

**(Study Scheme – English)**

<b>Title of Double Major Programme</b>	
Bachelor of Engineering in Financial Technology and Integrated BBA Programme Double Major Programme	
<b>Study Scheme</b>	
<b>Applicable to students admitted in 2022-23</b>	
<b>Major Programme Requirement</b>	
Students are required to complete a minimum of 90 units of courses as follows:	
	Units
1. Faculty Package: ENGG1120/ESTR1005, ENGG1130/ESTR1006, MGNT1020	9
2. Required Courses:	
(a) <u>1<sup>st</sup> Major: Financial Technology</u>	40
i) Foundation Courses: CSCI1120/1130/ESTR1100/1102, ENGG2440/ESTR2004, ENGG2760/ESTR2018, ENGG2780/ESTR2020, MATH1510[a]	
ii) Required Courses: CSCI2100#/ESTR2102, CSCI4130#/IERG4130#/ESTR4306, DSME1030#, FINA2010#, FTEC2101/ESTR2520, FTEC3001[b], 3002, SEEM3550#/ESTR3506, SEEM3590#[b]/ ESTR3509[b]	
(b) <u>2<sup>nd</sup> Major: Integrated BBA Programme</u>	26
ACCT2111#, 2121, 2151#, DSME1040#, 2030#, FTEC4003[b], IBBA3040#, MGNT2611, 4010, MKTG2010#	
3. Elective Courses:	
(a) <u>1<sup>st</sup> Major: Financial Technology</u>	3
3 units from the following: FTEC4001, 4002, FTEC4004/IERG4004#, FTEC4005, 4006, 4007	
(b) <u>2<sup>nd</sup> Major: Integrated BBA Programme[b]</u>	6
i) 3 units of DSME/FINA/MGNT/MKTG courses at 2000 or above level, excluding DSME2011, 2051, 4220, FINA3080, 4110, MGNT2511, 2512 and courses taken for fulfilment of requirement (ii) below	
ii) One course from the following: FINA3020, 3030, 3070, 3210, 4010	
4. Research Component/ Capstone Course/ Final Year Project[c]: FTEC4998, 4999	6
<b>Total:</b>	<b>90</b>

In addition to fulfilling the above Major Programme Requirement, students may also challenge themselves by taking the following stream offered by the Faculty of Engineering:

**Engineering Leadership, Innovation, Technology and Entrepreneurship (ELITE) Stream[d]**

Elective Courses:

15 units of courses[e] :

- i) 12 units of ESTR courses of which at most 6 units of courses at 1000 or 2000 level and at least 6 units of courses at 3000 or 4000 level[f]
- ii) 3 units of BMEG/CENG/CSCI/ELEG/ENGG/IERG/MAEG/SEEM courses at 5000 level[g]

Explanatory Notes:

1. Students who have fulfilled the Major Programme Requirements of their respective Engineering programmes (or equivalent courses as approved by the Sub-Committee on Education Technologies --pending) will be eligible to apply for exemption of 1 unit of University Core IT Requirement.

Students are required to apply for the exemption. When exemption from a particular course is recognized, students can only be exempted from the course but not the units. Please follow the application procedures as announced by the IT Foundation Course Office at <https://engg1000.cse.cuhk.edu.hk>

2. ENGG, ESTR and FTEC courses at 2000 and above level as well as those labeled as # will be included in the calculation of Major GPA for honours classification, excluding courses in the Faculty Package and Foundation Courses.
3. Students are not allowed to declare Minor in Business.
4. Students should have gone through a selection process in order to be admitted to this Double Major Programme.

- [a] i) Non-JUPAS admittees and JUPAS admittees with HKDSE Mathematics Extended Modules I or II are required to attend a Mathematics Placement Test of the Faculty of Engineering. Students who fail or are absent from the Placement Test will be required to take MATH1020 in the same term when they take MATH1510.

ii) JUPAS admittees without HKDSE Mathematics Extended Modules I or II are required to take MATH1020 concurrently with MATH1510.

iii) Students who fail MATH1510 in Term 1 will have to retake the course in Term 2. The pre-assigned course, ENGG1130, will also be dropped.

- [b] Courses taken to fulfill the requirements of items 2(a)(ii), 2(b) and 3(b) will be used to fulfill the requirement of General Business Concentration of the Integrated BBA Programme.

- [c] Students who have declared to specialize in the ELITE Stream will be required to complete 6 units of ESTR4998 and 4999 to substitute for FTEC4998 and 4999. These 6 units cannot be used to fulfill the Elective Courses requirement of the ELITE Stream.

- [d] Details of the entrance and coursework requirements, and declaration procedures for the ELITE Stream can be found at the ELITE website ([www.erg.cuhk.edu.hk/elite](http://www.erg.cuhk.edu.hk/elite)).

Non-ELITE Engineering students may be allowed to take ESTR courses. Students are required to seek approval from their respective Major Programmes for using ESTR courses taken to fulfill the Major Programme Requirement. Details are available at the ELITE website.

- [e] Students can use up to 9 units of courses which have been taken to fulfill the requirements of items 1 to 3 above to fulfill the elective requirements of the ELITE Stream. Item 4 Research Component/ Capstone Course/ Final Year Project will not be included in these 9 units. A full list of ESTR courses is available at the ELITE website.
- [f] Students can use BMEG/CENG/CSCI/ELEG/ENGG/IERG/MAEG/SEEM courses at 5000 level to substitute for ESTR courses at 3000 or 4000 level, subject to the approval of the Stream Director and the Associate Dean (Education) of the Faculty of Engineering.
- [g] The requirement of at least 3 units of Engineering courses at 5000 level is a requirement for the ELITE Stream only. It should not be interpreted as a requirement of the Double Major Programme.

(Recommended Course Pattern - English)

Recommended Course Pattern

1. A student shall take at least 9 units and no more than 18 units of courses in any term within the normative study period. A student shall take no more than 6 units of courses in each summer session, and no student shall be allowed to take more than 39 units in an academic year.
2. Sufficient units should be allowed in each term for students to fulfill the University Core Requirements, which include: (i) 6 units of Chinese; (ii) 9 units of English; (iii) 1 unit of IT; (iv) 21 units of General Education; and (v) 2 units of Physical Education.
3. Programmes with different streams/concentrations are required to provide the recommended pattern for each stream/concentration.

	<b>Bachelor of Engineering in Financial Technology and Integrated BBA Programme Double Major Programme Recommended Course Pattern</b>	<b>Units</b>
<b>First Year of Attendance</b>	1 <sup>st</sup> term Faculty Package: MGNT1020 Financial Technology Major Required: DSME1030, MATH1510 Major Elective(s):	3 6
	2 <sup>nd</sup> term Faculty Package: ENGG1120/ESTR1005, ENGG1130/ESTR1006 Integrated BBA Major Required: DSME1040, IBBA3040 Major Elective(s):	6 4
<b>Second Year of Attendance</b>	1 <sup>st</sup> term Financial Technology Major Required: CSCI1120/1130/ESTR1100/1102, ENGG2440/ESTR2004, ENGG2760/ESTR2018 Integrated BBA Major Required: ACCT2111 Major Elective(s):	8 3
	2 <sup>nd</sup> term Financial Technology Major Required: CSCI2100/ESTR2102, ENGG2780/ESTR2020, FINA2010, FTEC2101/ESTR2520 Integrated BBA Major Required: ACCT2121 Major Elective(s):	11 3
	1 <sup>st</sup> term Financial Technology Major Required: CSCI4130/IERG4130/ESTR4306, FTEC3001/3002, SEEM3590/ESTR3509 Integrated BBA Major Required: ACCT2151, DSME2030 Major Elective(s):	9 5
<b>Third Year of Attendance</b>	2 <sup>nd</sup> term Financial Technology Major Required: FTEC3001/3002, SEEM3550/ESTR3506 Integrated BBA Major Required: MKTG2010 Financial Technology Major Elective(s): 1 course	6 3 3

<b>Fourth Year of Attendance</b>	1 <sup>st</sup> term	
	Major Required: FTEC4998	3
	Integrated BBA Major Required: MGNT2611	2
	Integrated BBA Major Elective(s): 1 course	3
	2 <sup>nd</sup> term	
	Major Required: FTEC4999	3
Integrated BBA Major Required: FTEC4003, MGNT4010	6	
Integrated BBA Major Elective(s): 1 course	3	
<b>Total (including Faculty Package):</b>		<b>90</b>

## Course List

Course Code	Course Title (English)	Course Title (Chinese)	Unit(s)
ACCT2111	Introductory Financial Accounting	財務會計導論	3
ACCT2121	Introductory Management Accounting	管理會計導論	3
ACCT2151	Legal Environment for Business	商業法律環境	2
CSCI1120	Introduction to Computing Using C++	計算導論 (C++語言)	3
CSCI1130	Introduction to Computing Using Java	計算導論 (JAVA 語言)	3
CSCI2100	Data Structures	數據結構	3
CSCI4130	Introduction to Cyber Security	網際安全概論	3
DSME1030	Economics for Business Studies I	企業經濟學 (一)	3
DSME1040	Economics for Business Studies II	企業經濟學 (二)	3
DSME2011	Statistical Analysis for Business Decisions	企業決策之統計分析	4
DSME2030	Operations Management	營運管理	3
DSME2051	Business Information Systems	商業資訊系統	3
DSME4220	Data Mining for Business Intelligence	資料探勘與商業智能	3
ENGG1120	Linear Algebra for Engineers	線性代數及其工程應用	3
ENGG1130	Multivariable Calculus for Engineers	多元微積分及其工程應用	3
ENGG2440	Discrete Mathematics for Engineers	離散數學的工程應用	3
ENGG2760	Probability for Engineers	概率及其工程應用	2
ENGG2780	Statistics for Engineers	統計及其工程應用	2
ESTR1005	Linear Algebra for Engineers	線性代數及其工程應用	3
ESTR1006	Multivariable Calculus for Engineers	多元微積分及其工程應用	3
ESTR1100	Introduction to Computing Using C++	計算導論 (C++語言)	3
ESTR1102	Introduction to Computing Using Java	計算導論 (JAVA 語言)	3
ESTR2004	Discrete Mathematics for Engineers	離散數學的工程應用	3
ESTR2018	Probability for Engineers	概率及其工程應用	2
ESTR2020	Statistics for Engineers	統計及其工程應用	2
ESTR2102	Data Structures	數據結構	3
ESTR2520	Optimization Methods	優化方法	3
ESTR3506	Fundamentals in Information Systems	訊息系統工程概念	3
ESTR3509	Investment Science	投資科學	3
ESTR4306	Introduction to Cyber Security	網際安全概論	3
FINA2010	Financial Management	財務管理	3
FINA3020	International Finance	國際金融	3
FINA3030	Management of Financial Institutions	金融機構管理	3

FINA3070	Corporate Finance: Theory and Practice	公司財務：理論與實務	3
FINA3210	Risk Management and Insurance	風險管理與保險	3
FINA4010	Security Analysis	證券分析	3
FTEC2101	Optimization Methods	優化方法	3
FTEC3001	Financial Innovation and Structured Products	金融創新和結構性產品	3
FTEC3002	Introduction to Financial Infrastructures	金融基建概論	3
FTEC4001	Advanced Database Technologies	高級數據庫技術	3
FTEC4002	Behavioral Analytics	定量行為分析	3
FTEC4003	Data Mining for FinTech	面向金融科技的數據挖掘	3
FTEC4004	E-payment Systems and Cryptocurrency Technologies	電子支付系統及電子貨幣科技	3
FTEC4005	Financial Informatics	金融信息學	3
FTEC4006	Internet Finance	互聯網金融	3
FTEC4007	Introduction to Blockchain and Distributed Ledger Technology	區塊鏈及分布式分類帳技術介紹	3
FTEC4998	Final Year Project I	畢業專題研究（一）	3
FTEC4999	Final Year Project II	畢業專題研究（二）	3
IBBA3040	Business Lecture Series	商業管理講座系列	1
IERG4004	E-payment Systems and Cryptocurrency Technologies	電子支付系統及電子貨幣科技	3
IERG4130	Introduction to Cyber Security	網際安全概論	3
MATH1510	Calculus for Engineers	微積分的工程應用	3
MGNT1020	Management	管理學	3
MGNT2611	Business Sustainability	商業永續發展	2
MGNT4010	Strategic Management	戰略管理	3
MKTG2010	Marketing Management	市場管理	3
SEEM3550	Fundamentals in Information Systems	訊息系統工程概念	3
SEEM3590	Investment Science	投資科學	3