

## Programme Plan "International Master in Horticultural Sciences"

Semester	Modules	ECTS
1 <sup>st</sup>	Compulsory modules (6 ECTS each)	30
	Plant molecular physiology	
	Crop quality assessment	
	Plant biotechnology	
	<ul> <li>Ecophysiological basics of urban horticulture</li> </ul>	
	Seminar horticultural sciences	
	Compulsory elective modules (6 ECTS each)	60
	At least 6 ECTS have to be taken in the field of Complementary Activities!  15-45 ECTS have to be imported from one or several partner universities.	
2 <sup>nd</sup>	Crop management	
	Land use systems for horticultural crop	
	Cultivation of vegetables in tropics and subtropics	
	International floriculture and nursery	
	Food chain management	
	Urban horticulture – An introduction	
	Methods of monitoring and evaluation of technical processes in horticulture	
	Horticultural outdoor plant systems (decorative plants)	
	Economics	
	Management in horticulture	
	Plant and soil biochemistry	
	• Effects of plant nutrition and other environmental factors on composition and quality	
	of vegetable and ornamental plants	
	• Plant nutrition and nutrient supply in environmentally friendly horticultural systems	
	<ul><li>Crop ecophysiology</li><li>Physiology of woody plants and applied dendrology</li></ul>	
	<ul> <li>Plant biotechnology</li> <li>Biology of generative propagation in horticulture</li> </ul>	
	Complementary activities	
	• Current issues in horticulture (Field trip)	
3 <sup>rd</sup>	Crop management	
	Hydroponical systems in horticulture	
	Development of new floricultural products	
	Organic farming and sustainable land use	
	Plant and soil biochemistry	
	Symbiotics in plant nutrition	
	Plant protection	
	Post harvest quality and stored product protection	
	Complementary activities	
	<ul> <li>Information and communication technology in horticultural science</li> </ul>	
	Summer Schools (Two weeks during the holidays)	
	Plant protection  Lab course on selected plant pathogons/pasts or control management (Summer)	
	<ul> <li>Lab course on selected plant pathogens/pests or control management (Summer)</li> <li>Diagnosis of plant pathogens (Winter)</li> </ul>	
4th	Master Thesis (25 ECTS) and Colloquium (5 ECTS), supervised by home and partner	30
	university (=15 ECTS import from supervising partner university!)	
	To receive a double degree, at least 30 ECTS from modules plus 15 ECTS from the master thesis have	
	be acquired from one partner!	