Module number	**EM4**
Module name	**Genetically modified plants**
Program of Study	MSc Elective Module
Offered	Once a year, summer semester
Module coordinator	Prof. Dr. Christian Jung
Module advisor	Prof. Dr. Christian Jung
Courses and teachers	**Lecture**: Genetically modified plants (C. Jung, F. Kempken, D. Cai) **Practical course**: Genetically modified plants (C. Jung and C. Molina)
Prerequisites	Basic understanding of genetics, breeding and molecular biology according to modules “Introduction to molecular biology (MM1) and „Introduction to crop and animal breeding MM4“
Language	English
Module capacity on campus students	8
Module capacity off campus students	8
Registration for the practical course	From March 1st to April 20th via Olat
Course types (classroom/ total workload)	Lecture (30 h/90 h), practical course (30 h/90 h)
Schedule	Practical course during the non-lecture period at the Plant Breeding Institute
Grading	Oral examination: 75% (C. Jung, F. Kempken oder D. Cai) Practical report: 25% (C. Jung)
ID-card	Required for exams
European Credit Points	6
Module Objectives	The students learn about production of genetically modified plants and they will understand how genetically modified plants are employed in plant breeding and plant production
Contents	Techniques for plant transformation, vectors, reporter genes, Identification of genetically modified plants, main features of genetically modified plants used in plant breeding, ecological and economic implications of genetically modified plants, legal aspects, worldwide adoption of genetically modified plants in agriculture
Taught skills	Methodical responsibility, key qualifications
Course materials	Textbooks, Internet, scientific literature, lecture notes