



Master's Study Program (in English)
**Tissue Engineering and
 Regenerative Medicine**



Study Program

Courses in the 1 st semester		SP/W	ECTS
M	Laboratory Work in Teams 1		8
LV	Project Laboratory 1	2	8
M	Tissue Engineering 1		9
LV	Tissue Engineering for Regenerative Medicine	2	6
LV	Biomaterials in Tissue Engineering	1	3
M	Protein Chemistry		3
LV	Protein Chemistry	3	3
M	From DNA to Protein 1		6
LV	Molecular Biochemistry and Cell Biology	3	6
M	Economic and Legal Issues and Professional Communication 1		4
LV	Reporting and Data Presentation	1	1
LV	Corporate Management	2	2
LV	Pharmaceutical Law	1	1
Total		17	30

Courses in the 2 nd semester		SP/W	ECTS
M	Laboratory Work in Teams 2		7
LV	Project Laboratory 2	2	7
M	Bioreactors and Biotechnology		7
LV	Bioreactors and Biophysical Therapies	2	4
LV	Biotechnology	2	3
M	From DNA to Protein 2		9
LV	Methods in Cell Biology (incl. Lab)	2	6
LV	Gene Regulation and Signal Transduction	2	3
M	Scientific Research Design, Evaluation and Communication		7
LV	Project Management for (Bio)Pharmaceutical Products	2	2
LV	Writing Scientific English	1	1
LV	Study Design and Biostatistics	2	3
LV	Ethics in Engineering and Medicine	1	1
Total		17	30

ECTS-Credits Credits according to the European Transfer and Accumulation System (student workload required for each course for one semester)

SP/W semester periods per week

Courses in the 3 rd semester		SP/W	ECTS
M	Tissue Engineering 2		5
LV	Project Laboratory 3	0.5	1
LV	Advanced Immunology and Vascular Tissue Engineering	2	4
M	Regenerative Medicine		6
LV	Stem Cells in Regenerative Medicine	2	4
LV	Current Problems in Regenerative Medicine	1	2
M	Advanced Technologies in Biological Research		4
LV	Advanced Technologies in Biological Research	2	4
M	Methods of Scientific Research		8
	Methods of Scientific Research	0.5	8
M	Economic and Legal Issues and Professional Communication 1		7
LV	Management for Quality in Biomedicine	1	2
LV	Economics and Marketing	2	3
LV	Case Studies in Pharmaceutical Industries	2	2
Total		17	30

Courses in the 4 th semester		SP/W	ECTS
M	Master's Thesis		30
LV	Seminar for Degree Candidates	1	2
	Master's Thesis	-	28
Total		1	30

Double Degree Program (2nd year at Linköping University)

Elective Courses (two to choose each semester)	Semester	ECTS
Courses in the winter semester (3rd semester)	3	30
Medical Genetics		
Tumour Biology		
Molecular and Medical Pharmacology		
Laboratory Animal Sciences		
Stem Cells and Applied Regenerative Medicine		
Advanced Immunology		
Laboratory Techniques in Experimental Biosciences		
Analytical Techniques in Experimental Biosciences		
Courses in the summer semester (4th semester)	4	
Neurobiology		
Infection Biology – Clinical Perspectives		
Cardiovascular Biology		
Molecular Imaging		
Degree Project (Master's Thesis)	4	30
Total		60

It is possible to start with the degree project (master's thesis) during the 3rd semester.