

### Introduction

The 3TU CME newsletters focus on interesting and current topics in the field of the Master's programme in Construction Management & Engineering (CME).

This newsletter informs you about:

- The first 3CME Symposium
- TUD-CME student prizewinner during the ESCL
- The common 3TU CME kick-off day
- Evaluation of the CME Master's Programme
- CME Master Thesis Award
- Getting to know: Dr. G.Z. Gamze Dane
- Serious gaming – Testers needed!
- Of CoUrsE! International Exchange 2015
- Study Tour Concept (UT)

We hope you will enjoy reading this newsletter.

### First 3CME Symposium

On Thursday the 25th of November the first 3CME symposium was held at the TU Eindhoven. 3CME is the collaboration between the study associations of the 3TU CME programmes and the 3TU Federation. The main question for the first 3CME symposium was:

*How should construction process managers respond to technological innovations within the construction industry?*

The event theme '**Destination Innovation: a roadmap to the future**' was about a diversity of innovations in construction. This focus was narrowed down into three 'cornerstones': 1) innovations in construction processes, 2) innovations in construction techniques and 3) process innovations.

The day was divided in two parts; the morning programme was dedicated to an introduction, an icebreaker and an interesting first presentation by Reimar von Meding (KAW Architects) about a renovation shop for residents to choose intelligent products and achieve a sustainable living environment themselves.

The afternoon programme was dedicated to workshops provided by Count & Cooper (about collaboration between various contractors by building the Noord-Zuidlijn), Brink (about miscommunication between customers and clients in construction processes) and Heijmans (about working as an entrepreneur on a budget). After the workshops, Johan Postma (iQfabriek) hosted an innovative presentation about factory-build houses.

Between the morning and the afternoon programme, the 'innovative' biological lunch was sponsored by Jelmer, who also arranged a workshop during the lunch break about their innovative mindset and fresh perspective on the building industry. Part of the workshop was the awareness of our rapidly changing environment. At the end of the day, a networking drink was provided by the programme director of the 3TU CME Masters.

The study associations can look back on a successful first common event! They are looking forward to organise such an event in 2016 again. For the event next year, they are searching for new event-committee members. Please contact the study association of your location if you are interested in an inspiring and educational function in this event-committee.

We hope to welcome you next year!

of CoUrsE! (TU/e): [Ofcourse@bwk.tue.nl](mailto:Ofcourse@bwk.tue.nl)  
Concept (UT): [voorzitter@concept.utwente.nl](mailto:voorzitter@concept.utwente.nl)  
CME Dispuut (TUD): [chairman@cmedispuut.nl](mailto:chairman@cmedispuut.nl)



### TUD-CME student prizewinner during the ESCL Conference in London

On Friday 2 October 2015, TU Delft graduate Lonneke Cheung won the first place at the Master Thesis Prizes of the European Society of Construction Law (ESCL) in London. In the report, the jury described Cheung's research on trust between clients and contractors as 'very impressive'.

Cheung conducted her research during her graduation period at Royal HaskoningDHV. Her thesis focuses on the influence of mutual trust between clients and contractors on the efficiency and effectiveness of the change management process in complex Design & Construct (D&C) infrastructure projects.

Since the introduction of the Dutch Public Procurement Act 2012 (Aanbestedingswet), public-sector clients are required to use the Dutch UAV-GC 2005 standard contract for D&C projects. Cheung compared the UAV-GC 2005 contract to two other standard contracts in use internationally for D&C projects. A standard contract generally consists of a model agreement and the associated general terms and conditions. These documents contain provisions concerning the obligations and responsibilities of the parties to the contract, the start and completion dates of the project, the payment procedures, and the procedure for contractual amendments (i.e. the change management process).

Cheung's research showed that there are two fundamental factors that help build trust between the parties, regardless of the standard contract used: a win-win situation throughout the project, and a clear vision on collaboration and project control that is shared by the parties. Further to her research, she formulated a number of recommendations for creating an efficient and effective UAV-GC 2005 change management process, based on mutual trust between client and contractor.

The ESCL Master Thesis Prizes are awarded every year at the ESCL conference to students performing research in the field of construction law. Cheung's prize consisted of a sum of money and the publication of her thesis in the academic journal *International Construction Law Review*.

The jury evaluated the theses submitted on originality of topic, quality of analysis, quality of presentation, interest to construction law and construction professions, and connection with European law.

Interested in Lonneke's Thesis work?

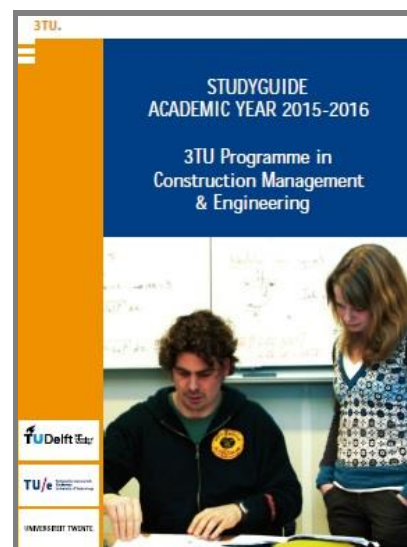
See: [repository.tudelft.nl](http://repository.tudelft.nl)

### Common CME Kick-off day

On Thursday the 3th of September 2015, the common CME Kick-off day has been organised in Twente. All students of CME at Delft, Eindhoven and Twente who started their programme in the second semester 2014-2015 or in the first semester of 2015-2016 were invited.

During this day, students from each location cooperated with each other during a 3TU-CME connecting activity, there was the CME MSc Thesis award ceremony, and the first Legal & Governance course (legal) was provided live. The day ended with a networking drink.

At this day, also the new 3TU CME study guide was provided. In this study guide you can find all information about the specialisations, procedures, contacts and courses at the 3 locations. You can click the picture below to [download the 2015-2016 study guide](#).



### CME Master Thesis Award winner

Mark van Swam (TU/e) is the winner of the 3TU Construction Management and Engineering Master's Thesis award 2014-2015. On the 3TU CME kick-off day at the University of Twente, UT Programme Director dr.ir. C.M. Dohmen-Janssen awarded him with a cheque to the value of €1000,- .

The Master's thesis of Mark van Swam is about the development of a Decision Support Tool that supports an investor in an early stage of the transformation process to get a justified answer to the question if transformation of a vacant office is (financially) feasible.

His Master's thesis is chosen by an independent jury from industry as the best thesis over three locations. The other nominees for this award were:

- Jelmer van der Weide (TU Delft) with Understanding Urban Road Life A Study of the Actual Life of Arterial Roads in Amsterdam
- Diana van der Asdonk (University of Twente) with 'Value Management in een Gemeentelijke Organisatie'.

According to the jury from industry, the winning MSc Theses should be practical applicable, contain an actual subject, should be well composed, and comprehensive written with a strong foundation.

#### Outlook thesis - Potential Transformation of Vacant Offices into Housing for Young People: Optimization of Decision Making Process

An increasing proportion of the available offices is outdated and will be difficult to rent without any adjustments. In order to prevent extended vacancy, it is necessary that a substantial portion of the outdated stock on the market will be removed or transformed. For an investor it is important to distinguish vacant buildings with potential for transformation as early as possible in the process.

The research provided by Mark van Swam provides an overview of the most important factors and barriers that influence the transformation potential of vacant offices into housing for young people, from both supply and demand side. Financial feasibility plays a central role in the investing decisions of companies and investors.

The results of this research form the input for a support tool which allows an investor to make a substantiated financial feasibility study in a quick way at an early stage of the transformation process.

The 3TU Construction Management & Engineering Master's thesis award is created to give excellent graduation work of CME the attention among a wider audience. For each of the three universities where the CME Master is taught, one graduation project was nominated. At the moment, Mark is working at Heijmans as a Project Consultant.

[Click here for Mark's Master Thesis.](#)

### Evaluation of the CME Master's Programme

During the summer, the CME programme has been evaluated. With a response of 89 students, the most important conclusions are:

- With reference to last year, many more students want to make use of the opportunity to study at another university.
- There could be a better balance between theory and practice.
- The study load is not well-balanced over the year, but the programme as a whole is feasible within two years (3.8 on a 5-point scale).
- Overall on a 5-point scale, students are satisfied with the depth (3.8) and width (3.8) of the programme, student counselling, and the selection of core courses (3.7).
- Students are very satisfied about the quality of the CME staff (2.5 of a 3-point scale).
- Students have a clear picture of the industry positions the CME Master course prepares for
- Above all... the CME Master's programme meets student expectations (3.6) and they would recommend the CME Master's programme to others (3.9).

The management of the programme will use this input for further improvement of the programme. If there are any questions about this evaluation, please contact our Programme Developer Sven Laudy.

E-mail: [s.laudy@utwente.nl](mailto:s.laudy@utwente.nl)

### Getting to know: Dr. G.Z. (Gamze) Dane (TU/e)

#### Who is Gamze Dane?

Since September 2015, she has been working as an Assistant Professor in the Construction Management and Urban Development Group within the teaching and research unit of Urban Science and System. There, she is involved in supervising master students, conducting research and lecturing several courses such as Research and Development Project and Smart City Project. Her research interests focus on behavioural urban models such as choices of residential location, and activity-travel patterns in the city. Gamze works on explaining individual behaviour in urban environments by applying econometric models. She is an author of several academic journals, book chapters and conference papers in these topics. In the future, she wants to integrate new smart technologies (e.g. sensors) into urban models in order to provide policy formulations for sustainable developments.

#### About CME at 3TU

Gamze Dane finds that a concept of CME at 3TU as a great advantage for both students and technical universities. Students can benefit from the expertise of teachers in each technical university and from working together with companies and universities. Moreover, this platform provides an environment to enhance the collaboration between companies and universities. This increases the knowledge and practice.



#### Brief Curriculum Vitae

Gamze Dane obtained her Bachelor's degree in 2005 in Urban Planning from Izmir Institute of Technology, Turkey. From 2005 to 2007, she completed the Master degree study in Geographical Information Systems from Dokuz Eylul University, Turkey where she also worked as a researcher in governmental projects from 2006 to 2009. In 2009, she joined Urban Planning Group of TU/e as a PhD. She finished her PhD in 2013. After her PhD study, she worked as a post-doc researcher at the same group. In September 2015, she started her new role as an assistant professor at TU/e.

### Serious gaming – Testers needed!

The University of Twente is developing an attractive and innovative serious Asset Management game for educational purposes. Serious games are simulations of real-world events or processes designed for the purpose of solving a problem.

The reasons for the development of this serious game are 1) learners tend to be more motivated during game-playing, 2) serious games cover and address motivational aspects, and 3) the games enable as well as foster learning by doing.

By playing the games, students will be the problem owner in a specific case. In an overreaching context (a road network for example) students will learn and experience during individual modules where specific actions in Asset Management will lead to. The games will consist simulations of real-world problems, and an challenging competition will be integrated.

For a good gameplay, we need students who can assist us and provide feedback on the concept game.

Do you want to help us during the testing phase of this game? Please contact 3TU CME programme developer Sven Laudy:

[s.laudy@utwente.nl](mailto:s.laudy@utwente.nl)

### Study Tour Concept (UT) - American Ambitions

The United States is a country built around ambitions. Americans are known for striving to be the very best in everything they do. Even the famous American Dream is based around the fact that you can reach the top if you just have the ambition to do so.

With those words in mind a group of 24 members of study association Concept (UT) accompanied by two teachers will depart to the United States in October of 2016. This journey will have the name *American Ambitions*. With the theme *'Modern methods in today's challenges'* these students will look at what new techniques and innovations the United States applies in the world of civil engineering.

During this three-week journey, numerous civil engineering projects and companies will be visited in the cities New Orleans, San Francisco and New York. All these cities have their own unique traits that make them worth visiting both culturally and in the field of civil engineering:

- New Orleans found itself in global news after hurricane Katrina in 2005. During this disaster the city's flood defences failed and large parts of the city were flooded, resulting in about 1500 casualties. After this disaster, the city has been rebuilt alongside with modern flood defences, which makes it a very interesting location from a civil engineering perspective.
- San Francisco is a city worth visiting for an endless list of reasons. From a civil engineering perspective, the city is challenged by the risk of earthquakes but manages to keep its buildings standing tall. Furthermore, the famous Golden Gate Bridge is something that increases the heartrate of every civil engineer.
- New York is a melting pot of all fields of civil engineering. It has some of the world's most impressive skyscrapers and some of the most challenging traffic problems. After hurricane Sandy in 2012, the city has also started planning for a new flood defence line, which is complicated by the very small amounts of free space present in inner New York City.

All in all, the Concept members hope to see how the United States tackle their civil engineering challenges and innovate for the future.

### Of CoUrsE! International Exchange 2015

The international exchange 2015 of the study association 'of CoUrsE!' went to the United States of America, this year with the topic: Smart Cities; and it was simply a great success from start to end.

The *'of CoUrsE! Tour 2015'* organised this ten days exchange which embraced both, knowledge exchange and leisure activities. Fifteen fellow CME students and one professor have taken note of all formal and informal visits. On the third of May the tour started by travelling to Boston and thereafter moving towards New York City, Brooklyn area. Afterwards, all students, voluntarily, stayed five days longer in the United States. Lastly, everyone travelled back on the seventeenth of May 2015.

During these ten days they visited a lot of companies, universities, governmental bodies, and consortiums which were related to our international exchange topic. Smart cities entails a comprehensive concept, for this reason, the focus was on water management, energy management and urban (re)development. And of course, being students, the nightlife of Boston and New York was amazing, all the same!

