Faculty of Biosciences

Master in Plant Sciences

Specializations:
Plant Production and Plant Protection
Plant Biotechnology

Admission 2021

Master in Plant Sciences

Master in Plant Sciences is a 2 years fulltime study of 120 credits. The program has two specializations in English:

- Plant Production and Plant Protection
- Plant Biotechnology

For both specializations the following applies:

- SDG302 – Sustainable plant production (5 credits, August block) is compulsory for both specializations
- Compulsory courses in each specialization
- Master thesis of 30 or 60 is compulsory
- Minimum 30 credits at 300-level

- The remaining credits of the 120 is elective courses
- Courses at 200-level can be part of the elective courses in the degree

Specialization Plant Production and Plant Protection

Year	Period	5	10	15	20	25	30
2	June						
	Spring	Master thesis 30/60 credits					
	January						
	Autumn	Specialization courses or master thesis 60 credits					
	August						
1	June						
	Spring	BIO324		PLV330			
	January						
	Autumn	PJH370		PLV321			
	August	SDG302					

Compulsory: Choose minimum 30 credits from the list below:

Code	Name	Credits	Semester
PJH370	Advanced crop production for future plant products	10	Autumn
PLV321	Plant Pathology and Resistance Breeding	10	Autumn (odd years)
PLV330	Insect-Plant Relationships	5	Spring (even years)
PLV340	Weed Biology and Weed-Crop Relationships	5	Spring (odd years)
BIO324	Plant Adaptation	10	Spring
PJH360	Term paper in Plant Production	5	Every term

Compulsory: Master thesis

M30-PV/ M60-PV	Master thesis	30 or 60

Recommended courses if you do not have similar courses in your bachelor's degree:

Code	Course	Credits	Semester
PJH212	Forage and Seed Crops	10	Autumn
PJH250	Plant production in controlled environment	10	Spring
BOT200	Plant Physiology	10	Autumn
BOT201	Physiology of Plant Production	5	Spring

Specialization Plant Biotechnology

Year	Period	5	10	15	20	25	30
2	June						
	Spring	Master thesis 30/60 credits					
	January						
	Autumn	Specialization courses or master thesis 60 credits					
	August						
1	June						
	Spring	BIO324					
	January						
	Autumn	BIO321		BIO351			
	August	SDG302					

Compulsory: Choose minimum 30 credits from the list below:

Code	Name	Credits	Semester
BIO321	Population Genetics and Molecular Evolution	10	Autumn
BIO325	CRISPR genome editing	10	Spring
BIO351	Genetically Modified Plants - Case Study	5	Autumn
BIO350	In situ RNA hybridization techniques	5	Jan
BIO300	Microscopy Techniques	10	Jan, Spring
BIO324	Plant Adaptation	10	Spring
BOT320	Advanced Course in Plant Developmental Physiology	10	Spring (not offered in 2022)
BIO320	Development Biology	5	Spring

Compulsory: Master thesis

M30-PV/ M60-PV	Master thesis	30 or 60

Recommended course if you do not have a similar course in your bachelor's degree:

Code	Name	Credits	Semester
BIO244	Plant Biotechnology: Cell- and tissue culture and genetic modifications	5	Spring

Some optional courses offered in English that can be relevant:

Code	Name	Period	Credits
Biotechnology			
BIO244	Plant Biotechnology: Cell- and tissue culture and genetic modifications	Spring	5
BIO246	Thematic Essay in Plant Biotechnology/Plant Breeding	Spring	5
BIO300	Microscopy Techniques	Jan, Spring	10
BIO301	Advanced Cell Biology	Spring	10
BIO325	CRISPR genome editing	Spring	10
BIO326	Genome sequencing; tools and analysis	Spring	10
BIO336	Mycology	Autumn	5
Plants			
BINT300	Internship plant sciences	Every term	10
BOT200	Plant Physiology	Autumn	10
BOT201	Physiology of Plant Production	Spring	5
BOT340	Photobiology	Autumn	10
PJH212	Forage and Seed Crops	Autumn	10
PJH250	Plant production in controlled environment	Spring	10
PJH251	Bedding Plant Production of Flowers and Vegetables in Greenhouses	Spring	5
Soil			
JORD330	Soil Health and Sustainable Soil Management	Autumn	10
Sustainability and agriculture			
BIN302	High throughput phenotyping for precision farming	Autumn	10
EDS315	Governance of Plant Genetic Resources and Seed: Laws, Policies and Practices	June	5
EDS352	Agroecology and Development	Spring	10
EDS355	Climate Change and Development	Autumn	10
SDG300	Sustainable development goals in plant and animal food systems	Jan	5
Zoology and ecology			
ZOOL300	Ecological Entomology	Autumn	10
Statistics			
STAT200	Regression Analysis	Jan	5
STAT210	Design of Experiments and Analysis of Variance	Aug	5
STAT340	Applied Methods in Statistics	Spring	10
STAT370	Selected topics in Statistics	Spring	5
STIN300	Statistical programming in R	Jan	5
Master thesis courses			
ECOL300	Methods in Natural Sciences	Spring	5
MTH300	E-learning Course: Planning and Scientific Writing of a Master's Thesis in Natural Sciences	Autumn	5

Other courses:

http://www.nmbu.no/courses/ (Always check the Course catalogue.)

Time schedule will be available here:

https://www.nmbu.no/en/students/administration/teaching-and-exam-schedule