Induction	0	---	---	---	---	---	---	---	---	---	---	0	Waived for DDP students		
LABU	2040	Business Case Analyses	3					3						3			
LABU	2060	Effective Communication in Business	3								3			3			
MATH	1003	Note: MATH 1003 OR MATH 1012 OR MATH 1013 OR MATH 1020 OR MATH 1023	3-4												DDP students should take MATH 1012 or MATH 1013 or MATH 1020 or MATH 1023 to satisfy the requirements of both BEng and BBA degrees		
MATH	1012	Calculus and Linear Algebra	3	(3)										0			
MATH	1013	Calculus IA	4														
MATH	1013	Calculus IB	3														
MATH	1020	Accelerated Calculus	4														
MATH	1023	Honors Calculus I	3														
Required credits for School Requirements			45-46											39			
Major Requirements																	
Major Required Courses and Electives																	
FINA	3001	Key Skills for Finance Professionals (A)	1					1						1			
FINA	3103	Intermediate Investments	3					3						3			
FINA	3203	Derivative Securities	3								3			3			
FINA	3303	Intermediate Corporate Finance	3							3				3			
FINA	3810	Bloomberg Market Concepts Certification	0					0						0			
ACCT	3010	Note: (ACCT 3010 AND ACCT 3020) OR ACCT 3030	3-6												3		
ACCT	3020	Financial Accounting I	3							3							
ACCT	3030	Financial Accounting II	3														
ACCT	3030	Intermediate Financial Accounting for Non-Accounting Majors	3														
ISOM	3230	Note: ISOM 3230 OR ISOM 3400	3						3					3	DDP students who took COMP 1021 in BEng requirements are required to take ISOM 3230		
ISOM	3400	Business Applications Programming	3														
FINA		Python Programming for Business Analytics	3														
FINA		FINA 3000-level or above Electives (Any 3 courses of the subject and level as specified)	9								3	3	3	9			
Required credits for Major Required Courses and Electives			25-28											25			
Additional Requirements																	
Requirements for Dual Degree Program																	
Required Courses																	
TEMG	1010	Technology and Management Professional Activities	0	0	0	0	0	0	0	0	0	0	0	0			
TEMG	3950	Case-based Problem Solving	3		3									3			
Required credits for Additional Requirements			3											3			
University CORE																	
CORE	C3 - C12	U CORE - Others	30	9	6					3		6	6	30			
CORE	C1 & C2	U CORE - English Language	6	3	3									6			
Sub-total for University CORE			36											36			
Term load (excl. free credits)																	
18				18				19				19				20	
18				18				19				19				20	
187##																	

<< Declaration of BSc major << Declaration of BBA major

School:		School of Engineering and School of Business Management			Student's Pathway												
Program:		Dual Degree Program (BSc in Integrative Systems and Design and BBA in Economics)														Remarks	
Course Offering Dept. (course code prefix)	Course Code	Course Title / Courses List	Credits	Year 1 Fall	Year 1 Spring	Year 2 Fall	Year 2 Spring	Year 3 Fall	Year 3 Spring	Year 4 Fall	Year 4 Spring	Year 5 Fall	Year 5 Spring	Sub-total			

BSc in Integrative Systems and Design

Major Requirements

Engineering Fundamental Courses																		
COMP	1021	Note: COMP1021 OR COMP1022P	3	3										3	This course will also be used to substitute ISOM 2010			
COMP	1022P	Introduction to Computer Science	3															
ENGG	1010	Introduction to Computing with Java	0	0	0									0				
LANG	2030	Academic Orientation	3						3					3				
		Technical Communication I	4-7															
		Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020]																
MATH	1012	Calculus IA	4															
MATH	1013	Calculus IB	3	3	3									6				
MATH	1014	Calculus II	3															
MATH	1020	Accelerated Calculus	4															
MATH	1023	Honors Calculus I	3															
MATH	1024	Honors Calculus II	3															
PHYS	1001	Note: PHYS1001 OR PHYS1111 OR PHYS1112 OR PHYS1312	3															
PHYS	1111	Physics and the Modern Society	3		3									3				
PHYS	1112	General Physics I	3															
PHYS	1312	General Physics I with Calculus	3															
		Honors General Physics I	3															
Required credits for Engineering Fundamental Courses			13-16											15				

Major Required Courses and Electives

ISDN	1002	Redefining Problems for the Real Needs	3			3								3				
ISDN	1004	Sketching	1			1								1				
ISDN	1006	Human-centered Innovation	3				3							3				
ISDN	2001	Second Year Design Project I	1					1						1				
ISDN	2002	Second Year Design Project II	4						4					4				
ISDN	2200	Systems Thinking and Design	3			3								3				
ISDN	2300	Digital Design	3			3								3				
ISDN	2400	Physical Prototyping	3						3					3				
ISDN	3001	Third Year Design Project I	4							4				4				
ISDN	3002	Third Year Design Project II	4								4			4				
ISDN	4001	Final Year Design Project I	5									5		5				
ISDN	4002	Final Year Design Project II	5										5	5				
LANG	4032	Technical Communication II for IEDA and ISDN	3							3				3				
ISDN/ENGG/IEDA		Design Electives (5 credits from the specified elective list)	36				5	3	3	3	7	3	3	27	DDP students could use FINA 2303, ISOM 2700 and MARK 2120 to satisfy the requirement of Product Management and Entrepreneurship Electives			
ISDN/ENTR/IEDA/SBM		Product Management and Entrepreneurship Electives (9 credits from the specified elective list)																
ISDN		Project-related Electives (22 credits from the specified elective list. Students should seek approval of their advisor for the choices of courses)																
Required credits for Major Requirements Courses and Electives			78											69				

BBA in Economics

School Requirements

ACCT	2010	Principles of Accounting I	3			3								3				
ACCT	2200	Principles of Accounting II	3						3					3				
ECON	2103	Note: ECON 2103 OR ECON 2113	3		3									3	ECON 2103/2113/2123 is a major prerequisite			
ECON	2113	Principles of Microeconomics	3															
ECON	2123	Macroeconomics	3			3								3				
ECON	3123	Macroeconomic Theory I	3															
FINA	2303	Financial Management	3				3							3				
ISOM	2010	Introduction to Information Systems	3	---	---	---	---	---	---	---	---	---	---	0	Substituted by COMP 1021/1022P			
ISOM	2020	Coding for Business	1					1						1				
ISOM	2500	Business Statistics	3			3								3				
ISOM	2600	Introduction to Business Analytics	1					1						1				
ISOM	2700	Operations Management	3					3						3				
MARK	2120	Marketing Management	3				3							3				
MGMT	2010	Business Ethics and the Individual	2				2							2				
MGMT	2110	Organizational Behavior	3				3							3				
MGMT	2130	Business Ethics and Social Responsibility	2					2						2				
SBMT	1111	Business Student Induction	0	---	---	---	---	---	---	---	---	---	---	0	Waived for DDP students			
LABU	2040	Business Case Analyses	3					3						3				
LABU	2060	Effective Communication in Business	3							3				3				
MATH	1003	Note: MATH 1003 OR MATH 1012 OR MATH 1013 OR MATH 1020 OR MATH 1023	3-4												DDP students should take MATH 1012 or MATH 1013 or MATH 1020 or MATH 1023 to satisfy the requirements of both BEng and BBA degrees			
MATH	1012	Calculus and Linear Algebra	3															
MATH	1013	Calculus IA	4															
MATH	1013	Calculus IB	3															
MATH	1020	Accelerated Calculus	4															
MATH	1023	Honors Calculus I	3															
Required credits for School Requirements			45-46											39				

Major Requirements

Major Required Courses and Electives

ECON	3014	Managerial Microeconomics	4					4						4				
ECON	3024	Managerial Macroeconomics	4						4					4				
ECON	3334	Introduction to Econometrics	4							4				4				
ECON	4670	Economics Research and Communication	0									0		0				
ECON		ECON 4000-level Electives (Any 3 courses of the subject and level as specified)	11								4	4	3	11				
Required credits for Major Required Courses and Electives			23											23				

Additional Requirements

Requirements for Dual Degree Program

Required Courses																		
TEMG	1010	Technology and Management Professional Activities	0	0	0	0	0	0	0	0	0	0	0	0				
TEMG	3950	Case-based Problem Solving	3		3										3			
Required credits for Additional Requirements			3											3				

University CORE

CORE	C3 - C12	U CORE - Others	30	9	3					3	3	6	6	30				
CORE	C1 & C2	U CORE - English Language	6	3	3									6				
Sub-total for University CORE			36											36				

Term load (excl. free credits)									
18	18	19	19	18	20	20	18	18	17
185##									

Notes:

- () indicates the reuse of the same course to fulfill more than one requirement.
- * Courses offered in winter term
- ^ Courses offered in summer term
- denotes the course/requirement is either waived or substituted
- ## To graduate, students should complete all requirements as specified for DDP.

<< Declaration of BEng major << Declaration of BBA major

**Remarks on course(s):

>> The content of this example is not necessarily equivalent to a complete list of graduation requirements of the program. Students should refer to the Program Catalog/UG Curriculum Handbook for updated graduation requirements. For up-to-date information on course offering and scheduling, students should check it out from respective School and Department.

Notes:		<div> <div> Declaration of BEng major </div> </div>	<div> <div> Declaration of BBA major </div> </div>
() indicates the reuse of the same course to fulfill more than one requirement.			
* Courses offered in winter term			
^ Courses offered in summer term			
--- denotes the course/requirement is either waived or substituted			
## To graduate, students should complete all requirements as specified for DDP.			

>> The content of this example is not necessarily equivalent to a complete list of graduation requirements of the program. Students should refer to the Program Catalog/UG Curriculum Handbook for updated graduation requirements. For up-to-date information on course offering and scheduling, students should check it out from respective School and Department.

<< Declaration of BSc major << Declaration of BBA major

School:		School of Engineering and School of Business Management		Student's Pathway													Remarks	
Program:		Dual Degree Program (BSc in Integrative Systems and Design and BBA in Management)																
Course Offering Dept. (course code prefix)	Course Code	Course Title / Courses List	Credits	Year 1 Fall	Year 1 Spring	Year 2 Fall	Year 2 Spring	Year 3 Fall	Year 3 Spring	Year 4 Fall	Year 4 Spring	Year 5 Fall	Year 5 Spring	Sub-total				
BSc in Integrative Systems and Design																		
Major Requirements																		
Engineering Fundamental Courses																		
COMP	1021	Note: COMP1021 OR COMP1022P	3	3										3	This course will also be used to substitute ISOM 2010			
COMP	1022P	Introduction to Computer Science	3															
ENGG	1010	Academic Orientation	0	0	0									0				
LANG	2030	Technical Communication I	3						3					3				
MATH	1012	Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020]	4-7												6			
MATH	1013	Calculus IA	4															
MATH	1014	Calculus IB	3	3	3													
MATH	1020	Calculus II	4															
MATH	1023	Accelerated Calculus	3															
MATH	1024	Honors Calculus I	3															
MATH		Honors Calculus II	3															
PHYS	1001	Note: PHYS1001 OR PHYS1111 OR PHYS1112 OR PHYS1312	3												3			
PHYS	1111	Physics and the Modern Society	3		3													
PHYS	1112	General Physics I	3															
PHYS	1112	General Physics I with Calculus	3															
PHYS	1312	Honors General Physics I	3															
Required credits for Engineering Fundamental Courses			13-16											15				
Major Required Courses and Electives																		
ISDN	1002	Redefining Problems for the Real Needs	3			3								3				
ISDN	1004	Sketching	1			1								1				
ISDN	1006	Human-centered Innovation	3				3							3				
ISDN	2001	Second Year Design Project I	1					1						1				
ISDN	2002	Second Year Design Project II	4						4					4				
ISDN	2200	Systems Thinking and Design	3			3								3				
ISDN	2300	Digital Design	3			3								3				
ISDN	2400	Physical Prototyping	3						3					3				
ISDN	3001	Third Year Design Project I	4							4				4				
ISDN	3002	Third Year Design Project II	4								4			4				
ISDN	4001	Final Year Design Project I	5									5		5				
ISDN	4002	Final Year Design Project II	5										5	5				
LANG	4032	Technical Communication II for IEDA and ISDN	3							3				3				
ISDN/ENGG/IEDA		Design Electives (5 credits from the specified elective list)	36				5	3	3	3	7	3	3	27	DDP students could use FINA 2303, ISOM 2700 and MARK 2120 to satisfy the requirement of Product Management and Entrepreneurship Electives			
ISDN/ENTR/IEDA/SBM		Product Management and Entrepreneurship Electives (9 credits from the specified elective list)																
ISDN		Project-related Electives (22 credits from the specified elective list. Students should seek approval of their advisor for the choices of courses)																
Required credits for Major Requirements Courses and Electives			78											69				
BBA in Management																		
School Requirements																		
ACCT	2010	Principles of Accounting I	3			3								3				
ACCT	2200	Principles of Accounting II	3						3					3				
ECON	2103	Note: ECON 2103 OR ECON 2113	3			3								3				
ECON	2113	Principles of Microeconomics	3															
ECON	2123	Note: ECON 2123 OR ECON 3123	3					3						3				
ECON	3123	Macroeconomics	3															
FINA	2303	Macroeconomic Theory I	3															
ISOM	2010	Financial Management	3				3							3				
ISOM	2020	Introduction to Information Systems	3	---	---	---	---	---	---	---	---	---	---	0	Substituted by COMP 1021/1022P			
ISOM	2500	Coding for Business	1					1						1				
ISOM	2500	Business Statistics	3			3								3				
ISOM	2600	Introduction to Business Analytics	1					1						1				
ISOM	2700	Operations Management	3										3	3				
MARK	2120	Marketing Management	3				3							3				
MGMT	2010	Business Ethics and the Individual	2				2							2				
MGMT	2110	Organizational Behavior	3				3							3	MGMT 2110 is a major pre-requisite			
MGMT	2130	Business Ethics and Social Responsibility	2								2			2				
SBMT	1111	Business Student Induction	0	---	---	---	---	---	---	---	---	---	---	0	Waived for DDP students			
LABU	2040	Business Case Analyses	3					3						3				
LABU	2060	Effective Communication in Business	3								3			3				
MATH	1003	Note: MATH 1003 OR MATH 1012 OR MATH 1013 OR MATH 1020 OR MATH 1023	3-4	(3)											0			
MATH	1012	Calculus and Linear Algebra	3															
MATH	1013	Calculus IA	4															
MATH	1020	Calculus IB	3															
MATH	1023	Accelerated Calculus	4															
MATH		Honors Calculus I	3															
Required credits for School Requirements			45-46											39				
Major Requirements																		
Major Required Courses and Electives																		
MGMT	3110	Note: MGMT 3110 OR MGMT 3120 (For students in the Consulting Option, they will use MGMT 3110 to fulfill the Option Requirements and should take MGMT 3120 to fulfill this requirement.)	4						4					4	Students in the Consulting Option must take MGMT 3120			
MGMT	3120	Human Resources Management	4															
MGMT	3130	Note: MGMT 3130 OR MGMT 3140 (Students in the Consulting Option must take MGMT 3140 to fulfill this requirement.)	4					4						4	Students in the Consulting Option must take MGMT 3140			
MGMT	3140	Judgement and Decision Making in Organizations	4															
MGMT		Negotiation	4															
MGMT	4210	Note: MGMT 4210 OR MGMT 4220 (Students in the Consulting Option or in the Corporate Social Responsibility and Sustainability Option must take MGMT 4210 to fulfill this requirement.)	3-4											3	Students in the Consulting Option must take MGMT 4210			
MGMT	4220	Corporate Strategy	3							3								
MGMT		Entrepreneurship and Innovation	4															
MGMT		MGMT 3000-level or above Electives (Any 3 courses of the subject and level as specified. Courses taken as Option Required Courses may not be counted towards the elective requirement.)	9							3	3	3		9	Students in the Consulting Option are recommended to take MGMT 4220 and a new course in Simulating Strategy to fulfill the major elective requirement			
Required credits for Major Required Courses and Electives			20-21											20				
Additional Requirements																		
Requirements for Dual Degree Program																		
Required Courses																		
TEMG	1010	Technology and Management Professional Activities	0	0	0	0	0	0	0	0	0	0	0	0				
TEMG	3950	Case-based Problem Solving	3		3									3				
Required credits for Additional Requirements			3											3				
University CORE																		
CORE	C3 - C12	U CORE - Others	30	9	6			3		3		6	3	30				
CORE	C1 & C2	U CORE - English Language	6	3	3									6				
Sub-total for University CORE			36											36				
Term load (excl. free credits)																		
18 18 19 19 19 20 19 19 17 14																		
182##																		

<< Declaration of BSc major << Declaration of BBA major

School:		School of Engineering and School of Business Management			Student's Pathway											
Program:		Dual Degree Program (BSc in Integritive Systems and Design and BBA in Finance)														Remarks
Course Offering Dept. (course code prefix)	Course Code	Course Title / Courses List	Credits	Year 1 Fall	Year 1 Spring	Year 2 Fall	Year 2 Spring	Year 3 Fall	Year 3 Spring	Year 4 Fall	Year 4 Spring	Year 5 Fall	Year 5 Spring	Sub-total		
BSc in Integrative Systems and Design																
Major Requirements																
Engineering Fundamental Courses																
COMP	1021	Note: COMP1021 OR COMP1022P	3	3										3	This course will also be used to substitute ISOM 2010	
COMP	1022P	Introduction to Computer Science	3													
ENGG	1010	Academic Orientation	0	0	0									0		
LANG	2030	Technical Communication I	3						3					3		
MATH	1012	Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020]	4-7												6	
MATH	1013	Calculus IA	4													
MATH	1013	Calculus IB	3	3	3											
MATH	1014	Calculus II	3													
MATH	1020	Accelerated Calculus	4													
MATH	1023	Honors Calculus I	3													
MATH	1024	Honors Calculus II	3													
PHYS	1001	Note: PHYS1001 OR PHYS1111 OR PHYS1112 OR PHYS1312	3												3	
PHYS	1111	Physics and the Modern Society	3		3											
PHYS	1112	General Physics I	3													
PHYS	1112	General Physics I with Calculus	3													
PHYS	1312	Honors General Physics I	3													
Required credits for Engineering Fundamental Courses			13-16											15		
Major Required Courses and Electives																
ISDN	1002	Redefining Problems for the Real Needs	3			3								3		
ISDN	1004	Sketching	1			1								1		
ISDN	1006	Human-centered Innovation	3				3							3		
ISDN	2001	Second Year Design Project I	1					1						1		
ISDN	2002	Second Year Design Project II	4						4					4		
ISDN	2200	Systems Thinking and Design	3			3								3		
ISDN	2300	Digital Design	3			3								3		
ISDN	2400	Physical Prototyping	3						3					3		
ISDN	3001	Third Year Design Project I	4							4				4		
ISDN	3002	Third Year Design Project II	4								4			4		
ISDN	4001	Final Year Design Project I	5									5		5		
ISDN	4002	Final Year Design Project II	5										5	5		
LANG	4032	Technical Communication II for IEDA and ISDN	3							3				3		
ISDN/ENGG/IEDA		Design Electives (5 credits from the specified elective list)													DDP students could use FINA 2303, ISOM 2700 and MARK 2120 to satisfy the requirement of Product Management and Entrepreneurship Electives	
ISDN/ENTR/IEDA/SBM		Product Management and Entrepreneurship Electives (9 credits from the specified elective list)														
ISDN		Project-related Electives (22 credits from the specified elective list. Students should seek approval of their advisor for the choices of courses)	36				5	3	3	3	7	3	3	27		
Required credits for Major Requirements Courses and Electives			78											69		
BBA in Finance																
School Requirements																
ACCT	2010	Principles of Accounting I	3			3								3		
ACCT	2200	Principles of Accounting II	3						3					3		
ECON	2103	Note: ECON 2103 OR ECON 2113	3				3							3		
ECON	2113	Principles of Microeconomics	3													
ECON	2123	Note: ECON 2123 OR ECON 3123	3					3						3		
ECON	3123	Macroeconomics	3													
ECON	3123	Macroeconomic Theory I	3													
FINA	2303	Financial Management	3				3							3	FINA 2303 is a major pre-requisite	
ISOM	2010	Introduction to Information Systems	3	---	---	---	---	---	---	---	---	---	---	0	Substituted by COMP 1021/1022P	
ISOM	2020	Coding for Business	1					1						1		
ISOM	2500	Business Statistics	3			3								3		
ISOM	2600	Introduction to Business Analytics	1					1						1		
ISOM	2700	Operations Management	3									3		3		
MARK	2120	Marketing Management	3				3							3		
MGMT	2010	Business Ethics and the Individual	2					2						2		
MGMT	2110	Organizational Behavior	3				3							3		
MGMT	2130	Business Ethics and Social Responsibility	2							2				2		
SBMT	1111	Business Student Induction	0	---	---	---	---	---	---	---	---	---	---	0	Waived for DDP students	
LABU	2040	Business Case Analyses	3					3						3		
LABU	2060	Effective Communication in Business	3								3			3		
MATH	1003	Note: MATH 1003 OR MATH 1012 OR MATH 1013 OR MATH 1020 OR MATH 1023	3-4												DDP students should take MATH 1012 or MATH 1013 or MATH 1020 or MATH 1023 to satisfy the requirements of both BEng and BBA degrees	
MATH	1012	Calculus and Linear Algebra	3	(3)										0		
MATH	1013	Calculus IA	4													
MATH	1013	Calculus IB	3													
MATH	1020	Accelerated Calculus	4													
MATH	1023	Honors Calculus I	3													
Required credits for School Requirements			45-46											39		
Major Requirements																
Major Required Courses and Electives																
FINA	3001	Key Skills for Finance Professionals (A)	1					1						1		
FINA	3103	Intermediate Investments	3					3						3		
FINA	3203	Derivative Securities	3								3			3		
FINA	3303	Intermediate Corporate Finance	3							3				3		
FINA	3810	Bloomberg Market Concepts Certification	0					0						0		
ACCT	3010	Note: (ACCT 3010 AND ACCT 3020) OR ACCT 3030	3-6													
ACCT	3020	Financial Accounting I	3							3				3		
ACCT	3020	Financial Accounting II	3													
ACCT	3030	Intermediate Financial Accounting for Non-Accounting Majors	3													
ISOM	3230	Note: ISOM 3230 OR ISOM 3400	3						3					3	DDP students who took COMP 1021 in BEng requirements are required to take ISOM 3230	
ISOM	3400	Business Applications Programming	3													
ISOM	3400	Python Programming for Business Analytics	3													
FINA		FINA 3000-level or above Electives (Any 3 courses of the subject and level as specified)	9								3	3	3	9		
Required credits for Major Required Courses and Electives			25-28											25		
Additional Requirements																
Requirements for Dual Degree Program																
Required Courses																
TEMG	1010	Technology and Management Professional Activities	0	0	0	0	0	0	0	0	0	0	0	0		
TEMG	3950	Case-based Problem Solving	3			3								3		
Required credits for Additional Requirements			3											3		
University CORE																
CORE	C3 - C12	U CORE - Others	30	9	9							6	6	30		
CORE	C1 & C2	U CORE - English Language	6	3	3									6		
Sub-total for University CORE			36											36		
Term load (excl. free credits)																
18	18	19	20	18	19	18	20	20	17							
187##																
<< Declaration of BEng major << Declaration of BBA major																

Notes:

- () indicates the reuse of the same course to fulfill more than one requirement.
* Courses offered in winter term
^ Courses offered in summer term
--- denotes the course/requirement is either waived or substituted
To graduate, students should complete all requirements as specified for DDP.

**Remarks on course(s):

<< Declaration of BSc major

Major Requirements

COMP	1021	Note: COMP1021 OR COMP1022P
COMP	1022P	Introduction to Computer Science
		Introduction to Computing with Java

Required credits for Engineering Fundamental Courses	
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ISDN	1002	Redefining Problems for the Real Needs
ISDN	1004	Sketching
ISDN	1006	Human-centered Innovation

Required credits for Major Requirements Courses and Electives	
Major Requirements	12
Electives	12
Total	24

School Requirements

Required credits for School Requirements	
--	--

FINA	3001	Key Skills for Finance Professionals (A)
FINA	3103	Intermediate Investments
FINA	3104	Investment Management

Required credits for Major Required Courses and Electives	
Major Required Courses	12
Major Electives	6
Total	18

Requirements for Dual Degree Program

TEMG	1010	Technology and Management Professional Activities
TEMG	3950	Case-based Problem Solving
Required credits for Additional Requirements		

		Required credits for Additional Requirements
--	--	--

CORE	C3 - C12	U CORE - Others
CORE	C1 & C2	U CORE - English Language
		Sub-total for University CORE

			Sub-total for University CORE
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<< Declaration of
BEng major

To graduate, students should complete all requirements as specified for DDP.

>> The content of this example is not necessarily equivalent to a complete list of graduation requirements of the program. Students should refer to the Program Catalog/UG Curriculum Handbook for updated graduation requirements. For up-to-date information on course offering and scheduling, students should check it out from respective School and Department.

<< Declaration of BSc major << Declaration of BBA major

School:		School of Engineering and School of Business Management		Student's Pathway												
Program:		Dual Degree Program (BSc in Integrative Systems and Design and BBA in Finance)														Remarks
Course Offering Dept. (course code prefix)	Course Code	Course Title / Courses List	Credits	Year 1 Fall	Year 1 Spring	Year 2 Fall	Year 2 Spring	Year 3 Fall	Year 3 Spring	Year 4 Fall	Year 4 Spring	Year 5 Fall	Year 5 Spring	Sub-total		

BSc in Integrative Systems and Design

Major Requirements

Engineering Fundamental Courses

COMP	1021	Note: COMP1021 OR COMP1022P	3	3										3	This course will also be used to substitute ISOM 2010		
COMP	1022P	Introduction to Computer Science	3														
ENGG	1010	Academic Orientation	0	0	0									0			
LANG	2030	Technical Communication I	3						3					3			
MATH	1012	Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020]	4-7												6		
MATH	1013	Calculus IA	4														
MATH	1014	Calculus IB	3	3	3												
MATH	1020	Calculus II	3														
MATH	1023	Accelerated Calculus	4														
MATH	1024	Honors Calculus I	3														
PHYS	1001	Note: PHYS1001 OR PHYS1111 OR PHYS1112 OR PHYS1312	3												3		
PHYS	1111	Physics and the Modern Society	3		3												
PHYS	1112	General Physics I	3														
PHYS	1312	General Physics I with Calculus	3														
		Honors General Physics I	3														
Required credits for Engineering Fundamental Courses			13-16											15			

Major Required Courses and Electives

ISDN	1002	Redefining Problems for the Real Needs	3	3										3			
ISDN	1004	Sketching	1	1										1			
ISDN	1006	Human-centered Innovation	3		3									3			
ISDN	2001	Second Year Design Project I	1					1						1			
ISDN	2002	Second Year Design Project II	4						4					4			
ISDN	2200	Systems Thinking and Design	3			3								3			
ISDN	2300	Digital Design	3			3								3			
ISDN	2400	Physical Prototyping	3						3					3			
ISDN	3001	Third Year Design Project I	4							4				4			
ISDN	3002	Third Year Design Project II	4								4			4			
ISDN	4001	Final Year Design Project I	5									5		5			
ISDN	4002	Final Year Design Project II	5										5	5			
LANG	4032	Technical Communication II for IEDA and ISDN	3							3				3			
ISDN/ENGG/IEDA		Design Electives (5 credits from the specified elective list)													DDP students could use FINA 2303, ISOM 2700 and MARK 2120 to satisfy the requirement of Product Management and Entrepreneurship Electives		
ISDN/ENTR/IEDA/SBM		Product Management and Entrepreneurship Electives (9 credits from the specified elective list)															
ISDN		Project-related Electives (22 credits from the specified elective list. Students should seek approval of their advisor for the choices of courses)	36				5	3	3	3	7	3	3	27			
Required credits for Major Requirements Courses and Electives			78											69			

BBA in Finance

School Requirements

ACCT	2010	Principles of Accounting I	3			3								3			
ACCT	2200	Principles of Accounting II	3						3					3			
ECON	2103	Note: ECON 2103 OR ECON 2113	3				3							3			
ECON	2113	Principles of Microeconomics	3														
ECON	2123	Note: ECON 2123 OR ECON 3123	3					3						3			
ECON	3123	Macroeconomics	3														
FINA	2303	Macroeconomic Theory I	3														
FINA	2303	Financial Management	3				3							3	FINA 2303 is a major pre-requisite		
ISOM	2010	Introduction to Information Systems	3	---	---	---	---	---	---	---	---	---	---	0	Substituted by COMP 1021/1022P		
ISOM	2020	Coding for Business	1					1						1			
ISOM	2500	Business Statistics	3			3								3			
ISOM	2600	Introduction to Business Analytics	1					1						1			
ISOM	2700	Operations Management	3						3					3			
MARK	2120	Marketing Management	3				3							3			
MGMT	2010	Business Ethics and the Individual	2			2								2			
MGMT	2110	Organizational Behavior	3				3							3			
MGMT	2130	Business Ethics and Social Responsibility	2					2						2			
SBMT	1111	Business Student Induction	0	---	---	---	---	---	---	---	---	---	---	0	Waived for DDP students		
LABU	2040	Business Case Analyses	3					3						3			
LABU	2060	Effective Communication in Business	3							3				3			
MATH	1003	Note: MATH 1003 OR MATH 1012 OR MATH 1013 OR MATH 1020 OR MATH 1023	3-4												DDP students should take MATH 1012 or MATH 1013 or MATH 1020 or MATH 1023 to satisfy the requirements of both BEng and BBA degrees		
MATH	1012	Calculus and Linear Algebra	3	(3)													
MATH	1013	Calculus IA	4														
MATH	1013	Calculus IB	3														
MATH	1020	Accelerated Calculus	4														
MATH	1023	Honors Calculus I	3														
Required credits for School Requirements			45-46											39			

Major Requirements

Major Required Courses and Electives

FINA	3001	Key Skills for Finance Professionals (A)	1					1						1			
FINA	3103	Intermediate Investments	3					3						3			
FINA	3203	Derivative Securities	3								3			3			
FINA	3303	Intermediate Corporate Finance	3							3				3			
FINA	3810	Bloomberg Market Concepts Certification	0					0						0			
ACCT	3010	Note: (ACCT 3010 AND ACCT 3020) OR ACCT 3030	3-6												DDP students who took COMP 1021 in BEng requirements are required to take ISOM 3230		
ACCT	3020	Financial Accounting I	3							3				3			
ACCT	3030	Financial Accounting II	3														
ACCT	3030	Intermediate Financial Accounting for Non-Accounting Majors	3														
ISOM	3230	Note: ISOM 3230 OR ISOM 3400	3						3					3			
ISOM	3400	Business Applications Programming	3														
FINA		Python Programming for Business Analytics	3														
FINA		FINA 3000-level or above Electives (Any 3 courses of the subject and level as specified)	9								3	3	3	9			
Required credits for Major Required Courses and Electives			25-28											25			

Additional Requirements

Requirements for Dual Degree Program

Required Courses

TEMG	1010	Technology and Management Professional Activities	0	0	0	0	0	0	0	0	0	0	0	0			
TEMG	3950	Case-based Problem Solving	3			3									3		
Required credits for Additional Requirements			3												3		

University CORE

CORE	C3 - C12	U CORE - Others	30	6	6	3	3							6	6	30	
CORE	C1 & C2	U CORE - English Language	6	3	3											6	
Sub-total for University CORE			36													36	

Notes:

- () indicates the reuse of the same course to fulfill more than one requirement.
- * Courses offered in winter term
- ^ Courses offered in summer term
- denotes the course/requirement is either waived or substituted
- ## To graduate, students should complete all requirements as specified for DDP.

**Remarks on course(s):

>> The content of this example is not necessarily equivalent to a complete list of graduation requirements of the program. Students should refer to the Program Catalog/UG Curriculum Handbook for updated graduation requirements. For up-to-date information on course offering and scheduling, students should check it out from respective School and Department.

<< Declaration of BEng major << Declaration of BBA major

English Language Requirements of SENG, SBM and DDP students

4Y

SENG

SBM

DDP (ID+ECON/FINA/GBM/MGMT/MARK)

Course code_SENG	Course title_SENG	Credits_SENG	Course code_SBM	Course title_SBM	Credits_SBM	Course code_DDP	Course title_DDP	Credits_DDP	Remarks
U Core	English Language	6	U Core	English Language	6	U Core	English Language	6	university requirement
LANG 2030	Technical Communication I	3	LABU 2040	Business Case Analyses	3	LANG 2030	Technical Communication I	3	SENG requirement
LANG 4032	Technical Communication II for IEDA and ISDN	3	LABU 2060	Effective Communication in Business	3	LABU 2040	Business Case Analyses	3	SBM requirement
						LABU 2060	Effective Communication in Business	3	SBM requirement
						LANG 4032	Technical Communication II for IEDA and ISDN	3	SENG requirement
	Total	12		Total	12		Total	18	