1. Programme information sources

In order to prepare yourself well, we advise you to carefully read and study this document, with important information regarding your degree programme. In this document, you can find:

a) *'How to prepare for your degree programme'* provides a step-by-step guide to prepare your degree programme before (and soon after) arriving in Groningen.

b) The *'Course unit schedule'* contains a schedule of the course units in our master programme.

Furthermore, you can find information online:
Ocasys is our online course unit catalogue. Here you can find detailed information about all mandatory and elective course units in our master programme. Please ensure to use the 2024/2025 setting, when you consult Ocasys. Some information may still be in concept modus and will be updated soon.

2. Instructions and deadlines

Considering the preparation for your degree programme, we request you to inform us about these issues:

- **Before June 25:** Fill in the Degree Confirmation Form to inform us that you are planning to start your master degree programme in September at the University of Groningen. You may have already confirmed your attendance to the Admission Office, please note that this is a separate procedure and we request your confirmation as well.

  On the form, inform us which track/profile you want to follow and which courses you would like to be enrolled in.

- **During the summer months:** Familiarize yourself with all information documents regarding your degree programme, as mentioned in this letter.

- **During the summer months:** We expect that the formal introduction to our programme will be on site on Friday 30th of August. You will be informed about the introduction in July/August. Plan your arrival in Groningen such that you can participate in all introduction events.

In case you have any questions about (the preparations for) your degree programme, please feel free to contact your academic advisor (Maartje Giesbers) by e-mail (academicadvisor.MScBIO@rug.nl). She will be happy to answer your questions.

university of groningen / faculty of science and engineering / school of science and engineering

How to prepare for your degree programme

This information concerns the Master's degree programme

Biology (BIO)

Contents

Version: May, 2024

Preparing for your degree programme

This document describes the best way to prepare for the Master's degree programme Biomolecular Sciences. It involves matters such as the content of the study programme, planning, organizing individual study elements, various administrative issues and a description of the main sources of information.

The Biology master's degree programme is one of the four master programmes run by the BioSciences Programme Team. This team, which consists of a programme coordinator, an academic advisor and a programme assistant is responsible for the daily (administrative) operations of the master degree programmes Biomolecular Sciences, Biology, Marine Biology, and Ecology & Evolution. Each degree programme is led by a Programme Director that is responsible for the content and quality of their respective degree programme. During the duration of the programme, you may receive messages from the Programme team from the general email address msc.biosciences@rug.nl.

Step 1: Choose your track & profile (June)

The Biology Master's degree programme allows you to choose between two **tracks**:

- Integrative Biology track (IB-track), which provides training as a researcher within an inter- or multidisciplinary focus areas in integrative biology.
- Science, Business and Policy track (SBP-track), which prepares for professions in a societal, political and/or commercial context. When following the SBP track, your first year will be similar to the IB- or R-track.

In Studielink, you may have already registered for one of these tracks, but you can still change your track at this moment, if you do this timely. As explained in more detail below, the IB track offers improved access to popular courses owned by other MSc programmes. Therefore, we recommend research-oriented students to register for this track unless they cannot find a suitable specialisation within IB. You can still switch to the SBP track in year two, if you plan your first year wisely. Discuss your plans with your Academic Advisor.

Track content

STEP 1: Before starting the programme in September, you will need to decide if you want to follow the IB-track (with some mandatory course units) or the SBP-track. Submit your choice using the Degree Confirmation Form. If choosing the Integrative Biology track, you will also need to choose a **Profile** before **June 25** (*see Step 1B*).

In the tables below, you can find the general content for each track.

Integrative Biology track

Study element	ECTS	Note
Research project (RP)	≥40	
Research project (RP)	≥30	
Colloquium	5	Entry requirement: RP
Compulsory MSc courses: - *Skills for Biology 1: Professional Perspectives and Career Orientation* - *Skills for Biology 2: Quantitative Research Methods* - Profile-specific Compulsory courses	 5 5 10-15	 Can be substituted by *Data Science in Biomedicine* in the Biological Data Science Profile See Integrative Biology: Profiles
Electives	≤25	See Ocasys

Study element	ECTS	Note
Research project (RP)	≥30	
Work Placement Business & Policy (yr 2)	40	Entry requirement: RP
Colloquium	5	Entry requirement: RP
Compulsory MSc courses: - *Skills for Biology 1: Professional Perspectives and Career Orientation* - *Skills for Biology 2: Quantitative Research Methods* - *Introduction Science and Business* (yr 2) - *Introduction Science and Policy* (yr 2)	 5 5 10 10	
Electives	≤15	See Ocasys

Step 1B: Choose a profile (Integrative Biology students only) (June)

The Integrative Biology track offers a choice of structured **Profiles**. When choosing one of the profiles, you will have guaranteed access to **compulsory courses** in your programme. Even if these are part of other MSc programmes. Students in the R track do not have this guarantee. Guaranteed placement is not given for courses that are part of the electives.

STEP 1B: **Before 25 June**, IB track students will need to inform us which **Profile** they would like to follow by submitting the Degree Confirmation Form.

You can choose between the following **Profiles**:

Biological Data Science (BDS)
Evolutionary Medicine (EvM)
Ecological Sustainability (EcS)
Human Physiology, Behaviour and Health (PBH)
Modelling in the Life Sciences (MLS)
Flexible Research

Planning semester 1

Step 2: Choose your courses (June)

Most students generally start their programme in September with one or a few course units.

Students in the Integrative Biology track, and students in the SBP track start with two **compulsory courses**:

Compulsory course units for IB track + SBP track	ECTS	Period
Skills for Biology 1: Professional Perspectives and Career Orientation	5	1a1
Skills for Biology 2: Quantitative Research Methods*	5	1a2

* students in Biological Data Science track may replace this course with *Datascience in Biomedicine*)

Note: students with the flexible research profile may choose to start with other courses, but we strongly advice starting with the Skills for Biology courses.

After these compulsory courses, students are advised to take additional **compulsory** and **elective courses**.

IB track students: Try to aim for 20-30 ECTS on courses in total for your first year. Combined with the Research Project of 40 ECTS or 30 ECTs, respectively, you will have completed the desired 60 ECTS in your first year. You can find a list of compulsory + suggested courses below. You can find additional courses on Ocasys.

SBP track students: Try to aim for 15-25 ECTS on courses in total for your first year. Combined with a Research Project of 40 ECTS or 30 ECTs, respectively, and a colloquium of 5 ECTS, you will have completed the desired 60 ECTS in your first year. You can find a list of available courses on Ocasys.

Many of the course units have a **limited capacity** so it is important to register for them well in advance.

Note: When taking a course from another Master programme, students in that programme will have Priority. Students from the IB-track have priority *only* for the courses that are mandatory for their Profile.

IB track Profiles + courses

Below, you can find an overview of the **compulsory courses** per **Profile**, as well as suggested electives that complement your Profile.

***STEP 2*: Before 25 June**, you need to submit your choices for the compulsory and elective **courses** you wish to follow in semester 1 of your programme, using the Degree Confirmation Form. If you submit your preferences later, we may not be able to guarantee you access to your (compulsory) courses.

Profile: Biological Data Science

In this Profile, there are two variants. One focusses on Biomedical Sciences, the other on broader topics in Biology. C means a course is compulsory for that variant, S means it is suggested as an elective.

Course units	Variant		ECTS	Period
	Biology	BMS		
Data Science in Biomedicine		C	5	1a2
Practical Computing for Biologists	C	S	5	1b3
Applied Statistics and Modeling		C	5	2a1

Big Data & Applications in Biomedicine	S	C	5	1b3
Advanced Statistics	C		6	2b3
From Big Data to Personalised Medicine*		S	5	1a2
Molecular Methods in Ecology and Evolution*	S		5	1a1
Tools and Approaches of Systems Biology*	S	S	5	1a2
Neural Networks and Computational Intelligence	S	S	5	1b
Programming in C++ for Biologists	S	S	5/10	1b1
Next-generation sequencing methods and data analysis	S	S	5	1b1
Principles of Population Genetics in Natural Populations	S	S	5	1b1
Genomics in Ecology and Evolution	S		5	1b2
Applied Statistics and Machine Learning	S	S	5	2a1
Statistical Genomics	S	S	5	2a

* cannot be taken in year 1

Profile: Evolutionary Medicine

Compulsory course units	**ECTS**	**Period**
Evolutionary Theory*	5	1a3
Evolutionary Medicine: Diseases of Affluence	5	1b3
Evolutionary Medicine: Infectious Diseases	5	2a1
Suggested electives		
Microbiome & Health	5	1a3
Molecular Biology of Ageing and Age-related Diseases	5	1b1
Genomics in Ecology and Evolution	5	1b3
Big Data & Applications in Biomedicine*	5	1b3

* cannot be taken in year 1

Profile: Ecological Sustainability

Compulsory course units	**ECTS**	**Period**
Ecology and Ecosystem Sustainability*	5	1a
Conservation Ecology Practices	5	1a3
Suggested electives		
Energy, Atmosphere and Resources*	5	1a
Marine Conservation*	5	1a3
Sustainability & Society	5	1b
Systems Integration and Sustainability	5	1b
Ecology of Sustainable Farming**	5	1b2
Flyway Ecology**	5	1b2
Polar Ecosystems	5	2a1
Marine Ecosystem Service and Global Change	5	2a1
Anthropocene*	10	1a

* cannot be taken in year 1

**biennial courses

Profile: Human Physiology, Behaviour and Health (PBH)

Compulsory course units	**ECTS**	**Period**
Nutrition, Brain Development and Cognition	5	1b2
Evolutionary Medicine: Diseases of Affluence	5	1b3
Suggested electives		
Neurodegenerative diseases*	5	1a1
Evolutionary Theory	5	1a3
Microbiome & Health	5	1a3
Neurobiology of nutrition	5	1b1
Molecular Biology of Ageing and Age-related Diseases	5	1b1
Neurobiology of Psychiatric Disorders	5	1b1
Nutrition, Brain Development and Cognition	5	1b2
Advanced Mammalian Cell Biology	5	1b2
Evolutionary Medicine: Diseases of Affluence	5	1b3
Laboratory Animal Science*	2/5	1b3
Advanced Light Microscopy	5	1a3

* cannot be taken in year 1

** see Ocasys for requirements

Profile: Modelling in the Life Sciences

Compulsory course units	**ECTS**	**Period**
Mathematical Models in Biology	5	1a3
Programming in C++ for Biologists	5/10*	1b1
Modelling Complex Biological Systems	5	1b2
Suggested electives		
Evolutionary Theory*	5	1a3
Tools and Approaches of Systems Biology*	5	1a2
Molecular Dynamics*	5	1a2
Principles of Population Genetics in Natural Populations	5	1b1
Practical Computing for Biologists	5	1b3
Practical Modelling for Biologists	5	1b3
Mathematical Models in Ecology and Evolution	5	2a-2b

* cannot be taken in year 1

** the extended 10 ECTS variant of this course overlaps with “Modelling Complex Biological Systems” and cannot be taken in the same year as this course

Step 3: Attend introductory event & Start your programme (August – September)

All important information about course units, programme and schedules can be found on the Student Portal and on Ocasys. Upon arrival in Groningen, we will introduce you to the internal Student Portal, for which you will need a personal computer account. We recommend to already familiarize yourself with the Student Portal before arrival.

You will receive more information about the Introductory Event in July/August.

Step 4: Find a mentor (September – October)

An important characteristic of our Master's degree programme is that you yourself have to choose which course units, individual assignments (colloquium and essay) and research projects you want to do and when to do them (during the two years nominally allocated for the programme). This allows tailoring the degree programme to your interests. You do need to discuss these choices with your **study mentor** first, to ensure that your plans meet the requirements of the programme.

The mentor will be your personal contact person throughout the entire Master's programme. You are solely responsible for contacting the mentor of your choice, and for making a first appointment within the first few months of the programme and maintaining contact with your mentor during your entire programme.

You are advised to look for a **Study mentor** as soon as possible after the start of the first course.

Many students ask their mentor to be the **supervisor** of their first research project as well. This is not only convenient; conducting your research in your mentor's research group is also a good way to build on your relationship with them.

Planning semester 2

Research Project

You may already have ideas about an interesting research area from your previous education programme. The question is: which course units or topics that you followed previously really inspired you? You may search for interesting research groups and the themes they are working on at http://www.rug.nl/research/fse. Important research institutes for the Biology Master's degree programme include GELIFES, ESRIG, and GBB. Special research markets may be organized during the first semester, keep an eye on announcements.

Most students will start their **first Research Project** in the second semester

Usually, you will carry out a research project that is part of a bigger project from a PhD student or a postdoctoral researcher. He/she will normally be your daily supervisor in the laboratory. You will carry out a research project, essay or colloquium under the supervision of an authorized **examiner** (a list of these examiners is published on the Student Portal). The first research project should be carried out 'internally', i.e. within one of the research institutes within the Faculty of Science and Engineering/UMCG and under the primary supervision of one of the authorized examiners from the list. He/she is usually not your daily supervisor in the lab, but is ultimately responsible for supervision, including assessment and grading of your project.

After selecting a few interesting research groups, you contact the leaders of these groups to make an appointment to talk about possible research projects. We recommend talking with at least two or three research groups to get a good idea of the differences and similarities between the groups and which project is most appealing. Once you have met with all the research groups of interest, you can decide which one to join and on what date. Do not forget to politely inform both the group of your choice and the groups you have rejected of your decision.

Formalizing individual study elements: Programme Proposal Form

Because the Master's programme involves many optional components, there is a risk that students include study elements that do not meet the minimum requirements, e.g. an unsuitable research topic, a project that is too limited in time or subject matter, too little student workload, unauthorized supervisor, etc. The **Board of Examiners** is responsible for ensuring that the Master's degree programme maintains an acceptable level, which is why you require its approval for each individual study component before starting it.

You will need to complete a special '**Programme Proposal Form**' for each study component and discuss this with your **study mentor**. You need to send the form to msc.biosciences@rug.nl and will hear within a few weeks whether the component has been approved or not. If you do not request approval of a curriculum component in advance, you will be running a real risk: If the component is rejected after you have completed it, the ECTS credit points gained for that component will not count towards your Master's degree programme. So, make sure to do this as early as possible before starting a new individual programme element, to prevent a potential problem!

Once you have found a first **research project**, discuss your plans with your mentor and complete the **Programme Proposal Form** with all relevant information for your first individual study component. Submit your form by email to the Programme Management (msc.biosciences@rug.nl) for approval by the Board of Examiners.

You do not need to enter your entire study plan on the Programme Proposal Form. You will probably decide on other/further study elements sometime during your first research project. This will be a good moment to include your new plans to your existing Programme Proposal Form and submit that to the Programme Management. And so on.

Planning year 2

During the second year of the programme, most students in the **Research track** will conduct their second research project, colloquium and additional electives to fulfil the requirement of a total of 120 ECTS.

Student in the **SBP track** will start the second year with the two mandatory courses in the SBP programme, followed by the Work Placement of 40 ECTS. We advise SBP students to conduct their colloquium in year 1, so the entire second year can be devoted to SBP.

Graduation

In order to obtain your degree, you need to submit your complete study programme via Progress Portal for assessment by the Board of Examiners. You are advised to complete this step of your **diploma application** before starting your second research project, when you have obtained approximately 80 ECTS and completed your first research project. Deadlines for submitting your study programme to meet scheduled ceremony dates can be found on the Student Portal.

Information and communication channels

In the Master's degree programme, you have a lot of responsibility for obtaining information about schedules, the programme, registration, administrative matters, etc., than in your previous education programme. The most important sources of information on the Master's degree programme are:

- The *Student Portal on Brightspace:* for the latest news and announcements, important forms, information about study and internships abroad, tips for preparing for the labour market, information on graduation, contact details, etc.
- S*tudy Mentor:* for all information about programme content, discussing your study plan, agreeing on your Programme Proposal Form, contacts abroad. A list of available mentors in the Biology programme can be found here.
- *Academic Advisor:* for all other questions or possible flaws in information. Also, report any extraordinary circumstances affecting your study progress (illness, handicap, family matters, pregnancy, etc.), immediately to your Academic Advisor! Conversations with the Academic Advisor are always 100% confidential.
- BioSciences Programme Team: msc.biosciences@rug.nl
- Other standard University of Groningen information systems: *e-mail, Progress Portal, Ocasys*, etc. These systems, as well as the Student Portal, will be explained in these instructions and upon arrival in Groningen.

Frequently Asked Questions

How does the 'Course Unit Schedule' work?

The **Course unit schedule** (see the end of this document) shows all course units that we offer in our programmes, and the time periods in which they are scheduled. Please note that this is the schedule for the duration of one academic year, to be used by first-year and second-year students in the master.

The **academic year** is divided into **two semesters**, which are divided into **two periods** of 10 weeks (Period Ia and Ib for Semester I, and Period 2a and 2b for Semester II). During each 10-week period, you can take a maximum of three (consecutive) courses of 5 ECTS, for a total of 15 ECTS.

Page 2 of the Course unit schedule explains the course unit abbreviations. Note the difference between fulltime course units, non-fulltime course units, and special course units:

A) Fulltime course units usually have a study load of 5 ECTS and can be recognized by being scheduled in only 3 or 4 weeks. Examples in the Biology Master's programme are: *Skills in Biology 1* and *Skills in Biology 2*. Of course, one cannot participate in multiple fulltime courses simultaneously.

B) Non-fulltime course units usually have a study load of 5 ECTS and can be recognized by being scheduled for about 5-10 weeks. Examples in the Biology Master's programme are *Orientation on Non-Academic Careers*, and *Advanced Statistics* (6 ECTS).

Use Ocasys for course unit descriptions and the time table generator for day-to-day schedules. Don't be misled by these day-to-day schedules of some fulltime course units: They sometimes have only few scheduled lectures, but also in these course units you will be working fulltime, for example because of non-scheduled group assignments, preparing presentations, writing assignments, self-study, etc.

What is the difference between 'compulsory master courses' and 'elective courses'?

You can find a list of all available course units in the Biology Master's degree programme on Ocasys. It is compulsory to include 20 ECTS (or 10 ECTS for the SBP Profile) of programme-topic related course units ('Master courses') in your two-year study programme. All MSc Biology students (except students in the Research-track), need to take the courses *Skills for Biology 1* and *Skills for Biology 2*. You can choose Master courses from the list of Master course units on Ocasys.

Available course units that are not mentioned on the list of Master course units on Ocasys can only count as 'electives' in your programme (20 ECTS for the research profile or 10 ECTS for the SBP profile). The difference between Master courses and Elective course units is that the latter do not necessarily involve the general topic of your degree programme and are followed to broaden rather than to deepen your knowledge (as Master courses do). In case the required amount of ECTS for 'Master courses' in an individual programme are completely filled, additional Master courses may be chosen. These courses will automatically be part of the 'electives'.

Are there any course units that are worth mentioning, because they differ from most other course units?

Yes, here are the most important ones, see also Ocasys for more details:

Laboratory Animal Science is a course unit that you are only allowed to follow (and must follow) in case you are going to do a research project involving animal experimentation. Before registering for this course, your plans for the first (or second) research project need to be decided.

Orientation on Non-Academic Careers is a course unit for Master students who want to examine the possibilities of a career outside the academy. This is a non-fulltime course that students usually take while they are doing one of their research projects. In small groups (3-4 students) a case delivered by a company in the Netherlands or a neighbouring country is solved. The case report will be presented to the participating company during an excursion to all participating companies.

iGEM is a worldwide competition on synthetic biology, in which the RUG partakes every other year. You can receive maximally 20 ECTS of elective study points for participation. Selection takes place during wintertime.

Can I choose two course units that are scheduled in the same time period?

Usually not, because most course units are scheduled as full-time course units, so you will not be able to do something else (or be at a different location), such as following another course unit (full-time or part-time), writing an essay, preparing a colloquium or doing research. However, it is possible to combine a fulltime course unit with a lecture series course unit in which one or two lectures are scheduled during the month.

Can I follow a course unit at the same time as the research project?

Always consult with your supervisors well in advance before planning a course unit during your research project! They must approve your plans. In practice, it is usually possible to interrupt a research project to follow a course unit, but if you can avoid doing this then you should. The time that you cannot spend on your research (usually 3 weeks per 5 ECTS course unit) is added to the end of your research project to ensure you earn the required number of ECTS for the project.

I will start my programme on September 1. How should I plan my programme?

Most students start their programme in September with a series of **compulsory master course units**, starting with the courses *Skills for Biology 1* and *Skills for Biology 2,* followed by one or two electives. After these courses, you can start with a research project of 30 or 40 ECTS. We recommend aiming for approximately 60 ECTS in the first year.

I plan to follow the SBP profile. How should I plan my programme?

If you start your Master's degree programme in September, the most logical course of action is to follow the SBP component of the programme in the second year (course units and the SBP work placement with a total of 60 ECTS, from September up to the summer break). You can follow all the other components in the first year: research project (30 ECTS or more), *Skills for Biology 1* and *Skills for Biology 2* (10 ECTS) and electives (15 ECTS), which you can supplement with extra research or course units. You can also plan your colloquium (5 ECTS) at the end of the first year. Some students decide to do their colloquium after their second-year internship instead. This will require you to work through into the holidays if you want to graduate without a delay (see also below).

How long does a research project take?

A full working week for a research project is 40 hours. One ECTS credit point is equivalent to 28 hours. A research project of 30 ECTS is equivalent to 30 x 28 = 840 hours, or 21 weeks (5 months) of fulltime work. This amounts to about one complete semester, including holidays. A research project of 40 ECTS is equivalent to 28 weeks, or 6.5 months of full-time work. You can calculate the duration of research projects with other ECTS values in a similar fashion as is explained on the **Programme Proposal Form**.

What is the workload of my first research project (30 ECTS or 40 ECTS)?

The first research project may have a workload of 40 ECTS or 30 ECTS (you can also spend some of your elective ECTS on extra research). If you are following the SBP profile, you must complete your first research project before the second year starts. Therefore, a 30 ECTS project is advised. However, a 40 ECTS research project is possible for SBP students. This would mean that you have 10 ECTS less to spend on electives.

The last opportunity to increase the student workload of your research project is during the midterm evaluation, which takes place halfway through your research project.

How far do I need to plan ahead?

You do not have to, nor can you, draw up a detailed study plan for your entire Master's degree programme straightaway (see above). Make sure that at the start of the programme you have a rough idea of which study components you might want to follow during the coming two years, and discuss this with your **study mentor**. Hand in the first **Programme Proposal Form** as soon as you know the details of the first research project. Consult with your mentor when you are filling in the further details and planning of study plan.

Can I work on study elements during the summer break?

This is not prohibited, but your supervisors will tell you whether this is practically feasible. Many research groups will have a few staff members who continue working through the holidays, so there will often be someone present to provide supervision. First consult with your supervisors on whether this is both possible and feasible. Obviously, if you work on your colloquium you will need supervision, which will not be possible if your supervisor is on holiday leave. Moreover, there are colloquium requirements regarding the minimum number of scientific staff who must be present during your presentation, which will be difficult to arrange in the holiday season.

Can I enrol for course units in the Progress Portal and follow course units without prior approval via the Programme Proposal Form?

Yes, you can. For Master courses and Elective courses listed on the Ocasys page of your degree programme, you do not need permission from the Board of Examiners. For courses that are not listed on this page, you need to obtain permission by submitting a request form that can be found on the Board of Examiners page on the Student Portal.

Do not enrol for mandatory course units yourself, this will be done for you. Inform us of your elective course unit preferences by submitting the Degree Confirmation Form before 25 June. You will be instructed after arriving in Groningen about enrolling for course units yourself.

My academic writing skills are somewhat poor. What can I do about this?

You will be required to write extensive reports during your Master's degree programme. Many students have trouble finding the discipline to write or achieve the proper level of academic quality in their writing. The Student Service

Centre (www.rug.nl/ssc) offers various writing course units and has a thesis support group for students who are having difficulty writing their thesis. The Faculty of Science and Engineering also has similar **thesis support groups**; these have the added advantage of a focus on science, instead of the broader focus you will find in the support groups for the students of other faculties. Ask your **Academic Advisor** for more information if you are interested.

Make sure you hold your supervisor responsible for providing good supervision: for example, you could agree to have a short meeting once a week to discuss your progress or to submit draft sections of your writing for the supervisor to assess. You could also ask for a workplace in the department where you could work on fixed days. It can also be stimulating to work together with your fellow students on your theses if you cannot find the discipline to spend whole days behind your computer. Contact the Academic Advisor as soon as possible if you are stuck and cannot find a way out.

What should I do if exceptional circumstances arise, such as illness, psychological problems, disability, family circumstances, pregnancy, etc.

Contact your **Academic Advisor** as soon as possible. Your personal circumstances will always be treated confidentially; the academic advisor will never discuss your situation with others (lecturers, parents, etc.) without your express permission. In many cases the Academic Advisor may be able to help and otherwise they will refer you to another service if you so wish.

If your studies are delayed due to such circumstances, financial compensation may be available via the University's Graduation Fund. It is important that you report the circumstances to an Academic Advisor as soon as possible to be eligible for this fund. If you fail to report or report too late, you will not be compensated.

I still have questions after reading all information documents. What should I do?

Please ask your questions to the Academic Advisor (Maartje Giesbers: academicadvisor.MScBIO@rug.nl), she is happy to help you out. Many incoming students find it quite hard to understand all the information before arriving in Groningen as the programme and environment may be very different from what you are used to in your home country. Please do not worry: before and after arrival in Groningen, we will help you as much as possible, so you will soon understand the most important aspects of the programme, and you will settle in well within our Faculty. Good luck and we are looking forward to receiving you!

TIME TABLE BIOLOGY MODULES 2024/2025

	2024 Ia										Ib 2025												IIa										IIb														
	September					October				November				December				January					February				March				April				May					June				July			
Monday	2	9	16	23	30	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27	3	10	17	24	3	10	17	24	31	7	14	21	28	5	12	19	26	2	9	16	23	30	7		
Biology (Integrative)	*SkillsBio 1*			*SkillsBio 2*			MathBio												EMDA				EMID						Mathematical Models in Ecology and Evolution																		
							[1]AdvMicros				[4]ProgC++			ProgC++cont					Modelling																				Adv.Statist.									
														RadioIso					BioComp				Orientation on Non-academic Careers																								
														ModBio					LAS																												
SBP track (year 2)	*SBP: Science & Business*							*SBP: Science & Policy*							*SBP*				*Work placement*																												
Biomolecular Sciences				[1]ToolSys							[1]AdvMem			[1]ProtEnz					[1]AdvGenEng																												
				[1]MolDyn			[1]MM&ASBio				[1]SeqMethods			[1]Adv MamBio					[1]EM BM				Synthetic biol. & Systems chem.																								
											Biocatalysis & Green								chemistry				Advances in chemical biology										BI&MT														
	iGEM vervolg																									iGEM Competition																					
Ecology and Evolution	[4]Mol. meth. in E&E							[2]ConsPract						Flyway Ec.					[2]Res.Prop				IslandBio																								
	[2] Behaviour EE						[2]Evol. theory																																								
Marine Biology								Marine Cons															MES-GC			Polar eco.																		NIOZ			
																							Water management																								
Electives (other programmes)																																															
BMS	[3]AMN			[3]DSB							[3]ASM			[3]NBDC					[3]BDAB																												
BCN							[5]F&EB																																								
Education and Communication	Res. methods science and comm																						Basiscursus Master Lerarenopleiding																								
																							Masterstage 1																								
																							Skills in Science Communication EC																								
Energy and Environmental Science	Energy, Atmosphere and Resources										Modelling Energy								Systems																												
	Ecology and Ecosystem Sustainability										Sustainable								Society																												
MPS										MS												MS																									
Week no	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27			
Academic no	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16			17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42			

[1] Course for Biomolecular Sciences, limited access

[2] Course for Ecology and Evolution, limited access or depending on profile IB

[3] Course for Biomedical Sciences, limited access or depending on profile IB

italics = compulsory for track

[4] Course is organized in a 5 and 10 ECTS version

[5] Course for BCN; limited access

(grey) week without contact hours

Abbreviation	Module	Code		Abbreviation	Module	Code
AdvGenEng	Advanced genetic engineering	WMBS006-05		Math models in E&E	Mathematical Models in Ecology and Evolution	WMEV013-06
AdvMem	Advanced Membrane Biology	WMBS007-05		Masterstage 1	Masterstage 1	TEM0205
AdvMN	Advanced metabolism and nutrition	WMBM004-05		MES-GC	Marine ecosystem service & global change	WMMB008-05
AdvMicros	Advanced light microscopy	WMBY016-05		Modelling	Practical modelling for biologists	WMBY009-05
AdvPCEcol	Advanced Population & Community Ecology	WMEV008-05		Modelling Energy Systems	Modelling Energy Systems	WMEE0XX-05
Adv. Statist.	Advanced Statistics	WMBY018-06		MolDyn	Molecular Dynamics	WMBS003-05
ASM	Applied Statistics and Machine Learning	WMBM024-05		Mol. meth. in E&E	Molecular Methods in Ecology and Evolution 2021/2022	WMEV007-10
Advanced Biocatalysis	Advanced Biocatalysis	WMCH033-05		MM&ASBio	Molecular Modeling and Analysis in Structural Biology	WMBS021-05
Advances in chemical biology	Advances in chemical biology	WMCH014-05		MS	Microbiological safety	WMMP004-01
Adv MamBio	Advanced Mammalian Cell Biology	WMBS022-05		NIOZ	NIOZ-course: www.nioz.nl/marine-masters-en	NA
Basiscursus Lerarenopleiding	Basiscursus Lerarenopleiding	TEM0105		NBDC	Nutrition, Brain Development and Cognition	WMBM020-05
Behaviour EE	Behaviour, Ecology and Evolution	WMEV003-10		Oceanography	Principles of Biological Oceanography	WMMB003-05
BDAB	Big Data and Applications in Biomedicine	WMBM025-05		Orientation on Non-academic Careers	Orientation on Non-academic Careers	WMBY032-05
BI&MT	Biophysical Imaging & Manipulation Technique	WMPH047-05		Polar Ecosyst	Polar Ecosystems	WMMB009-05
BioComp	Practical Computing for Biologists	WMBY008-05		Pop.Genetics	Principles of Populations Genetics in Natural Populations	WMMB005-05
Coll.	Colloquium MEME	WMEV001-05		ProgC++	Programming C++ for biologists	WMBY010-05
ConsPract	Conservation Ecology Practices	WMEV004-05		ProtEnz	Protein and Enzyme Engineering	WMBS004-05
DSB	Data Science in Biomedicine	WMBM023-05		RadioIso	Radioisotopes in Experimental Biology	WMBY011-05
Eco-farming	Ecology of sustainable farming 23/24	WMEV009-05		res. methods science and comm	Research Methods in Science Education and Communication	WMEC005-05
Ecol. Res. Skills	Ecology research skills	WMEV005-10		ResProp	Research Proposal Ecology and Evolution	WMEV012-05
Ecology and Ecosystem Sustainability	Ecology and Ecosystem Sustainability	WMEE0XX-05		SBP: Science & Policy	Introduction Science& Policy	WMSE002-10
Ecosystems shores	Ecosystems Mediterranean Rocky Shores	WMMB010-10		SBP: Science & Business	Introduction Science & Business	WMSE001-10
EMDA	Evolutionary Medicine Diseases of Affluence	WMBY025-05		SBP: work placement	Work placement Business and Policy	WMSE003-40
EMID	Evolutionary Medicine Infectious Diseases	WMBY024-05		SeqMethods	Next-generation sequencing methods and data analysis	WMBS023-05
Evol. theory	Evolutionary Theory	WMEV006-05		Skills in Science Communication EC	Skills in Science Communication EC	WMEC006-05
EM BM	Electron microscopy of biological macromolecules	WMBS011-05		SkillsBio 1	Skills for Biology 1: Professional Perspectives and Career Orientation	WMBY029-05
Flyway. Ec	Flyway Ecology 22/23	WMEV010-05		SkillsBio 2	Skills for Biology 2: Quantitative Research Methods	WMBY028-05
F&EB	Function and Evolution of Behaviour	WMBC004-04		Sustainable Society	Sustainable Society	WMEE0XX-05
Gen. EE	Genomics in Ecology & Evolution	WMEV011-08		Synthetic biol. & Systems chem.	Synthetic bioloy & Systems chemistry	WMCH021-05
iGEM Competition	International Genetically Engineered Machine competitior	WMBS013-20		TBAs	Tropical Biology Association summer field courses	NA
Energy, Atmosphere and Resources	Energy, Atmosphere and Resources (EES)	WMEE0XX-05		Tools syst	Tools and approaches of systems biology	WMBS005-05
IntroBR	Introduction to Biomolecular Research	WMBS0XX-05		Water management	Transitions in water management	GEMTRWATM
IslandBio	Island Biology	WMEV016-05				
LAS	Laboratory Animal Science	WMBY026-05				
Marine biol.	Principles of Marine Biology	WMMB004-05				
Marine cons.	Marine Conservation	WMMB011-05				
MathBio	Mathematical models for Biology	WMBY031-05				
ModBio	Modelling Complex Biological Systems	WMBY027-05				