

Biotechnology

Study Year 1 (Mandatory Courses)

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links	09/10 sp4
KBKA01	6	G1	-	S	Introduction to Biochemistry		KS KE U W	
KOO101	9	G1	-	S	Fundamental Chemistry		KS KE U W	
KKKA05	15	G1	-	S	Biotechnology		KS KE U W	1
EMAA01	15	G1	-	S	Calculus in One Variable		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 (Mandatory Courses)

Course Code	Credits	Cycle	Language		Course Name	Footnote	Links	09/10 sp4
			S.Ex. stud.					
FMA430	6	G1	-	S	Calculus in Several Variables		KS KE U W	
KFK080	7.5	G1	-	S	Thermodynamics		KS KE U W	
KMB060	7.5	G1	-	E2	Microbiology		KS KE U W	
KETF01	9	G2	-	S	Transport Phenomena, Basic Course		KS KE U W	
KBK011	7.5	G1	-	S	Biochemistry		KS KE U W	
KFK090	7.5	G2	-	S	Molecular Interactions and Dynamics		KS KE U W	1
KETF10	7.5	G2	-	S	Separation Processes, Basic Course		KS KE U W	1

Study Year 2 (Elective Mandatory Courses)

Course Code	Credits	Cycle	Language		Course Name	Footnote	Links	09/10 sp4
			S.Ex. stud.					
KOK032	7.5	G2	X	E1	Environmental Chemistry		KS KE U W	
KOO022	7.5	G1	-	S	Inorganic Chemistry		KS KE U W	

Study Year 3 (Mandatory Courses)

Course Code	Credits	Cycle	S.Ex. stud.	Language		Course Name	Footnote	Links		09/10 sp4
KAKF01	9	G2	-	S		Analytical Chemistry		KS KE U W		
FMS086	7.5	G2	-	S		Mathematical Statistics		KS KE U W		
KET045	7.5	G2	-	S		Chemical Reaction Engineering		KS KE U W		
MIO012	6	G1	-	S		Managerial Economics, Basic Course		KS KE U W		
BLT015	7.5	G2	X	E1		Unit Operations in the Biotech and Food Industry		KS KE U W		
KBT115	7.5	G2	X	S		Bioprocess Technology	X	KS KE U W		1
KBK041	7.5	G2	X	E2		Gene Technology		KS KE U W		1

[KBT115](#) Bioprocess Technology: *Kursen ges på svenska i VT2 i årskurs 3*

Study Year 3 (Elective Mandatory Courses)

Course Code	Credits	Cycle	S.Ex. stud.	Language		Course Name	Footnote	Links		09/10 sp4
KBK070	7.5	G2	-	S		Cell biology		KS KE U W		
FMS210	7.5	G2	-	S		Chemometrics		KS KE U		

Specialisation I - Pharma

Course Code	Credits	Mand./ Elect.		Year	From year	S.Ex. stud.	Language		Course Name	Footnote	Links	
		Cycle										sp4
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	3	X	E1		Aerosol Technology		KS KE U W	
KFK032	7.5	A	V	4	3	X	E1		Biophysical Chemistry		KS KE U W	
KOK095	7.5	G2	V	4	3	X	E1		Computational Chemistry and Structure Analysis		KS KE U W	
KOK090	7.5	A	V	4	3	X	E1		Drug Synthesis		KS KE U W	
KFK095	7.5	G2	V	4	4	X	E2		Molecular Spectroscopy		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	X	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	3	X	E1		Chromatographic Analysis		KS KE U W	
KPO010	7.5	A	V	4	3	X	E		Polymer Physics		KS KE U W	
KLG031	15	A	V	4	4	X	E1		Drug Formulation, Project		KS KE U W	1
KOK100	15	A	V	4	4	X	E1		Project in Medicinal Chemistry		KS KE U	1
KAK070	7.5	A	V	4	3	X	E1		Chromatographic Bio Analysis		KS KE U W	1
KAT080	7.5	A	V	4	3	X	E2		Particle Technology		KS KE U W	1

Specialisation Im - Food

Course Code	Credits	Cycle	Mand./ Elect.		Year	From year	S.Ex. stud.	Language		Course Name	Footnote	Links	sp4
KLG060	7.5	A	V		4	4	X	E		Food Chemistry for Product Formulation		KS KE U W	
KMB023	7.5	G2	V		4	4	X	E1		Food Microbiology		KS KE U W	
KLG080	7.5	A	V		4	4	X	E		Integrated Food Science		KS KE U W	
KLG01	7.5	A	V		4	4	X	E		Probiotics		KS KE U W	
KFK025	7.5	G2	V		4	3	X	E2		Surface and Colloid Chemistry		KS KE U W	
KLG085	7.5	A	V		4	4	X	E1		Integrated Food Science: Production System		KS KE U W	
KLT031	15	A	V		4	4	X	E1		Integrated Food Project		KS KE U W	1
KLT051	7.5	G2	V		4	4	-	E2		Dairy Technology		KS KE U W	1
KNL031	7.5	A	V		4	4	X	E		Human Nutrition & Functional Foods		KS KE U W	1
KLT065	7.5	G2	V		5	5	-	E2		Dairy Processing		KS KE U W	

Specialisation mb - Molecular Biotechnology

Course Code	Credits	Mand./ Elect.		Year	From year	S.Ex. stud.	Language		Course Name	Footnote	Links	
		Cycle										sp4
KBT050	7.5	G2	V	4	3	X	E		Bio Analytical Chemistry		KS KE U W	
K BK050	7.5	A	V	4	4	X	E1		Protein Engineering		KS KE U W	
KFK032	7.5	A	V	4	3	X	E1		Biophysical Chemistry		KS KE U W	
K BK031	7.5	A	V	4	4	X	E1		Enzyme Technology		KS KE U W	
KFK095	7.5	G2	V	4	4	X	E2		Molecular Spectroscopy		KS KE U W	
KBT060	7.5	G2	V	4	3	X	E		Separations in Biotechnology		KS KE U W	
K BK070	7.5	G2	V	4	3	-	S		Cell biology		KS KE U W	
KAK050	7.5	A	V	4	3	X	E1		Chromatographic Analysis		KS KE U W	
KMB040	7.5	A	V	4	4	X	E		Metabolic engineering		KS KE U W	
K BK075	7.5	A	V	4	4	X	E1		Bioinformatics		KS KE U W	1
KAK070	7.5	A	V	4	3	X	E1		Chromatographic Bio Analysis		KS KE U W	1
KIM015	7.5	A	V	4	4	X	E2		Immunotechnology		KS KE U W	1

Specialisation pt - Bioprocess Technology

Course Code	Credits	Cycle	Mand./ Elect.		Language			Course Name	Footnote	Links	sp4
			Year	From year	S.Ex. stud.						
KTE071	7.5	A	O	4	4	X	E1	Biochemical Reaction Engineering		KS KE U W	
KBT060	7.5	G2	O	4	4	X	E	Separations in Biotechnology		KS KE U W	
KBT050	7.5	G2	V	4	3	X	E	Bio Analytical Chemistry		KS KE U W	
KBK050	7.5	A	V	4	4	X	E1	Protein Engineering		KS KE U W	
KFK032	7.5	A	V	4	3	X	E1	Biophysical Chemistry		KS KE U W	
KBK031	7.5	A	V	4	4	X	E1	Enzyme Technology		KS KE U W	
KBT080	7.5	G2	V	4	3	X	E	Environmental Biotechnology		KS KE U W	
KMB040	7.5	A	V	4	4	X	E	Metabolic engineering		KS KE U W	
KETN01	7.5	A	V	4	3	X	E1	Process Simulation		KS KE U W	
KBT042	15	A	V	4	4	X	E2	Biotechnology, Process and Plant Design		KS KE U W	1
KBK075	7.5	A	V	4	4	X	E1	Bioinformatics		KS KE U W	1
KIM015	7.5	A	V	4	4	X	E2	Immunotechnology		KS KE U W	1

Elective Courses - B

Course Code	Credits	Cycle		Language			Course Name	Footnote	Links		sp4
		Year	From year	S.Ex. stud.							
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		
MTTF20	7.5	G2	4	4	X	E	Packaging Technology and Development	X	KS KE U W		
GEMA30	4.5	G1	4	1	-	S	Swedish for Engineers		KS KE U W		
GEMA20	7.5	G1	4	1	-	E	English for Engineers	X	KS KE U W		
GEMF01	7.5	G2	4	2	-	S	Environmental Science		KS KE U W		
GEMA05	7.5	G1	4	1	-	S	French for Engineers: Language, Culture and Society, Second Course		KS KE U W		
GEMF05	7.5	G2	4	1	X	E	Gender in Science and Engineering		KS KE U		
GEMA25	7.5	G1	4	1	-	S	German for Engineers		KS KE U		
GEMA50	4.5	G1	4	1	-	S	History of Technology		KS KE U W		
GEMA60	7.5	G1	4	1	-	S	Law for Engineers, Introductory Course in Business Law	X	KS KE U W		
GEMA10	7.5	G1	4	1	-	S	Spanish for Engineers: Language, Culture and Society, First Course		KS KE U W		
KKK000	15	A	4	4	X	E2	Advanced course in one or more subjects	X	KS KE U W		
KMB031	7.5	G2	4	4	X	E1	Quality and Product Safety		KS KE U W		
KKK000	15	A	4	4	X	E2	Advanced course in one or more subjects	X	KS KE U W		
FMAF10	5	G2	4	4	-	S	Applied Mathematics - Linear systems		KS KE U W		
FHL055	7.5	G1	4	3	-	S	Engineering Mechanics		KS KE U W		
ETI280	6	G1	4	2	X	S	Intellectual Property Right Management (IPR)		KS KE U W		
MIO040	6	G2	4	2	-	S	Managerial Economics, Advanced Course	X	KS KE U W		
KNL026	7.5	G2	4	3	X	E2	Physiology		KS KE U W		
GEMA65	7.5	G1	4	1	-	S	Chinese for Engineers		KS KE U	1	
GEMA20	7.5	G1	4	1	-	E	English for Engineers	X	KS KE U W	1	

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp4
GEMA40	7.5	G1	4	1	-	S	Entrepreneurship and Business Development		KS KE U W	1
GEMA01	7.5	G1	4	1	-	S	French for Engineers: Language, Culture and Society, First Course		KS KE U W	1
GEMA60	7.5	G1	4	1	-	S	Law for Engineers, Introductory Course in Business Law	X	KS KE U W	1
GEMA55	6	G1	4	1	-	S	Medicine for Engineers		KS KE U W	1
GEMA15	7.5	G1	4	1	-	S	Spanish for Engineers: Language, Culture and Society, Second Course		KS KE U	1
GEMA45	3	G1	4	1	-	S	Teaching and Learning		KS KE U W	1
KKK000	15	A	4	4	X	E2	Advanced course in one or more subjects	X	KS KE U W	1

Course Code	Credits	Cycle		From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp4
		Year								
EMAE15	7.5	G2	4	3	-	S	Applied Mathematics - Partial Differential Equations		KS KE U W	1
EKFF01	4	G2	4	3	X	E	Atmospheric Chemistry and Physics		KS KE U W	1
MIO040	6	G2	4	2	-	S	Managerial Economics, Advanced Course	X	KS KE U W	1

[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.*

[MTTF20](#) Packaging Technology and Development: *Ersätter [MTTF15](#), med samma namn.*

[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.*

Degree Projects - B

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

Links

Course Code	Credits	Course Name	Links
MAM720	30	Degree Project in Aerosol Technology	U
KBK820	30	Degree Project in Applied Biochemistry for Engineers	U
KMB820	30	Degree Project in Applied Microbiology for Engineers	U
KNL820	30	Degree Project in Applied Nutrition and Food Chemistry	U
FRT820	30	Degree Project in Automatic Control for Engineers	U
KFK920	30	Degree Project in Biophysical Chemistry	U
KBT820	30	Degree Project in Biotechnology for Engineers	U
KET920	30	Degree Project in Chemical Engineering	U
KLT920	30	Degree Project in Food Engineering	U
KLK820	30	Degree Project in Food Technology	U
KIM820	30	Degree Project in Immunotechnology	U
KOO920	30	Degree Project in Materials Chemistry for Engineers	U
KOK820	30	Degree Project in Organic Chemistry for Engineers	U
MTT920	30	Degree Project in Packaging Logistics	U
KLK920	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