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UNESCO Chair in
Entrepreneurship Education,
J.J. Strossmayer University in Osijek, Croatia

J.J. Strossmayer University in Osijek
Faculty of Economics in Osijek

ICES
International Centre for
Entrepreneurial Studies

International inter-university postgraduate interdisciplinary doctoral program

ENTREPRENEURSHIP AND INNOVATIVENESS

International inter-university postgraduate interdisciplinary doctoral program

ENTREPRENEURSHIP AND INNOVATIVENESS

organized by
J.J. Strossmayer University in Osijek
International Centre for Entrepreneurial Studies
UNESCO Chair in Entrepreneurship Education
Faculty of Economics in Osijek

In co-operation with professors from:
University of Turku, Finland
University of Maribor, Slovenia
University of Klagenfurt, Austria
Durham University, United Kingdom
St. Louis University, U.S.A.
University of Southern California, Marshall School of Business, U.S.A.
University of Virginia, Darden School of Business, U.S.A.
Leiden University, the Netherlands
National University of Ireland Galway, Ireland
RMIT University, Australia
University of Rijeka, Croatia

Partners of the program:
Centre for Entrepreneurship, Osijek
CEPOR – SMEs and Entrepreneurship Policy Center, Zagreb

"Doctoral program ENTREPRENEURSHIP AND INNOVATIVENESS is designed to fulfill expectations of crossing the boundaries of disciplines by challenging assumptions and connecting unconnected pieces of knowledge. It is a pioneering work for all of us, students and mentors alike, and the expected outcome is (re)energizing through new horizons, networks and fun of being a part of such a group."

Slavica Singer,
J.J. Strossmayer University in Osijek, Croatia
Doctor of Economics / Entrepreneurship Honoris Causa,
Turku School of Economics, Finland

20.11.1939-21.12.2019

"This unique entrepreneurial doctorate is expected to position the PhD as an Entrepreneurial Learning Experience with focus upon: Futures (the doctoral concept deconstructed in the context of university/ society change); Relevance (to society stakeholder problems and opportunities); Multi-disciplinary (working across the established bodies of knowledge); Experiential Learning (valuing tacit knowledge and heuristic models); Cultures and Meanings (the global challenge and meanings in different cultures); Philosophy of Practice and Entrepreneurial Personal Development."

Allan Gibb,
Durham University, United Kingdom

"Successful entrepreneurship has always been international and global. In order to fulfill its aims, entrepreneurship education must be the same."

Miroslav Rebernik,
University of Maribor, Slovenia

Faculty of Economics in Osijek

"Entrepreneurship is the key driver for job creation, innovation and economic growth. This program challenges the students into becoming top level international academic experts in a challenging entrepreneurial learning environment."

Antti Paasio,
University of Turku, Finland

"The Doctoral Program ENTREPRENEURSHIP AND INNOVATIVENESS is an international, intercultural and interdisciplinary program for outstanding students that are willing to think out of the box. Applying proven theories as well as reaching out for new insights and theory development, using scientific research methods and transferring the knowledge to both, practitioners and the scientific community fosters the creation of an entrepreneurial society. Furthermore, education in entrepreneurship and innovativeness is significant for the development of societal welfare."

Erich J. Schwarz
University of Klagenfurt, Austria

"With over 180 English-language refereed journals in Entrepreneurship and related fields (https://bit.ly/eweb-journals) the opportunities and responsibilities for entrepreneurship research has never been greater. The PhDs in Entrepreneurship are the key drivers of this effort to develop policies and theories that will shape Entrepreneurship's contribution to the world. Program's like J.J. Strossmayer's lead this effort concentrating top-level worldwide experts and resources in a program accessible to all."

Jerome Katz, Robert H. Brockhaus Endowed Chair in Entrepreneurship Department of Management, Chaifetz School of Business, Saint Louis University, U.S.A.

"Entrepreneurship is the engine of growth in all economies. Furthermore, it is increasingly a method to tackle big problems such as climate change, migration and poverty. Good entrepreneurship can and should tackle all kinds of problems in ways that are both financially and socially sustaining. Therefore, we need to not only teach entrepreneurship to everyone the way we teach science, we need to invest in training educators. Research, especially cross-disciplinary and cross-border is key to develop deeper understanding as well as relevant and engaging educational experiences in entrepreneurship. A doctoral program such as ENTREPERENEURSHIP AND INNOVATIVENESS is crucial to this endeavor. Incorporating DREAM (Designing Research in Entrepreneurship As Method) is an important and inspiring part of this program."

Saras Sarasvathy, Paul M Hammaker Professor of Business Administration, University of Virginia The Darden School of Business, U.S.A.

About the program

Starting the international inter-university interdisciplinary postgraduate (doctoral) study ENTREPRENEURSHIP AND INNOVATIVENESS was stimulated by the need for creation of competitive knowledge necessary for strengthening the proactive and innovative capacity of individuals and society in facing and managing changes. Study is the result of the TEMPUS Joint European Project International Centre for Entrepreneurial Studies (CD_JEP-41014-2006), which was realized by Josip Juraj Strossmayer University in Osijek, Croatia; University of Turku, Finland; University of Maribor, Slovenia; University of Klagenfurt, Austria and Durham University, United Kingdom in the 2007-2009 period.

The primary goal of the doctoral program ENTREPRENEURSHIP AND INNOVATIVENESS is building the capacity for researching the phenomenon of entrepreneurship. Besides it, building educational capacity at all levels of education for entrepreneurship competences requires creating a critical mass of educators capable to work across campus, across curricula at different educational levels, from primary to tertiary, and the doctoral program is promoting such approach.

Our values:

- Questioning everything, everyone
- Be tolerant to different opinions, but challenge them
- Learning from each other's experience
- Sharing (knowledge, contacts)
- Developing a learning community (honest, open).

Proud about recognitions:

UNESCO Chair in Entrepreneurship Education, from 2008

For our contribution to entrepreneurship education, the UNESCO awarded us with the UNESCO Chair in Entrepreneurship Education in 2008, and the mandate was renewed for the third time for additional four years, until March 2023. In its recent positive evaluation, UNESCO emphasized 'very good results' of the Chair as well as its contribution 'to the UNESCO's Future of Education project as part of the UNESCO Education Research and Foresight Program'.

One of twenty good practices of entrepreneurship education on university level in European Union, 2015

University of Osijek, Croatia: Developing entrepreneurship education from scratch over time, published in Supporting the Entrepreneurial Potential of Higher Education, European Commission, Final Report. Appendix: Case studies, June 2015 (pp. 362-389), with a statement: 'One of the main lessons to be learned from this case is that even in an unfavourable environment it is possible to build EE and a related ecosystem. The preconditions are that there is adequate human resource management, basic funding and autonomy to act. The approach might be transferable to countries or regions with comparable disadvantageous framework conditions.', p. 363

Supporting the Entrepreneurial Potential of Higher Education, Final Report

Supporting the Entrepreneurial Potential of Higher Education, Final Report – Appendix: Case Studies

Professor Slavica Singer, recipient of the European Entrepreneurship Education Award 2021, by the Sten K. Johnson Centre for Entrepreneurship, Lund University, Sweden

The European Entrepreneurship Education Award recognises an individual or organisation that has contributed to the improvement of entrepreneurship education in academia in Europe. From the explanation: "This year the award goes to Professor Slavica Singer, J.J. Strossmayer University in Osijek, Croatia. Given the invaluable impact on the development of entrepreneurship education both nationally and internationally, Slavica Singer is undoubtedly a worthy recipient of the 2021 European Entrepreneurship Educator Award." (more at https://entrepreneur.lu.se/en/events/eeea/winner-2021)

Global Entrepreneurship Week, 2020,
Faculty of Economics in Osijek

Circulation of knowledge through our network and institutional eco-system

Our doctoral program insists on openness and circulation of knowledge through all possible channels: students from Croatia and many countries around the world (Canada, Oman, Kosovo, Spain, Bosnia and Herzegovina, Nigeria, China), partnering universities (Durham, Turku, Maribor and Klagenfurt), lecturers from Croatia, Finland, Slovenia, Austria, UK, U.S.A., Luxembourg, the Netherlands, as well as through participation in international projects.

The hubs of these activities are:

- ICES International Centre for Entrepreneurial Studies (which is the organizational cradle of the doctoral program Entrepreneurship and Innovativeness) www.ices.hr/en
  ICES is an institutional outcome of the EU funded project (2007-2009) in which five universities (Durham University, Turku School of Economics, University of Klagenfurt, University of Maribor and J.J. Strossmayer University) developed the doctoral program ENTREPRENEURSHIP AND INNOVATIVENESS. The main role of the ICES is to promote and establish a platform for building entrepreneurship competences among students across the campus.
- UNESCO Chair in Entrepreneurship Education
- Participation of Croatia in the Global Entrepreneurship Monitor, the largest worldwide study in entrepreneurship is led by the research team from the International Centre for Entrepreneurial Studies and CEPOR, from 2002.

Inspiration for research problems often comes from the institutional eco-system, which we developed as our response to development issues of the post 1990-1995 war situation in eastern Croatia (location of our J.J. Strossmayer University in Osijek):

- Centre for Entrepreneurship, Osijek, established in 1996 http://www.czposijek.hr/About-us/
- CEPOR – SMEs and Entrepreneurship Policy Center, established in 2001, as the first think-tank in Croatia, which deals with the problems of the SME sector and entrepreneurship. Its founding institutions range from academic community, business associations, development agencies to entrepreneurship centres.

Such institutional eco-system, based on Triple Helix understanding of spiral interconnectedness among academia, business sector and government contributed to circulation of knowledge from research to research-based education and research-based policy design.

Openness of the study and mobility of students

Considering the interdisciplinary character of entrepreneurship, which can be defined in the narrow (within social sciences) or the broader sense (as cognitive science within the interdisciplinary area of science), doctoral study ENTREPRENEURSHIP AND INNOVATIVENESS is open to everyone interested to contribute to the hybridization of knowledge, and thus develop competence for innovative approach to diagnosing and solving problems.

Since five universities (Osijek, Turku, Durham, Maribor and Klagenfurt) participated in the development of the concept of the program, students are given the opportunity to, without payment of tuition, on the principle of reciprocity, use teaching and research resources of partner universities, on the basis of the signed Agreement of Co-operation between universities.

Study program is expressed through ECTS credits, which will enable mobility of the students of the program, transfer of points, or accumulation of points within the system of lifelong learning.

Competences which student acquires upon completion of the study

Regardless of the organization of the study (full time or part time), doctoral candidates are obligated to acquire the same number and structure of ECTS points and achieve the same learning outcomes.

Individual courses/seminars/workshops can be enrolled into by doctoral candidates from other studies or by non-doctoral students, if they fulfil conditions for enrolment in this level of study, and can obtain a certificate on fulfilment of the required conditions for the course/seminar/workshop in question.

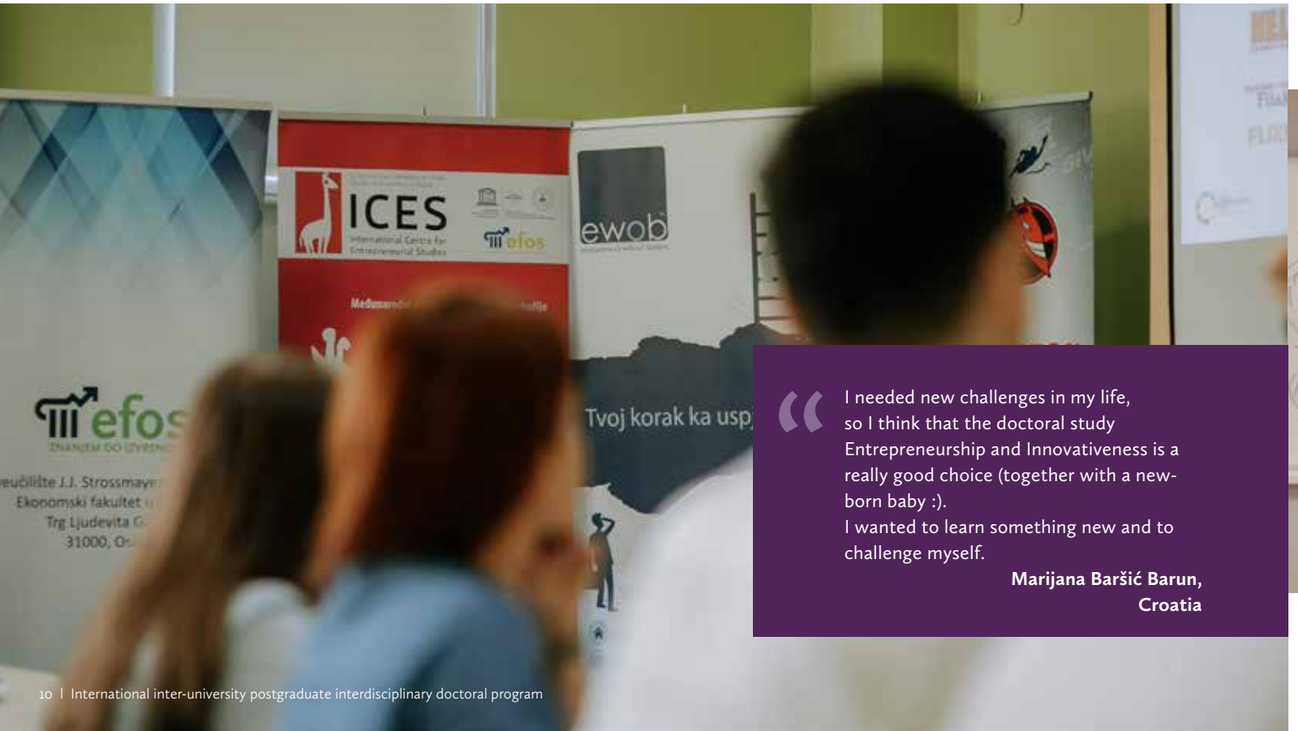
Upon completing the doctoral study ENTREPRENEURSHIP AND INNOVATIVENESS students will possess knowledge and skills required for independent and team research work in the interdisciplinary scientific field within social sciences and be able to participate in the global scientific discussion on entrepreneurship, entrepreneurial competences, entrepreneurship education and innovativeness, by

- Demonstrating possession of systematic knowledge about the fundamental determinants of entrepreneurial behaviour and relevant areas on which that behaviour depends,
- Qualification to use theories and conceptual frameworks for dissemination of research results,
- Application of ethical principles in designing and implementing research and presentation of research results,
- Ability of critical synthesis of scientific literature,
- To be qualified for the selection, application and interpretation of adequate research methods and techniques,
- The ability to contextualize scientific knowledge with the aim of identification of the research problem,
- The ability to conduct open, objective and critical analysis and valuation of new and other people's scientific ideas and results,
- The ability to prepare proposals for financing of the research work; managing projects and research teams,
- The ability of dissemination of research results in scientific and general public.

General competences that are acquired include:

- Greater flexibility in dealing with change and the ability of continuous improvement (potential for learning),
- The ability to assume responsibility and solve problems (leadership potential).

> “My motive to enroll at my age (just celebrated my 71st birthday!) in the doctoral study ENTREPRENEURSHIP AND INNOVATIVENESS is my wish to write the doctoral thesis with the topic “Economic Beneficence of the Third Age Generation” and send a written message to anyone who wants to know more about significance of the well-being and contribution of the third age generation to economic development through working with younger generations.”
>
> **Vlad Veckie, Canada**



> I needed new challenges in my life, so I think that the doctoral study Entrepreneurship and Innovativeness is a really good choice (together with a new-born baby :).
> I wanted to learn something new and to challenge myself.
>
> **Marijana Baršić Barun, Croatia**

Description of the program

Study program includes on-site and/or virtual classes, individual scientific-research work on the doctoral dissertation, and elective scientific and teaching activities. The study lasts three years (six semesters). Each student gains at least 180 ECTS credits.

Out of a total of 180 ECTS credits

- 60 ECTS credits are gained through classes, out of which 39 ECTS credits through obligatory courses and 21 ECTS credits through elective courses
- 90 ECTS credits are gained through individual scientific-research work focused on the doctoral dissertation
- 30 ECTS credits are gained through scientific activities and teaching.

Class activities (60 ECTS)

Classes are divided into 3 semesters during which theoretical and methodological bases for understanding entrepreneurship and innovativeness are acquired.

In the first semester, students attend two obligatory courses focused on theoretical foundations of entrepreneurship and innovativeness and one obligatory workshop with which they gain a minimum of 23 ECTS credits.

During the second semester, students gain basic knowledge about the methodology of research work, through two obligatory courses (a minimum of 16 ECTS).

During the third semester of studying, students have possibility to choose between many elective courses and/or workshops/seminars, with which they deepen interdisciplinary approach to entrepreneurship and innovativeness (21 ECTS) and profile own research interests.

Professor Allan Gibb, PhD

Research activities focused on the doctoral dissertation (90 ECTS)

Students are working on their research topics from the very beginning and, in collaboration with the potential mentor/supervisor of doctoral work, submit their proposal of doctoral dissertation. Work on the doctoral dissertation includes selection of the research topic, writing the research proposal (20 ECTS), public defense of the topic (20 ECTS), research activity conducted at own and/or other universities (especially the partners in organization of this study) and writing the dissertation (40 ECTS), and public defense of the dissertation (10 ECTS). The dissertation is written in Croatian (with a summary in English) or English language.

Presentation of the research proposal of doctoral work is the pre-condition for enrolling the fourth semester of the doctoral program.

Teaching and scientific activities (30 ECTS)
Students have to gain 30 ECTS credits through various teaching and scientific activities, with which they strengthen their teaching and/or research competences (publishing papers in secondary cited publications, presenting papers at conferences, participating in educational activities of undergraduate, graduate and/or specialist classes).

Structure of the program

The program is structured around:
- Theoretical foundations of entrepreneurship and innovativeness
- Methodology of entrepreneurial research
- Three concentrations:
  - Technopreneurship
  - Effectuation, learning organization and human resources
  - Entrepreneurial finance and venture funds

The **first semester** is focused on the theoretical foundations of entrepreneurship (psychological, economic, technological, sociological), and understanding the connection between innovativeness and entrepreneurship. It is expected that students will receive a wide conceptual framework within which they will recognize theoretical evolution of entrepreneurship, and have a critical approach to different schools of thought in that area.

The **second semester** is focused on the methodology of scientific research, i.e., on qualitative (with a special emphasis on case study, ethnographic research, oral history, grounded theory, etc.) and quantitative methods of research, relevant for the area of entrepreneurship, and on understanding of personal development during the work on the doctoral dissertation, also encompassing the ethics of scientific research.

The **third semester** provides the opportunity for choosing direction of deepening the understanding between technology, human resources, financial dimension of entrepreneurial activity and many other aspects of entrepreneurship (Triple Helix, Family Business, Sustainable Entrepreneurship, Entrepreneurial Universities, etc.).

> “This program has already given me courage to set goals for my future in the academic world and begin research that will make a difference.”
>
> **Tamara Drezner, Croatia**

> “Well-structured study program and the experienced academic team made the study process like coming home by creating a welcoming, supportive, guiding and motivating environment.”
>
> **Lidija Gruber, Croatia**

Activities by semester

1. Semester	Courses	Lecturers	ECTS credits
Obligatory courses and workshop:	Entrepreneurial Insight & Personal Development	Zoran Sušanj Ana Jakopec Julia Perić	8
	Contemporary Issues of Entrepreneurship	Jarna Heinonen	8
	Scientific reading and research communication – deconstructing PhD dissertation	Slavica Singer	7

2. Semester	Courses	Lecturers	ECTS credits
Obligatory courses:	Methodology of Entrepreneurial Research	Jerome Katz Nataša Šarlija Sanja Pfeifer	8
	Qualitative Methods in Entrepreneurial Research	Ulla Hytti	8

3. Semester	Courses	Lecturers	ECTS credits
Elective courses and/or workshops/ seminars:	By choice, from the list of elective courses and workshops/seminars		

List of elective courses

3. Semester	Courses	Lecturers	ECTS credits
	Technopreneurship	Harmen Jousma Josip Mesarić Tomislav Matić	7
	Effectuation, Learning Organization and Human Resources	Saras Sarasvathy Marina Stanić	7
	Entrepreneurial Finance and Venture Funds	Nataša Šarlija Anamarija Delić Jonathan Levie	7
	Innovation and Entrepreneurship	Mirna Leko Šimić	7
	Triple Helix	Marina Ranga Sunčica Oberman Peterka	7
	Turning Ideas into Business	Sunčica Oberman Peterka	7
	Statistical Research Methods	Josipa Mijoč	7
	The Survey Method in Entrepreneurial Research	Pia Arenius Josipa Mijoč	7
	Entrepreneurial Strategies for Growing Businesses	Slavica Singer Sunčica Oberman Peterka Karin Širec	7
	Microeconomics of Competitiveness	Slavica Singer Sanja Pfeifer	7

3. Semester	Courses	Lecturers	ECTS credits
	Philosophy of Science	Slavica Singer Ivana Barković Bojanić	7
	Marketing Theory	Marcel Meler Marija Ham	7
	Sustainable Entrepreneurship	Barbara Bradač Hojnik	7
	Family Business	Mirela Alpeza	7
	SMEs in a Network Economy	Aleksandar Erceg Davor Dujak	7
	Business Valuation Methods	Nataša Šarlija Dubravka Pekanov Starčević	7
	Financial Modeling	Nataša Šarlija	7
	Elective courses at partner universities: University of Turku; Finland, University of Maribor, Slovenia; University of Klagenfurt, Austria; Durham University, United Kingdom		*Depending on the number of ECTS at the parent institution*

> "The best part of the study is an interdisciplinary approach in perceiving problems and finding optimal solutions for them. Insisting on asking the right questions and applying the right research methods are of great importance to me for acquiring relevant knowledge. I consider the constant re-examination of valid theories and methods to be the most significant outcome of this study."
>
> **Gordana Kurtović, Croatia**

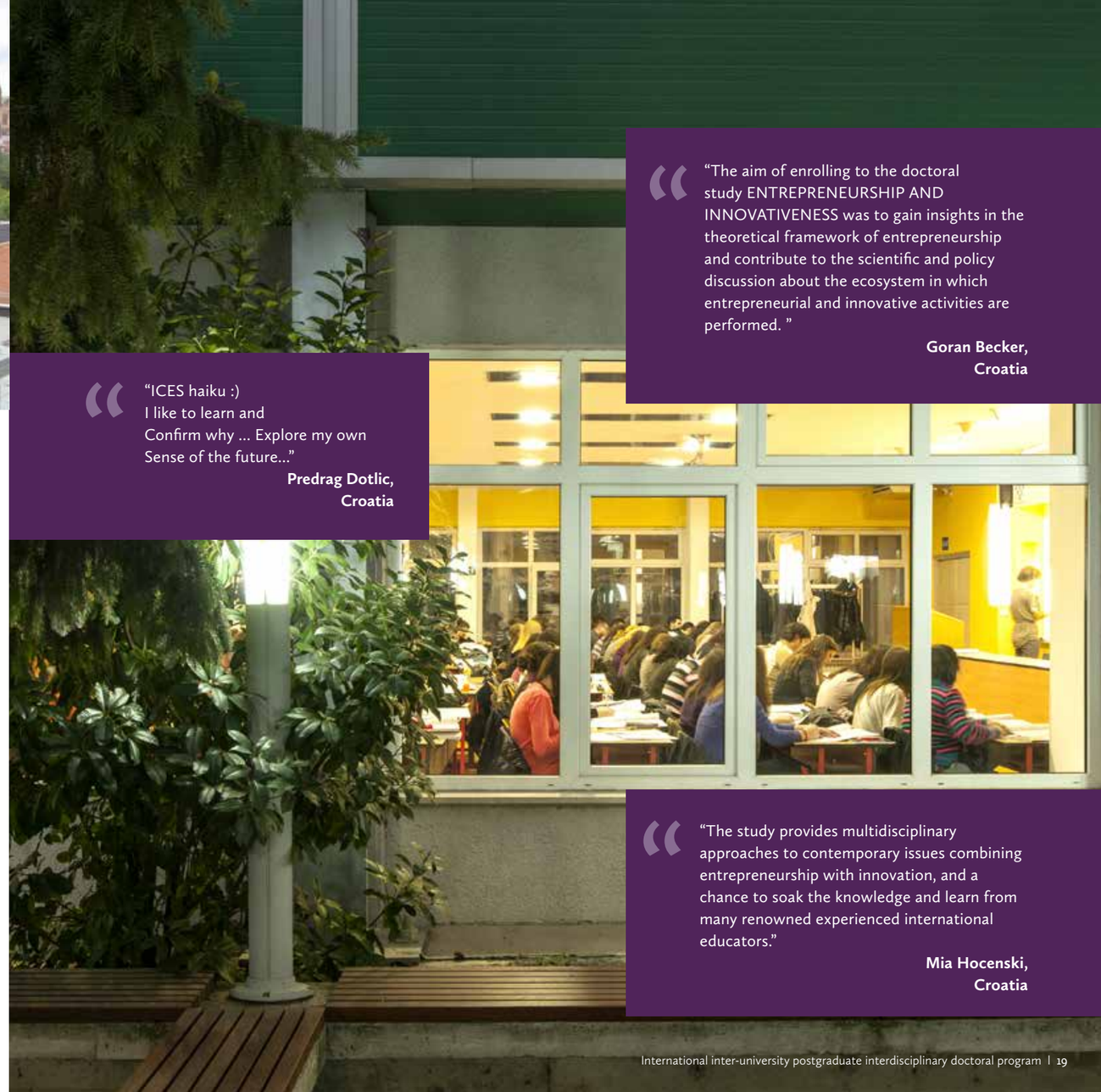
> "I am in business of running a successful engineering manufacturing company. In order to continue to be successful I need to have an entrepreneurial and innovative mindset."
>
> **Darko Fruk, Croatia**

> "The process of studying and completing my studies have strengthened my life competences.
> It was a life decision that directed me towards further lifelong entrepreneurial activity based on accepting and creating new life situations."
>
> **Katarina Štavlić, Croatia**

Doctoral seminar, Durham Business School,
June 2008, Durham, UK

List of elective workshops / seminars

WORKSHOPS / SEMINARS	Courses	Lecturers	ECTS credits
	Schumpeterian Foundations of Entrepreneurial Economy	Ivana Barković Bojanić	7
	Managing Universities	Željko Turkalj Sunčica Oberman Peterka Hans Wissema	7
	Due Diligence	Ivo Mijoč	7
	International doctoral seminars		*If available*



> "ICES haiku :)
> I like to learn and
> Confirm why ... Explore my own
> Sense of the future..."
>
> **Predrag Dotlic, Croatia**

> "The aim of enrolling to the doctoral study ENTREPRENEURSHIP AND INNOVATIVENESS was to gain insights in the theoretical framework of entrepreneurship and contribute to the scientific and policy discussion about the ecosystem in which entrepreneurial and innovative activities are performed. "
>
> **Goran Becker, Croatia**

> "The study provides multidisciplinary approaches to contemporary issues combining entrepreneurship with innovation, and a chance to soak the knowledge and learn from many renowned experienced international educators."
>
> **Mia Hocenski, Croatia**

Lecturers and guests

CROATIA

Mirela Alpeza
Faculty of Economics in Osijek

Ivana Barković Bojanić
Faculty of Economics in Osijek

Anamarija Delić
Faculty of Economics in Osijek

Davor Dujak
Faculty of Economics in Osijek

Aleksandar Erceg
Faculty of Economics in Osijek

Anita Freimann
Faculty of Economics in Osijek

Marija Ham
Faculty of Economics in Osijek

Jasna Horvat
Faculty of Economics in Osijek

Ana Jakopec
Faculty of Humanities and Social Sciences, Osijek

Mirna Leko-Šimić
Faculty of Economics in Osijek

Marcel Meler
Faculty of Economics in Osijek

Tomislav Matić
Faculty of Electrical Engineering, Computer Science and Information Technology, Osijek

Josip Mesarić
Faculty of Economics in Osijek

Ivo Mijoč
Faculty of Economics in Osijek

Josipa Mijoč
Faculty of Economics in Osijek

Sunčica Oberman Peterka
Faculty of Economics in Osijek

Dubravka Pekanov Starčević
Faculty of Economics in Osijek

Julia Perić
Faculty of Economics in Osijek

Sanja Pfeifer
Faculty of Economics in Osijek

Slavica Singer
Faculty of Economics in Osijek

Marina Stanić
Faculty of Economics in Osijek

Zoran Sušanj
Department of Psychology
Faculty of Philosophy in Rijeka

Nataša Šarlija
Faculty of Economics in Osijek

Željko Turkalj
Faculty of Economics in Osijek

Dream Doctoral Retreat, Dubrovnik, May 31 - June 4, 2010,
Saras Sarasvathy with participants

FOREIGN LECTURERS

Pia Arenius
RMIT University, Australia

Barbara Bradač Hojnik
University of Maribor, Slovenia

Susan Harmeling
Marshall School of Business, University of Southern California, U.S.A.

Jarna Heinonen
University of Turku, Finland

Ulla Hytti
University of Turku, Finland

Harmen Jousma
Leiden University, the Netherlands

Jerome Katz
St. Louis University, U.S.A.

Jonathan Levie
National University of Ireland, Galway, Ireland

Marina Ranga
University of Warsaw, School of Management, Poland

Miroslav Rebernik
University of Maribor, Slovenia

Saras Sarasvathy
University of Virginia, Darden School of Business, U.S.A.

Erich Schwarz
University of Klagenfurt, Austria

Karin Širec
University of Maribor, Slovenia

Information about the study:

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Why giraffes?

For a story about giraffes, check

www.ices.hr