



Faculty of Biosciences

Department of Plant Sciences

Master in Plant Sciences

**Specializations:
Plant Production Systems
Plant Biotechnology
Plant Protection**

Admission 2017

Master in Plant Sciences

- Master degree is awarded on 120 credits (2 years fulltime study)
- Minimum 30 credits at 300-level, see below
- Courses at 200 level are accepted in the master
- Master thesis of 30 or 60 credits is compulsory

Studyplan for the specialization: Plant Production Systems

Code	Course	Credits	Period
PJH300	Compulsory: Choose one of the courses among: Sustainable Production Systems or Applied Plant Physiology in Greenhouses	15	1,2
PJH350		10	2 odd year
BIO324	Compulsory: Choose minimum 20 credits among: Adaptation of plants to climate Quality in Food Plants Term paper in Plant Production Plant Pathology Insect-plant relationships Weed biology and weed-crop relationships	10	4
PJH340		10	2 even year
PJH360		5	1/2/3/4/5
PLV321		10	2
PLV330		5	4 even year
PLV340		5	4 odd year
	Optional courses from the Course Catalogue 200 or 300 level	30	
M60-PV/ (M30/PV)	Master thesis	60 (30)	

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

Code	Course	Credits	Period
BOT201	Physiology of Plant Production	5	2 (even year)
PJH212	Cropping Systems of Grain Crops and Grasslands	10	4
PJH230	Fruit and Berries	10	2 (odd year)
PJH250	Production in greenhouses	10	4 (odd year)

Study plan for the specialization: Plant Biotechnology:

Code	Course	Credits	Period
	Compulsory course, choose minimum 30 credits among:		
BOT320	Advanced Course in Plant Developmental Physiology	10	4
BIO300	Microscopy Techniques	10	3,4
BIO320	Development Biology	5	4 odd year
BIO321	Population Genetics and Molecular Evolution	10	2
BIO323	Evolution in Host-Pathogen Systems: Plant Breeding for Resistance	5	3, even year
BIO324	Adaptation of plants to climate	10	4
BIO350	In Situ RNA Hybridization Techniques	5	3
BIO351	Genetically Modified Plants - Case Study	5	2
	Optional courses from the Course Catalogue 200 or 300 level	30	
M60-PV/ (M30-PV)	Master thesis	60 (30)	

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

Code	Course	Credits	Period
BIO200	Molecular Genetics in Eukaryotes (NO)	5	3
BIO210	Molecular Biology (NO)	10	2
BIO211	Laboratory Course in Molecular Biology (NO)	5	5
BIO244	Plant Biotechnology: Cell- and tissue culture and genetic modifications	5	4

Study plan for the specialization: Plant Protection

Code	Course	Credits	Period
	Compulsory: Choose one of the courses among:		
PLV321	Plant Pathology	10	2
PLV330	Insect-plant relationships	5	4 (even year)
PLV340	Weed biology and weed-crop relationships	5	4 (odd year)
	Compulsory: Choose minimum 20 credits among:		
BIO300	Microscopy Techniques	10	3,4
BIO323	Evolution in Host-Pathogen Systems; Plant Breeding for Resistance	5	3 (even year)
BIO324	Adaptation of plants to climate	10	4
PJH300	Sustainable Production Systems	15	2
PJH340	Quality in Food Plants	10	2 (even year)
PJH360	Term paper in Plant Production	5	1,2,3,4,5
ZOOL300	Ecological Entomology	10	2
	Optional courses from the Course Catalogue 200 or 300 level	30	
M30-PV/ M60-PV	Master thesis	60 (30)	

Some courses given at the Department of Plant Sciences:

Code	Name	Credits	Period*)
BIO223	Population Genetics and Molecular Ecology	5	4
BIO244	Plant Biotechnology: Cell- and tissue culture and genetic modifications	5	4
BIO245	Plant Biotechnology - Genomics and Breeding	5	4
BIO300	Microscopy Techniques	10	3,4
BIO301	Advances Cell Biology	10	4
BOT200	Plant Physiology	10	2
BOT201	Physiology of Plant Production	5	2
BOT320	Advanced Course in Plant Development Physiology	10	4
PJH212	Cropping Systems of Grain Crops and Grasslands	10	4
PJH230	Fruit and Berries	10	2,3 odd year
PJH250	Production in greenhouses	10	4 odd year
PJH251	Bedding Plant Production of Flowers and Vegetables in Greenhouses	5	4

*) Period: 1. August block, 2 Autumn parallel, 3 January block, 4 Spring parallel, 5 June block

Other current courses at NMBU:

Code	Name	Credits	Period
BIO233	Experimental Environmental Microbiology	10	4
BIO300	Microscopy techniques	5	3
BIO332	Experimental Molecular Microbiology	10	3,4
BIO336	Mycology	5	2
BOT230	Plant Ecology and Diversity	10	1
BOT340	Photobiology	10	2
ECOL200	General Ecology	10	4
ECOL300	Methods in Natural Resources	5	4
EDS260	Global Environmental Changes	5	2
EDS275	Writing seminar	5	2/4
EDS315	Management of Genetic Resources; Law and Policy	5	5
EDS352	Agroecology and Development	10	4
EDS355	Climate Change and Development	10	4
FMI309	Environmental Pollutants and Ecotoxicology	10	3,4
FMI312	Environmental Exposures and Human Health	10	2
GEN220	Genetic Basis of Biodiversity	10	2
JORD200	Soils in natural environments – field and laboratory course	10	1,2
JORD210	Soil: Classification, process modelling and application of GIS	10	4
LNG240	Academic Writing	10	2/4
MINA310	Project Management and Research Methods	10	2,3
STAT200	Regression Analysis	5	3
STAT210	Design of Experiments and Analysis of Variance	5	1
STAT340	Applied methods in statistics	10	
STAT370	Selected topics in statistics	5	4
STIN300	Statistical programming in R	5	3

Other courses:

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

Time schedule fall 2017 will be available here:

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