



CZ07 - Scholarship Program and Bilateral Scholarship Program Activity report1 for 1st workshop at TUL

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Backgrounds

TUL – Technical University of Liberec <http://www.tul.cz>, Czech Republic collaborated with OUC – Østfold University College <http://www.hiof.no/>, Norway, to apply and successfully received EEA Grants <http://eeagrants.org/> for 2015. Since TUL and OUC made a first contact in March 2014, the two institutions have gradually made significant collaboration outcomes, particularly in exchange activities for staff members and student, and academic competence exchange in workshop.

The 1st workshop was conducted at TUL with 2 days programs: Day1 a seminar with staff and student presentations both sides, combined with laboratory visiting; Day2 meetings and social activities. 2 OUC staff members, 3 OUC students and many more TUL staff members and students attending the seminar and guiding the laboratory visiting.

Summary

This report summarized the project activities for 1st academic workshop conducted at TUL, and the workshop was designed after the project framework, planed and organized by TUL colleagues collaborated with OUC project coordinator. During the workshop planning, the two institutions have had frequent and well functioned dialogs for information exchanges concerning workshop program details, selecting of exchange candidates and finding the matching academic areas for both institutions, which have been a learning curve but also valuable experience for further maintaining and expanding of this collaboration.

Introduction

TUL and OUC are two institutions with different combined similar structures and organizing. However, the differences are more significant than similarity in a formal structure aspect. TUL has roughly 9.000 students, all related with engineering or economy majors and quite few PhD or master programs, while OUC has 5.000 students, divided into 6 different faculties where engineering with 500 students on bachelor programs only, is one of these 6 faculties and economy is a merely department of another faculty. The difference in sizes and study program details might reflect the different systems or approaches for engineering related education. It seems to be challengeable to match but actually provide more openings for mutual exchanges and compensations between collaboration partners.

The collaboration and project activating partners

TUL, Faculty of Mechanical Engineering (TUL-ME), and OUC, Faculty of Engineering (OUC-FE) are the particular collaboration partners for this project. The project facilitates the start of collaboration and via faculty leader meetings (already done October 2014).

Furthermore, both TUL and OUC present possibilities regarding education, study programs, teaching methods, domestic rules and laws, etc. the project also provides a possibility to exchange students (Ph.D. or normal students). The 1st workshop at TUL was successfully conducted and most mentioned activities are included into the workshop. The workshop was combined general presentations of partners but also addressed few academic or research topics as well.

1st workshop program

Both project NF-CZ07-ICP-1-030-2014 and the 1st workshop are announced at the TUL websites so the information was given ahead of the workshop.

The workshop presentations by OUC attendant Hong Wu in these 4 topics:

- A general presentation of Ostfold University College
- Work experience combined with education curriculum – A fresh approach to meet job market needs
- The necessity of product development for value creation
- Norway, China, Nordic, West, East, different cultures, values and communication challenges

A 3 year OUC student Lill Therese Michaelsen had a presentation in:

- The importance and challenges of inter-disciplinary collaboration – a case of student project for Shell-Eco marathon competition

The workshop presentations by TUL attendants are these topics:

- FEM Model Rotor Simulation, by David Svabola, a TUL master student
- Inner climate and air circulation, by Tomáš Kořínek, a TUL master student
- Analysis of properties for crystalline cellulose and reinforcement materials, by Martin Boruvka, a TUL PhD candidate

TUL laboratory and facility tour

The workshop was followed by a guiding tour through a number of laboratories, including:

- KVM, Department of Vehicle and Engines
- KSP, Department of Engineering Technology
- KMT, Department of Material Science
- KSA, Department of Applied Cybernetics + Department of Machining and Assembly
- KEZ, Department of Power Engineering Equipment

The laboratory tour demonstrated TUL well equipped laboratory facilities and highly competence laboratory personnel, many research activities.

The TUL faculties and study programs

The TUL study programs are organized as for the undergraduate Programs:

- Bachelor Economics and Management
- Bachelor System Engineering and Informatics (Nisa University)
- Bachelor Textile Technologies, Materials and Nanomaterials
- Bachelor Textile and Fashion Design
- Bachelor Mechanical Engineering

For Postgraduate Programs:

- Master Electrical Engineering and Informatics, Mechatronics
- Master Textile Engineering, Clothing and Textile Engineering
- Master Textile Engineering, Nonwoven and Nanomaterials
- Master Economics and Management
- Master Mechanical Engineering, Innovation Engineering
- Master Mechanical Engineering, Engineering Technology and Materials
- Master Mechanical Engineering, Machines and Equipment Design
- Architecture and Urban Design

The OUC faculties and study programs

On contrast, OUC has 6 faculties, divided into 2 campuses, mostly bachelor, but few master programs:

- Norwegian Theatre Academy
- Faculty of Business, Languages, and Social Sciences
- Faculty of Computer Sciences
- Faculty of Education
- Faculty of Engineering
- Faculty of Health and Social Studies

TUL and OUC have different structures, sizes and concentrations of study programs. The TUL study programs seem to be specific or particular research areas focused while OUC study programs seem to be more general but extensive. Exchange and mutual learning each other indicated different learning approaches, for instance, that TUL learning approaches are most likely research and lab experiments focused while OUC emphasizes concept generating, development, and teamwork. The workshop provided an excellent opportunity for exchange and mutual learning for these two different approaches.

Another advantage can be mentioned was short term visit and student involving so a week short term visit combined with selected student presentation or teaching has motivated the students to be familiar with this and future exchange activities highly and therefore recommended highly for further implementation.

We appreciated very much Dr. Karel Frana, Ms. Marcela Válková and other TUL colleagues' initiatives for the project application, following up and well organizing for 1st workshop at TUL. There has been planned 2nd workshop will be held at 21st – 22nd April at OUC.

Wu Hong (sign.), Fredrikstad, 7 April, 2015

