Chemical Engineering

Study Year 1 (Mandatory Courses)

Course Code	Credits	Cycle	Language S.Ex. stud.		Course Name	Footnote	Links	08/09 sp4 F	O	L	H	S
KOO101	9	G1	-	S	Fundamental Chemistry		KS KE U W					
FMAA01	15	G1	-	S	Calculus in One Variable		KS KE U W	42	28	0	0	81
KETA01	21	G1	-	S	Chemical Engineering		KS KE U W	14	12	4	44	50
FMA420	6	G1	-	S	Linear Algebra		KS KE U W					
KOK012	9	G1	-	S	Organic Chemistry, Basic Course		KS KE U W	26	4	36	0	30

Study Year 2 (Mandatory Courses)

Course Code	Credits	Cycle	Language S.Ex. stud.		Course Name	Footnote	Links	08/09 sp4 F	O	L	H	S
FMA430	6	G1	-	S	Calculus in Several Variables		KS KE U W					
KFK080	7.5	G1	-	S	Thermodynamics		KS KE U W					
KBKA05	7.5	G1	-	E2	Technical Biology		KS KE U W					
KETF01	9	G2	-	S	Transport Phenomena, Basic Course		KS KE U W					
FHL055	7.5	G1	-	S	Engineering Mechanics		KS KE U W					
KOO022	7.5	G1	-	S	Inorganic Chemistry		KS KE U W					
KFK090	7.5	G2	-	S	Molecular Interactions and Dynamics		KS KE U W	28	28	20	0	60
KETF10	7.5	G2	-	S	Separation Processes, Basic Course		KS KE U W	24	36	18	24	90

Study Year 3 (Mandatory Courses)

Course Code	Credits	Cycle	Language S.Ex. stud.		Course Name	Footnote	Links	08/09 sp4 F	O	L	H	S
KAK016	7.5	G2	-	S	Analytical Chemistry		KS KE U W					
FMS086	7.5	G2	-	S	Mathematical Statistics		KS KE U W					
KTE023	15	G2	-	S	Chemical Process and Reaction Engineering, Basic Course		KS KE U W	0	0	86	0	40
KET030	7.5	G2	-	S	Heat Engineering		KS KE U W					
KOO052	7.5	G2	-	S	Materials and Polymer Technology		KS KE U W	56	0	0	14	80

Study Year 3 (Elective Mandatory Courses)

Course Code	Credits	Cycle	Language S.Ex. stud.		Course Name	Footnote	Links	08/09 sp4 F	O	L	H	S
FRT081	7.5	G2	-	S	Automatic Process Control		KS KE U W					
FMN130	7.5	A	X	E1	Numerical Methods for Differential Equations		KS KE U W					
KFK025	7.5	G2	-	E2	Surface and Colloid Chemistry		KS KE U W					
FMS210	7.5	G2	-	S	Chemometrics		KS KE U					
KTE131	7.5	G2	-	S	Loss Prevention		KS KE U W					

Specialisation I - Pharma

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp4				
											F	O	L	H	S
KLG027	7.5	A	O	4	4	X	E1	Drug Formulation		KS KE U W					
KOK085	7.5	G2	O	4	4	X	E1	Medicinal Chemistry		KS KE U W					
MAM242	7.5	G2	V	4	4	X	E1	Aerosol Technology		KS KE U W					
KFK032	7.5	A	V	4	4	X	E1	Biophysical Chemistry		KS KE U W					
KOK095	7.5	G2	V	4	4	X	E1	Computational Chemistry and Structure Analysis		KS KE U W					
KOK090	7.5	A	V	4	4	X	E1	Drug Synthesis		KS KE U W					
KMB031	7.5	G2	V	4	4	X	E1	Quality and Product Safety		KS KE U W					
KFK025	7.5	G2	V	4	3	-	E2	Surface and Colloid Chemistry		KS KE U W					
FMS210	7.5	G2	V	4	3	-	S	Chemometrics		KS KE U					
KAK050	7.5	A	V	4	4	X	E1	Chromatographic Analysis		KS KE U W					
KPO010	7.5	A	V	4	4	X	E	Polymer Physics		KS KE U W					
KLG031	15	A	V	4	4	X	E1	Drug Formulation, Project		KS KE U W	6	14	60	0	100
KOK100	15	A	V	4	4	X	E1	Project in Medicinal Chemistry		KS KE U	10	20	80	10	100
KAK070	7.5	A	V	4	4	X	E1	Chromatographic Bio Analysis		KS KE U W	25	3	25	0	147
KAT080	7.5	A	V	4	3	X	E2	Particle Technology		KS KE U W	30	12	10	30	90

Specialisation m - Materials

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp4				
											F	O	L	H	S
KOO045	7.5	A	O	4	4	X	E2	Materials Chemistry		KS KE U W					
KPO010	7.5	A	O	4	4	X	E	Polymer Physics		KS KE U W					
KTE080	7.5	A	V	4	4	X	E1	Polymer Chemistry		KS KE U W					
FHL021	7.5	G1	V	4	3	-	S	Solid Mechanics, Basic Course		KS KE U W					
FAFN20	15	A	V	4	4	X	E	Unifying Concepts in Nanoscience: Size Effects and Self-assembly		KS KE U W					
FAFN15	7.5	A	V	4	4	X	E2	Crystal Growth and Semiconductor Epitaxy		KS KE U					
KOK090	7.5	A	V	4	4	X	E1	Drug Synthesis		KS KE U W					
KOO065	7.5	A	V	4	4	X	E2	Microscopic Characterization of Materials		KS KE U W					
KFK025	7.5	G2	V	4	3	-	E2	Surface and Colloid Chemistry		KS KE U W					
KFK095	7.5	G2	V	4	4	-	S	Molecular Spectroscopy		KS KE U W					
FFFN05	7.5	A	V	4	3	X	E	Nanomaterials - Thermodynamics and Kinetics		KS KE U W					
KTE055	7.5	A	V	4	4	-	S	Catalysis, Extended Course		KS KE U W	36	0	17	12	140
KAT080	7.5	A	V	4	3	X	E2	Particle Technology		KS KE U W	30	12	10	30	90
KPO021	7.5	A	V	4	4	X	E2	Polymeric Materials, Project		KS KE U W	20	0	50	0	70

Specialisation p - Process Design

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp4				
											F	O	L	H	S
KET050	15	A	O	4	4	-	S	Feasibility Studies on Industrial Plants		KS KE U W	0	56	0	0	100
KTE071	7.5	A	V	4	4	X	E1	Biochemical Reaction Engineering		KS KE U W					
KET040	7.5	G2	V	4	4	-	S	Chemical Process Technology		KS KE U W					
KAT051	7.5	A	V	4	4	-	S	Separation Processes, Advanced Course		KS KE U W					
FHL021	7.5	G1	V	4	3	-	S	Solid Mechanics, Basic Course		KS KE U W					
FRT081	7.5	G2	V	4	3	-	S	Automatic Process Control		KS KE U W					
KTE061	7.5	A	V	4	4	-	S	Chemical Reaction Engineering, Advanced Course	X	KS KE U W					
KET010	7.5	A	V	4	4	-	S	Energy and Environment		KS KE U W					
FMN130	7.5	A	V	4	4	X	E1	Numerical Methods for Differential Equations		KS KE U W					
KTE131	7.5	G2	V	4	3	-	S	Loss Prevention		KS KE U W					
KETN01	7.5	A	V	4	4	X	E1	Process Simulation		KS KE U W					
KTE055	7.5	A	V	4	4	-	S	Catalysis, Extended Course		KS KE U W	36	0	17	12	140
KAT080	7.5	A	V	4	3	X	E2	Particle Technology		KS KE U W	30	12	10	30	90

KTE061 Chemical Reaction Engineering, Advanced Course: *Hemtentamen*

Elective Courses - K

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp4				
										F	O	L	H	S
GEMA30	4.5	G1	2	1	-	S	Swedish for Engineers		KS KE U W					
GEMA20	7.5	G1	2	1	-	E	English for Engineers	X	KS KE U W					
GEMF01	7.5	G2	2	2	-	S	Environmental Science		KS KE U W					
GEMA05	7.5	G1	2	1	-	S	French for Engineers: Language, Culture and Society, Second Course		KS KE U W					
GEMF05	7.5	G2	2	1	X	E	Gender in Science and Engineering		KS KE U W					
GEMA25	7.5	G1	2	1	-	S	German for Engineers		KS KE U					
GEMA50	4.5	G1	2	1	-	S	History of Technology		KS KE U W					
GEMA60	7.5	G1	2	1	-	S	Law for Engineers, Introductory Course in Business Law	X	KS KE U W					
GEMA10	7.5	G1	2	1	-	S	Spanish for Engineers: Language, Culture and Society, First Course		KS KE U W					
ETI280	6	G1	2	2	X	S	Intellectual Property Right Management (IPR)		KS KE U W					
GEMA65	7.5	G1	2	1	-	S	Chinese for Engineers		KS KE U	0	20	0	0	80
GEMA20	7.5	G1	2	1	-	E	English for Engineers	X	KS KE U W	20	0	0	0	30
GEMA40	7.5	G1	2	1	-	S	Entrepreneurship and Business Development		KS KE U W	23	0	0	5	75
GEMA01	7.5	G1	2	1	-	S	French for Engineers: Language, Culture and Society, First Course		KS KE U W	0	26	0	0	60
GEMA60	7.5	G1	2	1	-	S	Law for Engineers, Introductory Course in Business Law	X	KS KE U W	25	0	0	0	75
GEMA55	6	G1	2	1	-	S	Medicine for Engineers		KS KE U W	36	0	0	0	40
GEMA15	7.5	G1	2	1	-	S	Spanish for Engineers: Language, Culture and Society, Second Course		KS KE U	0	26	0	0	60
GEMA45	3	G1	2	1	-	S	Teaching and Learning		KS KE U W	0	2	0	2	40
MIO040	6	G2	3	2	-	S	Managerial Economics, Advanced Course	X	KS KE U W					
MIO012	6	G1	3	2	-	S	Managerial Economics, Basic Course		KS KE U W					
KOK032	7.5	G2	3	3	X	E1	Environmental Chemistry		KS KE U W					
FMA062	7.5	G2	3	3	-	S	Applied Mathematics		KS KE U W	28	14	0	0	58
FKFF01	4	G2	3	3	-	E2	Atmospheric Chemistry and Physics		KS KE U W	14	12	0	4	75
MIO040	6	G2	3	2	-	S	Managerial Economics, Advanced Course	X	KS KE U W	40	14	10	0	96
KKK000	15	A	4	4	X	E2	Advanced course in one or more subjects	X	KS KE U W					
EEM055	7.5	A	4	4	X	E2	Microfluidics		KS KE U W					
MTTF15	5	G2	4	4	X	E2	Packaging Technology and Development		KS KE U W					

Course Code	Credits	Cycle	Year	From year	Language S.Ex. stud.		Course Name	Footnote	Links		sp4 F	O	L	H	S
KKK000	15	A	4	4	X	E2	Advanced course in one or more subjects	X	KS KE U W						
KKK000								X							
KKK000								X			0	0	0	0	400

GEMA20 English for Engineers: *Kursen ges två gånger per läsår.*
GEMA60 Law for Engineers, Introductory Course in Business Law: *Kursen ges två gånger per läsår.*
MIO040 Managerial Economics, Advanced Course: *Kursen ges två gånger per läsår.*
KKK000 Advanced course in one or more subjects: *Kursen är inte knuten till någon specifik läsperiod. Uppgifterna om timmar förutsätter att kursen går över en läsperiod. Individuell studieplan ska upprättas och godkännas.*

Degree Projects - K

The list contains the degree project courses that are included in the K programme.

Course Code	Credits	Course Name	Links
MAM720	30	Degree Project in Aerosol Technology	U
KMB820	30	Degree Project in Applied Microbiology for Engineers	U
FRT820	30	Degree Project in Automatic Control for Engineers	U
KFK920	30	Degree Project in Biophysical Chemistry	U
KET920	30	Degree Project in Chemical Engineering	U
KLT920	30	Degree Project in Food Engineering	U
KOO920	30	Degree Project in Materials Chemistry for Engineers	U
KOK820	30	Degree Project in Organic Chemistry for Engineers	U
KLG920	30	Degree Project in Pharmaceutical Technology	U
KTE720	30	Degree project in Polymer Technology	U
MIO920	30	Degree Project in Production Management	U
KAK820	30	Degree Project in Technical Analytical Chemistry	U
TMA820	30	Degree Project in Technology Management	U
VVA820	30	Degree Project in Water and Environmental Engineering	U