

Miljan Cvetković, professor
University of Banja Luka Faculty of Agriculture

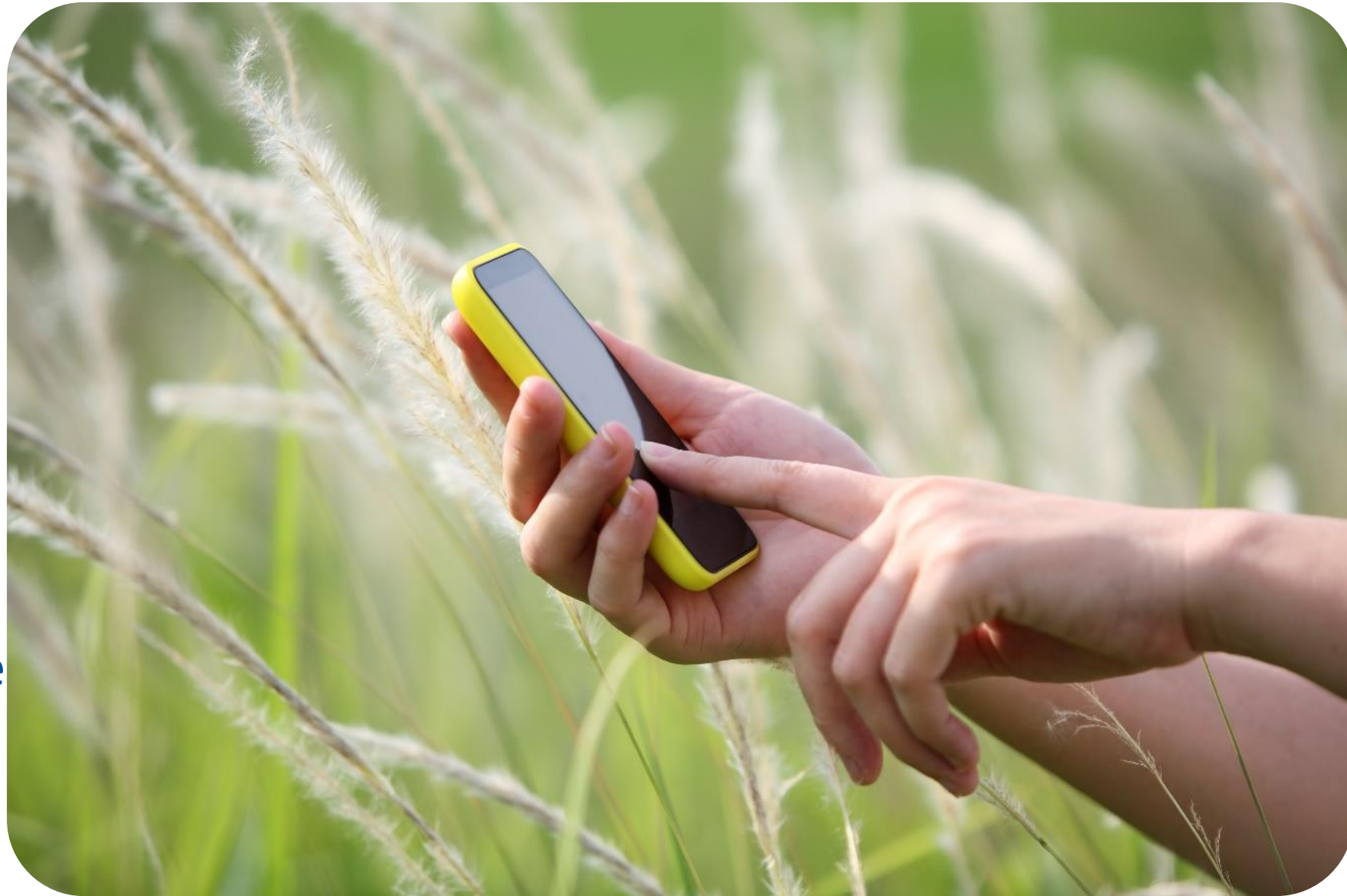
ICT in Agriculture – old and new forms of education and new knowledge acquisition



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In recent years, information and communication technologies (ICT) have become increasingly important in the field of agricultural production, both in size and scope.



Expanding extensive connectivity, the growing use of the Internet of Things (IoT), improved analytics, more affordable devices, and innovative applications are the basis of what we now call the digital society.

This momentum provides participants in the agricultural sector with the opportunity to adapt and apply this technology as a solution for modern agriculture.



A high level of narrowly specialized knowledge, along with the availability of modern equipment is a key condition for their successful application.





29/04/2020

VIRAL Project Implementation Commences

In the latter half of 2019, out of 833 projects submitted within the Erasmus+ programme, the Education, Audiovisual and Culture Executive Agency of the European Commission in Brussels (EACEA), selected 163 it will finance directly. Among them is the project titled "Vitalising ICT

Najnovije



01/06/2022
Workshop within
the conference



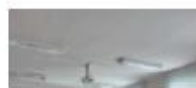
01/06/2022
Project meeting
and steering
committee in
Bucharest



24/05/2022
VIRAL in the world
of sweet cherry of
Herzegovina



24/05/2022
Hackathon lived up
to the expectations
of the project and
the participants



21/04/2022
Students of the
Faculty

2019-2022(3)



900.000 euros

Specialized thematic workshops, online lectures, ICT courses in agriculture, student competitions (hackathons), virtual fairs, teams of trainers for education in certain areas, guides and training materials, practical workshops, and demonstrations, are just some of the tools that enable successful education and acquiring new knowledge in this field.



Old and new forms
of education and new
knowledge
acquisition

Pros and Cons?

Different ways of non-
formal education and
acquiring new
knowledge about the
application of ICT in
agriculture.





Theoretical workshops



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Theoretical workshops



Theoretical workshops



Practical workshops



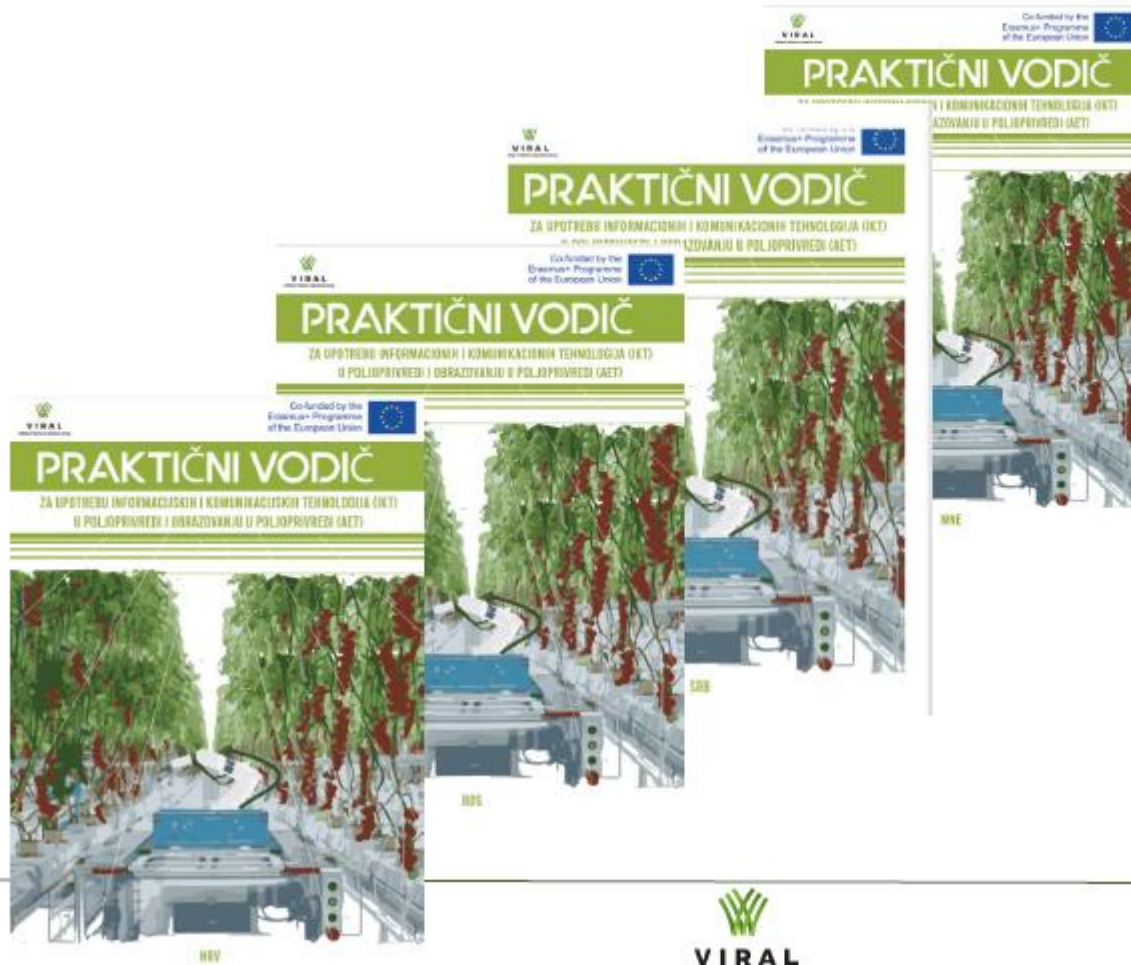
Practical trainings



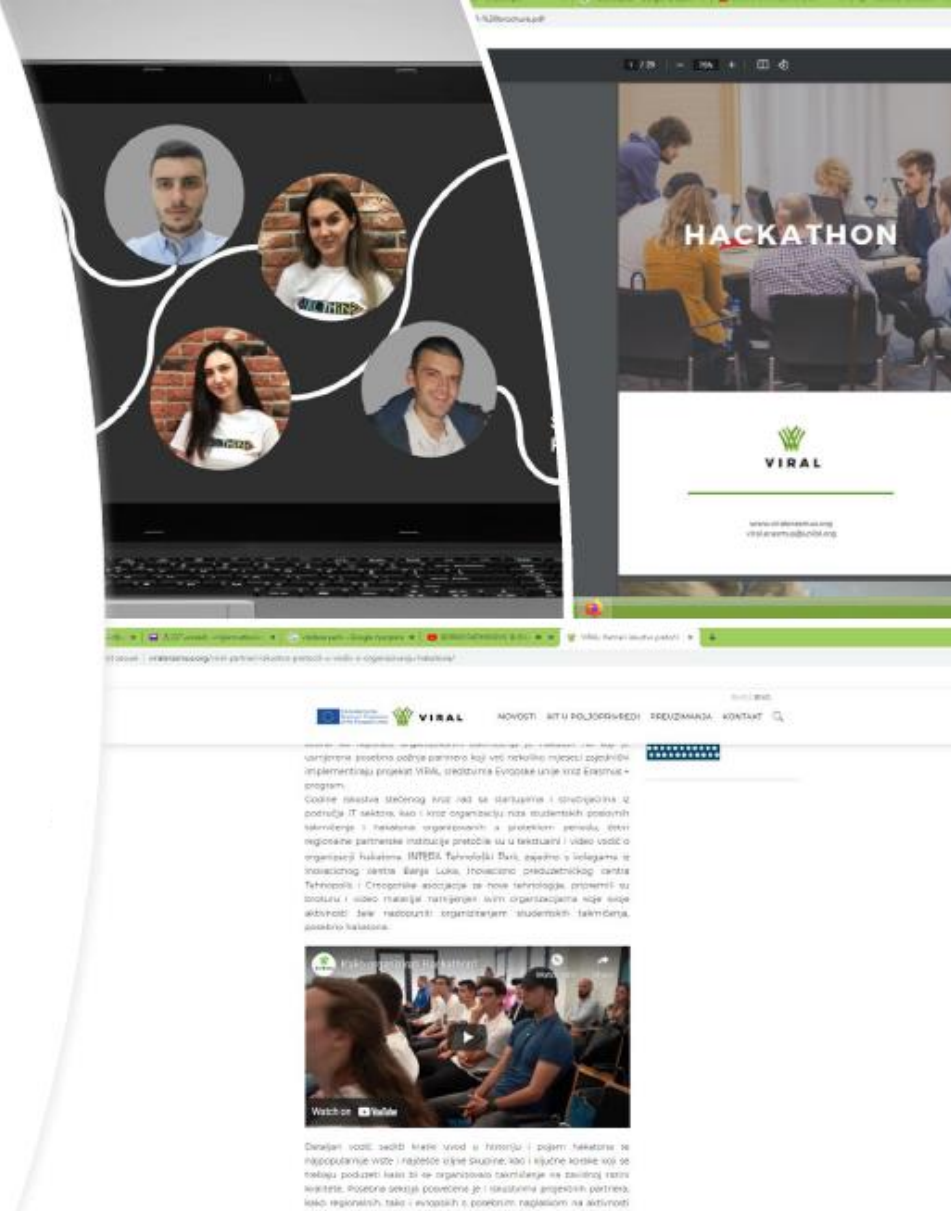
Vocational publications



Vocational publications



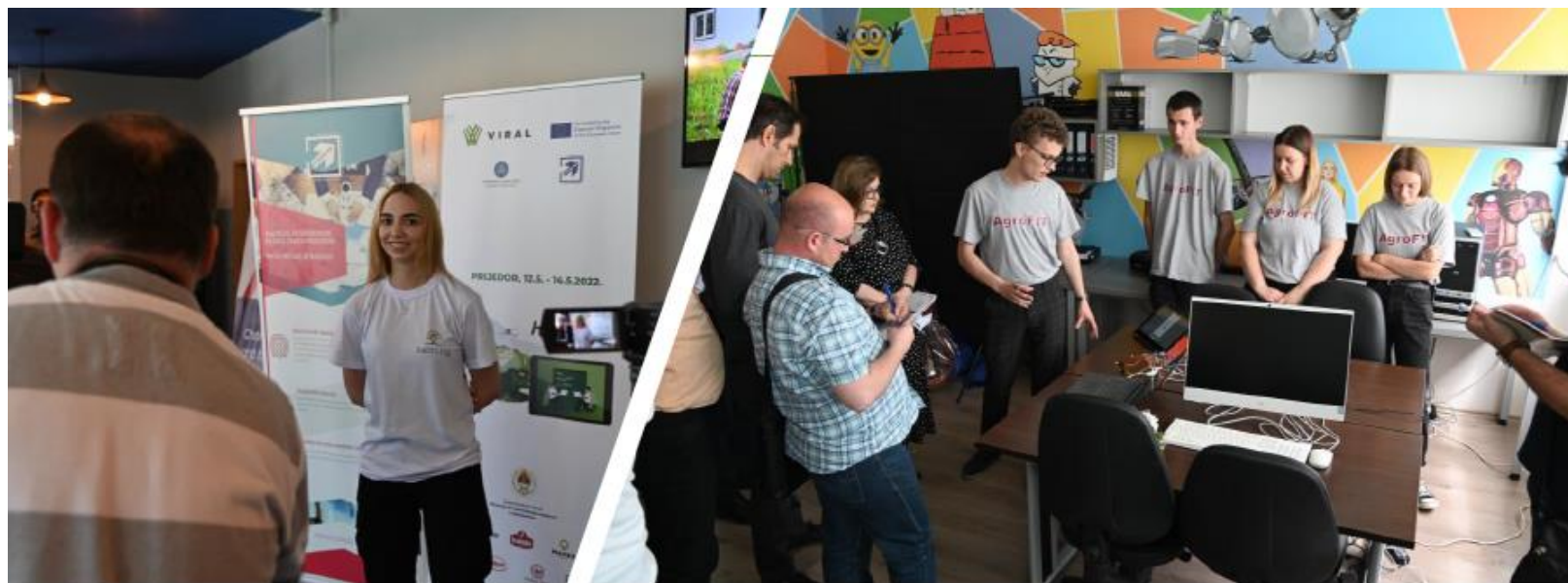
Student pitching Competitions HACKATONS





Student pitching Competitions HACKATONS

Student pitching Competitions HACKATONS



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Industry-Academia Research Collaboration in Software Engineering: Experience and Lessons Learned

Vahid Gencali

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OPTIMILK - meal rationing application for dairy cows

Miljan Erbez

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Precision Agriculture based on IoT, Cloud, and Mobile Apps

Tomo Popovic

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Rulebook on the requirements for aerial drone operation

Nikola Jovanovic

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IT systems in Integrated Plant Production - useful tool or need?

Mladen Zovko

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Robotics in Agriculture

Jurij Rakun

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Introduction conference

Radovan Stojanovic

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Introduction conference

Catal Cagatay

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Sanja Radonjic

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Remote Monitoring and Control System Based on IoT

Aljo Mujic

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Mirko Jokic

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Location Intelligence and Trends in Geographic Information Systems

Almir Karabegovic

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IoT in Agriculture

Qingzhi Liu

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Drones in Agriculture

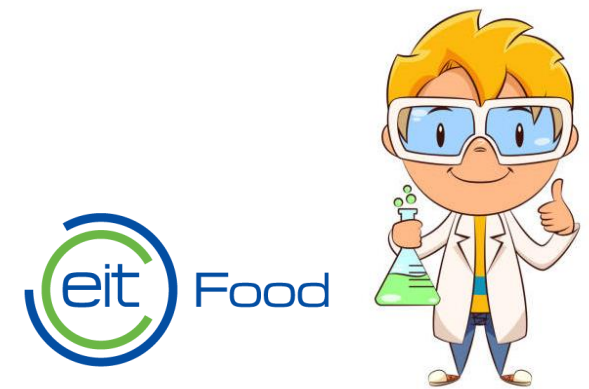
Joljo Valente

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Machine Learning/Deep Learning in Agriculture

Cagatay Catal



Online lectures

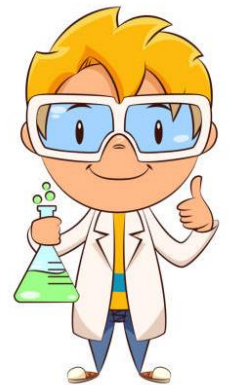


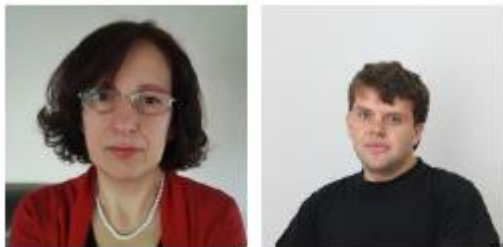
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Crash course on ICT in agriculture

Type	<input checked="" type="checkbox"/> Teaching material <input checked="" type="checkbox"/> Learning material <input checked="" type="checkbox"/> Training material	<input type="checkbox"/> Event <input type="checkbox"/> Report <input type="checkbox"/> Service/Product
Description	<p>Each Partner country HEI will introduce in 2nd project year extra-curricular course of use of ICT in agriculture, intended to University students, especially to those enrolled in agriculture and technical engineering sciences. The course duration will be up to ½ semester or 4 sessions and will be valued with certain number of ECTS, depending on final workload. Courses will be approved by Universities.</p> <p>This course will enable more relevant knowledge and better employability of University graduates. It is expected that min. 360 students at 5 Partner country HEIs per year attend the course.</p>	
	<input checked="" type="checkbox"/> Teaching staff <input checked="" type="checkbox"/> Students <input checked="" type="checkbox"/> Trainees <input type="checkbox"/> Administrative staff <input type="checkbox"/> Technical staff <input type="checkbox"/> Librarians <input checked="" type="checkbox"/> Other	

ONLINE COURSE





Zdenka Babić
Vedran Jovanović

Drones

Mobile applications

Tomo Popović
Stevan Čakić



Aljo Mujčić
Suad Kasapović
Alma Šećerbegović

IoT



GIS



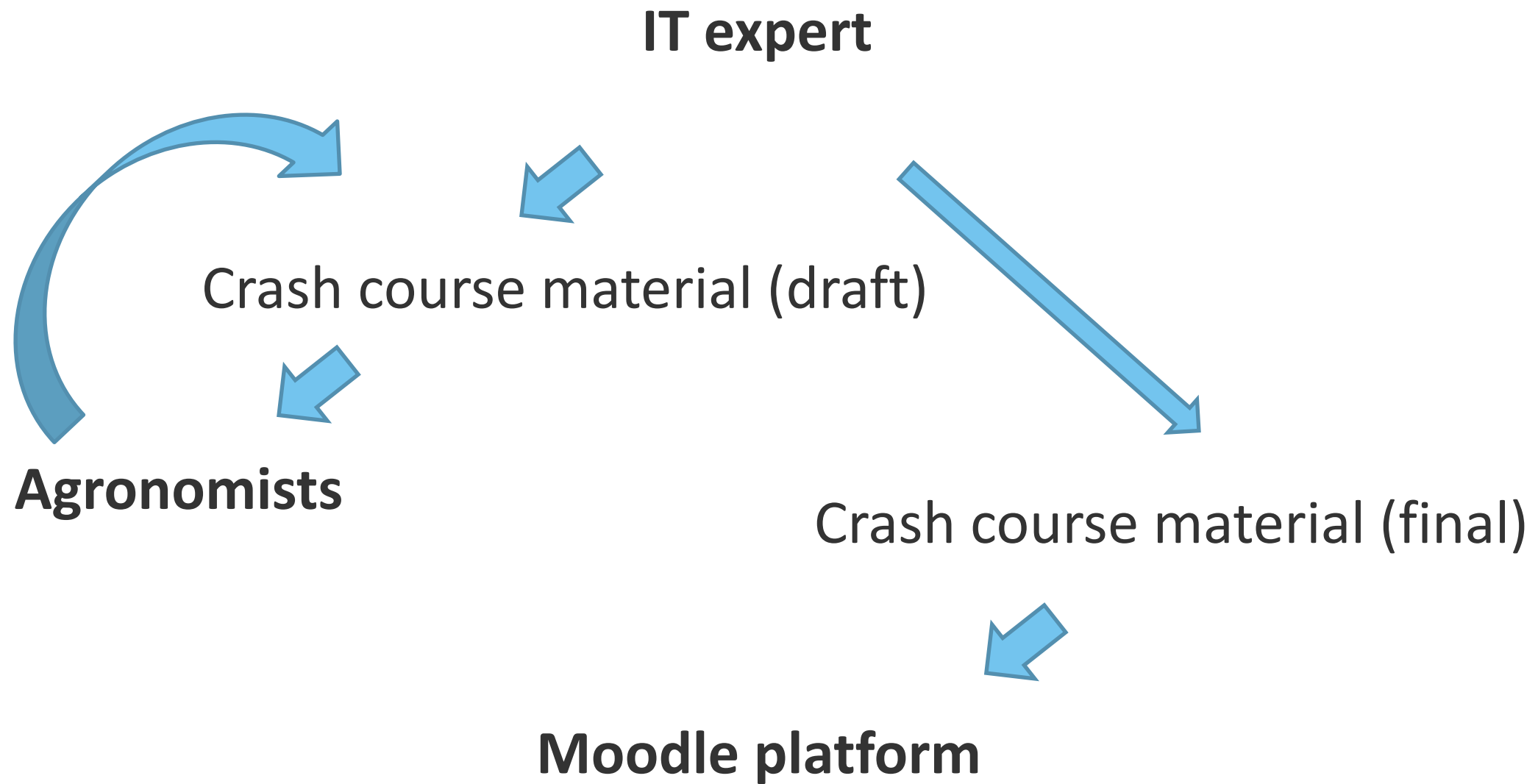
Milan Šipka
Mihajlo Mrković

Jurij Rakun
Erik Rihter



Robotics





Modules:

Mobile applications, IoT, Drones, Robotics and GIS

ppt + video presentation + quiz

bonus materials

final quiz

certificate



Poštovane kolege studenti,

Informaciono-komunikacione tehnologije su veoma značajne i u poljoprivrednoj proizvodnji.

Uloga informaciono-komunikacionih tehnologija (IKT) u poljoprivredi je poslednjih godina znatno porasla i razmerom i područjem primene. Proširenje opsežne povezanosti, sve veća primena "internet stvari" (IoT), poboljšano analitika, pristupačniji uređaji i inovativne aplikacije, osnova su onoga što danas nazivamo digitalnim društvom.

Istoričarske napretka i inovacija u IKT-u postaje sve značajnije dok tražimo načine za ublažavanje nekih izazova s kojima se suočava poljoprivreda, u svetu u kojem moramo proizvesti 60 posto više hrane do 2050 (FAO, 2017).

Promena paradigme u poljoprivredi se već odavno događa. Otvaraju se nove mogućnosti za efikasnost, produktivnost i u mnogim aspektima održivo upravljanje poljoprivrednim gazdinstvima. U budućnosti poljoprivrede, nove tehnologije neće biti pionir, već odgovor na suočavanje sa različitim izazovima.

U ovoj da bar malo približimo neke vrste informaciono-komunikacionih tehnologija i mogućnost njihove primene u poljoprivredi, pripremili smo za vas ovaj kurs. On ima za cilj da vas upozna sa osnovama "internet stvari" (IoT), mobilnih aplikacija, dronova, GIS i robotike i mogućnostima njihove primene u poljoprivrednoj proizvodnji.

Kurs su pripremile kolege sa tehničkih fakulteta Univerziteta u Banjoj Luci, Univerziteta u Tuzli, Univerziteta u Donjoj Gorici i Univerziteta u Mariboru uz podršku svojih kolega sa poljoprivrednih fakulteta istih univerziteta. Značajnu podršku u izradi kursa dale su i kolege sa Univerziteta u Wageningenu.

Pokaznici koji odražavaju ovaj kurs i uspešno odgovore na protekla pitanja uz svaku od celina, dobijaju i sertifikat o položenom kursu. Nadamo se da će on kao oblik dodatnog obrazovanja biti od značaja u vašem daljem radu i zapošljavanju.

Najviše se želim nadati, da će vam kurs biti interesantan i da će vas potaknuti na razmišljanje o mogućnostima koje informaciono-komunikacione tehnologije nude u poljoprivredi.



Komunikacijski sistemi



Kurs >



Senzori



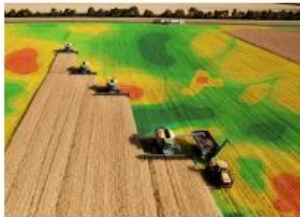
Kurs >



IoT sistemi



Kurs >



GIS



Kurs >



Mobilne aplikacije



Kurs >



Dronovi u poljoprivredi



Kurs >



Robotika



Kurs >



PDF materijali



Kurs >



ZAVRŠNI KVIZ



Kurs >

Virtual FAIR



SmAgTech EXPO
Small Agri-Tech Expo

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Polite as professionals - students
Opportunities for Postgraduate and students

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