



UNIVERSITY OF SARAJEVO



FACULTY OF AGRICULTURE AND FOOD SCIENCES

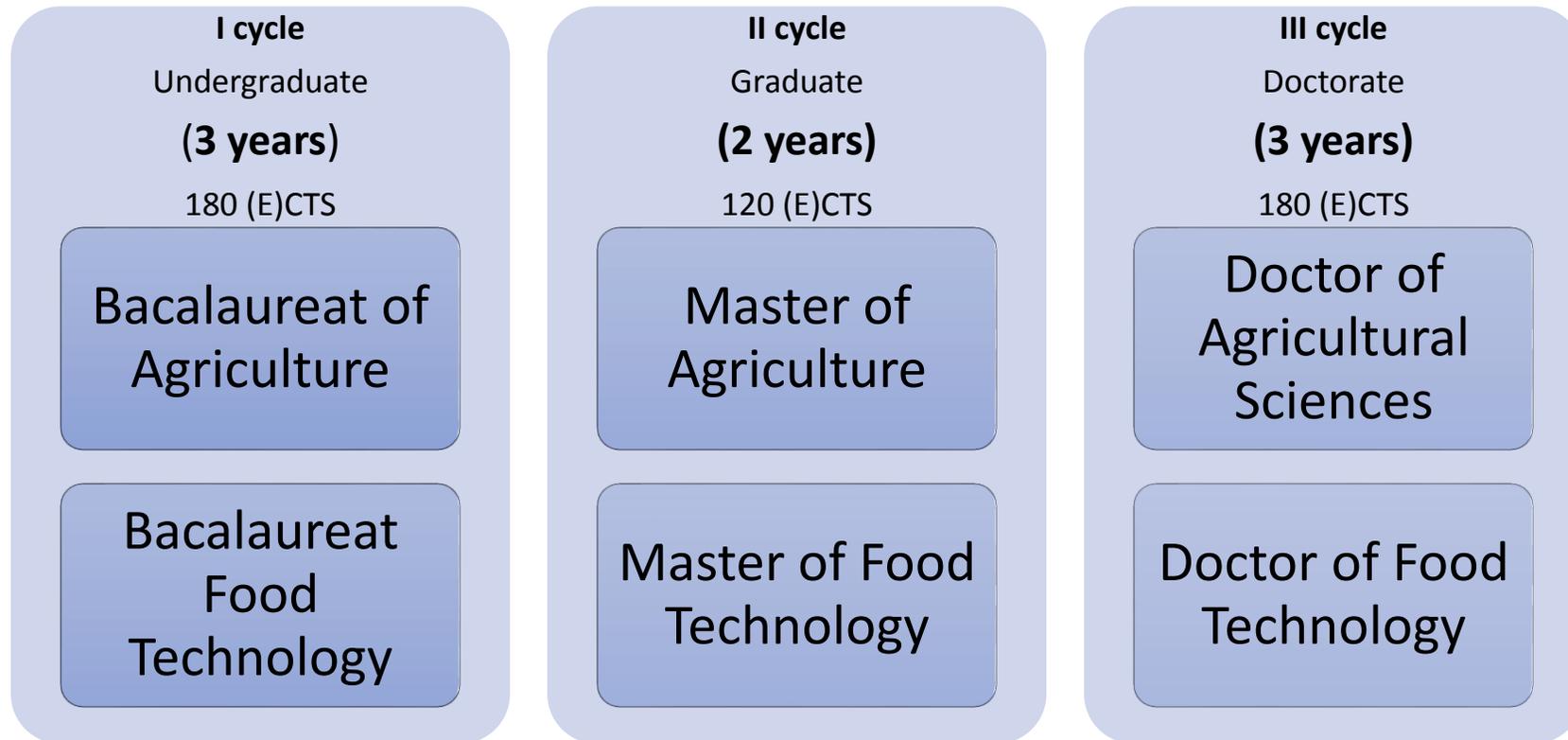
Agricultural Sciences Ph.D. Program





Education in line with Bologna process

The Bologna system of studying at the Faculty was introduced in 2005/2006 and is carried out according to the 3 + 2 + 3 scheme.



Doctoral Program (since 2013)

The Faculty offers doctoral studies in two scientific areas:

1. **Agricultural sciences**

2. Food technology



Duration of study: 3 years, 6 semesters

Evaluation of the study program in credit points: 180 (E)CTS

By completing the doctoral study, acquired academic qualification

Doctor of Agricultural Sciences, or

Doctor of Food Technology.





Agricultural Sciences Ph.D. Program

Learning outcomes

- analysis, evaluation and synthesis in problem solving and resolution,
- scientifically based assessment of requirements and application of scientific knowledge in practice,
- governance and communication of profound knowledge from the domain of agricultural science and
- team work, judgment and decision making.





Agricultural Sciences Ph.D. Program

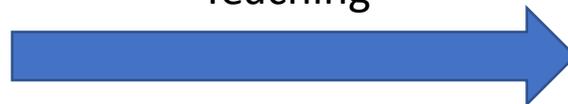
	Criterion	ECTS
1.	Attending classes and taking exams	<u>42</u>
2.	Two scientific papers published in journals from specialized databases – 2 x 9 (E)CTS	<u>18</u>
3.	Scientific work published in journal indexed in the leading databases	<u>18</u>
4.	Scientific paper presented at an international scientific conference	<u>8</u>
5.	Scientific paper presented at the domestic scientific conference	<u>4</u>
6.	Doctoral thesis	<u>90</u>
	- Doctoral dissertation project (defended):	18
	- Work version of the doctoral dissertation (defended):	60
	- Public defense of doctoral dissertation:	12
7.	Total ECTS	<u>180</u>



Agricultural Sciences Ph.D. Program

2nd year Obligations

Teaching



Research

1. During the third semester, a student can take exams from obligatory and elective courses that he did not pass during the first and second semester.

1. The second year of study is intended for research work (preparation and publication, or scientific papers presentation, work on doctoral dissertation).



Agricultural Sciences Ph.D. Program

3rd year Obligations



1. Preparation and defense of work version of the doctoral dissertation (defended)
2. Preparation and Public defense of doctoral dissertation





Agricultural Sciences Ph.D. Program

Obligatory subjects

Experimental statistics in agriculture – 6 ECTS

Ethics and Methodology of Scientific Work – 6 ECTS





Elective Courses (Plant Production)

Subject	ECTS	Subject	ECTS
Agricultural politics	3	Ecology and cultivation of medicinal, spice and aromatic herbs	6
Agrotechnics of fruit trees - selected chapters	8	Ecology and cultivation of legumes	6
Business analysis	6	Ecology and cultivation of vegetable crops	6
Plant genetic resources	6	Ecology and cultivation of cereal crops	6
Biochemical function, significance and analysis of vitamins	3	Ecology and biodiversity of lawns	6
Biological and physiological factors of production and application of ornamental plants	6	Economics of production	6
Design in horticulture	6	Ecopedology	3
Grapevine ecophysiology	6	Design elements in landscaping architecture	6
Ecology and cultivation of industrial plants	6	Plant fertilisation	6



Elective Courses (Plant Production)

Subject	ECTS	Subject	ECTS
Financial management	6	Methods of laboratory and field survey of soil	3
Physics and chemistry of soil	6	Methods of scientific research in vitiology	6
Plant genetic resources and grapevine breeding	6	Microorganisms and soil fertility	6
ICT in agriculture	6	Molecular methods in fruit breeding	6
Engineering measurement and data processing	6	Morphology and systematics of soils	6
Plant nutrition	6	Advanced equipment and technologies for agricultural production	6
Annual fodder plants	6	Renewable energy sources in agriculture	6
Conservation and utilization of feed in sustainable systems	6	Fruit and grapevine breeding	6
Quality and maintenance of husbandry seed	6	Organic husbandry	6



Elective Courses (Plant Production)

Subject	ECTS	Subject	ECTS
Basics of GIS	3	Types of lawns and management methods	6
Factors of soil formation	3	Quality management	6
Fruit pomology	8	Water management in agriculture	6
Biodiesel production	3	Soil management	3
Production of fruit propagation material	6		
Husbandry seed science	6		
Biology of fodder plants	6		
Specificity of plant production in greenhouses	6		
Standardisation and safety at work in biosystem engineering	6		





Elective Courses (Plant Protection)

Subject	ECTS
Acarology	3
Herbology	6
Nematology	3
Agricultural bacteriology	3
Agricultural entomology	6
Agricultural mycology	6
Agricultural virology	3
Total	30



List of PhD Completed Theses

- Autohtone populacije heljde u funkciji organske poljoprivredne proizvodnje na području Bosne i Hercegovine
- Genetska struktura i varijabilnost tradicionalnih genotipova jabuke sa područja istočne Bosne
- Evaluacija autohtonih genotipova oraha (*Juglans regia* L.) u Bosni i Hercegovini
- Korištenje finansijske poluge za ostvarivanje rentabilnosti u prehrambenoj industriji BiH
- Upravljanje ukupnim kvalitetom kao osnov izgradnje konkurentskih prednosti kompanija sektora bezalkoholnih pića Bosne i Hercegovine
- Svojstva tla i dinamika organske materije u šumama bukve i jele (sa smrčom) na krečnjacima i dolomitima na području Bjelašnice.
- Razvoj i primjena softverskih modela u cilju održivog upravljanja vodom i povećanja produktivnosti poljoprivrednih kultura u BiH



List of PhD Completed Theses

- Mogućnost korištenja sjemena lokalnih populacija raštike (*Brassica oleracea* L. var. *acephala* D.C.) za proizvodnju mladih izdanaka („microgreens“) u urbanoj poljoprivredi
- Evaluacija polifenolnih komponenti plodova autohtonih genotipova kruške“
- Prisutnost virusa u autohtonim i introduciranim sortama šljive na području Bosne i Hercegovine i njihova djelomična karakterizacija“
- Primjena bioregulatora u funkciji regulisanja parametara kvaliteta i skladištenja plodova jabuke (*Malus domestica* borkh.)
- Distribucija i alelopatska aktivnosti ambrozije (*Ambrosia artemisiifolia* L.) u invazivnom procesu na području kantona Sarajevo
- Genetička i fenotipska varijabilnost populacija borovnice (*Vaccinium myrtillus* L.) na području Bosne i Hercegovine“



ΓΕΩΠΟΝΙΚΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΑΘΗΝΩΝ





Thank you for your attention

Faculty of Agriculture and Food Sciences, Sarajevo, Bosnia and Herzegovina

