

3TU Master's Construction Management & Engineering Newsletter

This newsletter is published at irregular intervals

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Introduction

This newsletter focuses on interesting and current topics in the field of Construction Management & Engineering (CME): developments in the Legal & Governance Course, CME tutor gets his PhD, the annual evaluation of the CME Master's, CME students 'around the world', and an update from the study associations.

We hope you enjoy reading this newsletter.

Eindhoven joins L&G!

Next academic year, the course Legal & Governance (L&G) – one of the five cornerstone of CME – will be joined by Eindhoven. This will make L&G a true 3TU-course in which tutors and students of the three locations cooperate. After being the first CME-course integrating the virtual classroom last year, now they take up the challenge to implement a triple-joint course. The tutoring will take place at Twente (Governance part) and at Delft (Legal part). Eindhoven will 'simply' log in into the virtual course and thus be able to join L&G.

We thank the tutors of L&G for their ongoing enthusiasm and devotion to further develop CME.

The search for grants

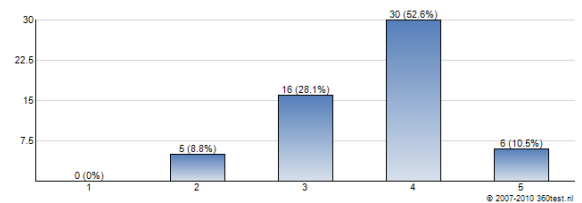
Over the past period an intensive search has been taken place to find grants to attract talented international students to CME. So far, the results are meagre; mostly due to the unfavourable economic conditions. Companies find it difficult to make this long-term investment while being in need for money at the short term. Even the big construction companies are hesitant to invest. Despite this, the education management will put effort in organizing grants and attracting international student to CME.

In addition to the search for grants, CME is actively seeking cooperation with the Industry. CME has assets such as the knowledge about Systems Engineering that can be of great value for companies. We are looking for ways to 'export' this knowledge of subjects like this, for example by designing courses that fit the needs of industry.

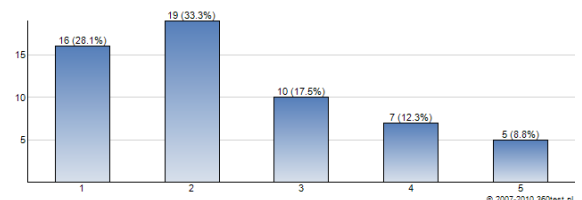
Evaluation Results CME 2010

In June 2010 students from all three locations were asked to fill out a questionnaire about CME. The response was 44%. In this article we will briefly mention the most striking results.

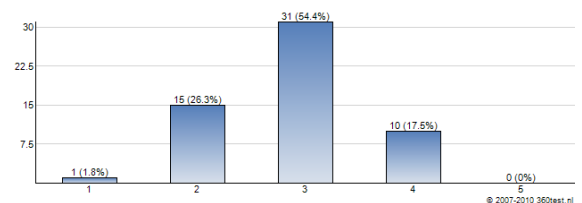
Generally students are quite happy with the match between their foreknowledge and the CME Master's courses. See figure below. More than 60% agrees or totally agrees with this statement.



At the Statement: "I want to make use of the opportunity to study at another university" most students answer negatively. See figure below. This result is an ongoing concern for the Education Management.



Most students find the overall level of the Master good (score = 3). Few students evaluate CME as either to tough or to light. See figure.



On the question "which courses should be added to the curriculum" many students answered they are in the need of social courses: psychology, teamwork, leadership and negotiation skills.

The Education Management wants to thank the students for their input. Results are taken seriously and will be used to further improve the Construction Management & Engineering Master.



Dr.ir. Erik Blokhuis

Getting to Know..... Dr. Ir. Erik Blokhuis at the TU/Eindhoven

Erik Blokhuis is one of the tutors of the CME-course Integration & Orientation. Let's get Erik in the spotlight to get to know him better.

On June 1st 2010, I successfully defended my Ph.D. thesis in Eindhoven. My research focused on Dutch industrial areas; I treated the problem that a large share of the current stock of industrial areas is obsolete, and that redevelopment of these obsolete areas stagnates. Ongoing redevelopment projects are often characterized by difficult negotiations and conflicts. A major cause of this is that multiple stakeholder groups occupy powerful positions in redevelopment projects, and that none of these involved stakeholders is powerful enough to manage projects individually.

I assumed that the parties need process governance; several studies reveal that centrally governing such alliances strongly contributes to project success. The aim of process governance is to promote cooperation between relevant parties, through the establishment of one central governing agency, which is held responsible for the management of the decision-making process. Regional development companies seem most appropriate for executing this role.

Assuming that process governance can be a solution to the occurring problems, it is essential to theoretically support governing agencies in managing decision-making processes. Therefore, the specific goal of the research was to model the decision-making of the most important actors in industrial area redevelopment processes, in order to analyze and predict the occurrence of cooperation or conflict, and to design interventions for solving or preventing such conflicts. The research covered three major steps: (1) modeling individual preferences and decision making; (2) modeling interactive (strategic) decision making as an interdependent process, in order to discover conflicts; and (3) designing interventions. Several analytical techniques, like Discrete Choice Modeling and Game Theory, are applied in the research.

Concluding, a model is created with which it is possible to give recommendations concerning the decision-making of a central governing agency. When conflicts are expected or actually occurring, the model can be used in a sensitivity analysis, in order to estimate the effect of different measures on reaching mutual cooperation. The most important practical results are that governance seems to be necessary for solving stagnation in redevelopment projects, and that instruments are available for executing this governance. Focus should be on the actual execution of the governance task, not on adding tools to the existing instrumental palette. From a more general scientific perspective, the study entails a new, structured way of studying and solving conflicts in interdependent negotiation environments, which is empirically testable.

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CME-students going abroad for a cross-cultural experience

Matthieu van der Grinten and Alexander Ampt spent four months in Peru making a new design for the port of Salaverry. The two CME-students from Delft University of Technology (DUT) worked in a group of 6 engineering students (all from DUT) and executed the project with the help of Royal Haskoning.

"The port of Salaverry is severely outdated and suffers from heavy siltation. Our group came up with a new design, consisting of a technical solution for the siltation problem and a master plan for the lay-out of the port." Matthieu and Alexander were responsible for the stakeholder analysis, financial analysis and risk analysis of the project. In this project they were able to apply financial, social and cross-cultural knowledge gained during their CME-study. Their contribution was well appreciated: "We made the technical design feasible and socially acceptable, which are critical factors for any large project in the world."

Matthieu and Alexander encourage others also to undertake these kinds of adventures: "Going abroad to work on a (study related) project is an unforgettable experience which enables you to develop other capacities than cannot be learned in university. Especially CME-students can contribute in several ways due to their wide background."



Cross-cultural experience of two CME students



Study Tour Booming Brazil

Study tour Brazil 2010

Extracurricular activities enable students to expand their horizon. One of the great opportunities in this respect is joining an international Study Tour. Every two years Study association ConceptT organizes such a Study Tour for master students in Enschede. This provides students with the opportunity to explore civil engineering outside Europe. The next study tour will be in September-October 2010, when we will travel to Brazil. We will be looking at sustainability in Brazil, focusing on our central theme: "Foundations for a Sustainable Future".

Currently, our 27 participants are doing research on the different projects that we will be visiting in our three week tour. We will visit some major civil engineering projects and related companies/institutions. Examples are the: INPE institute, metro expansion project in Sao Paulo, and the expansion of the Maracanã Stadium, but also a visit to the IBISS (focusing on social development). In total 24 project-visits are planned, covering many different areas of civil engineering. Next to these civil engineering projects we plan to visit cultural and ecological highlights, e.g. a real Brazilian football match and the Amazon area near Manaus. In this way we really try to gain an in-depth knowledge of Brazil. We always encourage everybody with suggestions, questions, opportunities or issues concerning Brazil and our study tour to contact us at: src2010@concept.utwente.nl. Thank you!

The Study Tour is organized by ConceptT (www.concept.utwente.nl). ConceptT is the student association connected to the Bachelor and different mastertracks of Civil Engineering in Enschede, including CME.

CME-student wins 2nd prize in BestGraduates 2010

Alexander Ampt, a CME-student at Delft University of Technology, became 2nd in this year's BestGraduates competition. BestGraduates is a game for high potentials organized by Memory Events in cooperation with 12 top employers. After several rounds in which over 700 people participated Alexander was selected by Shell to be their representative in the final.

On May 21st the 12 finalists showed their capabilities on the 32nd floor of the Rembrandt Tower in Amsterdam. The day consisted of three parts which were a presentation of a business plan, a 'virtue relay' and a group discussion.

In the evening the final scores were announced and Alexander achieved 2nd place. With his 2nd place he won an amount of € 1100,- and a trip to the Ferrari factory and the test course in Italy.

His combination of an engineering background and a managerial specialization played a large role. For the judges it was important the high potentials showed an understanding of the technical, commercial and social aspects that have to be dealt with when working for one of the 12 top companies.

University of Twente Education Day 2010

On April 1st, the University of Twente organized the Education Day 2010, meant for all teachers and students of the UT. Theme of the day was: Studying in the 21st century: the 'new' student?! and focused on issues like: How do global developments affect the student of the future? and How can the UT respond to this in terms of education and teaching? The University of Twente intends to involve the 'new' student as a partner in the design and implementation of its curriculum. Who is the 'new' student and what do they actually want? Which innovative approaches and 'state-of-the-art' facilities are required to engage them? The program consisted of an introduction by Ed Brinksma, Rector Magnificus of the UT, presentations by two key-note speakers, i.e. Harm Hospers, dean of the University College of Maastricht and Joep Schrijvers, author of the famous book How to become a rat? and 10 parallel workshops. CME-teacher Timo Hartmann was one of the workshop leaders and presented the workshop 'Gaming Why Virtual'.

Tutor Timo Hartmann started with an explanation about the non-virtual game that is used in the course 'Facility Design, which takes place in the 3rd year of the Civil Engineering Bachelor's program. This course introduces different design processes to the students. By means of playing a game in which groups of students design buildings, they experience the advantages and disadvantages of different design processes. This game is also actually played and it becomes clear that - depending on the chosen design process - the number of designs varies greatly. The workshop finished by discussing the value of gaming in an education setting. It was concluded that the game is useful for different courses which have a main focus on the contents as well as courses that make use of design processes and activities in order to improve cooperation within groups.



Education Day 2010 at UT

Workshop
CME-tutor Timo Hartmann