

## Faculty of Natural Sciences | English-taught courses

### (Under-)Graduate Courses

\* L = Lecture; P = Practical; E = Excursion; S = Seminar or Exercise; T = Tutorial

<b>Module Title</b>	<b>Code</b>	<b>Course type*</b>	<b>Winter/Summer Semester</b>	<b>ECTS</b>	<b>Responsible Chair</b>
Advanced Meat Science and Technology	1507-500	L + P + E	WS	7,5	Prof. Jochen Weiss
Advanced Meat Science Lecture Series	1507-600	Online course	WS	6	Prof. Jochen Weiss
Advanced Process Engineering Techniques for Cereal Processing	1509-500	L + P + E	SS	7,5	Prof. Bernd Hitzmann
AgFoodTech	1507-450	L + P	WS/SS	7,5	Prof. Jochen Weiss
AgFoodTech Lecture Series	1507-610	L	WS	6	Prof. Jochen Weiss
Agricultural and Forest Meteorology	1201-590	L + S	WS	6	Prof. Volker Wulfmeyer
Applied Mathematics for the Life Sciences II	1101-410	L + S	SS	7,5	Prof. Philipp Kügler
Astrobiology	1301-400	L + E + S	SS	6	Prof. Henry Strasdeit
Basics in Bioinformatics	1905-220	L + S	SS	6	Prof. Chang Liu
Bioethanol and Distilled Spirits	1506-500	L + S + P	SS	7,5	Prof. Ralf Kölling-Paternoga
Botanical Excursion in the Mediterranean	1902-470	E	WS	7,5	Prof. Philipp Schlüter
Cellular Microbiology	2502-430	L + P	SS	7,5	Prof. Julia Fritz-Steuber
Chemical Analytical Methods	1302-440	L + S + P	WS	7,5	Prof. Uwe Beifuß
Chemistry of the Earth System & Pollution	1301-470	L	WS	6	Prof. Henry Strasdeit
Climate Change and Climate and Climate Protection	1201-420	L + S + E	WS	6	Prof. Volker Wulfmeyer
Climate History and Evolution of the Earth System	1201-560	L + S	SS	4	Prof. Volker Wulfmeyer
Computational Thinking	1511-400	L + S	WS	6	Prof. Dr. Christian Krupitzer

Current topics in enzyme biotechnology	1502-440	S	SS	7,5	Prof Lutz Fischer
Debate Seminar	1201-570	S	SS	2	Prof. Volker Wulfmeyer
Drying, Granulation and Instantisation	1503-540	L	SS	7,5	Prof. Reinhard Kohlus
Ecology and Agroecosystems	4906-410	L + S	WS	6	Prof. Ingo Graß
Ecological Genomics	2102-510	L	SS	7,5	Prof. Philipp Schlüter
Encapsulation of Functional Food Components	1507-410	S	WS	7,5	Prof. Jochen Weiss
Energy and Water Regime at the Land Surface	3103-500	L + S	SS	6	Prof. Thilo Streck
Environmental and Resource Economics	4101-410	S	SS	6	Prof. Christian Lippert
Environmental Microbiology	3102-410	L + S	WS	6	Prof. Ellen Kandeler
Enzymatic Reactions	1502-410	L + S + P	WS	7,5	Prof. Lutz Fischer
Ethical Reflection on Food and Agriculture	4302-420	S	WS	6	Prof. Claudia Bieling
Experimental Plant Genomics	1905-200	L + S	WS	6	Prof. Chang Liu
Food Product Development: From Concept Ideation to Product Launch	1507-520	L + T	WS	7,5	Prof. Jochen Weiss
Food Microbiology	1501-440	L + S + P	WS	7,5	Prof. Herbert Schmidt
Food and Nutrition Security	4902-430	L	WS	6	Prof. Manfred Zeller
Food Process Design I - Efficient Processing and Transport Phenomena	1503-520	L + S	WS	7,5	Prof. Reinhard Kohlus
Food Process Design II - Process Integration and Scale up	1503-500	L + S	SS	7,5	Prof. Reinhard Kohlus
Free Project Work	1500-020	P	WS + SS	7,5	Prof. Lutz Fischer
Functional Genomics in the Three-Dimensional World	1905-400	L + S	WS	7,5	Prof. Chang Liu
Genetics of floral traits	1902-460	P	SS	7,5	Prof. Philipp Schlüter
Global Agri-food Systems: Conventional, Organic, and Beyond	4302-460	S + T	WS	6	Prof. Claudia Bieling
Global Change Issues	3202-420	L + S + P	WS	6	Prof. Andreas Fangmeier

Global Nutrition and Food Security	1403-400	L	WS	7,5	Prof. Jan Frank
Identification and characterization of foodborne microorganisms	1501-410	P	SS	7,5	Prof. Herbert Schmidt
Integrated Bioprocess Engineering - Bioproduction	1510-420	L + S + P	SS	7,5	Prof. Rudolf Hausmann
Integrated Bioprocess Engineering - Upstream Processing	1510-440	L + S + P	WS	7,5	Prof. Rudolf Hausmann
Integrated Bioprocess Engineering – Bioseparation Process Science (Downstream Processing)	1510-430	L + S + P	WS	7,5	Prof. Rudolf Hausmann
Land Use Economics	4904-430	L + P	WS	6	Prof. Thomas Berger
Lecture Series Earth System Science	1201-550	L	WS	2	Prof. Volker Wulfmeyer
Mathematics and Computational Sciences of the Earth System	1102-400	L + S	WS	4	apl. Prof. Georg Zimmermann
Massive Open Online Course on Climate Change, Risks and Challenges	1201-400/410	S	WS + SS	2-6	Prof. Volker Wulfmeyer
Measurement, Modeling and Data Assimilation I	1201-520	L + S	SS	6	Prof. Volker Wulfmeyer
Metal Coordination Chemistry in Biomolecules	1301-450	L	SS	7,5	Prof. Henry Strasdeit
Natural Resource Use and Conservation in the Tropics and Subtropics	4907-410	L	WS	6	Prof. Folkard Asch
Online - Dairy Science and Technology	1505-450	Online course	SS	5	Prof. Jörg Hinrichs
Pathogens, Parasites and their Hosts, Ecology, Molecular Interactions and Evolution / International Summer School	2202-400	L + S + P	SS	7,5	Prof. Ute Mackenstedt
Plant and Crop Modeling	3103-410	L + S	WS	6	Hon.-Prof. Eckart Priesack
Poverty and Development Strategies	4901-420	L + T	WS	6	Prof. Manfred Zeller
Process Driven Product Design: Cereals and Sweets	1503-510	L	WS	7,5	Prof. Reinhard Kohlus
Project Work (elective)	1500-520	P	WS + SS	7,5	Prof. Lutz Fischer
Quantitative Methods in Economics	4901-470	L + S	WS	6	Prof. Manfred Zeller
Remote Sensing of the Earth System	1201-500	L + S	SS	6	Prof. Volker Wulfmeyer
Research Project Biotechnology and Enzyme Science	1502-050/060/070	P	WS + SS	7,5-18	Prof. Lutz Fischer

Seminar in Plant Proteomics and Systems Biology	2602-900	S	WS + SS	2	Prof. Waltraud Schulze
Online - Soft Matter Science I - Food Rheology and Structure	1505-500	Online course	WS	5	Prof Jörg Hinrichs
Soft Matter Science II - Food Physics	1507-510	L + S	SS	7,5	Prof. Jochen Weiss
Special Topics of Earth System Science	1201-620	S	SS	6	Prof. Volker Wulfmeyer
SPOC: Introduction to Food Systems	1507-440	Online course	WS + SS	7,5	Prof. Jochen Weiss
UNIcert III English for Scientific Purposes	1000-040	S	WS + SS	7,5	Prof. Lutz Fischer

## Doctoral Degree Programmes

<b>Module Title</b>	<b>Module Number</b>	<b>L / S / T*</b>	<b>Winter/Summer Semester</b>	<b>ECTS</b>	<b>Responsible Chair</b>
Advanced Seminar on Current Topics in Plant Physiology	2601-900	S	WS + SS	3	Prof. Andreas Schaller
Current Topics in Biochemistry	2303-900	S	WS + SS	1,5	Prof. Armin Huber
Evolutionary Genetics Journal Club	1902-900	S	WS + SS	1,5	Prof. Philipp Schlüter
Mathematics for Graduate Students and Doctoral Candidates	1101-900	S	SS	3	Prof. Philipp Kügler
Seminar in Developmental Genetics	2401-900	S	WS	3	Prof. Anette Preiss
Seminar in Genetics and Signal Transduction	2401-910	S	SS	3	Prof. Anette Preiss
Seminar on Current Issues in Food Microbiology	1501-910	S	WS + SS	7,5	Prof. Herbert Schmidt
Seminar on Microbiological and Molecular Biological Methods	1501-900	S	WS + SS	7,5	Prof. Herbert Schmidt
Seminar in Plant Proteomics and Systems Biology	2602-900	S	WS + SS	2	Prof. Waltraud Schulze
Seminar of Food Physics and Meat Science for Graduate Students and Doctoral Candidates	1507-900	S	WS + SS	2	Prof. Jochen Weiss
Seminar on Current Issues in Food Microbiology	1501-910	S	WS + SS	7,5	Prof. Herbert Schmidt
Seminar on Microbiological and Molecular Biological Methods	1501-900	S	WS + SS	7,5	Prof. Herbert Schmidt