

**1<sup>st</sup> INTERNATIONAL WEEK on Practice Oriented Higher Education at  
Széchenyi István University, in Győr/Hungary February 2 – 5, 2015**

**Abstracts**

(last update: February 2, 2015)

Lecturer, Presentation	Abstract of the presentation
<p><i>A new approach to legal education - applying practice oriented teaching methods in humanities at the Széchenyi István University</i>  <b>Gergő G. Karácsony</b>, Deák Ferenc Faculty of Law and Political Sciences, Széchenyi István University, Győr/HU  <a href="mailto:karacsony@sze.hu">karacsony@sze.hu</a></p>	
<p><i>City and Traffic. International planning workshop</i>  <b>Emese Makó</b>, Department of Transportation Infrastructure, Széchenyi István University, Győr/HU  <a href="mailto:makoe@sze.hu">makoe@sze.hu</a></p>	<p>The Workshop City and Traffic is a one week planning course focused on sustainable urban transport and land use planning. The students - mostly civil engineers and urban planners - come from the 9 member universities from Germany, Austria, Slovakia, Czech Republic, Lithuania, Poland, Serbia, Slovenia and Hungary.  The task of the workshop is to develop improvement suggestions for urban areas, streets, etc. with obvious transport problems. Especially traffic safety and the functionality have to be kept in mind, but also the overall appearance of the townscape has to be considered. Working in groups helps to improve the international exchange of the respective experience.</p>
<p><b>Csaba Tóth-Nagy</b>, Department of Internal Combustion Engines, Széchenyi István University, Győr/HU  <a href="mailto:extern.csaba.toth@AUDI.hu">extern.csaba.toth@AUDI.hu</a></p>	<p>Based on the mutual interests from both industry and higher education a partnership was formed on December 17th 2007 between Széchenyi István University and Audi Hungaria Motor Ltd. (AHM) The presentation introduces the cooperative areas between the university and AHM. These include B.Sc. and M.Sc. education, adult education, research and development, and other mutual projects. The advantages and challenges of the partnership will be also highlighted. The document also presents the new M.Sc. program that trains students at Széchenyi István University with the emphasis of internal combustion engine design and development in German language.</p>

<p><i>Entrepreneurship, Networking and International Education - Three Ingredients for Education in the 21st Century -</i>  <b>Hans Hasselt</b>, Saxion University of Applied Sciences, Enschede/NL  <a href="mailto:j.e.hasselt@saxion.nl">j.e.hasselt@saxion.nl</a></p>	<p>The world is rapidly changing. Social and professional networks connect people all over the world. Economic development is depending on human and natural resources. Sustainable development is seen as the way forward to achieve a good economic climate, a healthy environment and happy people. What do these changes mean for education in the 21<sup>st</sup> century? Students will less easily find jobs but will more often be employed on short- or mid-term contracts, or employ themselves, based on their talents. Knowledge, which was a guarantee for success in previous decades, is subject of inflation. Knowledge becomes easily available and people’s personal skills determines much more the success rate. The new era requires creative, flexible people within networks who are continuously developing their personal expertise. How do we teach this new generation professionals? Entrepreneurship, intercultural communication and operating in networks will be three ingredients for the professionals of the (near) future.</p>
<p><b>Imre Felde</b>, SmartLab Knowledge Centre, Neumann Janos Faculty of Informatics, Óbuda University, Budapest/HU</p>	
<p><i>“From the Classroom to the Boardroom” – The Career Advantage program</i>  <b>Tibor Dóry</b>, Centre of Knowledge, Széchenyi István University, Győr/HU  <a href="mailto:doryti@sze.hu">doryti@sze.hu</a></p>	<p>The presentation gives an overview of the Career Advantage program that aims to develop highly motivated, elite university students with the ability to transition successfully from a university culture to a business culture. The students work in teams as „junior consultants” on real life corporate challenges and tasks provided by partner companies (e.g. Audi, Nestlé, IBM). The program concludes in a final presentation and a client report to be handed over to the representatives of the client companies.</p>
<p><i>Industry and education in electrical engineering</i>  <b>Szilvia Nagy</b>, Department of Telecommunication, Széchenyi István University, Győr/HU  <a href="mailto:nagysz@sze.hu">nagysz@sze.hu</a></p>	
<p><i>Integrated Watermanagement in Urban areas or Urban Trends and Developments -</i>  <b>Henk Blokland</b>, School of Governance, Law &amp;Urban Development, Saxion University of Applied Sciences, Enschede/NL  <a href="mailto:h.blokland@saxion.nl">h.blokland@saxion.nl</a></p>	<p>Sustainable area development including integrated water management related to spatial developments are used in our project work.</p> <p>We had – like many institutes of higher professional education - evolution in practice oriented education during the years; these changes are due to new requirements, trends and developments in the professional field, organisational changes and changing interests of students. At the other hand, some issues were maintained.</p> <p>Three main I’s are important guiding concepts: International (context, comparison and cultural dimensions), Interdisciplinarity and Integration (especially PPP People, Profit/Prosperity and Planet). So not only technical/physical but as well social and economic issues – and their interrelation – are important.</p>

	<p>At hand of an international and interdisciplinary project on integral water management an example of sustainable area development will be elaborated. Space for Rivers is a major operation in The Netherlands and has consequences in cities and rural areas, which is a major challenge in terms of a multi scale level approach, climate effects reduction, input of all kinds of (policy-)instruments, network and project management.</p> <p>Students are in this field acting as professionals (in their role as consultancy). Besides improving their knowledge there are process oriented skills for the students involved, and will be developed and assessed during this experience. Cooperation and partnerships are needed and the requirements how the education, research and the professional field can be organised in these real life projects will be discussed.</p> <p>Flexibility, motivation and guaranteed quality: How to deal with these challenges?</p>
<p><i>Made in Germany: 40 Years of the Dual System's Development and Internationalization at the DHBW</i>  <b>Thomas D. Queisser</b>, International Office, Baden-Wuerttemberg Cooperative State University, Mosbach/DE  <a href="mailto:queisser@dhw-mosbach.de">queisser@dhw-mosbach.de</a></p>	<p>The industrial, high-tech State of Baden-Württemberg celebrates 40years of pioneering the distinctive “dual system,” working closely with global and regional industries. DHBW-Mosbach, located in a region with successful “hidden champion” SMEs, has led the DHBW system in internationalization, including English-language semesters in both business and engineering, majors where 30% (average) to 100% of students study abroad, international partnerships with ca. 60 bilateral relationships, statewide partnerships with co-op consortia (in Latin America), and extensive practice semesters abroad. This paper explores the parallel developments of the co-op system, international programs at DHBW and “best practices” that can be applied in other environments.</p>
<p><i>Real practice is not a drill! – A case study on the participation of all classes in a running research project</i>  <b>Éva Pestiné Rácz</b>, Department of Mathematics and Computational Sciences, Széchenyi István University, Győr/HU  <a href="mailto:raczev@sze.hu">raczev@sze.hu</a></p>	<p>Within the frame of the research project “Smarter Transport” – IT for a co-operative transport system we performed field measurements on a fine spatiotemporal scale to investigate the daily profile and within-city differences in nitrogen-oxides (NOx) in Győr. Two campaign of synchronized air sampling, traffic counting and noise measurements were executed by involving almost every environmental engineering students of the university. This presentation summarizes challenges, solutions and lessons from organization of student's work and fitting participation in a concrete research into a regular semester.</p>
<p><i>Practice Oriented Education at the Kautz Gyula Faculty of Economics, Széchenyi István University, Győr, Hungary</i>  <b>Eszter Lukács</b>, Kautz Gyula Faculty of Economics, Széchenyi István University, Győr/HU  <a href="mailto:eszter@sze.hu">eszter@sze.hu</a></p>	<p>Széchenyi István University currently operates with five faculties and institutions in the academic fields of law and political sciences, engineering, health and social studies, musical art and of course, economics. The presentation on behalf of the Kautz Gyula Faculty of Economics will cover in detail the endeavours, at both undergraduate and graduate levels, our colleagues demonstrate to help ensure our students' soft landing at the labour market.</p>

<p><i>Practice-oriented Training from both Side</i>  <b>Balázs Sarkadi-Nagy</b>, Department of Vehicle Manufacturing, Széchenyi István University, Győr/HU  <a href="mailto:balazs.sarkadin@hotmail.com">balazs.sarkadin@hotmail.com</a></p>	<p>In this presentation Balázs SARKADI-NAGY will explain his experiences like a university student and the instructor too. During his studies, he found the way to get more and more industrial practices before his graduation and this example can be a good way for the students.</p>
<p><i>Soft skill Development in Engineering Education – Active Learning in the Classroom and beyond</i>  <b>Csilla Fejes</b>, Technical University of Cartagena, Cartagena/ES  <a href="mailto:cf16@alu.upct.es">cf16@alu.upct.es</a></p>	<p>Engineers of the 21st century are engaged in all phases of the lifecycle of products, processes and systems that range from the simple to the incredibly complex, but all have one feature in common. They meet a need of a member of the society. Good engineers observe and listen carefully to determine the needs of the member of society for whom the benefit is intended. They are involved in conceiving the device or system; they design products, processes, and systems that incorporate technology. In this era, the deliberate development of engineering soft skills – such as system thinking, problem-solving, critical thinking, decision making and work ethics – is inevitable. Our goal is to present a successful hands on educational approach that was designed in cooperation by the Technical University of Cartagena and Széchenyi University, where theory meets practice, students are engaged in learning and which equips engineering undergraduates with necessary soft skills the ever changing industry requires.</p>
<p><i>SUSCOMTEC - a good Example for international Cooperation in the field of Practice oriented Engineering Education</i>  <b>Felipe Penaranda Foix</b>, School of Telecommunications Engineering , Universitat Politecnica de Valencia, Valencia/ES  <a href="mailto:fpenaran@ocom.upv.es">fpenaran@ocom.upv.es</a></p>	<p>The Universidad Politecnica de Valencia and more universities from Europe has been organised more times practice oriented 10-day-long course in the cadre of the Erasmus Intensive program for students from 13 European academic institutes and invite some students also from St-Petersburg. The first course took place in Valencia in 2012, in addition Debrecen 2013 in Hungary and Sofia in Bulgaria 2014 hosted the event. Main goal of the project is to ensure up-to-date practical knowledge from the industry for the electrical engineering students from fields of telecommunication and soft skill sciences. Guest lecturers from the industry is constant element of the programme. The consortium is planning to continue their activity in the frame of Erasmus+ Strategic Partnership.</p>

<p><i>The Dual Type Of Training Model At Kecskemét College</i>  <b>Zsuzsanna Kovács</b>, Kecskemét College, Dual Training Methodological Centre, Kecskemét/HU  <a href="mailto:kovacs.zsuzsanna@gamf.kefo.hu">kovacs.zsuzsanna@gamf.kefo.hu</a></p>	<p>Due to Hungary becoming a vehicle manufacturing country in the last few years with big manufacturers settling in our country, the requirement for human manpower has increased. A new type of higher education is presented in my lecture: the developed and introduced dual training model at Kecskemét College. The model's success lies in the practical education of high quality while meeting the requirements of the society, economy and institution</p>
<p><i>Theory in Practice – A production process optimization training</i>  <b>Maria Victoria de la Fuente</b>, Technical University of Cartagena, Cartagena/ES  <a href="mailto:marivi.fuente@upct.es">marivi.fuente@upct.es</a></p>	<p>The implementation of new degrees in the EHEA has forced the definition of subjects that train the student in both knowledge and skills, reformulating master classes and lab activities. We present the experiences the R&amp;D group GIO (UPCT), in collaboration with the R&amp;D group Szabó-Szoba from Széchenyi István University (Hungary), has developed in the educational laboratory during the last academic years, with the aim of developing new lab activities for subjects in the area of operations management of the new degrees of the ECTS.</p> <p>These practices, developed within an innovation project in simulation with LEGOstics, have the main purpose of training the student to be able to construct special real-life environments for modelling production-logistics systems. During the LEGOstics trainings, students can get practical knowledge and develop many innovative skills to be able to construct, design and re-engineer sustainable and efficient logistics processes. They can understand the importance of observations and measurements in production processes, and they feel the responsibility of making decisions</p>