

Anlage 1: Prüfungsmodule

Nr.	Modulbezeichnung	Lehrform V Ü P	Sem.	SWS	Cred.	Prüfungs- art	Prüfungs- dauer
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Pflichtmodule: 25 credits

1	Ecophysiology: technical procedures and principles of protected cultivation	2 2	1	4	5	m	30
2	Crop physiology: growth and development of plants	2 2	1	4	5	m	30
3	Crop quality: basics of quality control and assurance	2 2	1	4	5	m	30
4	Crop biotechnology: plant breeding and micropropagation	2 2	1	4	5	m	30
5	Research project (oral presentation in English) in one of modules 1-4	2 2	1	4	5	m	30

Wahlpflichtmodule I : Aus folgender Liste sind mindestens 45 Credits zu erbringen:

	Angebote der Technischen Universität München						
1	Biotechnology in horticulture (E)	2 2	W	4	5	m	30
2	Horticultural plant breeding (E)	2 2	S	4	5	m	30
3	Control and optimization of secondary plant metabolites (E)	2 2	S	4	5	m	30
4	Analysis of bioactive compounds in fruits and vegetables (E)	2 2	S	4	5	m	30
5	Genetic and environmental control of vegetal plants (G/E)	2 2	S	4	5	m	30
6	Secondary plant metabolites and human health (E)	2 2	W	4	5	m	30
7	Host parasite interaction (E)	2 2	W	4	5	m	30
8	Methods in woody plant pathology (E)	2 2	S	4	5	m	30
9	Controlling (in horticultural farms) I (G)	2 2	W	4	5	m	30
10	Controlling (in horticultural farms) II (G)	2 2	S	4	5	m	30
11	Natural Resource Management (E)	2 2	S	4	5	m	30
12	Management planning and control (G)	2 2	S	4	5	m	30
13	Ecophysiology and crop quality (E)	2 2	W	4	5	m	30
14	Model systems and crop quality (E)	2 2	S	4	5	m	30

15	Energy conservation and alternative energy resources (E)	2 2	B	4	5	m	30
16	Physics of plant environment (E)	2 2	S	4	5	m	30
17	Systems analysis as a research method (E)	2 2	W/B	4	5	m	30
	Angebote der Universität Bologna						
1	Breeding & biotechnology applied to fruit tree species (E)	1 1 2	S	4	4	m	30
2	Wine grape physiology and ampelography (I)	2 2 2	S	6	9	m	30
3	Beneficial rhizopheric micro-organisms as plant production factor (E)	1 1	S	2	2	m	30
4	Insect resistance mitigation to artificial control methods (E)	1 1	W	2	3	m	30
5	Biological and epidemiological aspects of fruit trees (I)	2 2	S	4	4	m	30
6	Diagnosis of plant disease (E)	1 1	S	2	3	m	30
7	Ecology of insect population (E)	1 1	S	2	2	m	30
8	Agricultural policy evaluation (E)	2 2	W	4	4	m	30
9	Measuring management performance (E)	2 2	W	4	6	m	30
10	Elements of agrifood marketing (I)	2 2	W	4	4	m	30
11	Non-destructive methods for fruit quality assessment (E)	1 1	W	2	3	m	30
12	Vegetable crops (I)	2 2	S	4	4	m	30
13	Ergonomics and safety of spraying equipment (I)	1 1	S	2	3	m	30
14	Biotechnologies applied to arthropods (I)	1 1	S	2	2	m	30
15	Mathematics II (I)	1 1	SW	2	3	m	30
16	Application of Breeding technologies to fruit tree species (E)	1 1	S	2	3	m	30
17	Agricultural chemistry and biochemistry (I)	1 1	S	2	3	m	30
18	Microbiological ecology (E)	1 1	S	2	2	m	30
19	Conservation biological control (I)	1 1	W	2	2	m	30
20	Zoology (I)	1 1	W	2	2	m	30
21	Weed systematic (I)	1 1	W	2	3	m	30
22	Foundations of international agricultural markets economics	1 1	S	2	3	m	30

23	Fruit Growing I (E)	2 2	S	4	6	m	30
24	Fruit Growing II (I)	1 1	S	2	3	m	30
25	Molecular biology of scion/rootstock interaction (E)	1 1	S	2	2	m	30
26	Pomology (I)	1 1	W	2	3	m	30
27	Irrigation and drainage (I)	1 1	W	2	3	m	30
28	Agricultural engineering machinery (I)	1 1	S	2	3	m	30
29	Crop efficiency, orchard/vineyard design, real time monitoring of fruit growth (E)	1 1	W	2	3	m	30
30	Woody plant ecosystems (I)	1 1	S	2	3	m	30
31	Plant responses to abiotic stresses (E)	1 1	W	2	2	m	30
32	English language	2 2	W/S	4	4	m	30
33	Seminar in English	1 1	W/S	2	3	m	30
	Angebote der Universität für Bodenkultur (Wien)						
1	Plant Molecular biology (G/E)	1 1	S	2	2	m	30
2	Organic fruit growing and viticulture(G/E)	1 1	W	2	3	m	30
3	Rhizosphere Processes and Application to Agriculture and Soil Protection (E)	1 1	S	2	3	m	30
4	Soil structure: Development, functions and changes in agricultural soil (G/E)	1 1	S	2	3	m	30
5	Laboratory diagnosis of plant damages (G/E)	1 1	W	2	3	m	30
6	Integrated and biological pest management in horticultural crops (G)	1 1	W	2	3	m	30
7	Molecular phytopathology (G/E)	1 1	S	2	3	m	30
8	Soil-borne pathogenes and symbionts (E)	1 1	S	2	3	m	30
9	The ecological basis of biological control (E)	1 1	W	2	3	m	30
10	Use of plants in planting design (indoor, balcony and bedding plants (G/E)	1 1	S	2	3	m	30
11	Introduction to Therapeutical Gardening (G)	1 1	S	2	3	m	30
12	Aspects of product quality in plant production (E)	2 2	W	4	4,5	m	30
13	Technology of fruits and vegetable processing (G)	1 1	W	2	3	m	30
14	Biological Production of Vegetables and Ornamentals (G)	1 1	W	2	3	m	30

15	Postharvest Technology (E) offered at alternate years from 2005/06	1 1	W	2	3	m	30
16	Postharvest Technology (G/E) offered at alternate years from 2006/07	1 1	W	2	3	m	30
17	Methods of measuring stress resistance of plants (G/E)	1 1	S	2	3	m	30
18	Plants temperature and radiation (G)	1 1	W	2	3	m	30
19	Water relations of plants (G)	1 1	W	2	3	m	30
	Angebote der Corvinus Universität						
1	Propagation biology of plants (G/E)	1 1	S	2	3	m	30
2	Evaluation of fruit cultivars (E)	2 2	W	4	4	m	30
3	Applied biotechnology and resistance breeding (E)	1 1	S/W	2	3	m	30
4	Plant allergenes and the immune system (G/E)	1 1	W/S	2	3	m	30
5	Special plant compounds in nutrition and therapy (Phytotherapy) (E)	2 2	W	4	4	m	30
6	Chemical diversity of medicinal plants (E)	2 2	W	4	4	m	30
7	Ecological background of pest management (E)	2 2	W	4	4	m	30
8	Zoology in plant protection (G)	1 1	W/S	2	3	m	30
9	Applied entomology (E)	2 2	W/S	4	5	m	30
10	Pests of vegetables and ornamentals (E)	1 1	W	2	3	m	30
11	Pests of fruits (E)	1 1	S	2	3	m	30
12	Agrarmanagement (G/E)	2 2	W/S	4	5	m	30
13	Environmental management in horticultural production (E)	1 1	W/S	2	3	m	30
14	Techniques in horticultural production (E)	1 1	W	2	3	m	30
15	Plant geography and ecology (E)	1 1	W	2	3	m	30
16	Growth control of ornamental plants (E)	2 2	S	4	4	m	30
17	Horticultural dendrology (G/E)	2 2	W	4	4	m	30
18	Cultivation of special ornamental plants (G/E)	2 2	S	4	4	m	30
19	Up-to date production technologies of fruits (E)	2 2	S	4	4	m	30
20	Cultivation of special medicinal plants and spices (G/E)	2 2	S	4	4	m	30

21	Quality oriented viticulture, production-development (E)	2 2	W	4	4	m	30
22	Modern mushroom growing (E)	2 2	W	4	4	m	30
23	Saatgutherstellung und Vermehrung im Gemüsebau (G)	2 2	S	4	4	m	30
24	Plant stress physiology (E)	2 2	W/S	4	5	m	30
25	Methods of experimental design and evaluation (G/E)	1 1	W/S	2	3	m	30
26	Information systems in horticulture (E)	1 1	W	2	3	m	30
27	Decision making methods in consultation (E)	1 1	W	2	3	m	30
28	Environmental management in horticultural production (E)	1 1	W/S	2	3	m	30
29	Fruit and seed physiology (E)	1 1	W/S	2	3	m	30
30	Research activity for the thesis	-2 4	S/W	6	10	m	30
	Angebote der Humboldt Universität (für TUM Studierende nicht als ausländische Module gemäß § 43 Abs. 3 Satz 1 wählbar)						
1	Plant Biotechnology (G/E)	2 2	W	4	6	m	30
2	Biology of generative propagation in horticulture (G/E)	2 2	S	4	6	m	30
3	Effects of plant nutrition and other environmental factors on composition and quality of vegetable and ornamental plants (G/E)	2 2	S	4	6	m	30
4	Plant nutrition and nutrient supply in environmentally-friendly horticultural systems (G/E)	2 2	S	4	6	m	30
5	Crop Quality Assessment (G/E)	2 2	W	4	6	m	30
6	Symbiotics in Plant Nutrition (G/E)	2 2	W	4	6	m	30
7	Diagnosis of Plant Pathogens (G/E)	2 2	B	4	6	m	30
8	Lab Course Plant Pathogens or Pests (G/E)	2 2	B	4	6	m	30
9	Management in Horticulture (G/E)	2 2	S	4	6	m	30
10	Food Chain Management (G/E)	2 2	S	4	6	m	30
11	Hydroponical systems in Horticulture (G/E)	2 2	W	4	6	m	30
12	Cultivation of Vegetables in the Tropics and Subtropics (G/E)	2 2	S	4	6	m	30
13	Land use systems in horticulture (G/E)	2 2	S	4	6	m	30
14	Horticultural outdoor plant systems (decorative plants) (G/E)	2 2	W	4	6	m	30

15	International Floriculture and Nursery (G/E)	2 2	S	4	6	m	30
16	Development of new floricultural products (G/E)	2 2	W	4	6	m	30
17	Organic Farming and Sustainable Land Use (G/E)	2 2	W	4	6	m	30
18	Urban Horticulture - an introduction (G/E)	2 2	S	4	6	m	30
19	Methods of monitoring and evaluation of horticultural processes (G/E)	2 2	S	4	6	m	30
20	Ecophysiological basics of urban horticulture (G/E)	2 2	W	4	6	m	30
21	Physiology of woody plants and applied dendrology	2 2	S	4	6	m	30
22	Post harvest quality and stock protection of plant food crops (G/E)	2 2	W	4	6	m	30
23	Environmental Impact on Photosynthesis and Abiotic Stress Response (G/E)	2 2	W	4	6	m	30
24	Information and communication technologies in horticulture (G/E)	2 2	S	4	6	m	30
25	Current problems in horticulture	2 2	S	4	6	m	30
26	Seminar Horticultural Sciences with oral presentation (G/E)	2 2	S	4	6	m	30

Wahlpflichtmodule II: Aus folgender Liste sind mindestens 5 Credits zu erbringen:

Nr.	Modulbezeichnung	Lehrform V Ü P	Sem.	SWS	Cred.	Prüfungs- art	Prüfungs- dauer
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Angebote der Technischen Universität München							
1	Project administration, documentation and publication (E)		W		5	m	30
2	Research and science management (E)		S		5	m	30
Angebote der Universität Bologna							
1	Statistics and computer sciences	2 2	W/S	4	6	m	30
2	Research project	-4	W/S	4	6	m	30
Angebote der Universität für Bodenkultur							
1	Magister-Seminar (G/E)	-2	W/S	2	2	m	30

2	Seminar applied plant sciences (G/E)	-4	W/S	4	4	m	30
	Angebote der Corvinus Universität Budapest						
1	Methods of experimental design and evaluation (G/E)	1 1	W/S	2	3	m	30
2	Research activity for the thesis	---	W/S	---	8-10	m	30
3	Practicum: possibility at the research station	---	W/S	---	---	m	30
	Angebote der Humboldt Universität (für TUM Studierende nicht als ausländische Module gemäß § 43 Abs. 3 Satz 1 wählbar)						
1	Information and communication technologies in horticulture (G/E)	2 2	W	4	6	m	30
2	Current problems in horticulture	-4	S	4	6	m	30

**Wahlpflichtmodule III: aus der folgenden Liste beziehungsweise aus den nicht gewählten Angeboten der Wahlpflichtmodulliste I und II sind insgesamt 15 Credits zu erbringen^{*)}:
Dieser Katalog umfasst auch fachübergreifende Lehrangebote. Die Credits können auch in Lehrveranstaltungen anderer Fakultäten oder Hochschulen erworben werden.**

1	Gesamtangebot der TUM und der beteiligten Partneruniversitäten						
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Sem. = Semester; W = Wintersemester; S = Sommersemester; SWS = Semesterwochenstunden; V = Vorlesung; Ü = Übung; P = Praktikum.

In der Spalte Prüfungsdauer ist bei schriftlichen Prüfungen die Prüfungsdauer in Minuten aufgeführt. Bei mündlichen Prüfungen ist dort "m" eingetragen.

Ist die Unterrichtssprache in der Anlage bei einzelnen Modulen mit „(G/E)“ angegeben, so gilt für die Bekanntgabe § 6 Abs. 4 Satz 4 entsprechend.

Creditbilanz der jeweiligen Semester:

Semester	Credits Pflichtmodule	Credits Wahlmodule	Credits Wahlpflicht - module	Credits Masters- Thesis	Credits Masters- Kolloquium	SWS	Gesamt- credits
1	25		5			24	30
2			30			24	30
3			30			24	30
4				25	5	-	30

Gesamt: 120