

Erasmus +

STEPS

Cooperation for innovation and the exchange of good practices

Capacity Building in the Field of Higher Education

Milenko Blesić, Sabahudin Bajramović

MSc in Sustainable Food Production Systems STEPS 598963-EPP-1-2018-1-AL-EPPKA2- CBHE-JP



How is STEPS going at UNSA?

Milenko Blesić, Sabahudin Bajramović





What is this presentation about?



Creation of the STEPS study program at UNSA

Licensing of the STEPS at UNSA

Actual realization of the STEPS study program at UNSA

Accreditation of the STEPS at UNSA







- Study program created through the STEPS project activities
- STEPS WP1 Connection of the program with the labor market, the social and the economic environment
- Provided valuable inputs for creation and development of the Sustainable Food Production Systems study program at UNSA
 - Background and support design of the STEPS program in order to meet labor market and society's needs and expectations
 - BiH needs in terms of skilled engineers for the transition towards sustainable food production systems
 - Identified and analyzed relevant MSc/MA programs at European and international level
 - Highlighted best practices ...



- Study program created through the STEPS project activities
- STEPS WP2 STEPS study program structure and courses design
- Curriculum structure harmonized among the STEPS project partners and structured according to the UNSA specific conditions
- Syllabi framework agreed among STEPS project partners
 - Syllabi developed through active support and advices from the STEPS EU program partners
 - Syllaby final outfit according to the local legislative and academic requirements (Sarajevo Canton, UNSA)
 - Inputs for some syllabi contents provided through STEPS WP3 (Professional development of scientific staff)



- Study program created through the STEPS project activities
- STEPS WP3 Professional development of scientific staff
- Inputs through strengthening the capacity of UNSA teachers and researchers; suggested contemporary topics for some syllabi contents
- <u>STEPS WP4</u> STEPS Development
- Valuable inputs regarding modern teaching-methodological approaches; creation and use of digital resources and designing the syllabi for LMS teaching/studying conditions

So ... Thank you STEPS project so much!!!





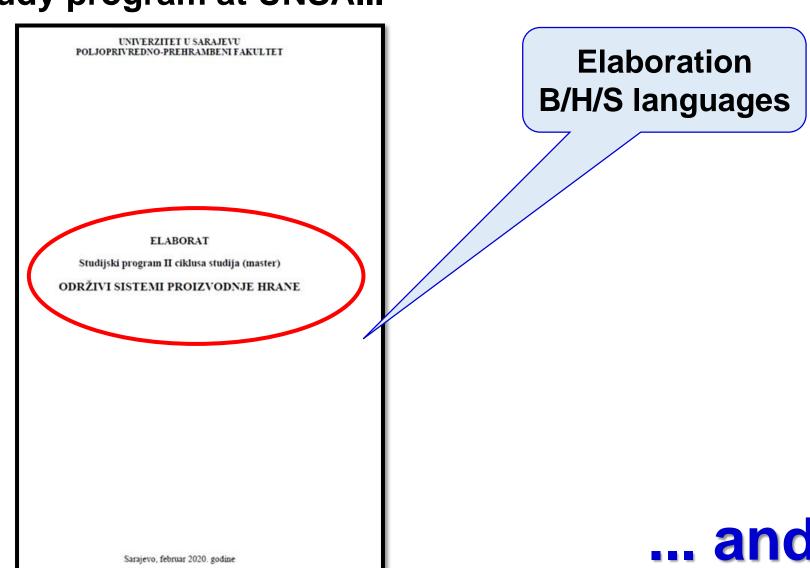


- Sarajevo Canton and University of Sarajevo legislative and academic requirements: <u>prior assessment and approval of the</u> <u>proposed study program – licensing</u>
- Licensing process
 - Starts from the UNSA faculty (department) that proposes the study program
 - Intra-faculty discussions and positive decisions of faculty bodies (the Faculty Quality Committee ✓ and Faculty's Teaching-Scientific Council ✓)
 Obtained
 - Academic assessment and approval through UNSA structures
 (commissions, committees, boards ✓ ✓ ✓) final academic approval →
 UNSA Senate Obtained
 - Governmental/ministerial assessment and approval (license) STEPS study program Sustainable Food Production Systems approved/licensed



 What was necessary to prepare for the initiation of the licensing process of the STEPS study program at UNSA...

1





 What was necessary to prepare for the initiation of the licensing process of the STEPS study program at UNSA...

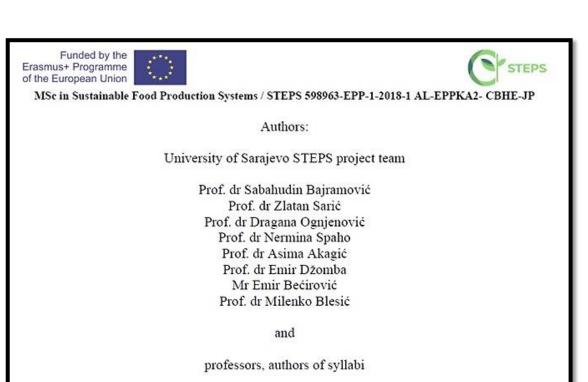
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ELABORATION

Second cycle study program

MSC IN SUSTAINABLE FOOD PRODUCTION SYSTEMS



The course coordinators named in Table 2 are fully responsible for the content of the syllabi

presented in the Chapter 4.

use which may be made of the information contained therein.

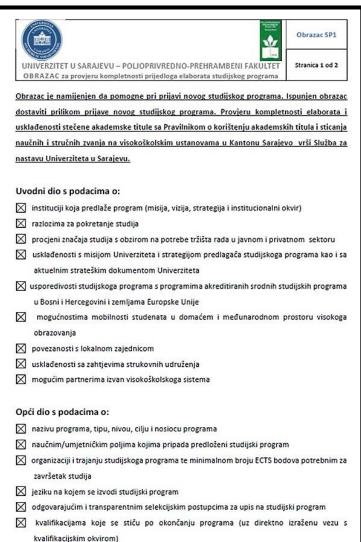
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Elaboration – English



 What was necessary to prepare for the initiation of the licensing process of the STEPS study program at UNSA...

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Obrazac SP1 UNIVERZITET U SARAJEVU – POLJOPRIVREDNO-PREHRAMBENI FAKULTET OBRAZAC za provjeru kompletnosti prijedloga elaborata studijskog programa Stranica 2 od 2 analizi mogućnosti zapošljavanja studenata po završetku studijskih programa koja uključuje mišljenje ili službeno objavljene dokumente organizacija vezanih za tržište rada o primjerenosti predviđenih kvalifikacija koje se stiču završetkom studija prohodnosti studija skali bodovanja i ocjenjivanja osiguranju kvalitete Opis studijskog programa: ishodima učenja na nivou studijskoga programa definiranim u skladu sa zahtjevima strukovnih udruženja i tržišta rada, nastavkom školovanja, općim društvenim potrebama i standardima kvalifikacijskog okvira popis obaveznih i izbornih predmeta s brojem ECTS bodova i brojem kontakt sati nastave potrebnim za njihovu izvedbu informacije o strukturi studija i uslovima upisa u sljedeći semestar popis ili uslovi izbora predmeta koje student može izabrati s drugih studijskih programa načini dokumentovanja 30 ECTS praktične nastave informacije o načinu završetka studija Opis svakoga predmeta na studiju: podatke o predmetu (naziv predmeta, nivo, ECTS, broj sati, status predmeta, godina studija, semestar, preduslovni predmeti ukoliko postoje, opis i ciljevi predmeta, očekivani ishodi učenja (znanje, vještine, kompetencije), tematske jedinice koje će se izučavati, metode izvođenja nastave, metode provjere znanja, literature (obavezna i dopunska)

Official certificate of providing proofs for fulfillment of the 26 mandatory elements of the elaboration of the proposed new study program





 What was necessary to prepare for the initiation of the licensing process of the STEPS study program at UNSA...

4

UNIVERZITET U SARAJEVU POLJOPRIVREDNO-PREHRAMBENI FAKULTET

KADROVSKI USLOVI I USLOVI PROSTORA I OPREME

Dokazi o ispunjavanju uslova u skladu sa Standardima i normativima za obavljanje djelatnosti visokog obrazovanja na području Kantona Sarajevo

(prilog uz Elaborat studijskog programa II ciklusa studija "Održivi sistemi proizvodnje hrane") Personnel conditions and conditions of premises and equipment





 What was necessary to prepare for the initiation of the licensing process of the STEPS study program at UNSA...

5

UNIVERZITET U SARAJEVU POLJOPRIVREDNO-PREHRAMBENI FAKULTET

Study program quality assurance procedures

OPIS POSTUPAKA OSIGURANJA KVALITETA STUDIJSKOGA PROGRAMA

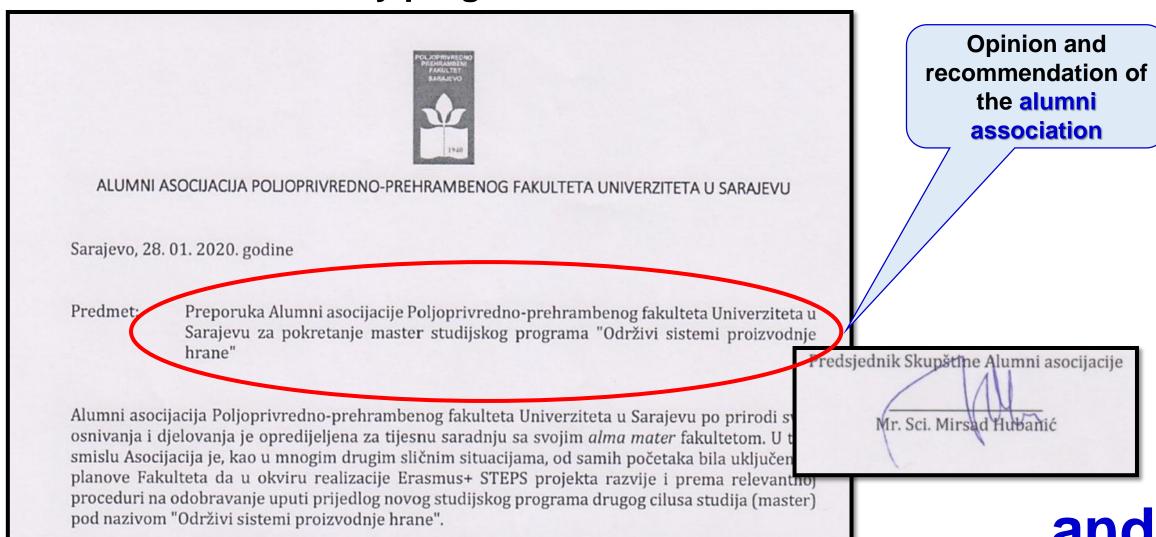
> (prilog uz Elaborat studijskog programa II ciklusa studija "Održivi sistemi proizvodnje hrane")





 What was necessary to prepare for the initiation of the licensing process of the STEPS study program at UNSA...







 What was necessary to prepare for the initiation of the licensing process of the STEPS study program at UNSA...

> POLJOPRIVREDNO-PREHRAMBENI FACULTY OF AGRICULTURAL FAKULTET AND FOOD SCIENCES UNIVERSITY OF SARAJEVO UNIVERZITETA U SARAJEVU BOSNA I HERCEGOVINA BOSNIA AND HERZEGOVINA Broj: 02/01.2020 Sarajevo, 30.01.2020. godine Odbor za osiguranje kvaliteta Prof.dr. Sabahudin Bajramović Voditelj studijskog programa Vrilednost Održivi sistemi proizvodnje hrane 269 Dana 30. Januara 2020. godine održan je sastanak članova Odbora za osiguranje kvaliteta na kojem se razmatrala prijava i zahtjev za mišljenje na Elaborat novog studijskog master programa Održivi sistemi proizvodnje hrane. Na osnovu diskusije članova Odbora i dostavljenog Elaborata, članovi Odbora za osiguranje kvaliteta jednoglasno donose slijedeće: MIŠLJENJE o opravdanosti i drugim aspektima predloženog Elaborata novog studijskog master programa Održivi sistemi proizvodnje hrane

Faculty Quality
Assurance
Committee
position

nositelja predloženih modula.

S poštovanjem,

Predsjednik Odbora

Døc.dr Almir Toroman





 What was necessary to prepare for the initiation of the licensing process of the STEPS study program at UNSA...

CURRICULUM	Form SP4			e	v aluati	al expe on of t ulum (1
SUSTAINABLE FOOD PRODUCTION SYSTEMS						
CURRICULUM REVIEW	PART III - CURRICULUM DE	SIGN AND C	ONTEN	T.		
Name of the reviewer: Natalija Bogdanov Institution: Faculty of Agriculture University of Belgrade Mission	How do you rate the sequence of the courses that students studied are in sequence to what students have studied in the previous semester? Consistency of the sequence of the courses that students study with the sequence to what students have studied in the previous semester	\boxtimes				
The Faculty of Agricultural and Food Sciences, University of S program "Sustainable Food Production Systems" which is dev program. The Faculty is a higher education institution with a University of Sarajevo), imposing reputation, respectable person	How do you rate the syllabus of the courses concerning the learning outcomes expected out of the course? Quality of syllabi concerning the learning outcomes expected out of the courses	\boxtimes				
(equipment, classroom space, laboratories) for the implementation Date: 15/01/2020	How do you rate the allocation of the credits to the courses? Allocation of the credits to the courses		\boxtimes			
Name (please print): Natalija Bogdanov	How do you rate the offering of the electives concerning their relevance to the specialization		\boxtimes			

Signature:



 What was necessary to prepare for the initiation of the licensing process of the STEPS study program at UNSA...

External expert Form SP4 evaluation of the curriculum (2) CURRICULUM SUSTAINABLE FOOD PRODUCTION SYSTEMS Is the employability ensured through curriculum design CURRICULUM REVIEW and development? Ensurance of employability through curriculum design Are global trends in higher education reflected in the Name of the reviewer: Prof. dr Semira Sefo curriculum? Reflection of global higher education trends in the curriculum Do individual courses focus on experiential learning including practical and work experience? Institution: Agromediterranean Faculty, University "Džemal Bijedić" Mostar Focus of individual courses on experiential learning, including practical and work experience Are certain courses aiming to promote ethics, responsibility and sustainability? Promotion of ethics, responsibility and sustainability by certain courses Date: 16, 01, 2020. PART II - ACADEMIC FLEXIBILITY Name (please print): Prof. dr Semira Sefo





 What was necessary to prepare for the initiation of the licensing process of the STEPS study program at UNSA...

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Obrazac SP5

Cijena programa i finansijska kalkulacija

Studijski program: ODRŽIVI SISTEMI PROIZVODNJE HRANE

Kalkulacija za 25 upisanih kandidata

Visina školarine po studentu	8.000,00 KM				
	Jedinica	Broj jedinica	Jedinična cijena (KM) bruto	Trošak (bruto) KM	
1. Ljudski resursi			bruto	bruto	
1.1 Honorari (bruto iznosi)					
1.1.1. Voditelj programa/Akademski koordinator	mjesec	24	170,00	4.080,00	
1.1.2. Predavači	čas	810	70,00	56.700,00	
1.1.3. Mentorstvo za izradu i odbranu završnog rada	student	25	200,00	5.000,00	
1.1.4. Članstvo u komisiji (2 člana po studentu)	student	25	100	2.500,00	
1.1.5. Administrator (upisnine, studentska služba, nastava, medicinsko nenastavno osoblje)	mjesec	24	350	8.400,00	

Financial elements of the study program



Licensing completed in the spring of 2020 !!!







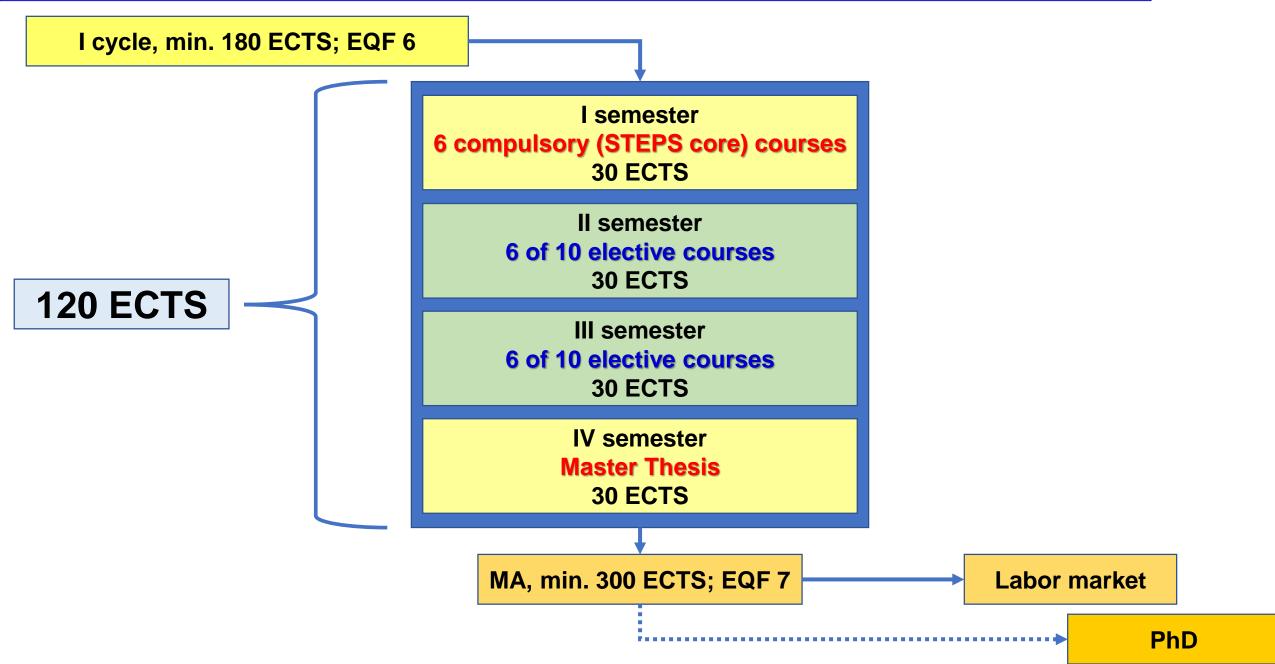
https://edtechreview.in/e-learning/5566-using-the-online-survey-tool-mentimeter-to-promote-student-led-learning





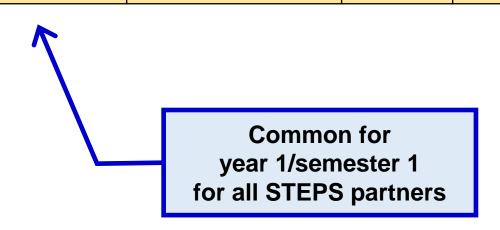
- Brief reminding ...
- Study program: Sustainable Food Production Systems
- II Cycle (MA Master) study program
 - Officially approved (UNSA, licensed by Sarajevo Canton Government Ministry of Education and Science) – spring 2020
 - The first generation enrolled at UNSA FoAFS in October 2020 (2020/21 academic year)
 - The second generation enrolled at UNSA FoAFS October 2021 (2021/22 academic year)
 - The third generation is still enrolling (October 2022) at UNSA FoAFS (2022/23 academic year)







Year 1, Semester I					
#	Course title	Formative category	Туре	ECTS	
1	Fundamentals of food production systems	Compulsory	FEQS	5	
2	Agricultural and food industry waste management	Compulsory	FEQS	5	
3	Advanced food science and technology	Compulsory	FEQS	5	
4	Food law	Compulsory	MFPS	5	
5	Food ethics	Compulsory	MFPS	5	
6	Research methodologies and tools	Compulsory	MFPS	5	



FEQS	Food engineering, quality, and safety
MFPS	Management of food production systems



	Year 1, Semester II					
#	Course title	Formative category	Туре	ECTS		
1	Low input agriculture	Elective	FEQS	5		
2	Waste and recycling technologies in agriculture	Elective	FEQS	5		
3	Basics of nutritionism	Elective	FEQS	5		
	Harvesting and post-harvesting technologies of agricultural products	Elective	FEQS	5		
5	Packaging technology	Elective	FEQS	5		
6	Consumer science and sustainable consumption	Elective	MFPS	5		
7	Total quality management in the agri-food sector	Elective	MFPS	5		
8	Agri-food economics	Elective	MFPS	5		
	Rural development	Elective	MFPS	5		
10	Sustainable land management	Elective	MFPS	5		

FEQS	Food engineering, quality, and safety
MFPS	Management of food production systems



	Year 2, Semester III					
#	Course title	Formative category	Туре	ECTS		
1	Principles of sustainable technology of milk and dairy products	Elective	FEQS	5		
2	Principles of sustainable technology in fruit and vegetable processing	Elective	FEQS	5		
3	Sustainable technology of meat products	Elective	FEQS	5		
4	Sustainable wine production	Elective	FEQS	5		
5	Principles of sustainable technology in cereal processing	Elective	FEQS	5		
6	Business economics and international trade in the agri-food sector	Elective	MFPS	5		
7	Innovation and entrepreneurship for sustainable food production systems	Elective	MFPS	5		
8	Marketing of sustainable agri-food products	Elective	MFPS	5		
9	Project cycle management	Elective	MFPS	5		
10	Sustainable food value chain management	Elective	MFPS	5		

FEQS	Food engineering, quality, and safety
MFPS	Management of food production systems



	Year 2, Semester IV			
#		Formative category	Туре	ECTS
1	Master thesis	Compulsory	FEQS	30





3

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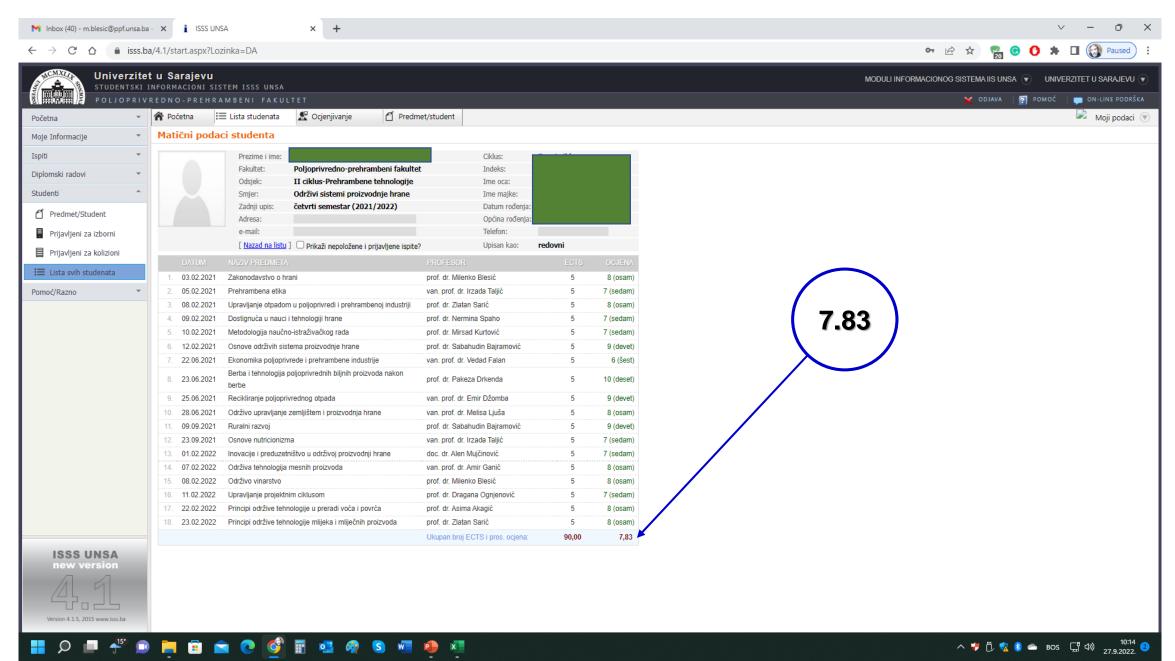




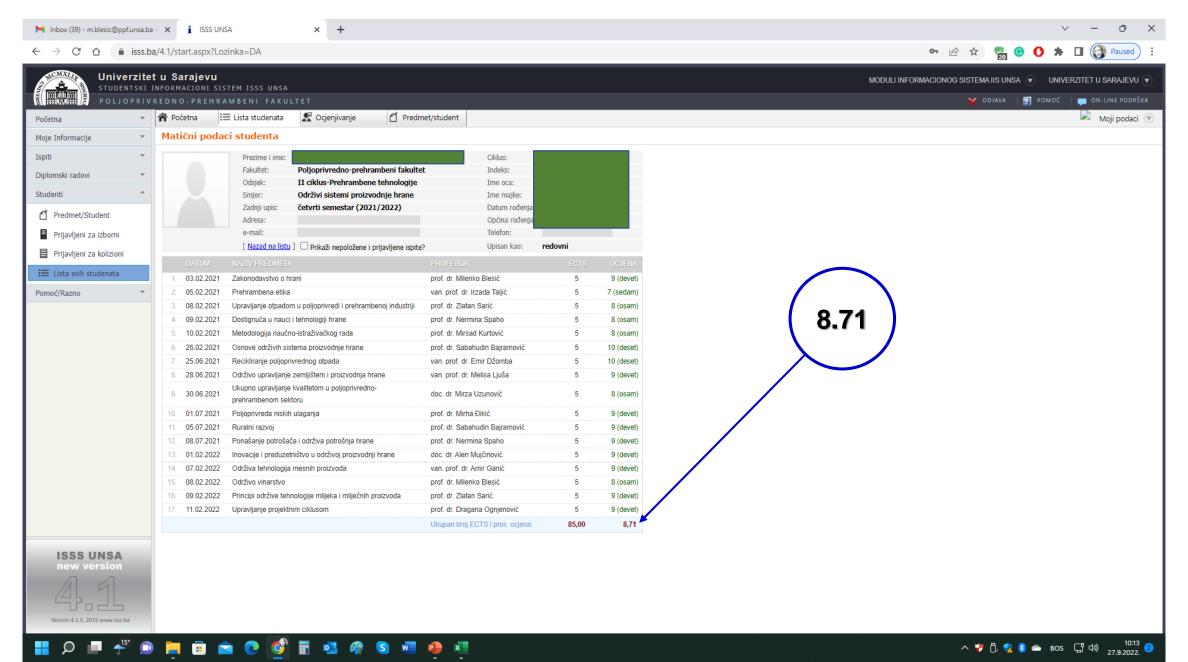
The first (2020/21) STEPS generation at UNSA ...

- 7 enrolled students
 - A small number in absolute terms, not so small in relative terms (about 9% of all those enrolled in masters' study programs at UNSA - FoAFS in 2020/21 academic year)
- Not particularly brilliant students; their average grade in the first cycle - 6.9 / 10
- Significantly better at the STEPS study program ...

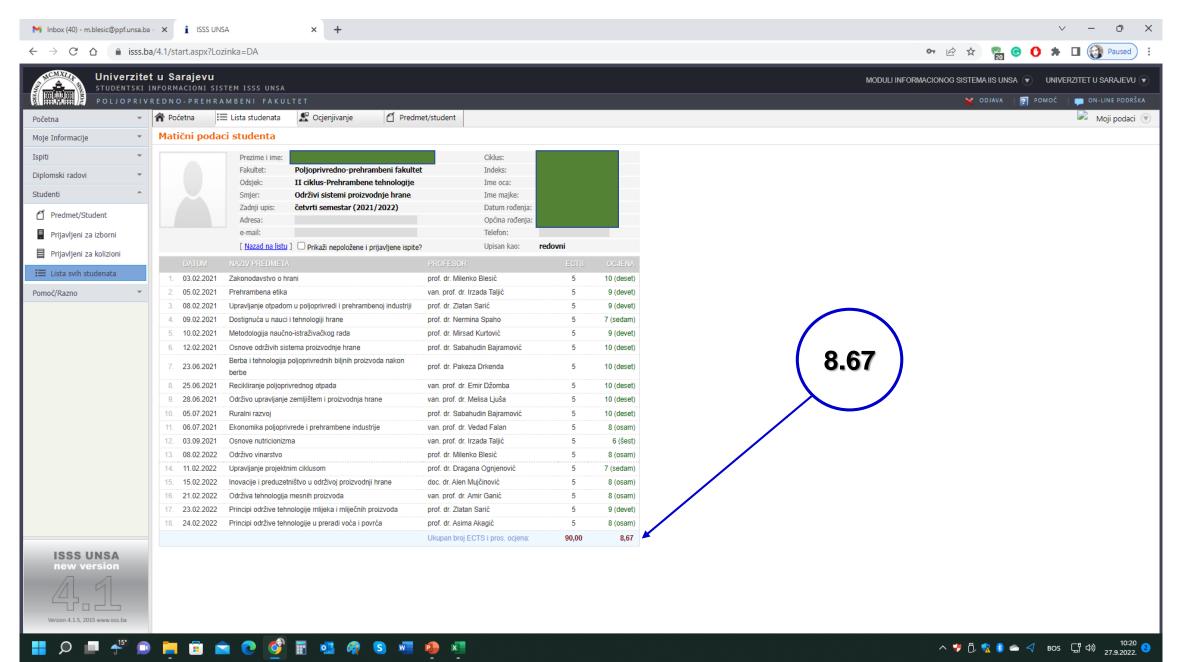




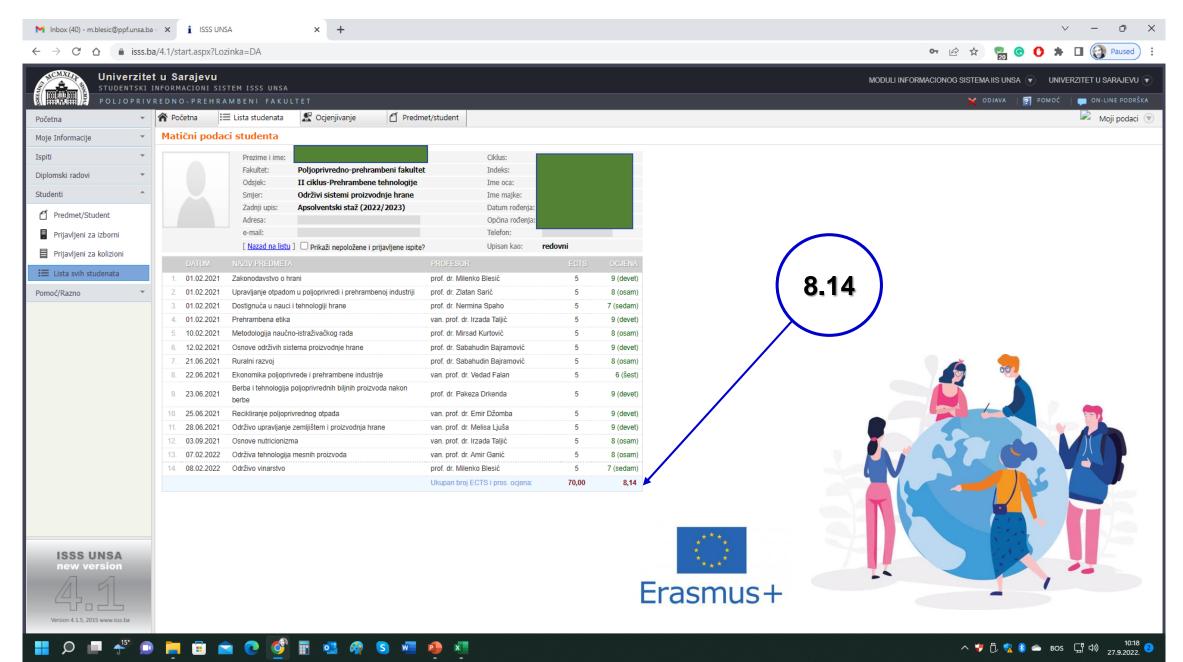




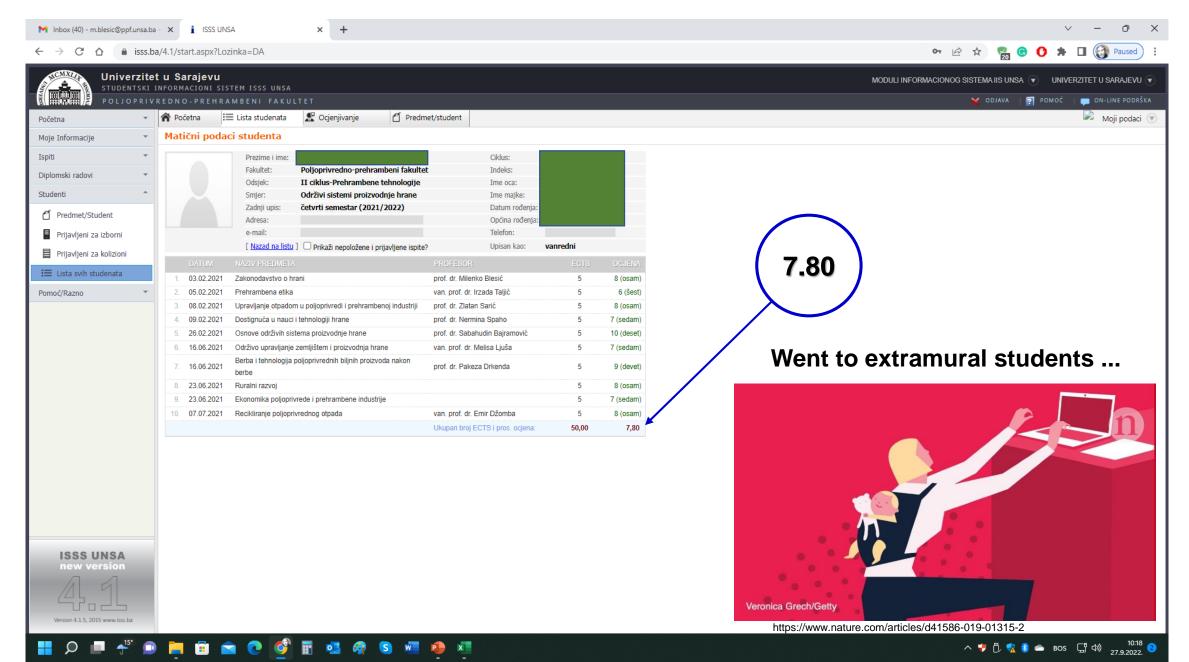




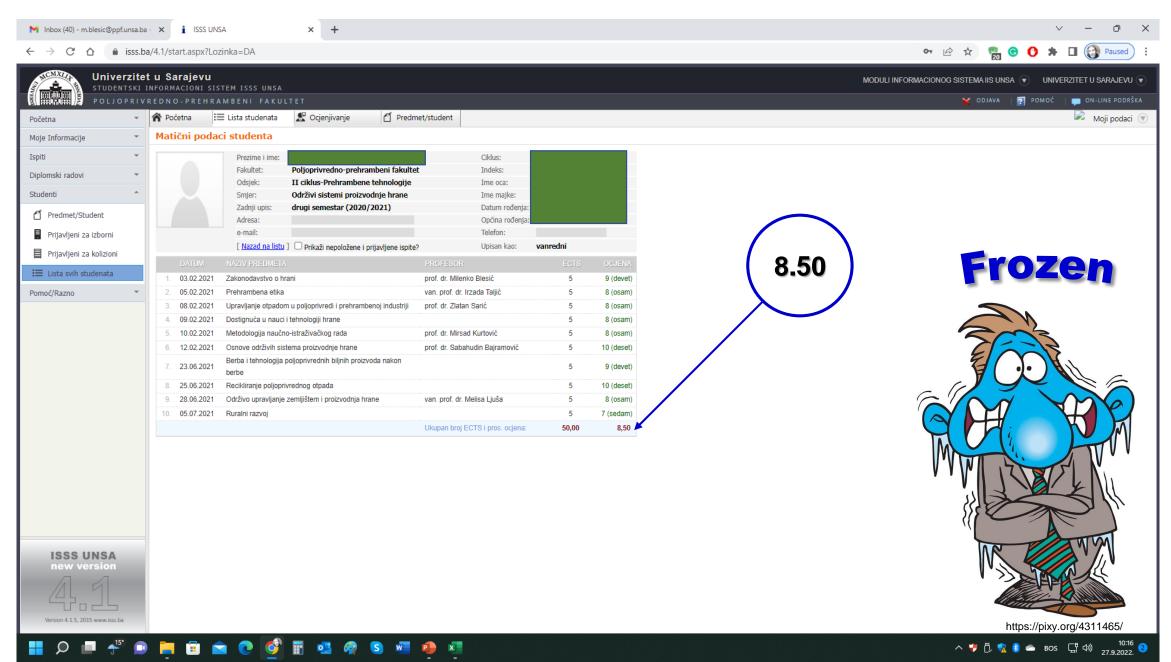














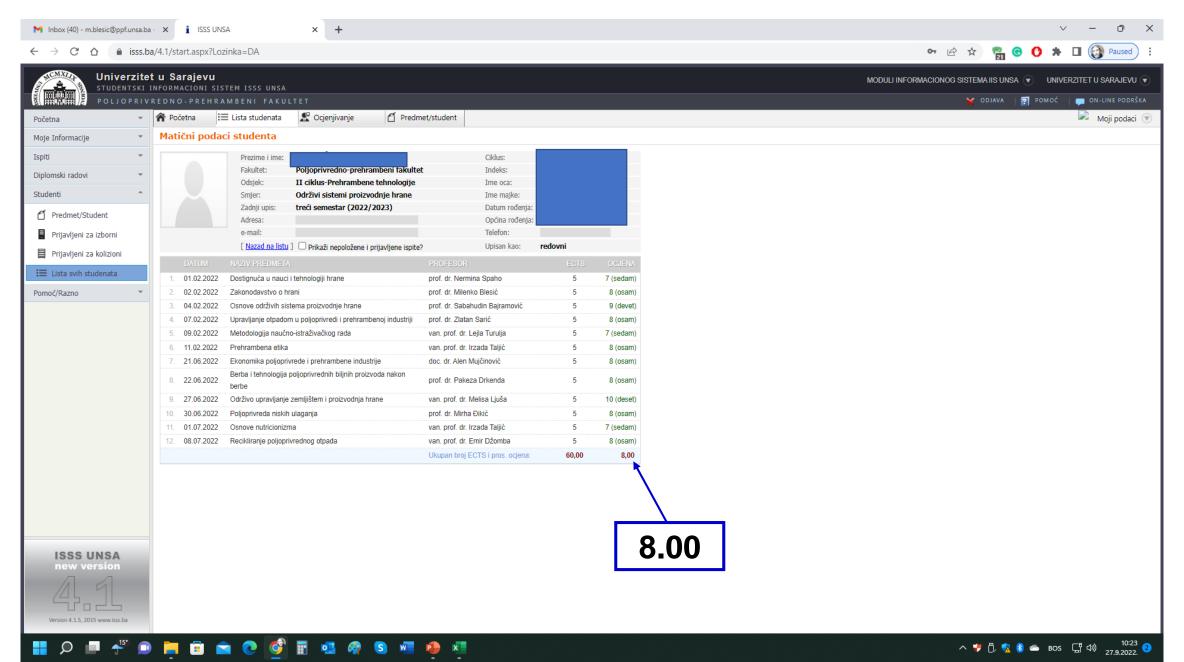




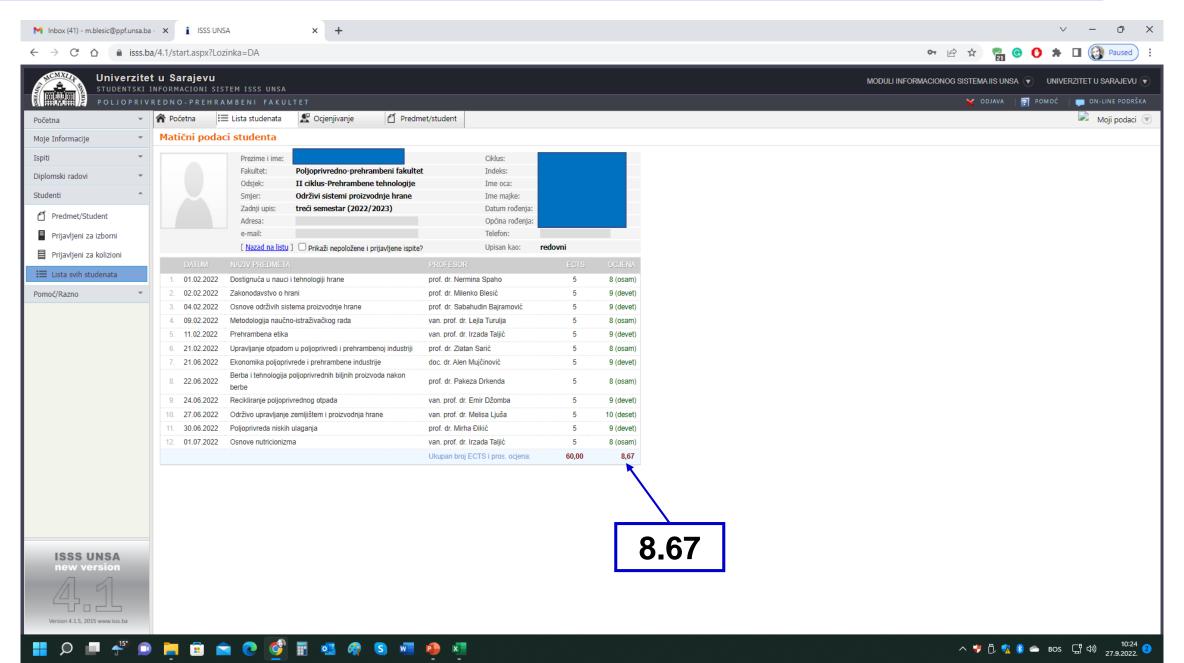
The second (2021/22) STEPS generation at UNSA ...

- 5 enrolled students (out of 54 enrolled at all MA study programs at UNSA - FoAFS; again around 9%)
- Again, not particularly brilliant students; their average grade in the first cycle – 7.4 / 10
- Students (studying???) improved at the STEPS study program ...

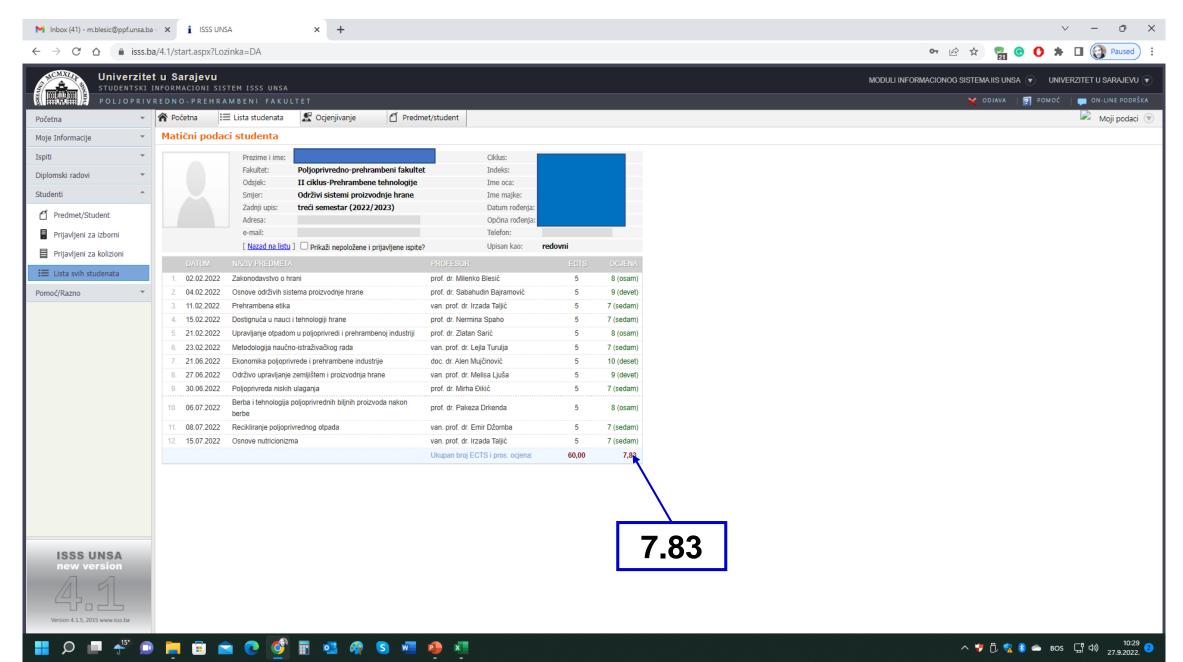




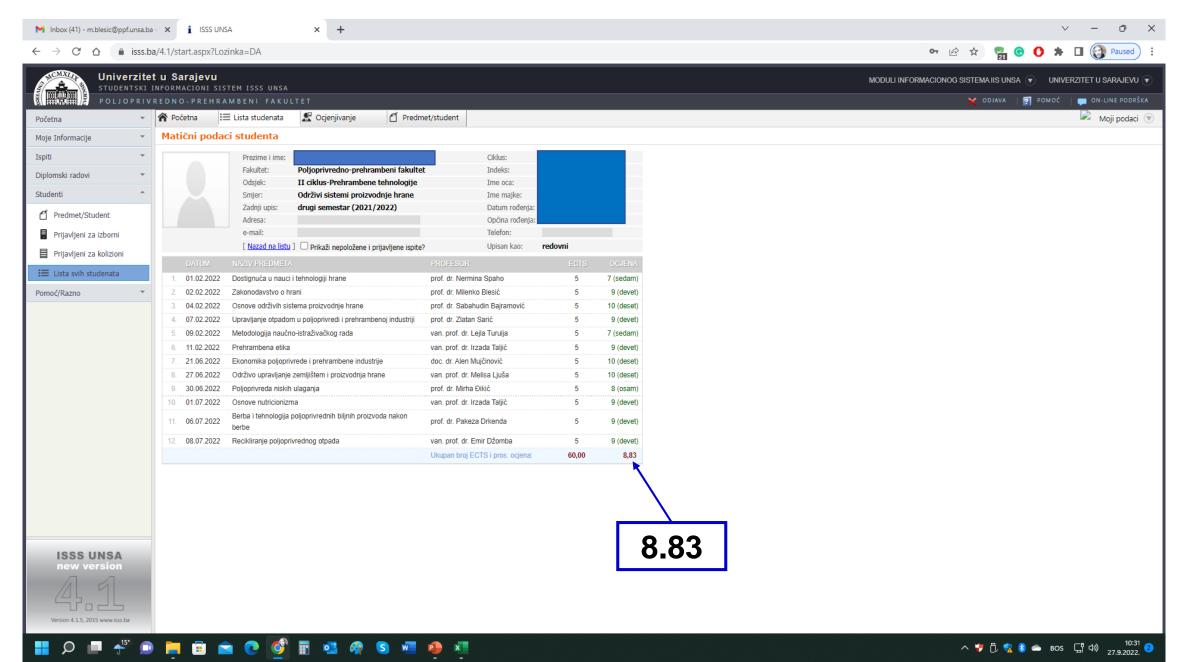




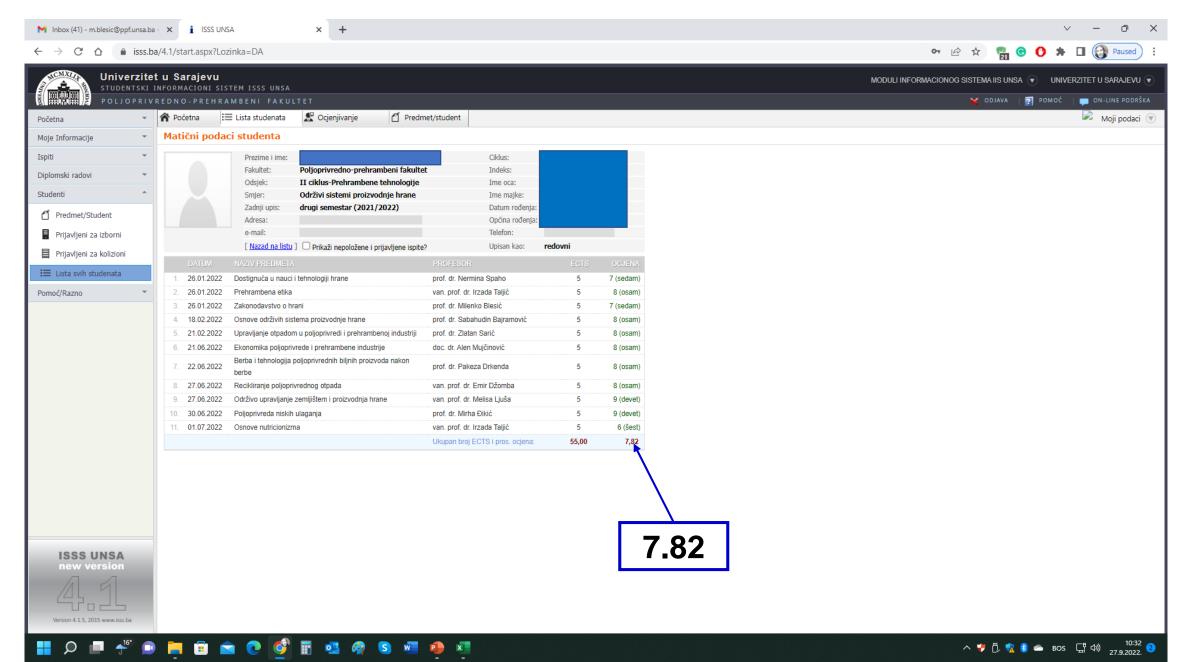














STEPS compulsory courses – Success after two generations...

	Year 1, Semester I – 2020/21 and 2021/22		
#	Course title	(n)	Average grade (x/10)
1	Fundamentals of food production systems	11	9.4
2	Agricultural and food industry waste management	11	8.2
3	Advanced food science and technology	11	7.3
4	Food law	11	8.5
5	Food ethics	11	7.9
6	Research methodologies and tools	9	7.7

FEQS	Food engineering, quality, and safety
MFPS	Management of food production systems



STEPS at UNSA – Elected elective courses

Year 1, Semester II – 2020/21 and 2021/22			
#	Course title	Elected by s	students
1	Low input agriculture	1 + 5 =	6
2	Waste and recycling technologies in agriculture	0 + 5 =	5
3	Basics of nutritionism	5 + 5 =	10
4	Harvesting and post-harvesting technologies of agricultural products	5 + 5 =	10
5	Packaging technology	0 + 0 =	0
6	Consumer science and sustainable consumption	1 + 0 =	1
7	Total quality management in the agri-food sector	1 + 0 =	1
8	Agri-food economics	5 + 5 =	10
9	Rural development	6 + 0 =	6
10	Sustainable land management	6 + 5 =	11



FEQS	Food engineering, quality, and safety
MFPS	Management of food production systems



STEPS at UNSA – Elected elective courses

Year 2, Semester III – 2020/21		
#	Course title	Elected by students
1	Principles of sustainable technology of milk and dairy products	5
2	Principles of sustainable technology in fruit and vegetable processing	4
3	Sustainable technology of meat products	5
4	Sustainable wine production	5
5	Principles of sustainable technology in cereal processing	
6	Business economics and international trade in the agri-food sector	
7	Innovation and entrepreneurship for sustainable food production systems	5
8	Marketing of sustainable agri-food products	
9	Project cycle management	5
10	Sustainable food value chain management	1

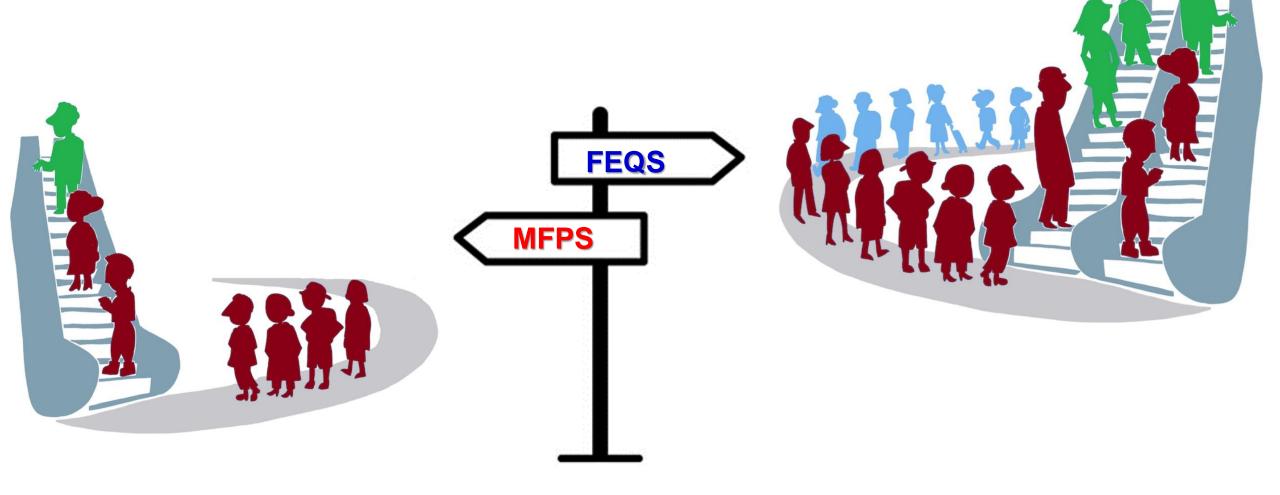


FEQS	19
MFPS	11

FEQS	Food engineering, quality, and safety
MFPS	Management of food production systems



For now it seems ...





The 3rd (2022/23) STEPS generation at UNSA ...

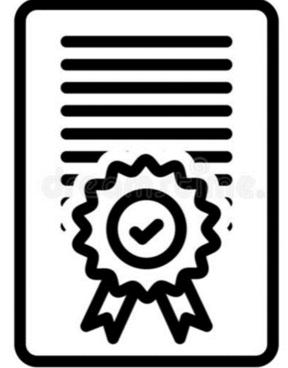
It's happening now ...

 So far, 7 students enrolled as the 3rd generation of STEPS at UNSA students ...

Who are they? ... What are they like? ... For now we only can guess ...



 What's about <u>accreditation</u> of the STEPS (Sustainable Food Production Systems) study program at UNSA?





Accreditation of the study programs in Bosnia and Herzegovina, in the Sarajevo Canton and at the University of Sarajevo...

- Accreditation A segment of the quality assurance process
 - To be distinguished from licensing!!!

 Accreditation of a study program cannot be done in advance, but <u>after the first results of the program</u> – as a rule, after the first generation of students has completed the study program



Accreditation of the study programs in Bosnia and Herzegovina, in the Sarajevo Canton and at the University of Sarajevo...

- A complex, long-term (and expensive) process in which (at least) the following actors are involved:
 - Faculty (Department) where the study program is organized
 - University structures and bodies
 - (Cantonal) Government / Ministry
 - State (BiH) Agency for Development of Higher Education and Quality Assurance
 - External commission of experts (external evaluation)



• A constant activity at UNSA - FoAFS re. STEPS study program (e.g. regular surveys – students' satisfaction and evaluations; institutional evaluation of the work of teachers and assistants; institutional evaluation of teaching methods; institutional evaluation of study results ...)



 The (UNSA - FoAFS) plan is to complete the selfevaluation report for the STEPS study program during the winter semester of the 2022/23 academic year and to launch an official initiative for its accreditation

 Accredited STEPS study program at UNSA – hopefully by the begining of the 2023/24 academic year (autumn 2023)

Thank you for your attention !!!



