

MSc Life Science & Technology - TU Delft

Master's Courses for Exchange Students

The course package proposals indicated here are composed taking into account the coherence of their contents. Overlap between lectures and exams of the courses within the same package is not likely, but may occur due to unforeseen circumstances leading to schedule modifications. The course package proposals are intended for MSc students and students in the process of finalizing their BSc programme.

Please read the courses' pre-requisites [here](#) in order to determine whether the courses you select are a good fit for your educational background. Please also note that the course offerings and time schedules may be subject to minor changes for the academic year 2023-2024.

Academic Year 2023-2024

Year 1 MSc Life Science & Technology						
Identifier	Course name	Credits	Period			
			1	2	3	4
General Mandatory Modules						
LM3331	Modelling and Computation for Life Science & Technology	5 ECTS				
LM3341	Microbial Omics	5 ECTS				
LM3451	Bioprocess Integration	5 ECTS				
LM3561	Ethical, Legal and Social Issues in Biotechnology	3 ECTS				
LM3822	Design	12 ECTS				
<i>Specialization Cell Factory</i>						
LM3432	Analysis of Metabolic Networks	6 ECTS				
LM3442-A*	Metabolic Reprogramming	3 ECTS				
LM3442-B**	Metabolic Reprogramming	3 ECTS				
LM3601-A*	Molecular Biotechnology & Genomics	3 ECTS				
LM3601-B**	Molecular Biotechnology & Genomics	3 ECTS				
<i>Specialization Biocatalysis</i>						
LM3434	Advanced Protein Chemistry and Analysis	6 ECTS				
LM3701-A*	Advanced Enzymology	3 ECTS				
LM3701-B**	Advanced Enzymology	3 ECTS				
LM3731-A*	Advanced Biocatalysis	3 ECTS				
LM3731-B**	Advanced Biocatalysis	3 ECTS				
<i>Specialization Biochemical Engineering</i>						
<i>Choice out of LM3432 or LM3611</i>						
LM3432	Analysis of Metabolic Networks	6 ECTS				
LM3611	Microbial Community Engineering	6 ECTS				
LM3741-A*	Fermentation Technology & Environmental Biotechnology	3 ECTS				
LM3741-B**	Fermentation Technology & Environmental Biotechnology	3 ECTS				
LM3751	Transport & Separation	6 ECTS				
Electives						
LM3311	Green Chemistry & Sustainable Technology	3 ECTS				
LM3351	Topics in Biotechnology - Theory	3-5 ECTS				
LM3356	Topics in Biotechnology - Practical	10-12 ECTS				
LM3581NB	Metabolic Systems Biology	3 ECTS				
LM3771	Protein Engineering	3 ECTS				

*Part A of the specialisation courses is applicable for exchange students in the 1st semester, or for exchange students with an exchange duration of one year (they can continue with part B).

**Part B of the specialisation courses can only be done after completion of part A.

NOTE: A list of preferred electives for each specialisation and the corresponding procedures for choosing electives are published on Brightspace, which is accessible with a TU Delft NetID or on demand through info-1st@tudelft.nl. Please also see the overview at the end of this document.

Year 2 MSc Life Science & Technology						
Identifier	Course name	Credits	Period			
			1	2	3	4
LM3991	Research Project (BSc/MSc level)***	15-30 ECTS				

***A (small) Research Project at one of our groups within the Faculty of Applied Sciences. It is possible to combine the Research Project with courses. The course code of the Research project is LM3991. A Research Project of 24 EC can be finalized before Christmas. Please do notice that an early termination of a TU Delft housing rental contract is not possible.

Please note that in case you intend to do the Design project: research work should preferably be scheduled in period 3; period 4 has a tight schedule and leaves room for research 1 day/week adjacent to the Design project.

The study guide of the MSc Life Science and Technology can be found [here](#). More information on the programme can be found on [this webpage](#).

Please note that the course offerings and time schedules may be subject to modifications.

We do not recommend to mix courses from various programmes and/or faculties since this will likely lead to scheduling conflicts and overlap. Such scheduling conflicts are the responsibility of the student.

Students who are planning to do a research project are strongly encouraged to take a proactive role in finding a supervisor and research project within the Biotechnology department. The first step is to find a scientific contact person within the Faculty of Applied Sciences (maybe someone you have already been in contact with, or are planning to collaborate with) and get direct approval from the professor of the group in which you wish to do your research. In most cases you will work under the supervision of a PhD student and their professor. Before applying to any of our two annual exchange periods, ideally you will already have arranged a project yourself or you are in the process of doing so. Please mention the actions you have taken in your application as well.

In special cases, we may assist you in finding a supervisor for the research project after the application deadline, but as mentioned earlier, we expect you to take the lead.

More information about the departments of the Faculty of Applied Sciences can be found on [this page](#).

When contacting our academic staff for the first time, we recommend you to include the following information in your e-mail:

- Why you have chosen for TU Delft and the respective department
- That you are an exchange student from a TUD partner university, registered through the International Office Applied Sciences.
- The research area/topic you are interested in and why
- A resume covering your experiences and personal details
- A transcript of records