An Example on Student's Pathway (as of Fall 2022-23)

## << Declaration of major

School:		School of Engineering											
Department:		Department of Mechanical and Aerospace Engineering											
Program:		BEng in Aerospace Engineering + Extended Major in Digital Mo and Creative Arts	edia	Backgro □	ound: 🗆								
				Profile:	Normative	e. Studer	nts to grad	date in Bi	Eng (AE)	with Res	earch Op	otion	
Course	Course Code	Course Title / Courses List				:							
Offering□ Dept□						! :							
(course code prefix)				<b>≺</b>	Year	<b>≺</b>	Year	<b>≺</b>	Year	<b>≺</b>	Year		
pronxy			Cre	Year 1	S	Year 2 Fal	Year 2 Spring	Year 3 Fal	Year 3 Spring	Year 4	Year 4 Spring	Sub-tota	
			Credits	Fall	oring	2 Fall	oring	Fall	oring	Fall	oring	otal	Remarks
Major Requ													
Engineering Fu	ındamental Coι □	Irses Note: COMP 1021 OR COMP 1022P OR COMP 2011 OR	3-5	1				I		I			
□ COMP□	□ 1021□	COMP 2012H□ Introduction to Computer Science□	3			!						_	
COMP COMP	1022P□ 2011□	Introduction to Computing with Java□ Programming with C++□	3	3		!						3	
COMP LANG	2012H 2030	Honors Object-Oriented Programming and Data Structures Technical Communication I	5	1								2	
MATH:		Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND□	4-7			3						3	
□ MATH□	□ 1012□	(MATH 1014 OR MATH 1024)] OR [MATH 1020]□ Calculus IA□	4			!							
MATH□ MATH□	1013□ 1014□	Calculus IB□ Calculus II□	3	3	3	!						6	
MATH□ MATH□	1020□ 1023□	Accelerated Calculus □ Honors Calculus I□	4 3			!							
MATH MATH	1024 2011	Honors Calculus II Introduction to Multivariable Calculus	3			3						3	
MATH□		Note: MATH 2111 OR MATH 2350 OR MATH 2351□	3									3	
MATH□ MATH□	2111 □ 2350 □	Matrix Algebra and Applications□ Applied Linear Algebra and Differential Equations□	3			!	3					3	
MATH PHYS□	2351	Introduction to Differential Equations Note: PHYS 1112 OR PHYS 1312□	3	1		<u> </u>							
PHYS□ PHYS	1112□ 1312	General Physics I with Calculus□ Honors General Physics I	3 3		3	<u>!</u>						3	
CHEM/LIFS/PHYS		Science 1000-level course (1 course from the specified course list)	3-4		3	:						3	
		l ired credits for Engineering Fundamental Courses	22-28	6	9	6	3	0	0	0	0	24	
Major Required		Electives Introduction to Aerospace Engineering		1				1		I	I	1	
MECH	1907 1990	Introduction to Aerospace Engineering Industrial Training	3	3		0*	[0^]					3	
MECH	2020	Statics and Dynamics	3		L	3	[0]					3	
MECH	2040	Solid Mechanics I	3			!	3					3	
MECH MECH	2210 2310	Fluid Mechanics Thermodynamics	3			3	3					3	
MECH	2410	Engineering Materials I	3				3					3	
MECH	3400	Introduction to Composite Materials	3			:		3				3	
MECH MECH	3610 3620	Control Principles Aircraft Design	3			!		3	3			3	
MECH	3640	Aerodynamics	3			<del>!                                    </del>		3	3			3	
MECH	3650	Aircraft Structural Analysis	3			:		3				3	
MECH MECH	3660 3670	Gas Turbines and Jet Propulsion  Aircraft Performance and Stability	3			:		3	3			3	
MECH	3680	Avionics Systems	3			<del>!                                    </del>		3	3			3	
MECH	3690	Aerospace Engineering Laboratory	3			:			3			3	
MECH ELEC	4980 2420	Final Year Aerospace Design Project  Basic Electronics	6			3				3	3	6	
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	
Option Require		credits for Major Required Courses and Electives	63	3	0	9	9	15	15	6	6	63	
Research Option	inonto												
MECH	4990	Aerospace Research Project	6			!				3	3	6	
DMCA Dear	·!uauaauta	Required credits for Research Option	6	0	0	0	0	0	0	3	3	6	
Pecommended		Courses											
COMP/ISOM	- Daving County	Note: COMP 1021 OR COMP 1022P OR ISOM 3230	3	Г		:							
COMP	1021	Introduction to Computer Science	3	(3)								0	
COMP ISOM	1022P 3230	Introduction to Computing with Java Business Applications Programming	3			:							
MATH		Note: MATH 1014 OR MATH 1020 OR MATH 1024	3-4			-							
MATH	1014	Calculus II	3		(0)								
MATH MATH	1020 1024	Accelerated Calculus Honors Calculus II	4		(3)	:						0	
COMP		Note: COMP 2011 OR COMP 2012 OR COMP 2012H	4-5			<u> </u>							
COMP	0044												
COMP COMP	2011 2012	Programming with C++ Object-Oriented Programming and Data Structures	4			4						4	
COMP	2012H	Honors Object-Oriented Programming and Data Structures	5										
		its for DMCA Recommended Background Courses	10-12	0	0	4	0	0	0	0	0	4	
Major Required	Courses and E	Electives Cross-disciplinary Seminar in Digital Media and Creative Arts	0			0						0	
EMIA	2020	Cross-disciplinary Design Thinking	3				3					3	
EMIA	2200	Introduction to Digital Media	3					3				3	
EMIA	4000	Note: EMIA 4990 OR EMIA 4991	0-3								0	0	
EMIA EMIA	4990 4991	Interdisciplinary Capstone Design Interdisciplinary Capstone Project	0 3								0	0	
SBM/SENG/ SSCI/IPO		Note: Students taking EMIA4990 should take a minimum of 12 credits; students taking EMIA4991 should take a minimum of 9 credits	12-15										
COOM O		DMCA Electives						3	3	3	3	12	
Habranette d		credits for DMCA Required Courses and Electives	21	0	0	0	3	6	3	3	3	18	
University C	C3 - C12	U CORE - Others	24			ı						1	The credit load of CORE1905
				1	5	:	3			6	9	24	(HMW) will usually be spread in the following pattern: Fall:
CORE	C1 & C2	U CORE - English Language	6	3	3	<del>!</del>						6	1; Spring: 2
	-	Sub-total for University CORE		4	8	0	3	0	0	6	9	30	
			-				m load (ex						,
				13	17	19	18 /o option)	21	18	18	21	}	
Notes:							o option) claration					1	
				-		· —			_				

Notes

<< Declaration of major

[] denotes the course is also offered in other terms as indicated and students may take the course in one of these terms subject to advice by the program office.

<sup>\*</sup> Courses offered in winter term

<sup>^</sup> Courses offered in summer term

<sup>#</sup> To graduate, students should complete at least 120 credits in approved courses. They may need to take courses additional to the required and elective courses as specified above to meet this minimum credit requirement.

<sup>&</sup>gt;> 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 for updated graduation requirements. For up-to-date information on course offering and scheduling, students should check it out from respective School and Department.

An Example on Student's Pathway (as of Fall 2022-23)

Student's Pathways (i.e. Student's Pathways (i	ern)
Pathway 1	
Background: HKDSE 4 Core + 2 Elec (incl. 1/2x PHYS, 1/2x C □	
Profile: Normative. Students to graduate in BEng CIEV with Re	ch Option
<del>                                     </del>	<del>     </del>
Yea Yea	
Year 4 Fall Year 3 Spring Year 3 Spring Year 2 Spring Year 2 Fal Year 1 Spring Year 1 Spring	ທ ປັ co a Remarks
3 Fal	ថ្នាំ Remarks
	-
3	3
i	
3	3
3	3
3 3	6
3	3
3	3
3	3
7 12 3 6 3 0 0 0	24
0 0	0
3	3
0 0	0 Student should attend the
0*	0 training modules in Year 2
3	Winter and Spring terms.
3	3
3	3
3 3	3
3 3	3
3	3
0	0
0^	0
3	3
3	3
3	3
3 3	3 3
3	3
3	3
	6
3	3
0 0 0	0
3	3
3	9
0 3 6 12 12 12 11	66
1 1	1
<del>+ + i + + + + +</del>	
i	3
0 0 0 0 0 1	4
(3)	0
(3)	0
	4
	4
	4
2 0 0 4 0 0 0 0	4
4	
2 0 0 4 0 0 0 0	4
2 0 0 4 0 0 0 0	0 3 3 3
2 0 0 4 0 0 0 0	0 3
2 0 0 4 0 0 0 0	0 3 3 3
2 0 0 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 3 3 3 0
2 0 0 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 3 3 3
2 0 0 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 3 3 3 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 3 3 3 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	12 The credit load of CORE19
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	12  The credit load of CORE19 (HMW) will usually be spre- in the following pattern: Fall
4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	12  The credit load of CORE19 (HMW) will usually be sprea
4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	12  The credit load of CORE19 (HMMV) will usually be sprea in the following pattern: Fall 1; Spring: 2
4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	12 18 The credit load of CORE19 (HMM) will usually be sprea in the following pattern: Fall 1; Spring: 2
4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	12  18  The credit load of CORE11 (HMW) will usually be spre in the following pattern: Fall; Spring: 2

- \* Courses offered in winter term
- ^ Courses offered in summer term
- # To graduate, students should complete at least 120 credits in approved courses. They may need to take courses additional to the required and elective courses as specified above to meet this minimum credit requirement >> 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 for updated graduation requirements. For up-to-date information on course offering and scheduling, students should check it out from respective School and Department.

An Example on Student's Pathway (as of Fall 2022-23)

<< Declaration of major

School:		School of Engineering					Ģ	Student's	Pathwav	s (i.e. Stu	dy Patter	n)	
Department:		Department of Civil and Environmental Engineering						Pathway	1	,		,	
Program:		BEng in Civil Engineering + Extended Major in Digital Media a Creative Arts	nd	Background: HKDSE 4 Core + 2 Elec (incl. 1/2x PHYS, 1/2x CHEM)□ □ Profile: Normative. Students to graduate in BEng CIVL with Research Option									
				Profile:	Normativ	e. Stude	nts to gra	iduate in	BEng Cl	VL with R	esearch	Option	
Course □ Offering□	Course Code	Course Title / Courses List				į							
Dept□ (course code					¥	į	<b></b>		<b>≼</b>		¥e		
prefix)			0	Year	Year 1 Sprin	Year	ar 2 :	Year	ar 3	Year	Year 4 Sprin	Sub	
			Credits	Year 1 Fal	Spring	Year 2 Fal	Year 2 Spring	Year 3 Fal	Year 3 Spring	Year 4 Fal	Spring	Sub-tota	Remarks
Major Requ	uirements			-	9		g		g	=	9		
Engineering F	undamental Co	OURSES Note: COMP 1021 OR COMP 1022P OR COMP 2011 OR	3-5	T		<u>.                                    </u>	1						
COMP	□ 1021□	COMP 2012H□ Introduction to Computer Science□	3	3		i i						3	
COMP□ COMP□	1022P□ 2011□	Introduction to Computing with Java□ Programming with C++□	3 4			i							
COMP CHEM	2012H 1020	Honors Object-Oriented Programming and Data Structures General Chemistry I	5 3	3		<u>i                                      </u>						3	
LANG MATH□	2030	Technical Communication I  Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND	3 4-7			<u> </u>	3					3	
□ MATH□	□ 1012□	(MATH 1014 OR MATH 1024)] OR [MATH 1020]□ Calculus IA□	4			!							
MATH□ MATH□	1013□ 1014□	Calculus IB□ Calculus II□	3	3	3	! !						6	
MATH□ MATH□	1020□ 1023□	Accelerated Calculus □ Honors Calculus I □	4 3			:							
MATH MATH	1024 2011	Honors Calculus II Introduction to Multivariable Calculus	3			3						3	
MATH PHYS :	2350	Applied Linear Algebra and Differential Equations  Note: PHYS 1112 OR PHYS 1312	3			3						3	
PHYS PHYS		General Physics I with Calculus□ Honors General Physics I	3	3		į						3	
		uired credits for Engineering Fundamental Courses		12	3	6	3	0	0	0	0	24	
CIVL	1010	Academic and Professional Development I	0			0	0					0	
CIVL	1100 2010	Discovering Civil and Environmental Engineering  Academic and Professional Development II	3		3	-		0	0			3	
CIVL	2020	Industrial and BIM Training	0	1		<del>:                                    </del>	C*	U	U				Student should attend the
CIVL	2110	Statics	3	1		; 	0*					0	training modules in Year 2 Winter and Spring terms.
CIVL	2110	Statics  Mechanics of Materials	3	+		3	3					3	
CIVL	2160 2170	Modeling Systems with Uncertainties Infrastructure Systems Engineering and Management	3	1		3	_					3	
CIVL	2410	Environmental Assessment and Management	3			<del>i</del>	3					3	
CIVL	2510 2810	Fluid Mechanics Construction Materials	3			<u> </u>	3	_				3	
CIVL	3010	Academic and Professional Development III	0			<u> </u>		3		0	0	3	
CIVL	3020 3210	Internship Training Introduction to Construction Management	0			:			0^			0	
CIVL	3310	Structural Analysis	3	+		<u>:</u> I		3	3			3	
CIVL	3320	Reinforced Concrete Design Hydrosystems Engineering	3			Î			3			3	
CIVL	3510 3610	Traffic and Transportation Engineering	3	+		<del>!                                      </del>		3	3			3	
CIVL	3730 3740	Fundamentals of Geotechnics Geotechnical Analysis and Design	3			į		3				3	
CIVL	□ □	Note: CIVL 4910 OR CIVL 4920 (Students taking the Research□	3 6			<del>!                                    </del>			3			3	
CIVL	□ 4910□	Option must take CIVL 4920)□ Civil and Environmental Engineering Final Year Project□	6			!				2	4	6	
CIVL	4920 4950	Civil and Environmental Engineering Final Year Thesis Civil Engineering Capstone Design Project	3							3		3	
ENGG LANG	2010 4033	Engineering Seminar Series  Technical Communication II for Civil and Environmental Engineering	3	-		0	0	0	0			0	
CIVL/SENG		CIVL Electives (3 courses from the specified elective list)	9			<u>i</u>				3		3	
CIVE/SENG						<u>i</u>				3	6	9	
Option Requir		ed credits for Major Required Courses and Electives	66	0	3	6	12	12	12	11	10	66	
Research Option		_											
CIVL/UROP CIVL	□ 4900□	Note: CIVL 4900 OR UROP 1100□ Directed Studies□	1-4 1-4			!				1		1	
UROP	1100	Undergraduate Research Opportunities Series 1 Advanced Electives (Courses at 4000- or PG level. Students should seek	3			<u>                                       </u>						_	
		approval of their advisor for the choices of courses.)				:					3	3	
DMCA Req	uirements	Required credits for Research Option	4-7	0	0	0	0	0	0	1	3	4	
Recommende	ed Background												
COMP/ISOM	1004	Note: COMP 1021 OR COMP 1022P OR ISOM 3230	3			į							
COMP COMP ISOM	1021 1022P 3230	Introduction to Computer Science Introduction to Computing with Java Business Applications Programming	3 3 3	(3)		!						0	
MATH	3230	Note: MATH 1014 OR MATH 1020 OR MATH 1024	3-4			<u> </u>							
MATH	1014	Calculus II	3										
MATH MATH	1020 1024	Accelerated Calculus Honors Calculus II	4 3		(3)	i						0	
COMP		Note: COMP 2011 OR COMP 2012 OR COMP 2012H	4-5			<u> </u>							
COMP	2011	Programming with C++	4			į							
COMP	2012 2012H	Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures	4 5			4						4	
		dits for DMCA Recommended Background Courses	10-12	0	0	4	0	0	0	0	0	4	
	ed Courses and	l Electives		0	0		U	0	0	- 0			
EMIA EMIA	2010B 2020	Cross-disciplinary Seminar in Digital Media and Creative Arts  Cross-disciplinary Design Thinking	3			0	3					0	
EMIA	2200	Introduction to Digital Media	3					3				3	
EMIA	4000	Note: EMIA 4990 OR EMIA 4991	0-3							0	0	0	
EMIA EMIA	4990 4991	Interdisciplinary Capstone Design Interdisciplinary Capstone Project	0 3			<u>i</u>				, and the second			
SBM/SENG/ SSCI/IPO		Note: Students taking EMIA4990 should take a minimum of 12 credits; students taking EMIA4991 should take a minimum of 9 credits	12-15			!							
		DMCA Electives							6	3	3	12	
		 d credits for DMCA Required Courses and Electives	21	0	0	0	3	3	6	3	3	18	
University CORE	CORE C3 - C12	LLCOPE Others	0.4										The gradities of CODE (SE
CORE	Co - C12	U CORE - Others	24	1	8	3	0	6	0	3	3	24	The credit load of CORE1905 (HMW) will usually be spread in the following pattern: Fall:
CORE	C1 & C2	U CORE - English Language	6	3	3	<del>!</del>						6	1; Spring: 2
		Sub-total for University CORE		4	11	3	0	6	0	3	3	30	
				16	17	Ten	m load (ex	cl. free cre	edits)	18	19		
					ı	145 (w/	o option)	149 (w/	option)#			l	
Notes:						<< De	alarati		nior				

<sup>#</sup> To graduate, students should complete at least 120 credits in approved courses. They may need to take courses additional to the required and elective courses as specified above to meet this minimum credit requirement >> 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 for updated graduation requirements. For up-to-date 2022-23 civilate (44)/r(2022-23:dntake) ing and scheduling, students should check it out from respective School and Department.

# The Hong Kong University of Science and Technology School of Engineering An Example on Student's Pathway (as of Fall 2022-23) !<< Declaration of major

Section   Sect	School:		School of Engineering   Student's Pathways (i.e. Study Pattern)											
Control of March   Control of	Department:		Department of Computer Science and Engineering											
Company	Program:			and		<b>l</b> : □								
Major Regiments	Course -	Course Code	Course Title / Courses List	1	Profile:			I			1	1	I	
Major Regular prisoners	Offering□	Course Code	Course Title / Courses List											
Major   Persistent   Persiste	(course code				<b>≼</b>	Year	<u></u> ≼	Year	<b>≼</b>	Year	<u>*</u>	Year	"	
Major   Property   P	,,			Crec	ar 1 F	1 Spri	ar 2 F	2 Spri	ar 3 F	3 Spri	ar 4 F	4 Spri	ub-to	
Fig.   Part	Maior Regi	uirements		lits	a a	ng	<u>a'</u>	ng	<u>a</u>	ng	<u>a'</u>	ng	<u>ਬ</u>	Remarks
Company	Engineering F			-	П						1	1	T	
Second	COMP COMP	1021□ 1022P	Introduction to Computer Science□	3	3								3	
Description   Company	CHEM/LIFS/PHYS		Note: CHEM 1008 OR CHEM 1020 OR LIFS 1901 OR□											
The content of the	CHEM□ CHEM□	1020□	General Chemistry I□	3										
192	PHYS =	1101□	Introductory Physics □	4		3							3	
Second   Second Secon	PHYS	1312	Honors General Physics I	3										
Column   C	LANG MATH ::	2030					3						3	
Mile	□ MATH□		(MATH 1014 OR MATH 1024)] OR [MATH 1020]□ Calculus IA□	4										
March   1930   March	MATH□	1014□	Calculus II□	3	3	3							6	
Second Second Processor   Seco	MATH□	1023□	Honors Calculus I□	3										
Second Control for Expression plane inclinate and a control for	MATH						3						3	
Move Required Course and Decided   **PARTICIPATION OF THE COURS AND COUNTY AN	SENG			3-4									0	
Move Required Course and Decided   **PARTICIPATION OF THE COURS AND COUNTY AN		Rea	 uired credits for Engineering Fundamental Courses	19-24	6	6	6	0	0	0	0	0		
Company   Comp			Electives		1		·		-	-	1	1		
Section   Section   Process   Proc	COMP		OR [COMP 4910]□				i							
Section   Section   Provide Transport   Provided   Pr	COMP□ COMP□	4910□ 4981□	Co-op Program□ Final Year Project□	6 6			į				3	3	6	
Section   Process   Proc	COMP COMP		Final Year Thesis	6	-	-	<b>i</b>							
Stock   Stoc	COMP COMP	2012	Programming with C++□	4			4	4					8	
Company   Comp	COMP													
Company   Comp	COMP	2611						4					4	
Company	COMP		Discrete Mathematical Tools for Computer Science□	4			4						4	
1110	COMP		·		-		<u> </u>							
Section   Compared to   Comp	COMP COMP		Software Engineering□	4			į		4				4	
Company	COMP	3511							3				3	
Column	COMP COMP		Design and Analysis of Algorithms□	3					3				3	
Second Content		3711H					<u> </u>							
March   Control   Contro			term in which they are in residency at HKUST with major□				0	0	0	0	0	0	0	
Company   Comp	COMP FLEC/JEDA/MATH		*				<u> </u>							
			IEDA 2540 OR MATH 2411 OR MATH 2421 OR □											
Processor   Proc	ELEC	2600H□	Honors Probability and Random Processes in Engineering□	4				4					4	
MATHER   Proceedings   Mathematical Process	IEDA□	2540□	Statistics for Engineers□	3				,					,	
Process   Proc	MATH□	2421□	Probability□				i							
COMP   Company	ENGG	2010	Engineering Seminar Series				0	0	0	0			0	
COMP	LANG	4030									3		3	
Required credits for Major Required Courses and Electives   53-89   0   0   8   12   10   0   12   0   57	COMP		3 courses should be taken from 1 area and at least 2 courses outside that area (including course(s) in the Courses Without Associated Area).  Students may use at most one course under Deep Learning Applications	15						6	6	3	15	
Required credits for Major Required Courses and Electives   53-58   0   0   8   12   10   8   12   9   57	COMP			3										
DMCA Requiremented Background Courses		Poguire		E0 F0		^		40	40		40			
Recommended Background Courses	DMCA Req		a creates for major required Courses and Electives	53-58	11 0	U	8	12	10	ь	12	9	5/	
1021   1022   1023				3										
10229	COMP	1021	Introduction to Computer Science	3	(3)								0	
MATH   1014   Calculus	COMP ISOM	1022P	Introduction to Computing with Java	3	(0)								Ů	
MATH   1020   Accelerated Calculus   8   3   6   12   1024   10	MATH		Note: MATH 1014 OR MATH 1020 OR MATH 1024	3-4										
MATH   1024	MATH MATH	1020	Accelerated Calculus	4		(3)							0	
COMP   2011	MATH	1024	Honors Calculus II	3										
2012   Object-Oriented Programming and Data Structures   4	СОМР		Programming with C++											
Major Required Courses and Electives	COMP COMP	2012	Object-Oriented Programming and Data Structures	4			(4)						Ö	
Major Required Courses and Electives		Required cree		10-12	0	0	0	0	0	0	0	0	0	
EMIA 2000 Cross-disciplinary Design Thinking 3 3 3 3 3 3 3 3 3 3 5 5 3 3 5 5 5 5 5		ed Courses and	Electives		"									
EMIA   2200   Introduction to Digital Media   3   3   3   3   3   3   3   3   3	EMIA EMIA						0							
Note: EMIA 4990   Interdisciplinary Capstone Project   0								3					3	
Marchisciplinary Capstone Project   12-15   18   18   18   16   15   18   18   18   16   15   18   18   16   15   18   18   18   16   15   18   18   18   16   15   18   18   18   18   18   18   18	EMIA EMIA	2200	-						3				3	
SBM/SENG/  SSC/IPO   Note: Students taking EMIA4990 should take a minimum of 12 credits; students taking EMIA4991 should take a minimum of 9 credits   12-15	EMIA EMIA	4990									0	0	0	
SSC/IPO   students taking EMIA4991 should take a minimum of 9 credits   DMCA Electives   DMCA Electives   DMCA Required Courses and Electives   21	EMIA		Interdisciplinary Capstone Project	3										
MCA Electives   March   Marc	SSCI/IPO		students taking EMIA4991 should take a minimum of 9 credits	12-15						3	3	6	12	
University CORE (Revamped)  CORE C3 - C12 U CORE - Others 24 1 5 3 3 6 3 24  CORE C1 & C2 U CORE - English Language 6 3 3 3 6 3 3 24  Sub-total for University CORE 30 4 8 0 3 3 6 3 3 30  Term load (excl. free credits)  10 14 14 18 16 15 18 18											Ů	Ů	12	
CORE C3 - C12 U CORE - Others 24 1 5 3 3 6 3 3 24 CORE C1 & C2 U CORE - English Language 6 3 3 3 6 3 3 6 6 6 6 CORE C1 & C2 U CORE - English Language 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Haires - 14			21	0	0	0	3	3	3	3	6	18	
CORE C1 & C2 U CORE - English Language 6 3 3	University CORE			24	1	5		3	3	6	3	3	24	
Term load (excl. free credits)  10 14 14 18 16 15 18 18	CORE	C1 & C2			1	3	_						6	
			Sub-total for University CORE	30	<u> </u>	8					3	3	30	
1 PRIM					10	14	14			15	18	18		

# To graduate, students should complete at least 120 credits in approved courses. They may need to take courses additional to the required and elective courses as specified above to meet this minimum credit requirement.

>> 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 for updated graduation requirements. For up-to-date information on course offering and scheduling, students should check it out from respective School and Department.

### The Hong Kong University of Science and Technology School of Engineering An Example on Student's Pathway (as of Fall 2022-23)

<< Declaration of major

School: Department:		School of Engineering  Computer Engineering Program Office											
Program:		BEng in Computer Engineering + Extended Major in Digital Med Creative Arts	dia and	Backgro	und: HK								
		Creative Arts			Normativ	e. Stude	nts to gra	aduate in	BEng Cl	PEG with	Researc	h	
				Option									
Course	Course Code	Course Title / Courses List				:							
Offering□ Dept□						<u> </u>							
(course code prefix)				¥.	Year	i ĕ	Year	¥e	Year	ĕ	Year	s	
,			Credit	Year 1 Fa	Year 1 Spring	10	Year 2 Spring	Year 3 F	Year 3 Spring	Year 4 F	Year 4 Spring	Sub-total	
Major Requ	iromonte		dits	<u>a</u>	ing	Fall	ing	Fall	ing	Fall	ing	tal	Remarks
	undamental Cou	ırses											
COMP COMP	1021	Note: COMP 1021 OR COMP 1022P□ Introduction to Computer Science□	3 3	3		i						3	
COMP LANG	1022P 2030	Introduction to Computing with Java Technical Communication I	3			<del>i          </del>	3					3	
MATH		Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND□ (MATH 1014 OR MATH 1024)] OR [MATH 1020]□	4-7			ĺ							
MATH□ MATH□	1012□ 1013□	Calculus IA□ Calculus IB□	4 3	3	3	!						6	
MATH□ MATH□	1014□ 1020□	Calculus II□ Accelerated Calculus□	3 4	3	3	!						6	
MATH□ MATH	1023□ 1024	Honors Calculus I□ Honors Calculus II	3 3			! 							
MATH MATH	2011	Introduction to Multivariable Calculus  Matrix Algebra and Applications	3			3		3				3	
PHYS:		Note: PHYS 1112 OR PHYS 1312	3			3							
PHYS PHYS	1112□ 1312	General Physics I with Calculus□ Honors General Physics I	3	3		!						3	
PHYS PHYS	11140	Note: PHYS 1114 OR PHYS 1314 General Physics II	3		3	! :						3	
PHYS SENG	1314	Honors General Physics II Engineering Introduction course (If the students take an introduction course	3-4			<u> </u>							
		included in their major, this course can be counted towards their major requirement.)			3	i						3	
	Requi	red credits for Engineering Fundamental Courses	25-29	9	9	3	3	3	0	0	0	27	
Major Required	Courses and E	Electives		 II			I			I			
CPEG	J 0	Note: [CPEG 1971 AND (CPEG 4901 OR CPEG 4902 OR CPEG 4911 OR CPEG 4912)] OR [CPEG 4910] (Students Asking the Recearch Ortice whet take aither CPEG 4902 or CPEG 4	6			i							
CRECE	□ □	taking the Research Option must take either CPEG 4902 or CPEG 4912				i							
CPEG CPEG	1971□ 4901□	Industrial Experience Computer Engineering Final Year Project in COMP Computer Engineering Final Year Thesis in COMP	0 6			i				3	3	6	
CPEG CPEG	4902□ 4910□	Computer Engineering Final Year Thesis in COMP  Co-op Program  Computer Segment Final Year Project in FLECT	6			i							
CPEG CPEG	4911 □ 4912	Computer Engineering Final Year Project in ELEC Computer Engineering Final Year Thesis in ELEC	6			<u>i                                    </u>							
CPEG CPEG	2930 3930	Academic and Professional Development I  Academic and Professional Development II	0			0	0	0	0			0	
COMP COMP	2011	Note: (COMP 2011 AND COMP 2012) OR COMP 2012H□ Programming with C++□	5-8 4			į							
COMP COMP	2012 D 2012 H	Object-Oriented Programming and Data Structures  Honors Object-Oriented Programming and Data Structures	4 5			4		4				8	
COMP/ELEC COMP	2611	Note: COMP 2611 OR ELEC 2350  Computer Organization	4 4			<u>i</u>	4					4	
ELEC COMP/ELEC	2350	Introduction to Computer Organization and Design Note: COMP 2711 OR COMP 2711H OR ELEC 2600□	4			<u> </u>							
COMP COMP	2711□ 2711H□	Discrete Mathematical Tools for Computer Science□ Honors Discrete Mathematical Tools for Computer Science□	4			!		4				4	
ELEC COMP	2600 3511	Probability and Random Processes in Engineering Operating Systems	4 3			<u> </u>			3			3	
ELEC	1100	Introduction to Electro-Robot Design	4			4			3			4	
ELEC		Note: ELEC 1200 OR ELEC 2100 OR ELEC 2400 (2 out□ of 3 courses)□	8			•							
ELEC D	1200□ 2100□	A System View of Communications: from Signals to Packets□ Signals and Systems□	4			] :	8					8	
ELEC ELEC	2400 3300	Electronic Circuits Introduction to Embedded Systems	4			<u>!</u>			4			4	
ENGG	2010	Engineering Seminar Series	0			0	0	0	0			0	
LANG    LANG	□ 4030□	Note: LANG 4030 OR LANG 4031  Technical Communication II for CSE, CPEG & DSCT	3			! :				3		3	
LANG COMP/ELEC	4031	Technical Communication II for ECE & CPEG CPEG Restricted Elective (1 course from the specified elective list. The	3			<u> </u>							
		course taken as Restricted Elective may not be counted towards the requirement under "Area Courses".)				:				3		3	
COMP/ELEC/ENGG		Area Courses (At least 2 courses should be taken from one single area and	15			-							The 15 credits are divided as 5
		at least 2 courses outside that area. Courses taken as Major Required Courses may not be counted towards the elective requirement.)				i			3	6	6	15	courses with each course carries 3 credits.
	Peguired	credits for Major Required Courses and Electives	59-62	0	0	8	12	8	10	15	9	62	
Option Require		credits for major required courses and Electives	39-02	U	0	0	12	0	10	15	9	62	
Research Option COMP/ELEC	1	CPEG Electives (1 PG-level course as approved by advisor)	3	1			ı			ı			
						<u>į                                    </u>				3		3	
COMP/ELEC/UROP		Research Electives [Students should take either (ELEC 5900 AND UROP 1100) or a 3-credit COMP 5000-level course to fulfill this requirement.]	2-3			[1]	[1]	1	1	[3]		2	
		Required credits for Research Option	5-6	0	0	0	0	1	1	3	0	5	
DMCA Requ													
Recommended COMP/ISOM	d Background C	OURSES Note: COMP 1021 OR COMP 1022P OR ISOM 3230	3										
COMP	1021	Introduction to Computer Science	3	(0)									
COMP ISOM	1022P 3230	Introduction to Computing with Java Business Applications Programming	3 3	(3)								0	
MATH		Note: MATH 1014 OR MATH 1020 OR MATH 1024	3-4										
MATH	1014	Calculus II	3										
MATH MATH	1020 1024	Accelerated Calculus Honors Calculus II	4 3		(3)							0	
COMP		Note: COMP 2011 OR COMP 2012 OR COMP 2012H	4-5			<u> </u>							
COMP	2011	Programming with C++	4-5			i							
COMP COMP	2012 2012H	Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures	4			(4)						0	
	Required credid Courses and E	ts for DMCA Recommended Background Courses Electives	10-12	0	0	0	0	0	0	0	0	0	
EMIA EMIA	2010B 2020	Cross-disciplinary Design Thinking	0			0						0	
EMIA	2200	Cross-disciplinary Design Thinking Introduction to Digital Media	3					3	3			3	
EMIA		Note: EMIA 4990 OR EMIA 4991	0-3										
EMIA EMIA	4990 4991	Interdisciplinary Capstone Design Interdisciplinary Capstone Project	0 3								0	0	
SBM/SENG/		Note: Students taking EMIA4990 should take a minimum of 12 credits;	12-15										Students can choose
SSCI/IPO		students taking EMIA4991 should take a minimum of 9 credits											suitable courses in Year 3 Spring and Year
		DMCA Electives							3	3	6	12	4 Spring to double
													count for CPEG and
Habrara ! 1 - 1		credits for DMCA Required Courses and Electives	21	0	0	0	0	3	6	3	6	18	
University (	C3 - C12	U CORE - Others	24			ı —							The credit load of CORE1905
				1	5	6	3	3	3		3	24	(HMW) will usually be spread in the following pattern: Fall: 1;
CORE	C1 & C2	U CORE - English Language	6	3	3	<del>i                                    </del>						6	Spring: 2
		Sub-total for University CORE	30	4	8	6	3	3	3	0	3	30	
				13	17	Ten	m load (ex	cl. free cre 18	dits) 20	21	18		
				<u> </u>			o option)						

An Example on Student's Pathway (as of Fall 2022-23)

<< Declaration of major

School:		School of Engineering  Department of Industrial Engineering and Decision Analytics		Student's Pathways (i.e. Study Pattern)									
Department: Program:		Department of Industrial Engineering and Decision Analytics BEng in Decision Analytics + Extended Major in Digital Media	and	Backers	und: HK[	)SF 4 C		Pathway rec (incl. 1		SII			
ogram.		Creative Arts	u				Z El	SS (IIIOI.	, EA EELG	<b>-</b> ,□			
				Profile: N	Normative	•							
Course □	Course Code	Course Title / Courses List											
Offering□ Dept□													
(course code					ĕ		Ύe		Ύe		Ύe		
prefix)				Yea	Year 1	Year 2	ar 2	Yea	ar 3	Yea	ar 4	Su	
			Credits	Year 1 Fa	Spring	1 2	Year 2 Spring	Year 3 Fa	Year 3 Spring	Year 4 Fa	Year 4 Spring	Sub-total	
			dits	Fall	ing	Fall	ing	Fall	ring	Fa	ing	otal	Remarks
Major Requ	irements												
Engineering Fu	ındamental Cou	rses											
COMP□			3-5										
□ COMP□	□ 1021□	COMP 2012H□ Introduction to Computer Science□	3										
COMP	1022P□	Introduction to Computing with Java□	3	3	ĺ	İ						3	
COMP COMP	2011□ 2012H	Programming with C++□ Honors Object-Oriented Programming and Data Structures	4 5		ľ	I 							
COMP CHEM/PHYS		Note: CHEM 1020 OR PHYS 1112 OR PHYS 1312	3										
CHEM□ PHYS□	1020□ 1112□	General Chemistry I□ General Physics I with Calculus□	3	3								3	
PHYS	1312	Honors General Physics I	3										
LANG	2030	Technical Communication I	3			3						3	
MATH		Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND	4-7										
⊔ MATH□	⊔ 1012□	(MATH 1014 OR MATH 1024)] OR [MATH 1020]□ Calculus IA□	4										
MATH□	1013□	Calculus IB□	3	3	3							6	
MATH□ MATH□	1014□ 1020□	Calculus II□ Accelerated Calculus□	3 4										
MATH□	1023□	Honors Calculus I□	3			!							
MATH MATH	1024 2011	Honors Calculus II Introduction to Multivariable Calculus	3	<b>—</b>			3					3	
MATH	2111	Matrix Algebra and Applications	3		——Ī	3	3					3	
SENG		Engineering Introduction course (If the students take an introduction course	3-4	<b>—</b>		3						3	
		included in their major, this course can be counted towards their major	5-4		,	!						9	
		requirement.)			3							3	
	P	ired gradite for Engineering Eundemantal Carres	00.00									0.4	
Major Required		ired credits for Engineering Fundamental Courses	22-28	9	6	6	3	0	0	0	0	24	
IEDA	1 Courses and E	Academic and Professional Development I	0	1								0	
IEDA	1020	Academic and Professional Development II	0			0	0	-	_			0	
IEDA	1901	·	0					0	0			0	
		Industrial Training and Experience										0	
IEDA	2520	Probability for Engineers	3			3	_					3	
IEDA	2540	Statistics for Engineers	3				3	_				3	
IEDA	3010	Prescriptive Analytics	3					3				3	
IEDA	3230	Engineering Economics and Accounting	3		i		3					3	
IEDA	3250	Stochastic Models	3					3				3	
IEDA	3300	Industrial Data Systems	3				3					3	
IEDA	3560	Predictive Analytics	3						3			3	
IEDA□ IEDA□	⊔ 4901□	Note: IEDA 4901 OR IEDA 4920 □ Final Year Thesis □	6 6							3	3	6	
IEDA	4920	Decision Analytics Final Year Project	6		;								
ENGG	2010	Engineering Seminar Series	0			0	0	0	0			0	
ECON□ ECON□	□ 2103□	Note: ECON 2103 OR ECON 2113 □ Principles of Microeconomics □	3		j			3				3	
ECON	2113	Microeconomics	3										
LANG	4032	Technical Communication II for IEDA and ISDN	3						3			3	
IEDA/ISOM		Area Electives (5 courses from the specified elective list, of which all 5 courses should be taken from the same area)	15					3	6	6		15	
						İ		3	Ü	o		15	
	Required	credits for Major Required Courses and Electives	48	0	0	3	9	12	12	9	3	48	
DMCA Requ	uirements												
Recommended		ourses											
COMP/ISOM		Note: COMP 1021 OR COMP 1022P OR ISOM 3230	3										
00110	1001												
COMP COMP	1021 1022P	Introduction to Computer Science Introduction to Computing with Java	3	(3)								0	
ISOM	3230	Business Applications Programming	3										
MATH		Note: MATH 1014 OR MATH 1020 OR MATH 1024	3-4										
WATH		NOW. WATH 1014 OR WATH 1020 OR WATH 1024	3-4										
MATH MATH	1014	Calculus II	3		(3)							0	
MATH MATH	1020 1024	Accelerated Calculus Honors Calculus II	4 3		(3)								
COMP		Note: COMP 2011 OR COMP 2012 OR COMP 2012H	4-5										
COMP	2011	Programming with C++	4										
COMP COMP	2012	Object-Oriented Programming and Data Structures	4			3						3	
COMP	2012H	Honors Object-Oriented Programming and Data Structures	5										
	Paguired area	its for DMCA Recommended Packground Courses	10.40	0	0	2		0	0	0	0	2	
Major Required		its for DMCA Recommended Background Courses	10-12	0	0	3	0	0	0	0	0	3	
EMIA	2010B	Cross-disciplinary Seminar in Digital Media and Creative Arts	0			0						0	
EMIA	2020	Cross-disciplinary Design Thinking	3			-	3					3	
EMIA	2200	Introduction to Digital Media	3				3	3				3	
EMIA		Note: EMIA 4990 OR EMIA 4991	0-3					3				3	
										0	0	0	
EMIA EMIA	4990 4991	Interdisciplinary Capstone Design Interdisciplinary Capstone Project	0							0	0	0	
SBM/SENG/		Note: Students taking EMIA4990 should take a minimum of 12 credits;	12-15										
SSCI/IPO		students taking EMIA4990 should take a minimum of 12 credits;	12-10										
									3	3	6	12	
		DMCA Electives											
	Required	credits for DMCA Required Courses and Electives	21	0	0	0	3	3	3	3	6	18	
University (													
CORE	C3 - C12	U CORE - Others	24	1	1								The credit load of CORE1905
			1	1	5	3	3	3	0	3	6	24	(HMW) will usually be spread
										-	-		in the following pattern: Fall: 1; Spring: 2
CORE	C1 & C2	U CORE - English Language	6	3	3	1						6	
		Sub-total for University CORE	30	4	8	3	3	3	0	3	6	30	
-		•				Ten	m load (ex	cl. free cre	dits)				
				13	14	15	18	18	15	15	15		
							12	6#					

te:

<sup>#</sup> To graduate, students should complete at least 120 credits in approved courses. They may need to take courses additional to the required and elective courses as specified above to meet this minimum credit requirement >> 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 for updated graduation requirements. For up-to-date information on course offering and scheduling, students should check it out from respective School and Department.

### The Hong Kong University of Science and Technology School of Engineering An Example on Student's Pathway (as of Fall 2022-23)

Department:		chool: School of Engineering				Control of major Student's Pathways (i.e. Study Pattern)									
		Department of Electronic and Computer Engineering					ı	Pathway	1	,	idy Falle	:111)	]		
Program:		BEng in Electronic Engineering + Extended Major in Digital N and Creative Arts	ledia				ore + 2 E	`		,					
				Profile: I Option	Normativ	e. Stude	nts to gra	aduate in	BEng El	_EC with	Researc	ch			
Course □ Offering□	Course Code	Course Title / Courses List											1		
Dept□ (course code					<b>*</b>	i 	<b>≾</b>		<b>*</b>		<b>≾</b>				
prefix)			_	Yea	Year 1 Spring	Yea	Year 2 Spring	Yea	Year 3 Sprinç	Yea	Year 4 Spring	Su			
			Credits	Year 1 Fa	Sprii	Year 2 Fal	Sprii	Year 3 Fal	Sprii	Year 4 Fal	Sprii	Sub-tota	Damada		
Major Requ	uirements	1	ĬĠ	<u>a</u>	ng	<u>a</u>	ng	<u>a</u>	ng	<u>a</u>	ng	ä	Remarks		
+	uncincino					_									
ELEC/MATH		Note: (ELEC 2600 OR ELEC 2600H) OR MATH 2011 OR □ MATH 2111 OR MATH 2350 OR MATH 2351 (3 courses □	9-10			!									
□ ELEC□	2600□	out of 6) □ Probability and Random Processes in Engineering □	4												
ELEC□ MATH□	2600H□ 2011□	Honors Probability and Random Processes in Engineering □ Introduction to Multivariable Calculus □	4			3	3	3				9			
MATH□ MATH□	2111 □ 2350 □	Matrix Algebra and Applications□ Applied Linear Algebra and Differential Equations□	3												
MATH COMP□	2351	Introduction to Differential Equations  Note: COMP 1021 OR COMP 1022P□	3												
COMP□ COMP	1021□ 1022P	Introduction to Computer Science□ Introduction to Computing with Java	3	3		!						3			
COMP COMP	2011	Note: COMP 2011 OR COMP 2012H  Programming with C++□	4-5 4				4					4			
COMP _ANG	2012H 2030	Honors Object-Oriented Programming and Data Structures  Technical Communication I	5 3	-		3						3			
MATH		Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND	4-7			,						3			
MATH	1012	(MATH 1014 OR MATH 1024)] OR [MATH 1020]□ Calculus IA□	4												
MATH□ MATH□	1013□ 1014□	Calculus IB□ Calculus II□	3	3	3	! !						6			
MATH□ MATH□	1020□ 1023□	Accelerated Calculus□ Honors Calculus I□	4 3												
MATH PHYS□	1024 □	Honors Calculus II Note: PHYS 1112 OR PHYS 1312□	3			-									
PHYS D PHYS	1112□ 1312	General Physics I with Calculus□ Honors General Physics I	3	3								3			
PHYS□ PHYS□	□ 1114□	Note: PHYS 1114 OR PHYS 1314 ☐ General Physics II ☐	3		3							3			
PHYS SENG	1314	Honors General Physics II Engineering Introduction course (If the students take an introduction course	3-4	1								1			
		included in their major, this course can be counted towards their major requirement.)		1	3	i i						3			
	Regi	 uired credits for Engineering Fundamental Courses	32-38	9	9	6	7	3	0	0	0	34			
Major Require	ed Courses and	<u> </u>	32=36	9	9	0	,	3	0	U	U	34			
ELEC	1100	Introduction to Electro-Robot Design	4			4						4			
ELEC	1200	A System View of Communications: from Signals to Packets	4			İ	4					4			
LEC   LEC	2100□	Note: ELEC 2100 OR ELEC 2100H□ Signals and Systems□	4					4				4			
ELEC	2100H 2350	Honors Signals and Systems Introduction to Computer Organization and Design	4	-		<u> </u>		4				4			
ELEC	2400	Electronic Circuits	4				4					4			
ELEC	2910	Academic and Professional Development I  Note: [ELEC 2991 AND (ELEC 4900 OR ELEC 4901)]	0			0	0					0	1) "0" refers to ELEC2991		
		OR [ELEC 4910] (Students taking the Research Option□	ь										2) Students should comple		
LEC	2991	must take ELEC 4901)□ Industrial Experience (Electronic Engineering)□	0										safety training and internsl industrial training to get pa		
ELEC	4900□ 4901□	Final Year Design Project□ Final Year Thesis□	6 6				0	0	0	3*	3	6	of ELEC2991. ELEC2991 is not required		
ELEC	4910	Co-op Program	6										students taking ELEC4910 they should complete the		
													safety training in order to go full pass of the course.		
													3) 3* = 1 credit in year 3 Summer + 2 credits in year		
ELEC ENGG	3910 2010	Academic and Professional Development II  Engineering Seminar Series	0	-			0	0	0			0			
_ANG	4031	Technical Communication II for ECE & CPEG	3			0	0	0	0	3		3			
ELEC		ELEC 3000-level or above Electives (Courses of the subject and level as specified, out of which at least 2 courses must be at 4000-level. ELEC 4940	21												
		cannot be used to count towards this elective requirement)						4	11	3	3	21			
							8	12		_					
	Require	d credits for Major Required Courses and Electives	50	0	0	4	٠	12	11	9	6	50			
	rements	d credits for Major Required Courses and Electives	50	0	0	4		12	11	9	6	50			
Research Option	rements	d credits for Major Required Courses and Electives  Modern Engineering Research Methodologies	1	0	0	4		12	11	9	6	50			
Research Option	rements	Modern Engineering Research Methodologies Advanced Elective Courses approved by advisor (at least one UROP course		0	0	4		12		9	6				
Research Option	rements	Modern Engineering Research Methodologies	1	0	0	4		12		3	3				
Research Option	rements	Modern Engineering Research Methodologies  Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)	1	0	0	0	0	0	1			1			
Research Option	5900	Modern Engineering Research Methodologies  Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)  Required credits for Research Option	1 6						1 0	3	3	1			
Research Option ELEC  DMCA Req Recommende	rements 5900	Modern Engineering Research Methodologies  Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)  Required credits for Research Option  Courses	1 6						1 0	3	3	1			
Research Option ELEC  DMCA Req Recommende		Modern Engineering Research Methodologies Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)  Required credits for Research Option  Courses  Note: COMP 1021 OR COMP 1022P OR ISOM 3230	1 6 7						1 0	3	3	1			
DMCA Req Recommende	sed Background (	Modern Engineering Research Methodologies  Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)  Required credits for Research Option  Courses  Note: COMP 1021 OR COMP 1022P OR ISOM 3230  Introduction to Computer Science Introduction to Computing with Java	7						1 0	3	3	1			
Recommende COMP/ISOM COMP COMP ISOM	sed Background (	Modern Engineering Research Methodologies  Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)  Required credits for Research Option  COURSES  Note: COMP 1021 OR COMP 1022P OR ISOM 3230  Introduction to Computer Science Introduction to Computing with Java Business Applications Programming	1 6 7 7 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	0					1 0	3	3	6 7			
DMCA Req Recommende COMP SOMP	specific properties of the second of the sec	Modern Engineering Research Methodologies Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)  Required credits for Research Option  Required credits for Research Option  Note: COMP 1021 OR COMP 1022P OR ISOM 3230  Introduction to Computer Science Introduction to Computing with Java Business Applications Programming  Note: MATH 1014 OR MATH 1020 OR MATH 1024	1 6 7 7 3 3 3 3 3 3 3-4	0					1 0	3	3	6 7			
PMCA Req Recommende COMP/SOM SOM MATH	5900   5900	Modern Engineering Research Methodologies Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)  Required credits for Research Option  Required credits for Research Option  Note: COMP 1021 OR COMP 1022P OR ISOM 3230  Introduction to Computing with Java Business Applications Programming  Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus	1 6 7 7 3 3 3 3 3 3 4 4 3 4 4	0					1 0	3	3	6 7			
PMCA Req Recommende COMP/SOM SOM MATH	juirements ad Background (	Modern Engineering Research Methodologies  Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)  Required credits for Research Option  Required credits for Research Option  Note: COMP 1021 OR COMP 1022P OR ISOM 3230  Introduction to Computer Science Introduction to Computing with Java Business Applications Programming  Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II	1 6 7 7 3 3 3 3 3 3 3 3 4 3 4 3	0	0				1 0	3	3	1 6 7			
DMCA Req Recompende COMP/ISOM	5900   5900	Modern Engineering Research Methodologies Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)  Required credits for Research Option  Required credits for Research Option  Note: COMP 1021 OR COMP 1022P OR ISOM 3230  Introduction to Computing with Java Business Applications Programming  Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus	1 6 7 7 3 3 3 3 3 3 4 4 3 4 4	0	0				1 0	3	3	1 6 7			
DMCA Req Recommende COMPISOM SOM WATH WATH WATH WATH	5900   5900	Modern Engineering Research Methodologies  Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)  Required credits for Research Option  Required credits for Research Option  Note: COMP 1021 OR COMP 1022P OR ISOM 3230  Introduction to Computer Science Introduction to Computing with Java Business Applications Programming  Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II	3 3 3 3 3 3 3 4 3	0	0				1 0	3	3	1 6 7			
DMCA Req Recommende COMP/ISOM MATH MATH MATH MATH MATH MATH MATH MAT	1021	Modern Engineering Research Methodologies  Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)  Required credits for Research Option  Required credits for Research Option  Note: COMP 1021 OR COMP 1022P OR ISOM 3230  Introduction to Computer Science Introduction to Computing with Java Business Applications Programming  Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II  Accelerated Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++	3 3 3 3 3 3 4 3 4 4 3	0	0		0		1 0	3	3	0			
DMCA Req Recommende COMP SOM MATH MATH MATH MATH MATH MATH COMP COMP COMP COMP COMP COMP COMP COMP	Sequired cred	Modern Engineering Research Methodologies  Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)  Required credits for Research Option  Required credits for Research Option  Note: COMP 1021 OR COMP 1022P OR ISOM 3230  Introduction to Computer Science Introduction to Computing with Java Business Applications Programming  Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II  Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures	3 3 3 3 3 3 4 3 4 4 5	0	0		0		1 0	3	3	0			
DMCA Req Recommende COMPISOM MATH MATH MATH MATH MATH COMP COMP COMP COMP COMP COMP COMP COMP	Juirements  Sed Background (1021 1022P 3230  1014 1020 1024  2011 2012 2012H  Required cree and Courses and	Modern Engineering Research Methodologies  Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)  Required credits for Research Option  Required credits for Research Option  Note: COMP 1021 OR COMP 1022P OR ISOM 3230  Introduction to Computer Science Introduction to Computing with Java Business Applications Programming  Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II  Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++  Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  Honors Object-Oriented Programming and Data Structures  Bits for DMCA Recommended Background Courses  Electives	3 3 3 3 3 3 4 4 5	(3)	(3)	0	(4)	0	1 0 1	3 3	3 3	0 0 0			
DMCA Req Recommende COMP COMP COMP COMP COMP COMP COMP COMP	Sequired cred	Modern Engineering Research Methodologies  Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)  Required credits for Research Option  Required credits for Research Option  Note: COMP 1021 OR COMP 1022P OR ISOM 3230  Introduction to Computer Science Introduction to Computing with Java Business Applications Programming  Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II  Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures	3 3 3 3 3 3 4 3 4 4 5	(3)	(3)	0	(4)	0	1 0 1	3 3	3 3	0 0			
DMCA Req Recommende COMP/ISOM COMP SOM MATH MATH MATH MATH MATH MATH MATH MAT	Joseph Service	Modern Engineering Research Methodologies Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)  Required credits for Research Option  Required credits for Research Option  Note: COMP 1021 OR COMP 1022P OR ISOM 3230  Introduction to Computer Science Introduction to Computer Science Introduction to Computing with Java Business Applications Programming  Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  Sits for DMCA Recommended Background Courses Electives  Cross-disciplinary Seminar in Digital Media and Creative Arts  Cross-disciplinary Design Thinking Introduction to Digital Media	3 3 3 3 3 4-5 4 4 5 10-12	(3)	(3)	0	(4)	0	1 0 1	3 3	3 3	0 0 0			
DMCA Req Recommende COMPISOM COMPISOM MATH MATH MATH MATH MATH COMP COMP COMP COMP COMP COMP COMP COMP	Section   Sect	Modern Engineering Research Methodologies Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)  Required credits for Research Option  Required credits for Research Option  Required credits for Research Option  Note: COMP 1021 OR COMP 1022P OR ISOM 3230  Introduction to Computer Science Introduction to Computing with Java Business Applications Programming  Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  Ifts for DMCA Recommended Background Courses  Electives  Cross-disciplinary Seminar in Digital Media and Creative Arts  Cross-disciplinary Design Thinking  Introduction to Digital Media  Note: EMIA 4990 OR EMIA 4991	3 3 3 3 3 4 4 5 4 10-12 0 3 3 0-3	(3)	(3)	0	(4)	0	1 0 1	3 3	3 3	0 0 0 0 0 0 3 3			
Research Option ELEC  DMCA Req Recommende COMP/ISOM COMP/ISOM MATH MATH MATH MATH MATH MATH MATH MAT	sements    S900     S	Modern Engineering Research Methodologies Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)  Required credits for Research Option  Required credits for Research Option  Note: COMP 1021 OR COMP 1022P OR ISOM 3230  Introduction to Computer Science Introduction to Computer Science Introduction to Computing with Java Business Applications Programming  Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  Sits for DMCA Recommended Background Courses Electives  Cross-disciplinary Seminar in Digital Media and Creative Arts  Cross-disciplinary Design Thinking Introduction to Digital Media	3 3 3 3 3 4-5 4 4 5 10-12	(3)	(3)	0	(4)	0	1 0 1	3 3	3 3	0 0 0 0 3			
DMCA Req Recommende COMPISOM WATH WATH WATH WATH WATH WATH WATH WATH	Joseph Service	Modern Engineering Research Methodologies Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)  Required credits for Research Option  Required credits for Research Option  Note: COMP 1021 OR COMP 1022P OR ISOM 3230  Introduction to Computer Science Introduction to Computing with Java Business Applications Programming  Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  Sits for DMCA Recommended Background Courses Electives  Cross-disciplinary Seminar in Digital Media and Creative Arts  Cross-disciplinary Design Thinking Introduction to Digital Media  Note: EMIA 4990 OR EMIA 4991  Interdisciplinary Capstone Design Interdisciplinary Capstone Project  Note: Students taking EMIA4990 should take a minimum of 12 credits;	3 3 3 3 3 4-5 4-5 10-12 0 3 3 0-3	(3)	(3)	0	(4)	0	1 0 1	3 3	3 3	0 0 0 0 0 0 3 3	advise students to t		
POMP COMP COMP COMP COMP COMP COMP COMP	Joseph Service	Modern Engineering Research Methodologies Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)  Required credits for Research Option  Required credits for Research Option  Note: COMP 1021 OR COMP 1022P OR ISOM 3230  Introduction to Computer Science Introduction to Computing with Java Business Applications Programming  Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  Electives  Cross-disciplinary Seminar in Digital Media and Creative Arts  Cross-disciplinary Design Thinking Introduction to Digital Media  Note: EMIA 4990 OR EMIA 4991  Interdisciplinary Capstone Design Interdisciplinary Capstone Project  Note: Students taking EMIA4991 should take a minimum of 12 credits; students taking EMIA4991 should take a minimum of 9 credits	3 3 3 3 3 3 4-5 4 4 5 10-12	(3)	(3)	0	(4)	0	1 0 1	3 3	3 3	0 0 0 0 0 0 3 3	ELEC4130 to fulfill		
DMCA Req Recommende COMP SOM MATH MATH MATH MATH MATH MATH MATH MAT	Section   Sect	Modern Engineering Research Methodologies Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)  Required credits for Research Option  Required credits for Research Option  Note: COMP 1021 OR COMP 1022P OR ISOM 3230  Introduction to Computer Science Introduction to Computing with Java Business Applications Programming  Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  Lits for DMCA Recommended Background Courses  Electives  Cross-disciplinary Seminar in Digital Media and Creative Arts  Cross-disciplinary Design Thinking  Introduction to Digital Media  Note: EMIA 4990 OR EMIA 4991  Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Project  Note: Students taking EMIA4991 should take a minimum of 9 credits;  students taking EMIA4991 should take a minimum of 9 credits;	1 1 6 7 7 3 3 3 3 3 3 3 4 4 5 4 4 5 5 10 - 12 12 12 - 15	(3)	(3)	0	(4)	0	0 0 3 3	3 3 3	0 0	0 0 0 0 0 0 3 3 3 0 0 12			
PRESEARCH Option ELEC  DMCA Req Recommende COMP/ISOM COMP COMP COMP COMP COMP COMP COMP CO	puirements    5900     5900     5900     5900     5900     5900     6900     1021     1022     1022     3230     1014     1020     1024     2011     2012     2012     2012     2012     2018     2020     2200     4990     4991     Required Require	Modern Engineering Research Methodologies Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)  Required credits for Research Option  Required credits for Research Option  Note: COMP 1021 OR COMP 1022P OR ISOM 3230  Introduction to Computer Science Introduction to Computing with Java Business Applications Programming  Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  Electives  Cross-disciplinary Seminar in Digital Media and Creative Arts  Cross-disciplinary Design Thinking Introduction to Digital Media  Note: EMIA 4990 OR EMIA 4991  Interdisciplinary Capstone Design Interdisciplinary Capstone Project  Note: Students taking EMIA4991 should take a minimum of 12 credits; students taking EMIA4991 should take a minimum of 9 credits	1 1 6 7 7 3 3 3 3 3 3 3 4 4 5 4 4 5 5 10 - 12 12 12 - 15	(3)	(3)	0	(4)	0	1 0 1	3 3	0	0 0 0 0 0 0 3 3 3 0 0	ELEC4130 to fulfill both ELEC+DMCA		
DMCA Req Recommender COMP/ISOM COMP COMP COMP COMP COMP COMP COMP CO	puirements    5900     5900     5900     5900     5900     5900     6900     1021     1022     1022     3230     1014     1020     1024     2011     2012     2012     2012     2012     2018     2020     2200     4990     4991     Required Require	Modern Engineering Research Methodologies Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)  Required credits for Research Option  Required credits for Research Option  Note: COMP 1021 OR COMP 1022P OR ISOM 3230  Introduction to Computer Science Introduction to Computing with Java Business Applications Programming  Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  Lits for DMCA Recommended Background Courses  Electives  Cross-disciplinary Seminar in Digital Media and Creative Arts  Cross-disciplinary Design Thinking  Introduction to Digital Media  Note: EMIA 4990 OR EMIA 4991  Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Project  Note: Students taking EMIA4991 should take a minimum of 9 credits;  students taking EMIA4991 should take a minimum of 9 credits;	1 1 6 7 7 3 3 3 3 3 3 3 4 4 5 4 4 5 5 10 - 12 12 12 - 15	(3)	(3)	0	(4)	0	0 0 3 3	3 3 3	0 0	0 0 0 0 0 0 3 3 3 0 0 12	ELEC4130 to fulfill both ELEC+DMCA curriculum		
DMCA Req Recommende COMP SOM MATH MATH MATH MATH MATH MATH MATH MAT	puirements    Sepon     Se	Modern Engineering Research Methodologies Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)  Required credits for Research Option  Required credits for Research Option  Note: COMP 1021 OR COMP 1022P OR ISOM 3230  Introduction to Computer Science Introduction to Computing with Java Business Applications Programming  Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  Lits for DMCA Recommended Background Courses  Electives  Cross-disciplinary Seminar in Digital Media and Creative Arts  Cross-disciplinary Design Thinking  Introduction to Digital Media  Note: EMIA 4990 OR EMIA 4991  Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Project  Note: Students taking EMIA4991 should take a minimum of 9 credits; students taking EMIA4991 should take a minimum of 9 credits; students taking EMIA4991 should take a minimum of 9 credits  DMCA Electives	1 1 6 7 7 3 3 3 3 3 3 4 4 5 4 4 5 5 10 - 12 1 2 1 2 1	(3)	(3)	0	(4)	0	0 0 3 3	3 3 3	0 0	0 0 0 0 0 0 3 3 3 0 0 12	ELEC4130 to fulfill both ELEC+DMCA curriculum  The credit load of CORE1 (HMW) will usually be spr		
DMCA Req Recommender COMP/ISOM COMP COMP COMP COMP COMP COMP COMP CO	puirements   5900     5900     5900     5900     5900     5900     600     600     701     702     702     702     703     704     705     706     707     707     708	Modern Engineering Research Methodologies Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)  Required credits for Research Option  Required credits for Research Option  Note: COMP 1021 OR COMP 1022P OR ISOM 3230  Introduction to Computer Science Introduction to Computing with Java Business Applications Programming  Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  Lits for DMCA Recommended Background Courses  Electives  Cross-disciplinary Seminar in Digital Media and Creative Arts  Cross-disciplinary Design Thinking  Introduction to Digital Media  Note: EMIA 4990 OR EMIA 4991  Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Project  Note: Students taking EMIA4991 should take a minimum of 9 credits;  DMCA Electives  UCORE - Others	1 1 6 7 7 3 3 3 3 3 3 3 4 4 5 4 4 5 5 10 - 12 1 2 1 2 4	0 (3)	0 (3)	0	(4)	0	0 0 3 3 6	3 3 3 3	0 0 6 6	0 0 0 0 0 3 3 3 0 12 18	ELEC4130 to fulfill both ELEC+DMCA curriculum  The credit load of CORE1 (HMW) will usually be spr		
DMCA Req Recommender COMP/ISOM COMP COMP COMP COMP COMP COMP COMP CO	puirements    Sepon     Se	Modern Engineering Research Methodologies Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)  Required credits for Research Option  Required credits for Research Option  Note: COMP 1021 OR COMP 1022P OR ISOM 3230  Introduction to Computer Science Introduction to Computing with Java Business Applications Programming  Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  Lits for DMCA Recommended Background Courses Electives  Cross-disciplinary Seminar in Digital Media and Creative Arts  Cross-disciplinary Design Thinking  Introduction to Digital Media  Note: EMIA 4990 OR EMIA 4991  Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Project  Note: Students taking EMIA4991 should take a minimum of 9 credits; students taking EMIA4991 should take a minimum of 9 credits  DMCA Electives  U CORE - Others	1 1 6 7 7 3 3 3 3 3 3 3 4 4 5 4 4 5 5 10 - 12 1 2 4 6 6	0 (3)	0 (3) 0	0 0 0	(4) 0	0	1 0 1 1 0 0 0 3 3 3 6 6 3 3	3 3 3 3	3 3 3 0 0 6 6	0 0 0 0 0 0 12 18 24 6	ELEC4130 to fulfill both ELEC+DMCA curriculum  The credit load of CORE1 (HMW) will usually be spring the following pattern: Fe		
COMP COMP COMP COMP COMP COMP COMP COMP	puirements   5900     5900     5900     5900     5900     5900     600     600     701     702     702     702     703     704     705     706     707     707     708	Modern Engineering Research Methodologies Advanced Elective Courses approved by advisor (at least one UROP course taken prior to the commencement of Final Year Thesis, and one PG-level course)  Required credits for Research Option  Required credits for Research Option  Note: COMP 1021 OR COMP 1022P OR ISOM 3230  Introduction to Computer Science Introduction to Computing with Java Business Applications Programming  Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  Lits for DMCA Recommended Background Courses  Electives  Cross-disciplinary Seminar in Digital Media and Creative Arts  Cross-disciplinary Design Thinking  Introduction to Digital Media  Note: EMIA 4990 OR EMIA 4991  Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Design Interdisciplinary Capstone Project  Note: Students taking EMIA4991 should take a minimum of 9 credits;  DMCA Electives  UCORE - Others	1 1 6 7 7 3 3 3 3 3 3 3 4 4 5 4 4 5 5 10 - 12 1 2 4 6 6	0 (3)	0 (3)	0 0 0	(4)	0	0 0 3 3 6 6 3 3	3 3 3 3	0 0 6 6	0 0 0 0 0 0 12 18 24	ELEC4130 to fulfill both ELEC+DMCA curriculum  The credit load of CORE1 (HMW) will usually be spring the following pattern: Fe		

<sup>\*</sup> Courses offered in winter term

<sup>#</sup> To graduate, students should complete at least 120 credits in approved courses. They may need to take courses additional to the required and elective courses as specified above to meet this minimum credit requirements. 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 for updated graduation requirements. For up-to-date information on course offering and scheduling, students should check it out from respective School and Department.

## The Hong Kong University of Science and Technology School of Engineering An Example on Student's Pathway (as of Fall 2022-23)

<< Declaration of major

chool: epartment: rogram:		School of Engineering											
rogram:		ent											
		BEng in Industrial Engineering and Engineering Management - Extended Major in Digital Media and Creative Arts	+	Backgro □	und: HKE	OSE 4 Co	re + 2 Ele	ec□					
				Profile: N	Normative	9							
	Course Code	Course Title / Courses List											
offering□ Dept□													
course code refix)				<b>*</b>	Year	≾	Year	<b>*</b>	Year	<b>≺</b>	Year		
,			Credit	Year 1 Fa	Year 1 Sprin	Year 2 Fal	Year 2 Sprin	Year 3 Fal	Year 3 Sprin	Year 4	Year 4 Sprin	Sub-tota	
			edits	Fall	oring	Fall	oring	Fall	oring	Fall	oring	otal	Remarks
/lajor Requi													
Engineering Fui omp□	ndamental Co	Urses Note: COMP 1021 OR COMP 1022P OR COMP 2011 OR	3-5	П									
OMP :	□ 1021□	COMP 2012H□ Introduction to Computer Science□	3										
OMP =	1022P□ 2011□	Introduction to Computing with Java□ Programming with C++□	3 4	3								3	
	2012H	Honors Object-Oriented Programming and Data Structures  Note: CHEM 1020 OR PHYS 1112 OR PHYS 1312	5										
HEM□	1020□	General Chemistry I□	3	3								3	
HYS	1112	General Physics I with Calculus□ Honors General Physics I	3										
ANG :	2030	Technical Communication I  Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND	3 4-7			3						3	
	□ 1012□	(MATH 1014 OR MATH 1024)] OR [MATH 1020]□ Calculus IA□	4			i							
IATH =	1013	Calculus IB□ Calculus II□	3	3	3	i						6	
IATH =	1020□	Accelerated Calculus□	4										
IATH	1023 □ 1024	Honors Calculus II Honors Calculus II	3			<u> </u>							
	2011	Introduction to Multivariable Calculus  Matrix Algebra and Applications	3	-		3	3					3	
ENG		Engineering Introduction course (If the students take an introduction	3-4			Ť							
		course included in their major, this course can be counted towards their major requirement.)			3	i						3	
	Regu	ired credits for Engineering Fundamental Courses	22-28	9	6	6	3	0	0	0	0	24	
/lajor Required	Courses and	Electives		— <u> </u>									<del></del>
	1010	Academic and Professional Development II	0			0	0					0	
	1020 1901	Academic and Professional Development II  Industrial Training and Experience	0			<u> </u>		0	0			0	
	2520	Probability for Engineers	3			3						3	
	2540	Statistics for Engineers	3				3					3	
	3230	Prescriptive Analytics Engineering Economics and Accounting	3			<u> </u>	3	3				3	
	3250	Stochastic Models	3					3				3	
	3300	Industrial Data Systems	3				3					3	
	4100 4130	Integrated Production Systems System Simulation	3			<u> </u>			3			3	
DA 🗆		Note: IEDA 4901 OR IEDA 4960 (Students taking the Research□	6						3			3	
DA□ .	□ 4901□	Option must take IEDA 4901)□ Final Year Thesis□	6							3	3	6	
	<u>4960</u> 2010	Industrial Engineering and Engineering Management Final Year Project Engineering Seminar Series	6			0	0	0	0			0	
CON□		Note: ECON 2103 OR ECON 2113	3										
CON	2103□ 2113	Principles of Microeconomics  Microeconomics	3					3				3	
ANG A	4032	Technical Communication II for IEDA and ISDN  Industrial Engineering Electives (Courses from the specified elective list, or	3			<u> </u>			3			3	
		which at least 15 credits should be taken from 1 of the 2 areas and at least 6 credits outside that area.)				İ		3	6	6	6	21	
		,											
Option Requirer		I credits for Major Required Courses and Electives	57	0	0	3	9	12	15	9	9	57	
inancial Engineerin													
	3330	Introduction to Financial Engineering	3					3				3	
EDA/FINA/ISOM/R IBI		Financial Engineering Electives (2 courses from the specified elective list)	6			ļ				3	3	6	
		Required credits for Financial Engineering Option	9	0	0	0	0	3	0	3	3	9	
OMCA Requ													
Recommended	Background (	Note: COMP 1021 OR COMP 1022P OR ISOM 3230	3										
OMP/ISOM	1021	Introduction to Computer Science	3										
	1022P 3230	Introduction to Computing with Java	3										
OMP		Business Applications Programming		(3)								0	
OMP OMP SOM		Business Applications Programming  Note: MATH 1014 OR MATH 1020 OR MATH 1024	3	(3)								0	
OMP OMP SOM :		Note: MATH 1014 OR MATH 1020 OR MATH 1024	3-4	(3)									
OMP OMP SOM IATH IATH IATH	1014 1020	Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II  Accelerated Calculus	3 3-4 3 4	(3)	(3)							0	
OMP OMP SOM	1014	Note: MATH 1014 OR MATH 1020 OR MATH 1024 Calculus II	3-4	(3)	(3)								
OMP OMP SOM IATH IATH IATH	1014 1020	Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II  Accelerated Calculus	3 3-4 3 4	(3)	(3)								
OMP OMP SOM IATH IATH IATH IATH OMP	1014 1020 1024	Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++	3 3-4 3 4 3	(3)	(3)	3							
OMP OMP SOM IATH IATH IATH IATH OMP OMP	1014 1020 1024	Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H	3 3-4 3 4 3 4-5 4	(3)	(3)	3		_				0	
OMP OMP SOM  ATH  ATH IATH IATH IATH OMP OMP OMP	1014 1020 1024 2011 2012 2012H	Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures	3 3-4 3 4-5 4-5 5	0	(3)	3	0	0	0	0	0	0	
OMP OMP IATH IATH IATH OMP OMP OMP OMP OMP	1014 1020 1024 2011 2012 2012H Required crec	Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  its for DMCA Recommended Background Courses Electives	3 3-4 3 4-5 4 4 5 10-12			3	0	0	0	0	0	3	
OMP OMP IATH IATH IATH OMP OMP OMP OMP OMP OMP OMP OMP OMP OMP	1014 1020 1024 2011 2012 2012H Required cred Courses and 2010B	Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  its for DMCA Recommended Background Courses Electives  Cross-disciplinary Seminar in Digital Media and Creative Arts	3 3-4 3 4 3 4-5 4 5				-	0	0	0	0	3	
OMP OMP IATH IATH IATH OMP OMP OMP OMP OMP OMP OMP OMP OMP OMP	1014 1020 1024 2011 2012 2012H Required crec	Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  its for DMCA Recommended Background Courses Electives	3 3-4 3 4-5 4 4 5 10-12			3	0	0	0	0	0	3	
OMP OMP IATH IATH IATH OMP OMP OMP OMP OMP OMP OMP OMP OMP OMP	1014 1020 1024 2011 2012 2012H Required cred Courses and 2010B 2020	Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  iits for DMCA Recommended Background Courses Electives  Cross-disciplinary Seminar in Digital Media and Creative Arts Cross-disciplinary Design Thinking	3 3-4 3 4-5 4-5 10-12			3	-		0	0	0	3 3 0 3	
OMP OMP IATH IATH IATH IATH OMP OMP OMP OMP OMP OMP OMP IMIA IMIA IMIA IMIA IMIA IMIA IMIA IM	1014 1020 1024 2011 2012 2012H Required cred Courses and 2010B 2020 2200	Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  its for DMCA Recommended Background Courses Electives  Cross-disciplinary Seminar in Digital Media and Creative Arts Cross-disciplinary Design Thinking Introduction to Digital Media Note: EMIA 4990 OR EMIA 4991 Interdisciplinary Capstone Design	3 3-4 3 4-3 4-5 4 4-5 5 10-12			3	-		0	0	0	3 3 0 3	
OMP OMP IATH IATH IATH IATH OMP OMP OMP OMP OMP OMP IMIA IMIA IMIA IMIA IMIA IMIA IMIA IM	1014 1020 1024 2011 2012 2012H Required cred Courses and 2010B 2020	Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  Iits for DMCA Recommended Background Courses Electives  Cross-disciplinary Seminar in Digital Media and Creative Arts  Cross-disciplinary Design Thinking Introduction to Digital Media  Note: EMIA 4990 OR EMIA 4991 Interdisciplinary Capstone Design Interdisciplinary Capstone Project	3 3-4 3 4-5 4-5 10-12			3	-		0			0 3 3 3 3	
OMP OMP IATH IATH IATH IATH OMP OMP OMP OMP OMP OMP OMP IMIA IMIA IMIA IMIA IMIA IMIA IMIA IM	1014 1020 1024 2011 2012 2012H Required cred Courses and 2010B 2020 2200	Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  its for DMCA Recommended Background Courses Electives  Cross-disciplinary Seminar in Digital Media and Creative Arts Cross-disciplinary Design Thinking Introduction to Digital Media Note: EMIA 4990 OR EMIA 4991 Interdisciplinary Capstone Design	3 3-4 3 4-3 4-5 4 4-5 5 10-12			3	-		0		0	0 3 3 3 3	
OMP OMP OMP OMP OMP OMP OMP OMP OMP OMP	1014 1020 1024 2011 2012 2012H Required cred Courses and 2010B 2020 2200	Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  its for DMCA Recommended Background Courses  Electives  Cross-disciplinary Seminar in Digital Media and Creative Arts  Cross-disciplinary Design Thinking Introduction to Digital Media  Note: EMIA 4990 OR EMIA 4991 Interdisciplinary Capstone Design Interdisciplinary Capstone Project  Note: Students taking EMIA4990 should take a minimum of 12 credits;	3 3-4 3 4-3 4-5 4 4-5 5 10-12			3	-		0			0 3 3 3 3	
OMP OMP OMP OMP OMP OMP OMP OMP OMP OMP	1014 1020 1024 2011 2012 2012H Required crec Courses and 2010B 2020 2200 4990 4991	Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  its for DMCA Recommended Background Courses Electives  Cross-disciplinary Seminar in Digital Media and Creative Arts Cross-disciplinary Design Thinking Introduction to Digital Media Note: EMIA 4990 OR EMIA 4991 Interdisciplinary Capstone Project Note: Students taking EMIA4990 should take a minimum of 12 credits; students taking EMIA4991 should take a minimum of 9 credits	3 3-4 3 4-3 4-5 4 4 5 10-12 0 3 3 0-3 0 3			3	-		3		0	0 3 3 3 3	
OMP OMP OMP OMP OMP OMP OMP OMP OMP OMP	1014 1020 1024 2011 2012 2012H Required cred 2010B 2020 2200 2200 4990 4991	Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  iits for DMCA Recommended Background Courses Electives  Cross-disciplinary Seminar in Digital Media and Creative Arts  Cross-disciplinary Design Thinking Introduction to Digital Media  Note: EMIA 4990 OR EMIA 4991 Interdisciplinary Capstone Design Interdisciplinary Capstone Project  Note: Students taking EMIA4990 should take a minimum of 12 credits; students taking EMIA4991 should take a minimum of 9 credits  DMCA Electives  Credits for DMCA Required Courses and Electives	3 3-4 3 4-5 4 4-5 5 10-12 0 3 0-3 0-3 12-15	0	0	0	3	3	3	0	0	0 3 3 0 12	
OMP OMP OMP OMP OMP OMP OMP OMP OMP OMP	1014 1020 1024 2011 2012 2012H Required crec 2010B 2020 2200 4990 4991	Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  iits for DMCA Recommended Background Courses Electives  Cross-disciplinary Seminar in Digital Media and Creative Arts Cross-disciplinary Design Thinking Introduction to Digital Media Note: EMIA 4990 OR EMIA 4991  Interdisciplinary Capstone Design Interdisciplinary Capstone Project Note: Students taking EMIA4990 should take a minimum of 12 credits; students taking EMIA4991 should take a minimum of 9 credits  DMCA Electives	3 3-4 3 4-3 4-5 4 4 5 10-12 0 3 3 0-3 0 3	0	0	0	3	3	3	0 3 3	6	0 3 3 0 3 3 0 12 18	
OMP OMP OMP OMP OMP OMP OMP OMP OMP OMP	1014 1020 1024 2011 2012 2012H Required cred 2010B 2020 2200 2200 4990 4991	Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  iits for DMCA Recommended Background Courses Electives  Cross-disciplinary Seminar in Digital Media and Creative Arts  Cross-disciplinary Design Thinking Introduction to Digital Media  Note: EMIA 4990 OR EMIA 4991 Interdisciplinary Capstone Design Interdisciplinary Capstone Project  Note: Students taking EMIA4990 should take a minimum of 12 credits; students taking EMIA4991 should take a minimum of 9 credits  DMCA Electives  Credits for DMCA Required Courses and Electives	3 3-4 3 4-5 4 4-5 5 10-12 0 3 0-3 0-3 12-15	0	0	0	3	3	3	0	0	0 3 3 0 12	(HMW) will usually be spre in the following pattern: Fa
OMP OMP OMP OMP OMP OMP OMP OMP OMP OMP	1014 1020 1024 2011 2012 2012H Required cred 2010B 2020 2200 2200 4990 4991	Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  iits for DMCA Recommended Background Courses Electives  Cross-disciplinary Seminar in Digital Media and Creative Arts  Cross-disciplinary Design Thinking Introduction to Digital Media Note: EMIA 4990 OR EMIA 4991  Interdisciplinary Capstone Design Interdisciplinary Capstone Project  Note: Students taking EMIA4990 should take a minimum of 12 credits; students taking EMIA4991 should take a minimum of 9 credits  DMCA Electives  Credits for DMCA Required Courses and Electives  U CORE - Others	3 3-4 3 4-5 4 4 5 10-12 0 3 3 0-3 0 3 12-15	0	0	0	3	3 3	3 3	3 3	0 6 6	0 3 3 3 0 12 18 24 6	The credit load of CORE1S (HMW) will usually be spre in the following pattern: Fa 1; Spring: 2
OMP OMP OMP OMP OMP OMP OMP OMP OMP OMP	2011 2012 2012 2012 2012H Required cred Courses and 2010B 2020 2220 4990 4991 Required CORE	Note: MATH 1014 OR MATH 1020 OR MATH 1024  Calculus II Accelerated Calculus Honors Calculus II  Note: COMP 2011 OR COMP 2012 OR COMP 2012H  Programming with C++ Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures  iits for DMCA Recommended Background Courses Electives  Cross-disciplinary Seminar in Digital Media and Creative Arts  Cross-disciplinary Design Thinking Introduction to Digital Media  Note: EMIA 4990 OR EMIA 4991  Interdisciplinary Capstone Design Interdisciplinary Capstone Project  Note: Students taking EMIA4990 should take a minimum of 12 credits; students taking EMIA4991 should take a minimum of 9 credits  DMCA Electives  Credits for DMCA Required Courses and Electives  U CORE - Others	3 3-4 3 4-5 4 4 5 10-12 0 3 3 0-3 0 3 12-15	0	0	0	3	3 3 3	3 3 0	0 3 3	6	0 3 3 3 0 12 18 24	(HMW) will usually be spre in the following pattern: Fa

<sup>&</sup>lt;< Declaration of major #To graduate, students should complete at least 120 credits in approved courses. They may need to take courses additional to the required and elective courses as specified above to meet this minimum credit requirement.

<sup>&</sup>gt;> 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 for updated graduation requirements. For up-to-date information on course offering and scheduling, students should check it out from respective School and Department.

An Example on Student's Pathway (as of Fall 2022-23)

#### << Declaration of major

Course Department:  Course Department Dept Course code orefix)  Major Requirements	Course Code	Department of Mechanical and Aerospace Engineering BEng in Mechanical Engineering + Extended Major in Digital and Creative Arts  Course Title / Courses List	Media		ound: HK		ore + 2 E	,	1/2x PH	,		ing	
Course  Differing  Dept  course code  orefix)  Major Requi	Course Code	and Creative Arts			Normativ	e (Stude	nts to ara	dusto in		· · · · · · · · · · · · · · · · · · ·		inc	
Offering□ Dept□ course code orefix)  Major Requi Engineering Fu	Course Code	Course Title / Courses List											
Offering□ Dept□ course code orefix)  Major Requi Engineering Fu	Course Code	Course Title / Courses List			Option	5. <b>2.</b> udo	nto to gra	ddato iii	DENG WIL	orr with	Liigiiiooi	"'9	
Offering□ Dept□ course code orefix)  Major Requi Engineering Fu	Course Code	Course Title / Courses List					1		ı	1	1		
course code orefix) Major Requi Engineering Fu						i I							
<b>Major Requ</b> Engineering Fu					¥e	i I	¥		¥e		¥		
Engineering Fu				Year 1	$\overline{}$	Year 2	ar 2	Year 3	Year 3 Sprin	Year 4	Year 4 Sprin	Sut	
Engineering Fu			Credits	1 Fa	Spring	. 2 Fa	Year 2 Spring	·3 Fa	Sprin	·4 Fa	Sprin	Sub-tota	Remarks
Engineering Fu	irements		S	=	g	_=	g	_=	g	_=	g	<u> </u>	Remarks
OMP	undamental Co												
]		Note: COMP 1021 OR COMP 1022P OR COMP 2011 OR□ COMP 2012H□	3-5			i							
COMP	1021□ 1022P□	Introduction to Computer Science□ Introduction to Computing with Java□	3	3		i						3	
COMP	2011□ 2012H	Programming with C++□ Honors Object-Oriented Programming and Data Structures	4 5			<u>i</u>							
ANG MATH ::	2030	Technical Communication I  Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND□	3 4-7			3						3	
]	1012	(MATH 1014 OR MATH 1024)] OR [MATH 1020]  Calculus IA	4			i							
MATH□	1013 1014	Calculus IB□ Calculus II□	3	3	3	i						6	
MATH□	1020□	Accelerated Calculus□ Honors Calculus □	4 3			i							
MATH	1023 D 1024	Honors Calculus II	3			<u>i                                     </u>							
MATH□	2011	Introduction to Multivariable Calculus  Note: MATH 2111 OR MATH 2350 OR MATH 2351	3			3						3	
MATH□	2111□ 2350□	Matrix Algebra and Applications□ Applied Linear Algebra and Differential Equations□	3			i I	3					3	
MATH PHYS	2351	Introduction to Differential Equations  Note: PHYS 1112 OR PHYS 1312	3		-	<del> </del>							
	1112□ 1312	Rober - Fitz Ok Fitts 1312 □ General Physics I with Calculus □ Honors General Physics I	3		3	i						3	
CHEM/LIFS/PHYS		Science 1000-level course (1 course from the specified course list)	3-4		3	i						3	
	Regi	│ uired credits for Engineering Fundamental Courses	22-28	6	9	6	3	0	0	0	0	24	
, ,	d Courses and	Electives											1
MECH MECH	1906 1990	Mechanical Engineering for Modern Life Industrial Training	3	3		Ct	FO.43					3	
MECH	2020	Statics and Dynamics	3			0* 3	[0^]					3	
MECH	2040	Solid Mechanics I	3				3					3	
MECH MECH	2210 2310	Fluid Mechanics Thermodynamics	3			<u>.</u>	3					3	
MECH	2410	Engineering Materials I	3			3	3					3	
MECH	2520	Design and Manufacturing I	3			i	3					3	
MECH =	3030	Mechanisms of Machinery  Note: MECH 3300 OR MECH 3420 OR MECH 3520 OR□	3					3				3	
]		MECH 3710□	3			i I							
MECH =	3300□ 3420□	Energy Conversion□ Engineering Materials II□	3			i I		3				3	
MECH□ MECH	3520□ 3710	Design and Manufacturing II□ Manufacturing Processes and Systems	3 3			<u> </u>							
MECH MECH	3310 3610	Heat Transfer  Control Principles	3			<u> </u>		3				3	
MECH	3630	Electrical Technology	3			<del></del>		3	3			3	
MECH	3830	Laboratory	3			;—————————————————————————————————————			3			3	
MECH MECH	3907 4900	Mechatronic Design and Prototyping  Final Year Design Project	3 6			<u> </u>			3	3	3	6	
ELEC	2420	Basic Electronics	3			3				3	3	3	
NGG	2010	Engineering Seminar Series	0			0	0	0	0			0	
ANG	4034	Technical Communication II for Mechanical and Aerospace Engineering	3			i I			3			3	
		d credits for Major Required Courses and Electives	54	3	0	9	12	12	12	3	3	54	
Option Require Engineering Design													
MECH Design	,, option	MECH Electives in Engineering Design (3 courses from the specified	9			<u> </u>							
		elective list. Courses taken as Major Required Courses or Elective Courses of other MECH Options may not be counted towards this elective				i				3	6	9	
		requirement.)  Required credits for Engineering Design Option	9	0	0	0	0	0	0	3	6	9	
DMCA Requ	uirements	required creates for Engineering Besign Option	·   -					Ů.	Ů		J	J	
Recommended	d Background												
COMP/ISOM		Note: COMP 1021 OR COMP 1022P OR ISOM 3230	3										
COMP COMP	1021 1022P	Introduction to Computer Science Introduction to Computing with Java	3 3	(3)		i						0	
SOM	3230	Business Applications Programming	3			i							
MATH		Note: MATH 1014 OR MATH 1020 OR MATH 1024	3-4			i							
MATH MATH	1014 1020	Calculus II Accelerated Calculus	3 4		(3)	i						0	
MATH	1024	Honors Calculus II	3			i							
COMP		Note: COMP 2011 OR COMP 2012 OR COMP 2012H	4-5			<del></del>							
COMP	2011	Programming with C++	4										
COMP	2012 2012H	Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures	4 5			4						4	
	Required cred d Courses and	dits for DMCA Recommended Background Courses Electives	10-12	0	0	4	0	0	0	0	0	4	
EMIA	2010B	Cross-disciplinary Seminar in Digital Media and Creative Arts	0			0						0	
MIA	2020	Cross-disciplinary Design Thinking	3				3					3	
MIA	2200	Introduction to Digital Media  Note: EMIA 4990 OR EMIA 4991	3 0-3					3				3	
EMIA	4990	Interdisciplinary Capstone Design	0-3								0	0	
MIA	4991	Interdisciplinary Capstone Project	3										
SBM/SENG/ SSCI/IPO		Note: Students taking EMIA4990 should take a minimum of 12 credits; students taking EMIA4991 should take a minimum of 9 credits	12-15										
		DMCA Electives						3	3	3	3	12	
	De mi												
University C		d credits for DMCA Required Courses and Electives	21	0	0	0	3	6	3	3	3	18	
	C3 - C12	U CORE - Others	24										The credit load of CORE1
				1	2	:		3	3	9	6	24	(HMW) will usually be spre in the following pattern: Fa
						! !							1; Spring: 2
ORE	C1 & C2	U CORE - English Language	6	3	3 5		0	3	3	^		6	
		Sub-total for University CORE	. 30	4	5	0 Ten	m load (ex			9	6	30	ļ
				13	14	19	18	21	18	18	18		
		Sub-total for University CORE	30			Ter	m load (ex	cl. free cre	edits) 18			30	ļ

#### Notes:

- [] denotes the course is also offered in other terms as indicated and students may take the course in one of these terms subject to advice by the program office.
- \* Courses offered in winter term
- ^ Courses offered in summer term
- # To graduate, students should complete at least 120 credits in approved courses. They may need to take courses additional to the required and elective courses as specified above to meet this minimum credit requirement

<< Declaration of major

>> 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 for updated graduation requirements. For up-to-date information on course offering and scheduling, students should check it out from respective School and Department.