Chemical Engineering

Study Year 1, Academic Year 2010/11 (Mandatory Courses)

Course Code	Credits	Cycle	Language S.Ex. stud.	Language	Course Name	Footnote	Links	10/11 sp4
KOO101	9	G1	-	S	Fundamental Chemistry		KS KE U W	
FMAA01	15	G1	-	S	Calculus in One Variable		KS KE U W	1
KETA01	21	G1	-	S	Chemical Engineering		KS KE U W	1
FMA420	6	G1	-	S	Linear Algebra		KS KE U W	
KOK012	9	G1	-	S	Organic Chemistry, Basic Course		KS KE U W	1

Study Year 2, Academic Year 2011/12 (Mandatory Courses)

Course Code	Credits	Cycle	Language S.Ex. stud.		Course Name	Footnote	Links	11/12 sp4
FMA430	6	G1	-	S	Calculus in Several Variables		KS KE U W T	
KFK080	7.5	G1	-	S	Thermodynamics		KS KE U W T	
KBKA05	7.5	G1	-	E2	Technical Biology		KS KE U W T	
KETF01	9	G2	-	S	Transport Phenomena, Basic Course		KS KE U W T	
FHL055	7.5	G1	-	S	Engineering Mechanics		KS KE U W T	
KOO022	7.5	G1	-	S	Inorganic Chemistry		KS KE U W T	
KFK090	7.5	G2	-	S	Molecular Interactions and Dynamics		KS KE U W T	1
KETF10	7.5	G2	-	S	Separation Processes, Basic Course		KS KE U W T	1

Study Year 3, Academic Year 2012/13 (Mandatory Courses)

Course Code	Credits	Cycle	Language S.Ex. stud.		Course Name	Footnote	Links	12/13 sp1	12/13 sp2	12/13 sp3	12/13 sp4
KAKF01	9	G2	-	S	Analytical Chemistry		KS KE U W T	1			
FMS086	7.5	G2	-	S	Mathematical Statistics		KS KE U W T	1			
KET045	7.5	G2	-	S	Chemical Reaction Engineering		KS KE U W T		2		
MIO012	6	G1	-	S	Managerial Economics, Basic Course		KS KE U W T		2		
KET030	7.5	G2	-	S	Heat Engineering		KS KE U W T			3	
KETF05	7.5	G2	X	E1	Chemical Engineering, Project Laboratory		KS KE U W T			3	4
KOO052	7.5	G2	-	S	Materials and Polymer Technology		KS KE U W T				4

Study Year 3, Academic Year 2012/13 (Elective Mandatory Courses)

Course Code	Credits	Cycle	Language S.Ex. stud.		Course Name	Footnote	Links	12/13 sp1	12/13 sp2	12/13 sp3	12/13 sp4
KOK032	7.5	G2	X	E1	Environmental Chemistry		KS KE U W T			3	
KTE131	7.5	G2	-	S	Loss Prevention		KS KE U W T			3	

Specialisation I - Pharma

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp4
KLG027	7.5	A	O	4 - 13/14	4	X	E	Drug Formulation		KS KE U W T	1
KOKN01	7.5	A	O	4 - 13/14	4	X	E1	Medicinal Chemistry		KS KE U W T	1
KFK032	7.5	A	V	4 - 13/14	4	X	E1	Biophysical Chemistry		KS KE U W T	
KAK050	7.5	A	V	4 - 13/14	4	X	E1	Chromatographic Analysis		KS KE U W T	
KOKN05	7.5	A	V	4 - 13/14	4	X	E1	Organic Chemistry - Theory		KS KE U W T	
KNL026	7.5	G2	V	4 - 13/14	4	X	E	Physiology		KS KE U W T	
FMS210	7.5	G2	V	4 - 13/14	4	-	S	Chemometrics		KS KE U T	
KFKN01	7.5	A	V	4 - 13/14	4	X	E	Magnetic Resonance - Spectroscopy and Imaging		KS KE U W T	
KMB031	7.5	G2	V	4 - 13/14	4	X	E1	Quality and Product Safety		KS KE U W T	
KASN01	15	A	V	4 - 13/14	4	X	E1	Project in Chemistry		KS KE U T	
FRTN25	7.5	A	V	4 - 13/14	4	-	S	Automatic Process Control		KS KE U W T	
KFKN05	7.5	A	V	4 - 13/14	4	X	E1	Surface and Colloid Chemistry		KS KE U W T	
KMBN02	15	A	V	5 - 14/15	5	X	E	Project in Life Science		KS KE U W T	1

Specialisation m - Materials

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp4
KOO045	7.5	A	O	4 - 13/14	4	X	E1	Materials Chemistry		KS KE U W T	1
KPO010	7.5	A	O	4 - 13/14	4	X	E	Polymer Physics		KS KE U W T	
KTE055	7.5	A	V	4 - 13/14	4	-	S	Catalysis, Extended Course		KS KE U W T	1
KETF20	7.5	G2	V	4 - 13/14	4	X	E1	Chemical Engineering Processes		KS KE U T	1
KTE080	7.5	A	V	4 - 13/14	4	X	E1	Polymer Chemistry		KS KE U W T	1
FKM070	7.5	A	V	4 - 13/14	4	X	E1	Advanced Materials Technology		KS KE U W T	
KOO105	7.5	G2	V	4 - 13/14	4	X	E	Materials Analysis at the Nanoscale		KS KE U W T	
FFFN05	7.5	A	V	4 - 13/14	4	X	E	Nanomaterials - Thermodynamics and Kinetics		KS KE U W T	
KOKN05	7.5	A	V	4 - 13/14	4	X	E1	Organic Chemistry - Theory		KS KE U W T	
FAFN15	7.5	A	V	4 - 13/14	4	X	E	Crystal Growth and Semiconductor Epitaxy		KS KE U W T	
KFKN01	7.5	A	V	4 - 13/14	4	X	E	Magnetic Resonance - Spectroscopy and Imaging		KS KE U W T	
KASN01	15	A	V	4 - 13/14	4	X	E1	Project in Chemistry		KS KE U T	
KOO065	7.5	A	V	4 - 13/14	4	-	E1	Microscopic Characterization of Materials		KS KE U W T	
KFKN05	7.5	A	V	4 - 13/14	4	X	E1	Surface and Colloid Chemistry		KS KE U W T	

Specialisation p - Process Design

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp4
KET050	15	A	O	4 - 13/14	4	-	S	Feasibility Studies on Industrial Plants		KS KE U W T	
KTE071	7.5	A	V	4 - 13/14	4	X	E1	Biochemical Reaction Engineering		KS KE U W T	1
KBT115	7.5	G2	V	4 - 13/14	4	X	E1	Bioprocess Technology	X	KS KE U W T	1
KTE055	7.5	A	V	4 - 13/14	4	-	S	Catalysis, Extended Course		KS KE U W T	1
KETF20	7.5	G2	V	4 - 13/14	4	X	E1	Chemical Engineering Processes		KS KE U T	1
KETN05	7.5	A	V	4 - 13/14	4	-	S	Industrial Separation Processes		KS KE U W T	1
KETN10	7.5	A	V	4 - 13/14	4	X	E	Applied Transport Phenomena		KS KE U T	
KET010	7.5	A	V	4 - 13/14	4	X	E	Energy and Environment		KS KE U W T	
KBT060	7.5	G2	V	4 - 13/14	4	X	E	Separations in Biotechnology		KS KE U W T	
FMS210	7.5	G2	V	4 - 13/14	4	-	S	Chemometrics		KS KE U T	
KETN01	7.5	A	V	4 - 13/14	4	X	E1	Process Simulation		KS KE U W T	
FRTN25	7.5	A	V	4 - 13/14	4	-	S	Automatic Process Control		KS KE U W T	

KBT115 Bioprocess Technology: *The course is given in Swedish in study period 4 for the K program, year 3.*

Elective Courses - K

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp4
KKK000	15	A	4 - 13/14	4	X	E1	Advanced course in one or more subjects	X	KS KE U W	1
MTTN40	7.5	A	4 - 13/14	3	X	E	Packaging Technology and Development		KS KE U W T	1
EDAA20	7.5	G1	4 - 13/14	3	-	S	Programming and Databases		KS KE U W T	1
GEMA20	7.5	G1	4 - 13/14	1	-	E	English for Engineers		KS KE U W T	1
GEMA25	7.5	G1	4 - 13/14	1	-	S	German for Engineers		KS KE U W T	1
GEMA50	4.5	G1	4 - 13/14	1	-	S	History of Technology		KS KE U W T	1
GEMA60	7.5	G1	4 - 13/14	1	-	S	Law for Engineers, Introductory Course in Business Law		KS KE U W T	1

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp4
GEMA70	15	G1	4 - 13/14	1	-	S	Japanese for Engineers		KS KE U W T	1
KKK000	15	A	4 - 13/14	4	X	E1	Advanced course in one or more subjects	X	KS KE U W	
EDA501	6	G1	4 - 13/14	3	-	S	Programming, First Course	X	KS KE U W T	
KKK000	15	A	4 - 13/14	4	X	E1	Advanced course in one or more subjects	X	KS KE U W	
FMAF10	5	G2	4 - 13/14	4	-	S	Applied Mathematics - Linear systems		KS KE U W T	
MIO040	6	G2	4 - 13/14	4	-	S	Managerial Economics, Advanced Course		KS KE U W T	
ETIA10	7.5	G1	4 - 13/14	4	X	E	Patent and Intellectual Property Rights		KS KE U W T	
BLT015	7.5	G2	4 - 13/14	4	X	E1	Unit Operations in the Biotech and Food Industry		KS KE U W T	
GEMA65	7.5	G1	4 - 13/14	1	-	S	Chinese for Engineers		KS KE U T	
GEMA20	7.5	G1	4 - 13/14	1	-	E	English for Engineers		KS KE U W T	
GEMA40	7.5	G1	4 - 13/14	1	-	S	Entrepreneurship and Business Development		KS KE U W T	
GEMA01	7.5	G1	4 - 13/14	1	-	S	French for Engineers: Language, Culture and Society, First Course		KS KE U W T	
GEMA60	7.5	G1	4 - 13/14	1	-	S	Law for Engineers, Introductory Course in Business Law		KS KE U W T	
GEMA55	6	G1	4 - 13/14	1	-	S	Medicine for Engineers		KS KE U W T	
GEMA45	3	G1	4 - 13/14	1	-	S	Teaching and Learning		KS KE U W T	
KKK000	15	A	4 - 13/14	4	X	E1	Advanced course in one or more subjects	X	KS KE U W	
FBR012	7.5	G2	4 - 13/14	4	X	E	Fundamental Combustion		KS KE U W T	
MIO040	6	G2	4 - 13/14	4	-	S	Managerial Economics, Advanced Course		KS KE U W T	
FRTN10	7.5	A	5 - 14/15	4	X	E1	Multivariable Control		KS KE U W T	1

KKK000 Advanced course in one or more subjects: *The course is not linked to a specific study period. The data on hours (time table) implies that the course is over one study period. An individual plan should be drawn up and approved.*

EDA501 Programming, First Course: *The course begins with a few lectures at the end of period 2, but the majority of the course is given in period 3 and 4.*

Bachelor's Projects - K

The list contains the bachelor's projects that are included in the K programme. The list is not necessarily complete before the academic year 2016/17.

			Links
Course Code	**Credits**	**Course Name**	
KFKL01	15	Bachelor Project in Biophysical Chemistry	KS KE U
KETL01	15	Bachelor Project in Chemical Engineering	KS KE U
KOOL01	15	Bachelor Project in Materials Chemistry	KS KE U
KOKL01	15	Bachelor Project in Organic Chemistry	KS KE U
KPOL01	15	Bachelor Project in Polymer Technology	KS KE U
KAKL01	15	Bachelor Project in Technical Analytical Chemistry	KS KE U

Degree Projects - K

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

Course Code	Credits	Course Name	Links
KMB820	30	Degree Project in Applied Microbiology for Engineers	KS KE U
FRT820	30	Degree Project in Automatic Control for Engineers	KS KE U W
KFK920	30	Degree Project in Biophysical Chemistry	KS KE U W
KBT820	30	Degree Project in Biotechnology for Engineers	KS KE U W
KET920	30	Degree Project in Chemical Engineering	KS KE U W
KLT920	30	Degree Project in Food Engineering	KS KE U W
KOO920	30	Degree Project in Materials Chemistry for Engineers	KS KE U
KOK820	30	Degree Project in Organic Chemistry for Engineers	KS KE U W
MTT920	30	Degree Project in Packaging Logistics	KS KE U W
KLG920	30	Degree Project in Pharmaceutical Technology	KS KE U W
KTE720	30	Degree project in Polymer Technology	KS KE U
KAK820	30	Degree Project in Technical Analytical Chemistry	KS KE U
VVA820	30	Degree Project in Water and Environmental Engineering	KS KE U W