

## Studies Plan

### Mineur : Ingénierie des Sciences du vivant 2024-25

Minor : Life Sciences Engineering

Courses				Exam Session	Exam	Credit
Lang.	Code	Sect.	Teacher			
E	ME-482	GM	Pioletti	Sum	During the semester	5
<b>Biomechanics of the musculoskeletal system</b>						
E	MICRO-561	SV	Altug	Win	Written	4
<b>Biomicroscopy I</b>						
E	BIO-471	SV	Lingner Oricchio	Win	During the semester	5
<b>Cancer biology I</b>						
E	BIO-105	SV	Zufferey	Win	Written	4
<b>Cellular biology and biochemistry for engineers</b>						
E	BIOENG-455	SV	Shillcock	Win	During the semester	4
<b>Computational cell biology</b>						
E	CS-502	IN		Sum	During the semester	6
<b>Deep learning in biomedicine</b>						
E	BIO-512	SV	Salathé	Sum	During the semester	4
<b>Digital epidemiology</b>						
E	BIO-463	SV	Bitbol Luisier Rougemont	Sum	During the semester	4
<b>Genomics and bioinformatics</b>						
E	MICRO-511	MT	Unser Van De Ville	Win	Written	3
<b>Image processing I</b>						
E	BIO-479	SV		Win	Written	5
<b>Immunology - advances and therapeutic implications</b>						
E	BIO-477	SV		Sum	Written	5
<b>Infection biology</b>						
E	BIO-501	SV	Profs divers	Sum Win	During the semester	8
<b>Lab immersion I</b>						
E	ME-480	GM	Persat Sakar	Win	During the semester	4
<b>Mechanobiology: how mechanics regulate life</b>						
E	BIO-450	SV	Briskin	Win	During the semester	4
<b>Molecular endocrinology: health and environment</b>						
E	BIO-480	SV	Gräff Mahul Mellier Schneider	Win	Written	5
<b>Neuroscience: from molecular mechanisms to disease</b>						
E	BIO-491	SV	Friedli Trono	Sum	During the semester	4
<b>New tools &amp; research strategies in personalized health</b>						
E	BIOENG-458	SV	Persat Tang	Sum	Written	4
<b>Next-generation biomaterials</b>						
E	BIO-369	SV	Bitbol	Sum	Written	4
<b>Randomness and information in biological data</b>						

<b>Single cell biology</b>						
E	BIOENG-420	SV	D'Angelo Deplancke	Sum	During the	4 semester
<b>Stem cells and organoids</b>						
E	BIO-447	SV	Karthaus Radtke Suter	Win	Written	3
<b>Structural biology</b>						
E	BIO-315	SV	Dal Peraro	Sum	During the	4 semester
<b>Synthetic biology</b>						
E	BIOENG-320	SV	Barth	Sum	Written	4