MSc Geo-Information Science

Information booklet 2021-2022

GEO-INFORMATION SCIENCE
WAGENINGEN UNIVERSITY & RESEARCH

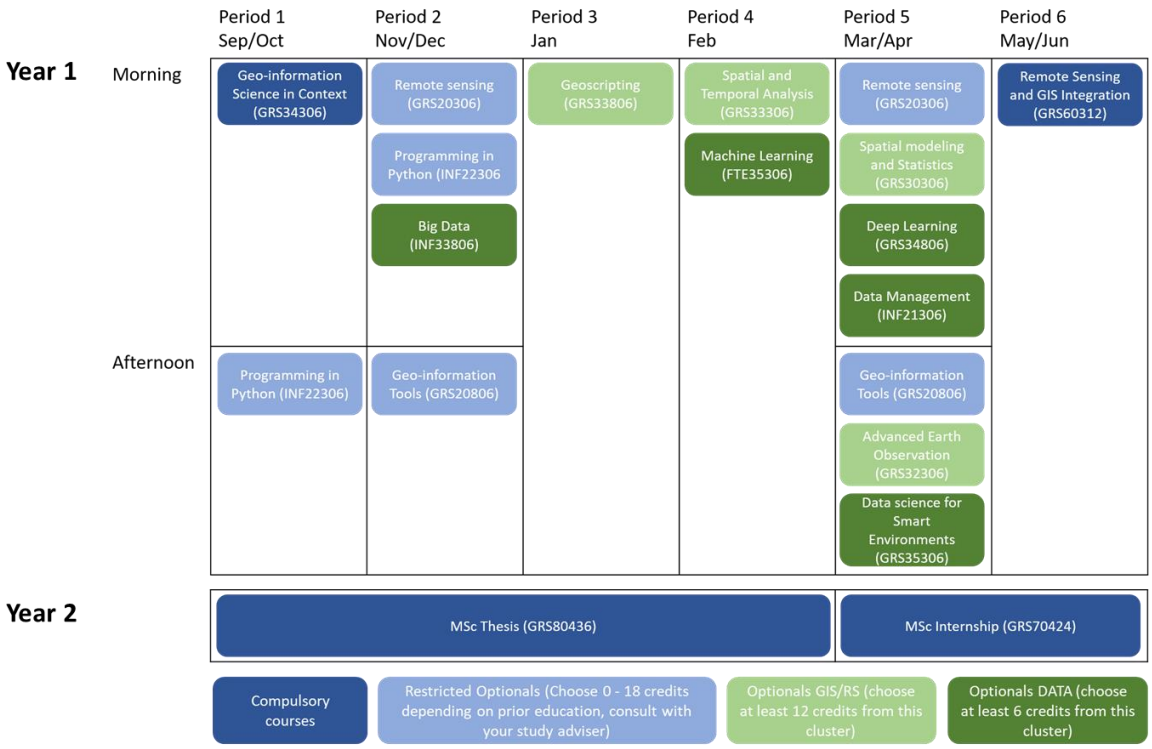
Content

Program and courses

The Master Geo-information science is a two-year master program. The program consists of some compulsory courses which all students have to follow. Besides the compulsory courses, there are restricted optionals, optionals and electives (free choice). This creates the option to tailor-make your program depending on your preferences, educational background and future aspirations. The figure below shows an example set-up of the study program.

TIP: Do you want to know how many ECTS a course is worth? The last two numbers of a course code indicate the ECTS of the course.

MSc Geo-Information Science program overview*



**The program may change; no rights can be derived from this overview*

Compulsory courses

Compulsary courses are courses that everyone in the MGI has to follow. These consist of the following courses:

- The MGI introduction course: Geo-information Science in Context (GRS34306)
- The Academic consultancy training: Remote Sensing and GIS integration (GRS60312)
- The MSc major thesis
- MSc internship

Restricted Optionals

The restricted optionals comprise of three courses that cover the basic skills of the MGI program which the rest of the MGI courses build upon. The courses of the restricted optionals are:

- Programming in Python (INF22306)
- Remote Sensing (GRS20306
- Geo-information tools (GRS20806)

When you followed the BSc minor Geo-information for Environment and Society (WUGIS) or these courses were in your WUR bachelor, you do not need to follow these courses during the Master program. Please consult the study advisor when you took comparable courses from another university to discuss your options.

Optionals GIS/RS

The Optionals GIS/RS consists of four courses of which you have to choose **at least two**. The courses included in this cluster are:

- Geoscripting (GRS33806)
- Spatial and temporal analysis (GRS33306)
- Spatial modelling and statistics (GRS30306)
- Advanced Earth observation (GRS32306)

Optionals DATA

The Optionals DATA consists of five courses of which you have to choose **at least one**. The courses included in this cluster are:

- Big data (INF33806)
- Machine Learning (FTE35306)
- Deep Learning (GRS34806)
- Data management (INF21306
- Data science for smart environments (GRS35306)

Electives

When you fulfilled the program requirements you can choose an individual minor and/or elective courses to complete your MSc program up to (at least) 120 credits. These electives can be from different programs, depending on what suits your educational background and personal interests. See the Study Handbook for more information about the courses and minors at the university.

Thesis

A thesis research is a compulsory part of every Master study program of Wageningen University & Research. Within the Laboratory of Geoinformation Science and Remote Sensing (GRS), a major thesis for a master program focuses on designing, conducting and scientifically reporting a research project in the broad field of Geo-Information Science. Such a thesis research corresponds to at least 36 ECTS of a master program. Several information sessions are organized to get an idea of thesis topics/ opportunities. The GRS thesis topics are maintained and kept up-to-date by the thesis coordinator and made accessible online via the GRS web page. A student can also propose his/her own thesis topic for the thesis research. In this case, the feasibility of the research is checked by the thesis coordinator and examiners

GRS thesis topics are closely related to the main fields of research of the GRS group:

1. Sensing & measuring
2. Modelling & visualization
3. Integrated land monitoring
4. Human - space interaction
5. Empowering & engaging communities

A GRS major thesis research is conducted under the supervision of a member of the GRS group. The location of the thesis work is with the GRS group but, after consultation with the supervisor, may also take place in another institute or company.

To get an impression of thesis topic possibilities please check this website.

Internship

An internship is a compulsory part of the MGI. It will help you gain working and research experience within the professional Geo-Information Science (GIS) and Remote Sensing (RS) domain. An MGI internship has to be a minimum of 24 ECTS, which corresponds with a 4 month period. A longer internship is possible, which a maximum of up to 36 ECTS. Please consult your study advisor when opting for an internship of more than 24 ECTS.

The internship should be in the field of Geo-Information Science and/or Remote Sensing in the broadest sense and take place at an organization in the field of GIS and/or RS. This can be any company, institute, or organization working on any aspect of GIS or RS in the Netherlands or abroad. The internship should meet the academic standards which mean that at least 60% of the internship must be spent on an MSc level personal research level.

Useful tips and links

Wageningen University information

Home page of the university: https://www.wur.nl/en.htm

Program site of the Master Geo-information Science: www.wur.eu/mgi

The online study handbook with information about courses, minors and programs: https://wur.osiris-student.nl/#/onderwijscatalogus/extern/start

Chair group site: https://www.wur.nl/en/Research-Results/Chair-groups/Environmental-Sciences/Laboratory-of-Geo-information-Science-and-Remote-Sensing.htm

Application

General admission requirements

Students who wish to enrol in the MSc Geo-Information Science program at Wageningen University must:

- Have a bachelor's degree in the field of Environmental Sciences (planning, soil and water, hydrology, forest and nature, ecology, biology) or Information Technology. Some basic knowledge of GIS (geo-information systems) and remote sensing is required.
- Have a Grade Point Average for their BSc of at least 7 (or 70% of the maximum of the scale);
- Be fluent in English, both written and spoken.

For information about application deadlines and steps please see: https://www.wur.nl/en/Education-Programmes/master/Apply-for-a-Master-programme.htm

Student life

Wageningen has a very active student life with a wide variety of student associations that organise many social and sport activities. An overview of the different association can be found here.

All study programmes the Wageningen University have a study association. The study association of MGI is Pyrus. They organize frequently social and educational activities.

To contact Pyrus:

Website: https://pyrusbwa.nl/en/

Email: pyrus.bwa@wur.nl

Or visit them at the Forum building, room 116 (On working days between 13:30 and 14:00)

Buddy system

The Buddy System is there to get you familiar with the MGI program, get useful tips and tricks, and expand your network. A second-year MGI student will be assigned to a small group of first-year MGI students. As a group, you can attend several activities of the student association or organise your own activities. The second-year MGI student will guide you when you want advice on courses, life in Wageningen, where to get your books, the best places to study on campus and anything else you want to know!

Housing

Most students who attend Wageningen University live in or near the city of Wageningen. Even though the public transportation to Wageningen is relatively good, most students prefer living close to the university. The University does not provide housing, so it is advised to start your search on time. Have a look at some tips and tricks here, to help you in your process of finding a nice place to stay during your studies at Wageningen University.

Academic calendar 2021-2022

Calendar academic year 2021-2022

WAGENINGEN UNIVERSITY & RESEARCH

Period					PERIOD 1								PERIOD 2									PERIOD 3				Resit 1	
Calender week	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6
Academic Week	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
Date	2-8	9-8	16-8	23-8	30-8	6-9	13-9	20-9	27-9	4-10	11-10	18-10	25-10	1-11	8-11	15-11	22-11	29-11	6-12	13-12	20-12	27-12	3-1	10-1	17-1	24-1	31-1	7-2
	Academic Year 2020-2021				Education week 1-6/7 Exams week 8 Education First half week 1-3 Exam week 4 Thursday / Friday Education Second half week 5-7 Exam week 8 Thursday / Friday						Exams		Education week 9-14/15 Exams week 16 Education First half week 9-11 Exam week 12 Thursday / Friday Education Second half week 13-15 Exam week 16 Thursday /						Exams		Holidays		Education week 19-21/22 Exam week 22 Thursday / Friday				Resit exams (2-2/11-2)	

Period	PERIOD 4				PERIOD 5								PERIOD 6										Resit 2					
Calender week	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
Academic week	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	1
Date	14-2	21-2	28-2	7-3	14-3	21-3	28-3	4-4	11-4	18-4	25-4	2-5	9-5	16-5	23-5	30-5	6-6	13-6	20-6	27-6	4-7	11-7	18-7	25-7	1-8	8-8	15-8	22-8	29-8	5-9
	Education week 25-27/28 Exam week 28 Thursday / Friday				Education week 29-34/35 Exams week 35 Friday / week 36 Education First half week 29-31 Exam week 32 Thursday / Friday Education Second half week 33-35 Exam week 36 Thursday / Friday						Friday, April 29 Exams	Exams*	Education week 37-42/43 Exams week 44 Education First half week 37-39 Exam week 40 Thursday / Friday Education Second half week 41-43 start Tuesday week 41 June 7 Exam week 44 Thursday / Friday								Holidays				Resit exams (1-8/10-8)		Holidays		Academic Year 2022-2023	