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Erasmus+ Programme
of the European Union



MSc in Sustainable Food Production Systems STEPS

ERASMUS+ PROJECT

Key Action 2 - Cooperation for innovation and the exchange of good practices

Capacity Building in the field of higher education

Project number:598963-EPP-1-2018-1-AL-EPPKA2-CBHE-JP

Sabahudin BAJRAMOVIĆ – UNSA coordinator

Sarajevo, 8th October 2021



Basic information

- **Financing:** EU Erasmus + programme
- **Key action:** Cooperation for innovation and the exchange of good practices
- **Action:** Capacity Building in the field of higher education
- **Aim:** Implementation of a modern MSc programme in “Sustainable food production systems”, in compliance to the Bologna convention
- **Duration:** 36 months, 15/01/2019 – 14/01/2023 (extension of one year due to pandemic COVID-19)
- **Budget:** EUR 990,000 (UNSA EUR 107,000)
- **Website:** <http://steps-project.eu/>
- **Facebook:** STEPS Erasmus+
- **Instagram:** stepserasmus



STEPS Consortium (11 partners)

Partner countries (7)

1. Agricultural University of Tirana, Albania (AUT)
2. European University of Tirana, Albania (UET)
3. University “Haxhi Zeka”, Peja, Kosovo (UHZ)
4. Universum College, Pristina, Kosovo (UC)
5. University of Bihać, Bosnia and Herzegovina (UNBI)
6. University of Sarajevo, Bosnia and Herzegovina (UNSA)
7. Ministry of Education, Science, Culture and Sport of Una-Sana Canton, Bosnia and Herzegovina (MESCS USK)

Program countries (4)

1. Czech University of Life Sciences Prague, Czech Republic (CULS)
2. University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania (USAMVB)
3. Agricultural University of Athens, Greece (AUA)
4. Research Innovation and Development Lab, Greece (ReadLab)



Main aim and objective

- STEPS project aim is building the capacities of higher education institutions in Western Balkans countries (Bosnia and Herzegovina, Albania and Kosovo) in order to help them offer curricula aligned with the needs of the labour market and society.
- The objective of the project is the development and the implementation of a new Joint MSc programme on “Sustainable Food Production Systems” (STEPS), which will be linked with the national - and regional - priorities of the countries involved.



Goals

1. To contribute to the modernization and improvement of the quality and relevance of the education, in order to meet labour market's needs and society's expectations
2. To contribute to the professional development of scientific staff and equip HEIs with modern facilities that support efficient teaching/learning approaches and research capacity
3. To improve the networking potential of HEIs and offer them the opportunity to offer an MSc Programme jointly



Specific objectives

- Development of a new MSc programme in Sustainable Food Production Systems (STEPS)
- Harmonization of the STEPS structure and courses design with the Bologna convention
- Professional development of scientific staff of Western Balkans HEIs through the transfer of knowledge and experience of EU partners
- Development of modernized curricula and delivery of knowledge through the utilization of ICT-based tools and modern teaching/learning environments
- Development of ICT centers and of laboratories of "Food Quality Control" and "Food Production Systems Management"



Main tasks of STEPS partner countries HEIs

- The STEPS Partner countries HEIs will be actively involved and lead important activities of the project.
- Teaching/research staff will be trained and demonstrate the functioning of modern laboratories and ICT-based teaching/learning environments.
- In addition, they will:
 - prepare laboratories to accommodate experimental facilities, computers and software
 - develop educational and training material
 - prepare documentation for the accreditation of the MSc programme
 - establish communication channels with the stakeholders, prepare dissemination materials, disseminate and exploit project results



Main tasks of Program countries (EU) institution

- The main responsibility of EU institutions is the transfer of knowledge on scientific, technical and organizational aspects, which will boost the level of education and the capacity of partner countries HEIs.
- More specifically, EU partners will:
 - review related MSc programmes at EU and international level
 - harmonize the content of the surveys and provide recommendations for improvement
 - contribute to the design and the harmonization of the MSc programme with the Bologna convention
 - deliver training courses for faculty staff of partner countries HEIs
 - provide guidelines for the development of educational content, resources and practices



Working packages (10)



- WP 1: Preparation** - Connection of the MSc programme with the world of work, the social and the economic environment
- WP 2: Development** - STEPS structure and courses design, study visit
- WP 3: Development** - Professional development of scientific staff (seminars and lectures)
- WP 4: Development** - LMS platform, harmonization of STEPS programme courses and the digitisation of the educational material
- WP 5: Development of infrastructures** - Teaching/learning environment and research labs
- WP 6: Development** - STEPS application for official accreditation
- WP 7: Development** - STEPS programme delivery
- WP 8: Quality plan and evaluation of project progress**
- WP 9: Dissemination and Exploitation**
- WP 10: Management** - Project management and coordination



The STEPS master at the UNSA

- The Elaborate of STEPS MSc study programme prepared (end of January 2020)
- MSc study programme is approved by:
 - Quality Assurance Committee of Faculty of Agriculture and Food Sciences Sarajevo
 - Senate of University of Sarajevo
 - Ministry of Science, Education and Youth
 - Waiting for accreditation certification (from state Agency of accreditation)
- First generation – Academic year 2020/2021: 6 students
 - Next generation – Academic year 2021/2022: 8 students (at least)



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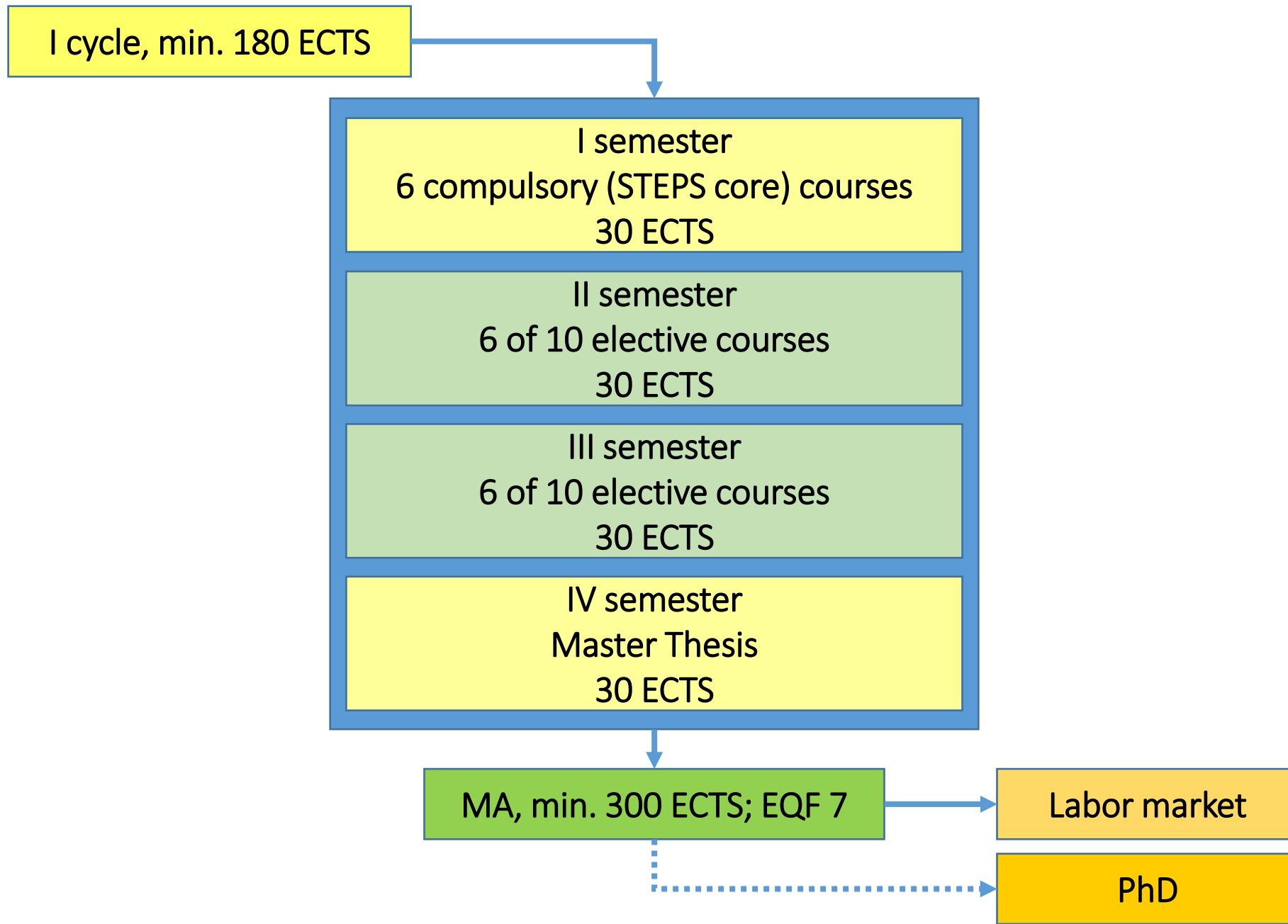
- Where: UNSA – Faculty of Agriculture and Food Sciences
- Two year, II cycle (master) university study program
- 4 semesters
 - 1st semester: 6 core subjects for all STEPS partners
 - 2nd and 3rd semester: 6 out of 10 electives
 - 4th semester: MA thesis
- Students' mobility: regulated, allowed, and stimulated



STEPS at UNSA Curriculum



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No.	Course title	Formative category	1 st Semester (15 weeks)						Total ECTS
			Lect.	S.	Lab.	P.	ECTS	ET	
I. COMPULSORY COURSES									
1	Fundamentals of food production systems	Core; FEQS	2	-	1	-	0.33	Written	5
2	Agricultural and food industry waste management	Core; FEQS	2	1	-	-	0.33	Written	5
3	Advanced food science and technology	Core; FEQS	1	-	2	-	0.33	Written	5
4	Governance, policy and legislation in the agri-food sector	Core; MFPS	2	1	-	-	0.33	Written + Oral	5
5	Food ethics	Core; MFPS	2	1	-	-	0.33	Written	5
6	Research methodologies and tools	Core; MFPS	1	1	-	1	0.33	Written + Oral	5
Total core courses: hours/ECTS/week			10	4	3	1	2		30

FEQS – Food engineering, quality & safety;
MFPS – Management of food production systems



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No.	Course title	Formative category	2 nd Semester (15 weeks)						Total ECTS
			Lect.	S.	Lab	P.	ECTS	ET	
II. ELECTIVE COURSES									
1	Low input agriculture	Elective; FEQS	2	-	1	-	0.33	Written + Oral	5
2	Waste and recycling technologies in agriculture	Elective; FEQS	2	-	-	1	0.33	Written + Oral	5
3	Basics of nutritionism	Elective; FEQS	2	1	-	-	0.33	Written	5
4	Harvesting and post-harvesting technologies of agricultural products	Elective; FEQS	2	-	1	-	0.33	Written	5
5	Packaging technology	Elective; FEQS	1	-	1	1	0.33	Written	5
6	Consumer science and sustainable consumption	Elective; MFPS	1	-	1	1	0.33	Written + Practical	5
7	Total quality management in the agri-food sector	Elective; MFPS	2	-	-	1	0.33	Written	5
8	Agri-food economics	Elective; MFPS	2	-	-	1	0.33	Written	5
9	Rural development	Elective; MFPS	2	1	-	-	0.33	Written	
10	Sustainable land management	Elective; MFPS	2	1	-	-	0.33	Written	5
Total elective courses: hours/ECTS/week						2	2		30



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No.	Course title	Formative category	3 rd Semester (15 weeks)						Total ECTS
			Lect.	S.	Lab.	P.	ECTS	ET	
II. ELECTIVE COURSES									
1	Sustainable technology of dairy products	Elective; FEQS	2	-	1	-	0.33	Written + Oral	5
2	Sustainable technology of fruit and vegetable processed products	Elective; FEQS	2	-	1	-	0.33	Written + Oral	5
3	Sustainable technology of meat products	Elective; FEQS	2	-	1	-	0.33	Written + Oral	5
4	Sustainable technology of wine, beer and spirit drinks	Elective; FEQS	2	-	1	-	0.33	Written + Oral	5
5	Sustainable technology of cereals, flour, and bakery products	Elective; FEQS	2	-	1	-	0.33	Written + Oral	5
6	Business economics and international trade in the agri-food sector	Elective; MFPS	2	-	-	1	0.33	Written + Oral	5
7	Innovation and entrepreneurship for sustainable food production systems	Elective; MFPS	2	1	-	-	0.33	Written	5
8	Marketing of sustainable agri-food products	Elective; MFPS	2	1	-	-	0.33	Written	5
9	Project cycle management	Elective; MFPS	2	-	-	1	0.33	Written	5
10	Sustainable food value chain management	Elective; MFPS	2	-	-	1	0.33	Written	5
Total elective courses: hours/ECTS/week							2		30



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No.	Course title	Formative category	4 th Semester (15 weeks)						Total ECTS
			Lect.	S.	Lab.	P.	ECTS	ET	
1	Master thesis	Compulsory				2	2	Oral	30
Total compulsory master thesis: ECTS/week							2		30



STEPS at UNSA

Syllabus form

(prescribed by UNSA)



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UNSA syllabus form



1. General information

- Subject title:
- Subject code:
- Study cycle:
- Study year:
- Semester:
- ECTS:
- Status:

2. Contact hours

- Distribution of hours by type:
 - Lectures
 - Exercises
 - Seminars
 - Field work
 - Laboratory exercises
 - Praxis
 - Projects
 - etc.

3. Educational staff (coordinator and possible associates)

4. Prerequisites for enrollment

5. Objective(s)

6. Thematic chapters:

- with a weekly implementation plan

7. Learning outcomes:

- Knowledge:
- Skills:
- Competencies:

8. Teaching methods:

9. Assessment methods and structure:

10. Literature:

- Obligatory:
- Supplementary:



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Thank you for your attention!