

Studying Chemical Engineering at BUCT

In BUCT each undergraduate student during 4 years should have at least 178 credit points which relates to required courses (150.5) and elective courses (27.5).

First year in BUCT

	Code	Title	Period (hour)	Credit	Semester
Required Course (47 credit points)	MAT13900T	Advanced Mathematics (I)	90	5.5	1
	CSE10300C	Basic Computing	40	2.5	1
	ENG11600T	English (I)	64	4	1
	CHM10700T	Fundamental Chemistry	72	4.5	1
	CHM11200L	Chemistry Experiment (I)	38	2	1
	PHY11600T	General Physics (I)	64	4	2
	ENG11601T	English (II)	64	4	2
	CHM1330T	Organic Chemistry	40	2.5	2
	MAT1391T	Advanced Mathematics (II)	90	5.5	2
	CHM1110L	Chemistry Experiment (II)	32	1.5	2
	CHE2000E	Introduction to Chemical Engineering and Processing	16	1	2
	CHE49000T	Advanced Topics in Chemical Technology	24	1	2
	MXI12200E	Conspectus of Chinese Modern History	32	2	1
	PHE10001T	physical education (I)	32	1	1
	PHE10002T	physical education (II)	32	1	2
	PHE10000E	Basic Military Knowledge	36	1	1
	MXI11400E	Principles of Law	48	3	2
PHE19000P	Military training	2 weeks	1	2	

The second year

	Code	Title	Period	Credit	Semester
Required Course (47 credit points)	ENG22600T	English (III)	64	4	1
	MEE16400T	Fundamental Chemical Engineering Machinery	48	3	1
	PHY11100L	Physics Experiment (I)	30	1.5	1
	PHY21601T	General Physics (II)	64	4	1
	CHM33301L	Chemistry Experiment (III)	48	2.5	1
	CHM34400T	Physical Chemistry (I)	48	3	1
	MEE11201T	Chemical Engineering Cartography	32	2	2
	PHY21101L	Physics Experiment (II)	30	1.5	2
	EEE11601E	Applied Electrotechnics	64	4	2
	ENG22601T	English (IV)	64	4	2
	CHM33100L	Chemistry Experiment (IV)	32	1.5	2
	CHM34402T	Physical Chemistry (II)	48	3	2
	PHE20000T	Physical education (III)	32	1	1
	PHE20001T	Physical education (IV)	32	1	2
	MXI122901E	Politics courses (I)	96	6	1
MXI121400E	Politics courses (II)	48	3	2	
	MEE29101P	Metalworking Practice	2 Weeks	2	2
Elective Course (>11 credit points)	MAT1130T	Linear Algebra	40	2.5	1
	CSE14302C	C Programming	40	2.5	1
	CSE14201C	Visual Basic Programming	32	2	1
	CHE20400C	Graphical and Data Computer Processing for Chemical Engineering (I)	48	3	2
	MAT25400T	Probability and Mathematical Statistics	48	3	2
	CHM22400T	Instrumental Analysis	48	3	2
	ENV48100T	Environmental Protection and Green Technology	24	1.5	2

The third year

	Code	Title	Period	Credit	Semester
Required Courses (31)	CHE33401T	Chemical Engineering Thermodynamics	48	3	1
	CHE3240T	Chemical Reaction Engineering	48	3	1
	CHE21501T	Chemical Engineering Principles (I)	56	3.5	1
	CHE21101L	Experiment of Chemical Engineering Principles (I)	30	1.5	1
	CHE21502T	Chemical Engineering Principles (II)	56	3.5	2
	CHE2110L	Experiment of Chemical Engineering Principles (II)	30	1.5	2
	CHE4640T	Analysis and Synthesis in Chemical Processes	48	3	2
	EEE34200T	Process Measurement and Control Technology	32	2	2
	CHE39203C	The Curriculum Design of Chemical Engineering Principles	2 weeks	2	2
	CHE39202P	The Curriculum Design of Chemical Engineering equipment	1 week	1	2
	EEE2911P	Practicum in Electronic Engineering	1 weeks	1	1
	HSS10000E	Graduates Career Guidance	18	1	2
	CHE29301P	Chemical engineering cognition practice	2 weeks	2	2
		Other practice	5 weeks	3	1 and 2
Elective Course (>11 credit points)	MAT30100T	Applied Mathematics for Chemical Engineering	24	1.5	1
	CHE20401C	Graphical and Data Computer Processing for Chemical Engineering (II)	48	3	1
	CHE20201T	Scientific and Technical English	32	2	1
	CHE3420T	Transport Phenomena	32	2	2
	BIO1120T	Introduction to Biochemistry	32	2	1
	CHE30100T	Introduction to Materials	24	1.5	1
	CHE42100T	Fundamentals of Industrial Catalysis	24	1.5	2
	CHE43100T	Introduction to Molecular Simulation	24	1.5	2
	ENV2010T	Introduction to Environmental Engineering	24	1.5	2
	CHE30101T	Specialty English for Chemical Engineering and Processing	24	1.5	2
	CHE4811T	Energy-saving Technology in Chemical Engineering	24	1.5	2

The fourth year

	Code	Title	Period	Credit	Semester
Required Course (25.5)	CHE3740C	Chemical Engineering Design	48	3	1
	BUS16300T	Technical Economics and Management	40	2.5	1
	CHE39101P	Practicum in Applied Software	1 Weeks	1	1
	CHE39301P	Engineering Practice	3 Weeks	3	1
	CHE39302L	Special Experiment of Chemical Engineering	2 Weeks	2	1
	CHE49902P	Dissertation Project	17 Weeks	8	2
	MXI42200E	Situation and Policy	128	2	2
	HSS49700P	Development and Innovation	4 Weeks	4	2
Elective Course (5.5 credit points)	CHE4110T	Fundamentals of Fine Chemical Technology	24	1.5	1
	CHE3621T	Process System Engineering	32	2	1
	CHE2011T	Information and Literature Searching	24	1.5	1
	CHE2710T	Design of Chemical Engineering Experiments	24	1.5	1
	CHE4520T	Introduction to Separation Technology	32	2	1
	CHE4810T	Chemical Process Safety Engineering	24	1.5	1