International inter-university postgraduate interdisciplinary doctoral program

# ENTREPRENEURSHIP AND INNOVATIVENESS

developed within the framework of the TEMPUS Joint European Project -<u>ICES - International Centre for Entrepreneurial Studies</u> financed by the EU, 2007-2009



## Josip Juraj Strossmayer University in Osijek, Croatia

in co-operation with:

University of Turku, Finland Univerza v Mariboru, Slovenia Universitaet Klagenfurt, Austria Durham University, United Kingdom International inter-university postgraduate interdisciplinary doctoral program

## ENTREPRENEURSHIP AND INNOVATIVENESS

... organized by J.J. Strossmayer University in Osijek Faculty of Economics in Osijek in co-operation with professors from:

University of Turku, Finland Universa v Mariboru, Slovenia Universitaet Klagenfurt, Austria Durham University, United Kingdom University College of Cork, Ireland Delft University, Netherlands St. Louis University, USA Stanford University, USA Howard University, USA University of Vaasa, Finland Leiden University, Netherlands University of Rijeka, Croatia GEA College, Slovenia

Partners of the program:

National Competitiveness Council, Croatia Centre for Entrepreneurship Osijek BIOS, Osijek CEPOR, Zagreb Microsoft Croatia

# 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 changes 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; Turku School of Economics, Finland; Univerza v Mariboru, Slovenia; Universitaet Klagenfurt, Austria and Durham University, UK in the 2007-2009 period.

Building educational capacity at all levels of education for training for initiative and entrepreneurship requires creating a critical mass of educators from that interdisciplinary area, that is, creating teams of educators in different disciplines who can implement entrepreneurship education programs at different educational levels, from primary to tertiary.

## **Openness of the study and mobility of attendants**

Considering the interdisciplinary character of entrepreneurship, which can be defined in the narrow (within social sciences) or the wide sense (as cognitive science within the interdisciplinary area of science), doctoral study "Entrepreneurship and Innovativeness" is open to everyone interested who want to contribute to the hybridization of knowledge, and thus open possibilities for innovative approach to diagnosing and solving problems.

Since five universities participated in the development of the concept of the program, whose lecturing teams will also participate in its realization, students are given the opportunity to, without payment of tuitions, 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 points, which will enable mobility of the attendants of the program, transfer of points, or accumulation of points within the system of lifelong learning.

# Competencies 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 points. If necessary, part time students can extend the time for research work on the doctoral thesis.

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:

- 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 results,
- The ability of presenting and communicating; 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 competencies 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).

## Description of the program

Study program includes organized classes, direct individual scientific-research work on the doctoral dissertation, and elective scientific and teaching activities. The study lasts three years. Each student gains at least 180 ECTS points.

Out of a total of 180 ECTS points

- 60 ECTS points are gained through organized classes, out of which 35 ECTS points through obligatory courses and 25 ECTS points through elective courses
- 90 ECTS points are gained through individual scientific-research work focused on the doctoral dissertation
- 30 ECTS points are gained through elective teaching and scientific activities.

#### 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 and elective course(s) and/or workshop/seminar with which they gain a minimum of 20 points.

During the **second semester**, students gain basic knowledge about the methodology of scientific-research work, through two obligatory and elective course(s) and/or workshop/ seminar (minimum of 20 ECTS).

During the **third semester** of studying, students have three obligatory and elective course(s) and/or workshop/seminar, with which they deepen interdisciplinary approach to entrepreneurship and innovativeness (20 ECTS). In each semester, students have the opportunity to choose from a wide range of courses, which will contribute to profiling of each candidate according to individual research interests.

#### Scientific-research activities focused on the doctoral dissertation (90 ECTS)

After the third semester, in agreement with the mentor, students choose their research topic and, in collaboration with the mentor, submit their proposal of doctoral dissertation. Students have to defend their proposal of doctoral dissertation before an audience of students and professors. Scientific-research activities on preparation of the doctoral dissertation include selection of the topic, writing the proposal of the topic, public defense of the topic, research activity conducted at own and other universities (especially the partners in execution of this study), and writing the dissertation, and public defense of the dissertation. The dissertation is written in Croatian (with a summary in English) or English language.

#### *Elective teaching and scientific activities (30 ECTS)*

Students have the possibility to choose between various teaching and scientific activities, with which they strengthen their teaching and/or research competence (publishing papers

in secondary cited publications, presenting papers at conferences, participating in execution of undergraduate, graduate and/or specialist classes).

### Virtual learning platform (VLP) – support to the execution of the program www.ices-study.org

The main purpose of the virtual platform for learning and research is to improve capacities for learning, teaching and researching in members of the consortium of the doctoral study "Entrepreneurship and Innovativeness" and other partner institutions in providing educational programs in entrepreneurship. The aim of the platform is to support learning and teaching about entrepreneurship, and enable the implementation of entrepreneurial methods and processes.

Target groups of the platform are primarily students of this inter-university doctoral program "Entrepreneurship and Innovativeness", current and future lecturers at the doctoral study, and the business environment, that is, entrepreneurs who want to perfect their knowledge in entrepreneurship.

By placing emphasis on communication tools that will enable personalization for each user (customization of interface and priority information), targeted connecting of students and teachers according to their common interests and creation of social and research network of the program (community of practice) are enabled.

### Structure of the program

**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 deepening the understanding between technology, human resources and financial aspects of entrepreneurial activity.

Detailed structure of class activities:

1. semester	Courses	Lecturers
Obligatory courses:	Theoretical	Allan Gibb
	Foundations of	Slavica Singer
	Entrepreneurship	Sanja Pfeifer
	or Turku:	Antti Paasio
	Theoretical	
	Perspectives of	
	Entrepreneurship	
	or Maribor:	Miroslav Rebernik
	Entrepreneurship	Polona Tominc
	Studies – Theories	
	and Methodology	
	Innovation and	Antti Paasio
	Entrepreneurship	Mirna Leko Šimić
Elective course and/or	By choice, from the list of elective courses and	
workshop/seminar:	workshops/seminars	
Other activities:	By choice, from the list of other activities	

2. semester		
Obligatory courses:	Methodology of Entrepreneurial Research Entrepreneurial Insight & Personal Development	Jerome Katz Rudolf Scitovski Nataša Šarlija Marijana Zekić Sušac Marko Kohtamaki
	Entrepreneurial Insight & Personal Development	Allan Gibb Zoran Sušanj
Elective course and/or workshop/seminar:	By choice, from the list of elective courses and workshops/seminars	
Other activities:	By choice, from the list of other activities	

3. semester		
Obligatory courses:	Technopreneurship	Harmen Jousma
	Effectuation,	Saras Sarasvathy
	Learning	Sanja Pfeifer
	Organization and	Zoran Sušanj
	Human Resources	Susan Harmeling
	Entrepreneurial	Nataša Šarlija
	Finance and	Stipan Penavin

	Venture Funds	Marijan Karić
Elective course and/or	By choice, from the list of elective courses and	
workshop/seminar:	workshops/seminars	
Other activities:	By choice, from the list of other activities	

4-6. semester	
Elective courses and/or workshops/seminars:	By choice from previous semesters
Scientific-research activities:	Stay at partner universities Writing the proposal of the topic of the doctoral dissertation Writing and defense of the doctoral dissertation
Other activities:	By choice, from the list of other activities

## List of elective courses:

Semester	Course	Lecturers	ECTS points
1.	Osijek		
semester	Triple Helix	Henry Etzkowitz Željko Turkalj Sunčica Oberman Peterka	5
	Turku		
	Business Development Laboratory: Turning Ideas into Business	Vesa Hautala	7
	Klagenfurt		
	Entrepreneurship and Evolutionary Economics	Lambert T. Koch	5
	Special topics of entrepreneurship	Erich Schwarz Malgorzata Wdowiak	5
	International Business and Entrepreneurship	Richard W. Wright	5
2.	Osijek		
semester	Philosophy of Science	Allan Gibb	5

	Statistical Research Methods	Jasna Horvat	5
	Business Valuation Methods	Stipan Penavin	5
	Financial Modeling	Nataša Šarlija	5
	Turku		
	The survey method in entrepreneurial research	Pia Arenius Antti Paasio	4
	Qualitative methods in entrepreneurial research	Ulla Hytti	4
	Klagenfurt		
	Entrepreneurship and Innovation (case studies)	Deirdre Hunt	5
3.	Osijek		
semester	Marketing Theory	Marcel Meler	5
	Entrepreneurial Strategies for Growing Businesses	Slavica Singer	5
	Microeconomics of Competitiveness	Slavica Singer Sanja Pfeifer Mira Lenardić	5
	Family Business	Robert H. Brockhaus Jaka Vadnjal	5
	SMEs in a Network Economy	Jouko Havunen	5
	Turku		
	Innovations and Global Growth	Antti Paasio	5
	New Practice	Antti Paasio Jussi Paasio	10
	Maribor		
	Marketing Theory	Damijan Mumel	5
	International Economy – Global Marketing and Supply Chain Management	Milan Jurše Klavdij Logožar	5
	Global Business and Economic Policy	Rasto Ovin	5
	Klagenfurt		
	Management of Technology Transfer – Inter/-national and regional perspectives	Kirsten Tangemann	5

## List of workshops / seminars:

	Workshop/seminar	Lecturers	ECTS
Seminars/	Osijek	-	
workshops	Managing Universities	Hans Wissema	5
	Schumpeterian Foundations of Entrepreneurial Economy	Ivan Ferenčak Ivana Barković Vladimir Cini	5
	Scientific reading and research communication – deconstructing PhD dissertation	Allan Gibb	5
	Durham University Centre for Entrepreneurial Learning		
	Entrepreneurial Learning, Durham University Centre for Entrepreneurial Learning	Allan Gibb Dinah Bennett	5
	Klagenfurt		
	PhD Seminar in the field of innovation management and entrepreneurship	Erich Schwarz	5
	Maribor		
	Doctoral seminar at the International Entrepreneurship and Innovation Conference, PODIM	Miroslav Rebernik Barbara Bradač	5

## **Professors and guests**

Participating in the postgraduate study are lecturers from Josip Juraj Strossmayer University in Osijek (Faculty of Economics, Faculty of Law, Faculty of Agriculture, and Faculty of Food Technology), British Durham University, Finnish University of Turku, Hungarian university from Pecs, Austrian university from Klagenfurt, Slovenian university from Maribor, Faculty of Sociology in Ljubljana, and American universities St. Louis University, Ohio State University, DePaul University, University of Wisconsin, Naropa University and Yale University.

## Lecturers: (J.J. Strossmayer University in Osijek, Croatia)

Ivana Barković, Ph.D. Faculty of Law in Osijek

Vladimir Cini, Ph.D. Faculty of Economics in Osijek

Jadranka Deže, Ph.D. Faculty of Agriculture in Osijek

Ivan Ferenčak, Ph.D. Faculty of Economics in Osijek

Jasna Horvat, Ph.D. Faculty of Economics in Osijek

Marijan Karić, Ph.D. Faculty of Economics in Osijek

Mirna Leko-Šimić, Ph.D. Faculty of Economics in Osijek

Marcel Meler, Ph.D. Faculty of Economics in Osijek

Josip Mesarić, Ph.D. Faculty of Economics in Osijek

Sunčica Oberman Peterka, Ph.D. Faculty of Economics in Osijek Stipan Penavin, Ph.D. Faculty of Economics in Osijek

Sanja Pfeifer, Ph.D. Faculty of Economics in Osijek

Vlasta Piližota, Ph.D. Faculty of Food Technology in Osijek

Rudolf Scitovski, Ph.D. Department of Mathematics of J.J. Strossmayer University in Osijek

Slavica Singer, Ph.D. Faculty of Economics in Osijek

Zoran Sušanj, Ph.D. Department of Psychology Faculty of Philosophy in Rijeka

Nataša Šarlija, Ph.D. Faculty of Economics in Osijek

Željko Turkalj, Ph.D. Faculty of Economics in Osijek

Marijana Zekić-Sušac, Ph.D. Faculty of Economics in Osijek

## Lecturers from international universities:

Pia Arenius University of Turku, Finland

Dinah Bennett Durham University, United Kingdom

Barbara Bradač Univerza v Mariboru, Slovenia

Robert H. Brockhaus St. Louis University, USA

Henry Etzkowitz Stanford University, USA Allan Gibb, Ph. D. Durham University, United Kingdom

Susan Harmeling Howard University, USA

Vesa Hautala University of Turku, Finland

Jouko Havunen University of Vaasa, Finland

Deidre Hunt University College of Cork, Ireland

Ulla Hytti University of Turku, Finland

Harmen Jousma Leiden University, Netherlands

Milan Jurše Univerza v Mariboru, Slovenia

Jerome Katz St. Lois University, USA

Lambert T. Koch Universitaet Klagenfurt, Austria

Marko Kohtamaki University of Vaasa, Finland

Klavdij Logožar Univerza v Mariboru, Slovenia

Damijan Mumel Univerza v Mariboru, Slovenia

Rasto Ovin Univerza v Mariboru, Slovenia

Antti Paasio, Ph.D. University of Turku, Finland Jussi Paasio University of Turku, Finland

Miroslav Rebernik, Ph.D. Univerza v Mariboru, Slovenia

Saras Sarasvathy Darden University, USA

Erich Schwarz Universitaet Klagenfurt, Austria

Kirsten Tangemann Universitaet Klagenfurt, Austria

Polona Tominc Univerza v Mariboru, Slovenia

Jaka Vodnjal GEA College, Slovenia

Hans Wissema Delft University, Netherlands

Malgorzata Wdowiak Universitaet Klagenfurt, Austria

## Information about the study can be obtained:

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