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 2023/2024 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:

• <u>Before June 25:</u> Inform us by e-mail (<u>msc.biosciences@rug.nl</u>) if you are planning to start your master degree programme in September at the University of Groningen or not. Please use the following subject for your email: "Confirmation degree programme". Please note: You may have already confirmed your attendance to the Admission Office, this is a separate procedure and we request your confirmation as well.

If you are registered in the <u>Integrative Biology track</u>: In the same email, inform us which profile you want to follow and which courses you would like to be enrolled in.

If you are registered in the <u>Research track</u> and you <u>were not a BSc student at the University of Groningen:</u> In the same email, inform us in which courses you would like to be enrolled in, and what your specific field of interest is within your study programme.

- **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 1st of September. 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.

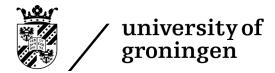
How to prepare for your degree programme

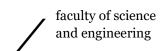
This information concerns the Master's degree programme

Biology (BIO)

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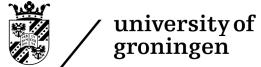


Preface

This information guide concerns the preparations for the Master's degree programme in Biology (BIO). As a student, you have a lot of freedom in planning your own study programme ('tailor-made'). One of the resulting advantages is that you can design a programme that fits best with your personal interests and planning. On the other hand, these choices come with considerable responsibility and require you to constantly think ahead during your studies.

This document describes the necessary steps you must take in preparing for your degree programme. Combined with the other information, this should allow you to properly start your programme. The last section of this document contains an extensive FAQ section with accompanying answers. In case you have any remaining questions, please do not hesitate to contact the Academic Advisor.

Version: May, 2023



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Preparing for your degree programme

This chapter describes the best way to prepare for the Biology Master's degree programme. It involves matters such as admission and registration, formulating and organizing your first research project, various administrative issues and a description of the main sources of information.

Step 1: Choose your track & profile (June)

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

- <u>Integrative Biology track</u> (IB-track), which provides training as a researcher within an inter- or multidisciplinary focus areas in integrative biology.
- Research track (R-track), which offers a customizable programme that provides training as a researcher.
- 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 IBor 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.

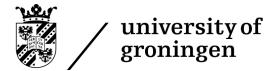
STEP 1: Before starting the programme in September, you will need to decide if you want to follow the IB-track (with some mandatory course units) or the R-track. If choosing the Integrative Biology track, you will also need to choose a **Profile** before **June 25** (see Step 1B).

Track content

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
Essay	5	
Compulsory MSc courses:		
- Skills for Biology 1: Professional	5	
Perspectives and Career Orientation		
- Skills for Biology 2: Quantitative	5	Can be substituted by Data Science in
Research Methods		Biomedicine in the Biological Data Science Profile
- Profile-specific Compulsory courses	10-18	See Integrative Biology: Profiles
Electives	≤20	See Ocasys



Research track

Study element	ECTS	Note
Research project (RP)	≥40	
Research project (RP)	≥30	
Colloquium	5	Entry requirement: RP
Essay	5	
Compulsory MSc courses:		
- Academic Skills course	5	Choose from relevant list (see Ocasys)
- Quantitative Skills course	5	Choose from relevant list (see Ocasys)
- Biology courses	10	Choose from relevant list (see Ocasys)
Electives	≤20	See Ocasys

Science, Business and Policy track

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	5	
Perspectives and Career Orientation		
- Skills for Biology 2: Quantitative	5	
Research Methods		
- Introduction Science and Business (yr 2)	10	
- Introduction Science and Policy (yr 2)	10	
Electives	≤15	See Ocasys

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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 submit which Profile they would like to follow.

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)

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	5	1a1
Orientation		
Skills for Biology 2: Quantitative Research Methods*	5	1a2

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

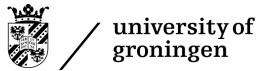
Students in the <u>Research track</u> are highly encouraged to start with these two courses, but this is not compulsory. See more info about courses for students in the Research track below.

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

<u>IB track students:</u> 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 <u>Ocasys</u>.

<u>SBP track students</u>: Try to aim for 20-30ECTS 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.



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<u>R track students:</u> Students who completed their BSc's degree at the University of Groningen (UoG) can enrol for course units independently, through Progress Portal. Students who did not complete their BSc at the UoG will have to send their course unit preferences by email. You can find a list of available courses on <u>Ocasys</u>.

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

Note: When taking a course from another Master programme, students in that programme will have Priority. Students from the IB-track have priority 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.

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	Var	iant	ECTS	Period
	Biology	BMS		
Data Science in Biomedicine		С	5	1a2
Practical Computing for Biologists	С	S	5	1b2
Applied Statistics and Modeling		С	5	2a1
Big Data & Applications in Biomedicine	S	С	5	2a2
Advanced Statistics	С		6	2b3
From Big Data to Personalised Medicine*		S	5	1a1
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	1b3
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*	8	1a
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	2a2

^{*} cannot be taken in year 1

Profile: Ecological Sustainability

Compulsory course units	ECTS	Period
Sustainable Use of Ecosystems*	5	1a
Conservation Ecology Practices	5	1a3
Suggested electives		
Impact of Energy and Material Systems*	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

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	8	1a
Microbiome & Health	5	1a3
Neurobiology of nutrition	5	1a3
Molecular Biology of Ageing and Age-related Diseases	5	1b1
Neurobiology of Psychiatric Disorders	5	1b1

^{**}biennial courses



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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	1b3

^{*} 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	8	1a
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	1b2
Practical Modelling for Biologists	5	1b3
Mathematical Models in Ecology and Evolution	5	2a-2b

^{*} 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)

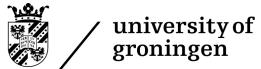
All important information about course units, programme and schedules can be found on the Student Portal and on Ocasys. Upon arrival in Groningen, we will introduce you to the internal Student Portal, for which you will need a personal computer account. We recommend to already familiarize yourself with 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. S/he can advise you during problems or questions that you are encountering in your programme. You are solely



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responsible for contacting the mentor of your choice, and for making a first appointment and maintaining contact with your mentor during your entire programme. Students who completed their BSc's degree at UoG may look for their mentor before the summer holidays. All other students may wait until starting the academic year. Choosing a mentor will also be part of the course *Skills for Biology 1*.

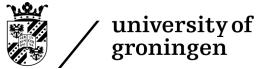
Many students ask their mentor to be the **supervisor** of their first research project as well. This is not only convenient; conducting your research in your mentor's research group is also a good way to build on your relationship with him or her. Once you have made your choice and drawn up a preliminary study plan for the first year of the Master's programme, you need to discuss your plans with your mentor and complete the **programme proposal form** for your first individual study item together (Step 6).

Step 5: Find a Research Project (October - December)

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 are organized during the first semester, keep an eye on announcements.

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. Do not give up right away should you not receive a reply; sometimes researchers are simply very busy and they may have missed your e-mail or have forgotten to reply. In other words, a lack of response does not necessarily mean that they do not have time for you. Try sending a reminder or visit the researcher in person. 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. Prepare for the meeting by reading a few of the group's recent articles and use the opportunity to ask everything you want to know. For example, which projects they are working on, where and when you could start, what kind of work is involved, what you could learn there, which techniques are used, what kind of supervision they offer, who will be your day-to-day supervisor, etc. Ask to be shown around the lab and talk with the Master's students who conduct research there. This will help getting a feel for the atmosphere and you will be able to compare the various groups. Do not hesitate to call upon the supervisors; they should welcome you with open arms (because you basically do research for them!). Once you have met with all the research groups of interest, you can decide which one to join and



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on what date. Do not forget to politely inform both the group of your choice and the groups you have rejected of your decision.

Step 6: Programme proposal form and Board of Examiners approval (4 weeks before start of individual study component)

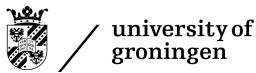
Because the Master's programme involves many optional components, there is a risk that students include study elements that do not meet the minimum requirements, e.g. an unsuitable research topic, a project that is too limited in time or subject matter, too little student workload, unauthorized supervisor, 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 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! It is not possible to graduate before all components have been approved by the Board of Examiners using the Programme Proposal Form. So, make sure to do this as early as possible before starting a new individual programme element, to prevent a potential problem!

You do not need to enter your entire study plan on the Programme Proposal Form. In fact, this is not possible, because you will very likely only choose the subject of your second research project and/or essay and/or colloquium later in the programme. We recommend that you submit your first Programme Proposal Form as soon as you know where you will be doing your first individual study component (research project or essay). Discuss your plans with your mentor and enter the information of the project on the Programme Proposal Form. Your mentor does not need to sign the form, but it is your responsibility to keep your mentor informed. After completing the Programme Proposal Form with all relevant information, you will need to send it by email to the Programme Management Team (msc.biosciences@rug.nl) for approval by the Board of Examiners. 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.

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:

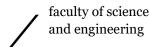
- The <u>Student Portal on Brightspace</u>: for the latest news and announcements, important forms, information about study and internships abroad, tips for preparing for the labour market, information on graduation, contact details, etc. The Student Portal is explained in these instructions and upon arrival in Groningen.



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- *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 <u>here</u>.
- <u>Academic Advisor</u>: 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.
- Other standard University of Groningen information systems: *e-mail, Progress Portal, Ocasys*, etc. In addition, these systems will be explained in <u>these instructions</u> 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:

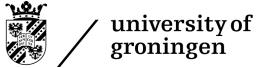
- A) Fulltime course units usually have a study load of 5 ECTS and can be recognized by being scheduled in only 3 or 4 weeks. Examples in the Biology Master's programme are: *Skills in Biology 1* and *Skills in Biology 2*. Of course, one cannot participate in multiple fulltime courses simultaneously.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



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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:

<u>Laboratory Animal Science</u> is a course unit that you are only allowed to follow (and <u>must</u> 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.

<u>Orientation on Non-Academic Careers</u> 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.

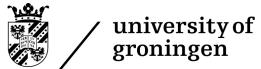
<u>iGEM</u> is a worldwide competition on synthetic biology, in which the RUG partakes every year. You can receive maximally 20 ECTS of elective study points for participation. Selection takes place during wintertime.

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

Usually no, 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. An example is the above-mentioned course unit Orientation on Non-Academic Careers. 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. Discuss with your supervisor that you would like to follow a non-fulltime course and ask if the research project allows that you sometimes may have a few hours during the day that your presence is needed in that particular course. If it concerns a single-block course unit (full-time, usually 5 ECTS or 3 weeks), this will usually mean that your research will come to a halt during that period. Make sure you do not schedule any experiments then, but limit your research work to some cell maintenance, freezing cultured cells, etc. If it concerns a non full-time course unit that spans



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two blocks (often taking up only a few mornings or afternoons per week), you can usually continue your research at the same time (as long as the course unit is taught in Groningen, of course), albeit less intensively. 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?

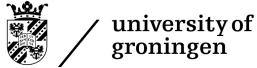
Most students start their programme in September with a series of **compulsory master course units**, starting with the courses *Skills in Biology 1* and *Skills in Biology 2*, followed by one or two electives. After these courses, you can start with a research project of 30 or 40 ECTS. We recommend 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), *Skills in Biology 1* and *Skills in 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 $30 \times 28 = 840$ 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**.



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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 individual study components (usually including your first research project). Consult with your mentor when you are filling in the further details and planning of study plan.

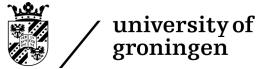
Can I work on study elements during the summer break?

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 essay or 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.

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

Yes, you can; enrolment for course units is completely independent from the approval of the Board of Examiners for individual study components via the Programme Proposal Form. 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.

For students that did not complete their BSc's degree at the University of Groningen: Do not enrol for course units yourself, but send your course unit preferences by email to the academic advisor before 25 June. You will be instructed after arriving in Groningen, about enrolling for course units yourself beyond the



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first semester. Students that did complete their BSc's degree at the University of Groningen can enrol for their courses through Progress Portal.

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

You will be required to write extensive reports and theses 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!

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Abbreviation	<u>Module</u>	Code	Abbreviation	Module	Code
Advanced Biocatalysis	Advanced Biocatalysis	WMCH033-05	Math models in E&E	Mathematical Models in Ecology and Evolution	WMEV013-06
AdvGenEng	Advanced genetic engineering	WMBS006-05	Masterstage 1	Masterstage 1	TEM0205
Adv Mem	Advanced Membrane Biology	WMBS007-05	MES-GC	Marine ecosystem service & global change	WMMB008-05
AdvMicros	Advanced light microscopy	WMBY016-05	Meta analyses in ecology	Meta analyses in ecology 22/23	WMBY013-05
AdvPCEcol	Advanced Population & Community Ecology	WMEV008-05	Modelling	Practical modelling for biologists	WMBY009-05
Adv. Statist.	Advanced Statistics	WMBY018-06	Mol. Dyn	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
Agro-ecology	Ecology of sustainable farming 23/24	WMEV009-05	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	WMEV003-09	Oceanography	Principles of Biological Oceanography	WMMB003-05
	Big Data and Applications in Biomedicine	WMBM025-05	Org. Mem	Organelle and Membrane Biogenesis	WMBS012-05
	Biophysical Imaging & Manipulation Technique	WMPH047-05	Orientation on Non-academic Careers	Orientation on Non-academic Careers	WMBY032-05
BioComp	Practical Computing for Biologists	WMBY008-05	Polar Ecosyst	Polar Ecosystems	WMMB009-05
Coll.	Colloquium MEME	WMEV001-05	Pop.Genetics	Principles of Populations Genetics in Natural Populations	WMMB005-05
ConsPract	Conservation Ecology Practices	WMEV004-05	Prog C for biol	Programming C++ for biologists	WMBY010-05
DSB	Data Science in Biomedicine	WMBM023-05	Prot Enz	Protein and Enzyme Engineering	WMBS004-05
Ecol. Res. Skills	Ecology research skills	WMEV005-10	Radiolso	Radioisotopes in Experimental Biology	WMBY011-05
Ecosystems shores	Ecosystems Mediterranean Rocky Shores	WMMB010-10	res. methods science and comm	Research Methods in Science Education and Communication	WMEC005-05
EMDA	Evolutionary Medicine Diseases of Affluence	WMBY025-05	Res. Prop	Research Proposal Ecology and Evolution	WMEV012-05
EMID	Evolutionary Medicine Infectious Diseases	WMBY024-05	Skills in Science Communication EC	Skills in Science Communication EC	WMEC006-05
Evol. theory	Evolutionary Theory	WMEV006-08	SBP: Science & Policy	Introduction Science& Policy	WMSE002-10
EM BM	Electron microscopy of biological macromolecules	WMBS011-05	SBP: Science & Business	Introduction Science & Business	WMSE001-10
Flyway. Ec	Flyway Ecology 22/23	WMEV010-05	SBP: work placement	Work placement Business and Policy	WMSE003-40
Gen. EE	Genomics in Ecology & Evolution	WMEV011-08	SkillsBio 1	Skills for Biology 1: Professional Perspectives and Career Orientation	WMBY029-05
iGEM Competition	International Genetically Engineered Machine competition	WMBS013-20	SkillsBio 2	Skills for Biology 2: Quantitative Research Methods	WMBY028-05
Impacts of Energy and Material System	Impact of Energy and Material Systems (EES)	WMEE002-05	Sustainable Use of Ecosystems	Sustainable Use of Ecosystems	WMEE003-05
	Island Biology	WMEV016-05	Sustainability & Society EES	Sustainability & Society EES- master	WMEE005-05
LAS	Laboratory Animal Science	WMBY026-05	Synthetic biol. & Systems chem.	Synthetic bioloy & Systems chemistry	WMCH021-05
Marine biol.	Principles of Marine Biology	WMMB004-05	Systems Integration & Sustainability	Systems Integration and Sustainability EES-master	WMEE006-05
Marine cons.	Marine Conservation	WMMB011-05	Seq.methods	Next-generation sequencing methods and data analysis	WMBS023-05
MathBio	Mathematical models for Biology	WMBY031-05	Tools syst	Tools and approaches of systems biology	WMBS005-05
	Modelling Complex Biological Systems	WMBY027-05	Water management	Transitions in water management	GEMTRWATM