

Curriculum for BEng in Chemical Engineering and BBA in General Business Management (CEGBM)

Major Program Requirements

Core courses

	CENG 101	Chemical Process Principles	[3-1-0:3]
	CENG 103	Products and Processes	[3-1-0:3]
	CENG 131	Chemical Engineering Thermodynamics	[3-1-0:3]
	CENG 151	Introduction to Materials Science and Selection	[3-1-0:3]
	CENG 202	Process Design and Integration	[2-0-2:3]
	CENG 211	Reaction and Reactor Engineering	[3-1-0:3]
	CENG 221	Separation Processes	[3-1-0:3]
	CENG 231	Process Fluid Mechanics	[3-1-0:3]
	CENG 241	Heat and Mass Transfer	[3-1-0:3]
	CENG 297	Chemical Engineering Laboratory I	[0-1-4:2]
	CENG 298	Chemical Engineering Laboratory II	[0-1-8:4]
	CENG 302	Process Dynamics and Control	[3-0-1:3]
	CENG 303	Plant Design and Economics	[3-0-0:3]
	CENG 397	Chemical Engineering Project I	[0-1-6:3]
	CENG 399	Chemical Engineering Project II	[0-1-6:3]
	ACCT 101	Introduction to Accounting for Business Majors	[4-0-0:4]
	CHEM 101	Fundamentals of Organic Chemistry	[3-0-0:3]
	CHEM 102	Physical Chemistry: Fundamentals and Applications	[3-0-0:3]
(1)	ECON 110	Introductory Microeconomics	[3-1-0:4]
	or ECON 111	Microeconomics	[3-1-0:4]
	or ECON 191	Honors Microeconomics	[3-1-0:4]
	FINA 111	Financial Management	[3-1-0:3]
	IELM 311	Engineers in Society	[1-0-0:1]
	ISOM 111	Business Statistics	[3-1-0:4]
	ISOM 161	Operations Management	[3-0-0:3]
	MARK 112	Marketing Management	[3-0-0:3]
(2)	MATH 021	Concise Calculus	[3-1-0:4]
	MATH 106	Multivariable Calculus and Basic Probability	[3-1-0:3]
	MATH 113	Introduction to Linear Algebra	[2-1-0:2]
	MATH 150	Introduction to Ordinary Differential Equations	[2-1-0:2]
	MATH 230	Introduction to Numerical Methods	[2-1-0:2]
	MGTO 121	Organizational Behavior	[3-1-0:3]

Required courses

(3)	CENG 098	Industrial Training	[0 credit]
	CENG 109	Biotechnology and Its Business Opportunities	[3-0-0:3]
	or CENG 152	Introduction to Environmental Engineering	[3-1-0:3]
	COMP 102	Computer and Programming Fundamentals I	[3-0-2:3]
	IELM 120	Engineering Management	[3-1-0:3]
(4)	LANG 111	Chinese Business Communication I	[0-3-0:3]
	MGTO 222	Business, Society and the Individual	[1-0-0:1]

Elective courses

	Elective types		Minimum no. of courses	Minimum total credits
(5)	CENG	Chemical Engineering Elective	4	12
(6)	SB&M	Business and Management Elective	6	20

General Education Requirements

Electives must be selected from amongst those general education courses that are listed under the section “Designated General Education Courses for Undergraduate Students”.

	Elective types		Minimum no. of courses	Minimum total credits
(7)	GEE(H&SS)	Humanities and Social Science General Education Elective	4	12

Required Courses in English Communication

LABU	101	Business Case Analyses	[0-3-0:4]
LANG	201	Business Communication	[0-3-0:3]
LANG	307	Communication for International Management	[0-2-0:2]

Other Requirements

	CENG	001	Academic and Professional Development I	[0-1-0:0]
	CENG	002	Academic and Professional Development II	[0-1-0:0]
(8)	HLTH	001	Healthy Life Style	[0 credit]
	TEMG	001	Technology and Management Professional Activities	[0 credit]

Notes:

- (1) Students entering with AL Economics take ECON 111; however, those with grade B or above in HKAL Economics will take ECON 191. All other students without AL Economics background, including those entering with AL Business and Economics, take ECON 110.
- (2) Students who have grade E or better in AL Pure Mathematics or in AL Applied Mathematics are not required to take MATH 021.
- (3) Students are required to complete and pass a prescribed training program within the normal length of study. Details of the program, its requirements and schedule will be announced on the website of the Industrial Training Center (<http://www.ust.hk/itc>) or website of the department in the first year Fall Semester. Training normally takes place in the Winter and Summer Sessions starting from the first year of study. For recording the overall training results, students are normally registered for the course in their last semester of study.
- (4) Students cannot replace this course by LANG 014/015 for graduation purposes. Students recruited from Mainland China will replace this course by a free elective. For international students who are assessed as having inadequate Chinese background to take LANG 111, they will replace this course by LANG 113.
- (5) Chemical Engineering Electives are to be chosen from CENG courses at 300-level or above. ENGG 351 and ENGG 395 can be used to count toward the CENG elective requirement.
- (6) ISOM 101 cannot be used to count toward the SB&M elective requirement. Of these 20 credits, at least 6 credits must be at 300-level or above and at least 6 credits must be at 200-level or above.
- (7) Of these courses, at least one course in Humanities and one in Social Science are required. SOSC 111 is a recommended elective.

(8) Students are required to take and pass this course in their first year of study. Details of the course and its requirements are announced on the course website <http://www.ab.ust.hk/sao/HLTH001> managed by the Student Affairs Office.

A minimum of 151 credits is required for the BEng program in Chemical Engineering and BBA program in General Business Management. For students who are required to take MATH 021, the minimum total required is 155 credits.

Recommended Pattern of Study for BEng in Chemical Engineering and BBA in General Business Management

1st year	Fall	C CENG 151, CHEM 101, CHEM 102, ISOM 111, MATH 021 [^] R CENG 001, CENG 109/152, HLTH 001, LABU 101, TEMG 001	(Total: 16 / 20 [^] credits)
	Spring	C CENG 101, CENG 131, MATH 106, ECON 110/111/191, MATH 113 R HLTH 001, LABU 101, TEMG 001	(Total: 19* credits)
2nd year	Fall	C CENG 211, CENG 231, MATH 150, ACCT 101, MGTO 121 R COMP 102, MGTO 222, TEMG 001	(Total: 19 credits)
	Spring	C CENG 202, CENG 241, MATH 230, FINA 111, ISOM 161, MARK 112 R LANG 201, TEMG 001	(Total: 20 credits)
3rd year	Fall	C CENG 221, CENG 297, IELM 311 R IELM 120, LANG 111/LANG 113/FREE, TEMG 001 E GEE(H&SS), SB&M	(Total: 19 credits)
	Spring	C CENG 103, CENG 298 R TEMG 001 E CENG, two GEE(H&SS), SB&M	(Total: 19 credits)
4th year	Fall	C CENG 302, CENG 397 R CENG 002, TEMG 001 E CENG, GEE(H&SS), two SB&M	(Total: 18 credits)
	Spring	C CENG 303, CENG 399 R CENG 098, LANG 307, TEMG 001 E two CENG, two SB&M	(Total: 21 credits)

[^] Students who have grade E or better in AL Pure Mathematics or in AL Applied Mathematics are not required to take MATH 021.

* LABU 101 is a two-semester course. The course credits will be earned on completion of the course at the end of the 1st year Spring.

C = core course; R = required course; E = elective course

