Study plan Biology, Master of Science
PO 2022

Areas Modules	Teaching courses	**C / CE / Compl.**	**WS / SS**		**ECTS**
Compulsory area: Biology					24
Biology in Ulm: Stress response and resilience of biological systems	Stress response and resilience of biological systems (S)	C	WS		3
	Scientific integrity, Data Analysis and Management (S)	C	SS		3
	Molecular Biology and Biotechnology (L)	C	WS		3
Advanced skills in life sciences	Philosophy of Science (S)	C	SS		3
Advanced methods in Biology	Advanced methods in Biology (P, S)	C	WS / SS		12
Compulsory elective area: Research focus Biology[1]					30
Molecular biology of Archaea	Molecular biology of Archaea (S, P)	CE	WS		15
Advanced microbiology	Advanced microbiology (L, S, P)	CE	SS		15
Cell biology & genetics	Cell biology & genetics (L, S, P)	CE	SS		15
Endocrinology	Endocrinology (L, S, P)	CE	SS		15
Protein Biochemistry / Structural Biology	Protein Biochemistry / Structural Biology (L, S, P)	CE	WS		15
Metabolism & Hormone Health	Metabolism & Hormone Health	CE	WS		15
Conservation genomics	Conservation Genomics (L, S, P)	CE	WS		15
Molecular plant stress physiology	Molecular plant stress physiology (L, S, P)	CE	SS		15
Neurobiology & Behaviour	Neurobiology & Behaviour (L, S, P)	CE	SS		15
Adaptation and diversity in tropical ecosystems	Adaptation and diversity in tropical ecosystems (L, S, P)	CE	WS		15
Tropical ecology in Costa Rica	Tropical ecology in Costa Rica (S, P)	CE	WS / SS		15
From tree biology to forest ecology	From tree biology to forest ecology (L, S, P)	CE	SS		15
Compulsory elective area: Advanced topics in biological resilience[2]					9
Lectures of modules of the area "Research focus Biology", further biological courses on offer	depending on choice	CE	WS / SS	Mobility[6]	3-9
Compulsory elective area: Biology in Praxis[3]					3
Excursion	choice from different excursion options	CE	SS		3
Career perspectives in life science	Career perspectives in life science (S)	CE	WS		3
Career exploration in Quality Assurance	Career exploration in Quality Assurance (S)	CE	SS		3
Compulsory elective area: Research focus Medicine[4]					15
Human genetics	Human genetics (L, S, P)	CE	WS / SS		15
Virology	Virology II - Part 1 & 2 (L, S)	CE	WS / SS		6
	Virology II - Practical course (P)	CE	WS / SS		9
Pharmacology/Toxicology	Pharmacology (L)	CE	WS		3
	Toxicology (L)	CE	WS		3
	Pharmacology & Toxicology (P, 2 S)	CE	WS / SS		9
Endocrinology	Endocrinology (L, S, P)	CE	SS		15
Complementary area[5]					9
Elective courses from the modules offered at Ulm University	depending on choice	Compl.	WS / SS		9
Compulsory area: Thesis					30
Master thesis	Master thesis (P)	C	WS / SS		30
Sum					120

P: Practical course, L: Lecture, S: Seminar, E: Excursion, C: Compulsory area, CE: Compulsory elective area, Compl.: Complementary area, WS: winter semester, SS: summer semester

[1] In the compulsory elective area "Research focus Biology", at least two modules are required.
[2] In the compulsory elective area "Advanced topics in biological resilience" modules of at least 9 ECTS are required.
[3] In the elective compulsory area "Biology in Praxis" modules of at least 3 ECTS are required.
[4] In the elective compulsory area "Research focus Medicine" at least 1 module is required.
[5] Selection of modules of at least 9 ECTS from the study programmes offered by Ulm University, except MSc Biology.
[6] For a mobility the areas "Advanced topics in biological resilience", "Biology in Praxis", "Research focus Medicine" and the Complementary area are intended.

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