

Civil News

American University of Beirut
Department of Civil & Environmental Engineering
Civil Engineering Society

CES



Prof. Mounir Mabsout Directs The New Center for Civic Engagement and Community Service (CCECS) at AUB

Letter from the Chairperson



The first issue of this newsletter was well received, and represented a distinguished effort for which the CES is to be commended. The presence of such an active student society is indeed refreshing, and the department is intent on supporting its activities in

every possible manner.

A major new development that I would like to report here is the approval by AUB of the new undergraduate program in Construction Engineering that will be offered by the Department of Civil and Environmental Engineering. We consider this a significant achievement as it is the first new undergraduate degree in the department since the BE degree in civil engineering was first offered in the 1950's. In addition, this will be the first time a BS degree (three-year degree) in engineering is offered at AUB, representing a new and dynamic model in engineering degrees at AUB. The program is expected to address the rapidly growing regional and local demand of the construction industry, with the FEA and AUB well positioned to play a vital role in serving such a need.

AUB will hopefully attract many regional students who are seeking an American style education from an accredited, leading institution. The new program shall be launched as soon as the necessary resources (faculty and otherwise) are secured, and following a campaign that is being planned to encourage applicants with distinguished academic records from Lebanon and the region to apply.

This spring semester the department welcomed a new faculty member in environmental sciences, Dr. Pascal Saikaly, and is actively recruiting new faculty members in transportation, structures, and construction. In February, Prof. Mounir Mabsout was selected for the position of Director of the new Center for Civic Engagement and Community Service (CCECS), an appointment we feel proud of. However, Prof. Mabsout's full-time (and more) presence at the CEE department will be missed.

Finally, I look forward to sharing with you in the coming issue news regarding the newly admitted CE class of 2012, which promises to be one of the strongest classes in recent memory. Till then, I wish you a most fruitful time.

Isam Kaysi

Narine Bolghourjian



The American University of Beirut has long been a pioneer in serving the people of Lebanon and the Middle East both at the academic and the community levels. After all, serving the people is in the core mission of AUB and has been successfully accomplished throughout the 141-year history of the university in particular, during the many crises which the country has gone through. The people have got back to their feet thanks in part to various relief initiatives many of which have been those of AUB itself.

In its latest endeavor to encourage community service, leadership, scholarship, and volunteerism, AUB announced the establishment of a new Center for Civic Engagement and Community Service (CCECS) in December 2007. Soon after, Prof. Mounir Mabsout from the Department of Civil and Environmental Engineering (CEE) was appointed as the first director of the center and was entrusted to build it up from an idea to a functioning and vibrant entity.

CCECS, which was launched through a funding provided by the United States Agency for International Development (USAID) will be housed in West Hall. The center came to further develop and enforce the work started by the Task Force for Reconstruction and Community Service (TFRCS). The latter was established by AUB directly after the summer 2006 war on Lebanon to assist those in crisis and to take part in the reconstruction efforts following the war,

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Spring Start Dinner at "China Rose"

Ramsey Nasr

The annual "Spring Start Dinner" organized by the Civil Engineering Society at the beginning of every spring semester was held this year at the China Rose Restaurant, in Hazmieh, on Friday March 7, 2008, in what was a festive and fun atmosphere. The society sold an impressive 80 tickets, as Civil and Environmental Engineering students from all four years filled the restaurant and eased into the mood early on. The society had two guests of honor at the dinner, Dr. Mounir Mabsout and Dr. Salah Sadek. The CES hopes both professors had a great time, as it was great having them!

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as well as engage the university in community service and development projects. The Task Force was likewise directed by Prof. Mounir Mabsout since December 2006.

Prof. Mabsout has a long history and interest in community service. The Civil Volunteering Summer Camps, which were organized by the Civil Engineering Society (CES) under his supervision during the past two years, are a proof of that fact. In fact, his involvement in such activities long predates his role in the TFRCS and the Civil Volunteering Summer Camps and can be traced back to the Civil War days at which time he used to participate with various teams in relief efforts. We, as students, remember that as a chairman of the CEE Department from 2003 to 2006, Prof. Mabsout has always underlined the importance of incorporating "community" components in educational programs. Interestingly enough this will be one of the plans to be initiated by the CCECS so as to "instill the culture of community engagement in academics".

When asked to describe the tasks to be undertaken by the CCECS, Prof. Mabsout said that the center is presented with the challenge of coming up with "a model that will suit AUB and be appreciated and pleasantly accepted by students and faculty members rather than being unwillingly imposed on them". Having this as its main target, the center will work with different teams within AUB and cooperate with several governmental and non-governmental organizations in order to draw its short and long term plans, aiming at institutionalizing civic engagement and the community service efforts at AUB.

Prof. Mabsout's appointment with the CCECS is on half-time basis and as a result his involvement in the CEE Department will be reduced in time, but surely not in spirit and commitment. The CEE and CES family wishes him a prosperous future, hoping that his tenure as the director of the CCECS will be as successful as his years of contribution and accomplishment in the department. ❖

❖ Ms. Zakiya Deeb: Service Excellence

Lori Slikhanian & Catherine Shadarevian



Ms. Zakiya Deeb is the Administrative Assistant of the Civil and Environmental Engineering Department at AUB and by far, she is the most helpful hand for every student in the department. Ms. Deeb received the President's Service Excellence Award in 2006 and was promoted from secretary to administrative assistant in October 2007. These achievements are a natural culmination of the services she offers to all students, from the sophomores, who are new to the department, to the 4th year seniors and the graduate students. Ms. Deeb is known for her friendliest character and her generous smile that never leaves her face, no matter what the circumstances are.

There is a common consensus among the CEE students that Zakiya, as she likes people to call her by first name, is one of the most serving and dear faces in our department and thus CivilNews yearned to get a closer look at her and share the following interview with its readers.

• When did you start working at AUB?

I started working at the AUB's surgery department in 1992

❖ CES Helps Students Master Important Software

Roula Rbeiz

Last year, during spring 2006-07 the Civil Engineering Society (CES) organized a special AutoCAD training course for third and fourth year Civil and Environmental Engineering (CEE) students in coordination and with the full support of the CEE Department. The sessions were initiated due to a lack of academic preparation in drafting and CAD in the CE program. This matter has now been resolved with the incorporation of the MECH220 course in the 1st year CE curriculum as of 2006-07.

At the end of the course, certificates were distributed to those who successfully completed the sessions and encouraged by the success, the CES decided to repeat the experience during the current spring 2007-08 course.

In addition, sessions for introducing the students to the project management software, Primavera, were also organized during the spring semester this year. Concurrently, efforts are being made to incorporate a special software course on project management in the curriculum, as was the case for AutoCAD. This effort as a whole is to cater for the students' need to have a knowledge of such tools in their careers. ❖

and after a year, I had an interview for the vacant secretary position at the Department of Civil and Environmental Engineering at AUB. Dr. George Ayoub, who was the chairman of the department at the time, conducted the interview and, soon after, he hired me for the position.

• Which Chairpersons have you worked with and for how long?

I have been working for 15 years at the CEE Department and, during this period, the department had several chairpersons. I started working with Dr. George Ayoub, who was followed by Dr. Mohammad Harajli for one year, then Dr. Bilal Hamad for four years, Dr. Mounir Mabsout for three years and finally by the current chairperson, Dr. Isam Kaysi.

• How was it like to work with different chairpersons?

Each one of them had his own unique personality and style, which made him different from the others, and I can say that working with each one was a great experience.

• How did the department evolve and how did your experience change from the time you were appointed till now?

When I first started, there were a good number of civil engineering students, but then came a time when the total number of graduating students in a certain year decreased to 23. After that period, and especially during these past 3 years, the number of students increased radically and transferring from different engineering majors to civil and environmental engineering became the trend, while it was the other way around just a few years ago. Moreover, with the launching of the PhD programs, the department got even larger, and so these last few years have certainly been more stressful but nonetheless more exciting and promising for the department.

• Which year was the most impressive and memorable year during the past 15 years?

I am not saying that the rest weren't good, but the class of 1998 was my favorite. Most of the students were naughty, but at the same time they were very smart, funny, and exciting. Interestingly enough, I am still in contact with some of them. ❖

The Booming World of Civil Engineering

Maysam Kamar

Besides being problem solvers, meeting the challenges of pollution, traffic congestion, drinking water and energy needs, urban redevelopment, and community planning, Civil and Environmental Engineers are nowadays making way for an exponential progress in the field by enabling the realization of Mega-Projects and the construction of structures once considered impossible to build.

With countries competing for superior images and reputation, mega-structures have become a major avenue for this competition. Budgets of billions of dollars are dedicated to extravagant projects in which the role of civil engineers is critical. As a result, demand for Civil Engineers in specific, all over the world, has drastically increased over the past decade.

Dr. Maryam Ghandour, of the Career and Placement services at the Student Affairs Office, declares that graduates in Civil Engineering are the most sought after, not only in relation to other Engineering majors, but among all majors at AUB. «Last year's Civil Engineering graduates, except for three of them, found jobs and received multiple offers before they even graduated». Several other credible sources confirmed the booming of job opportunities for Civil Engineers. They even challenged us to open the advertisement page in any newspaper and not find a listed ad, if not more, for a Civil Engineer.

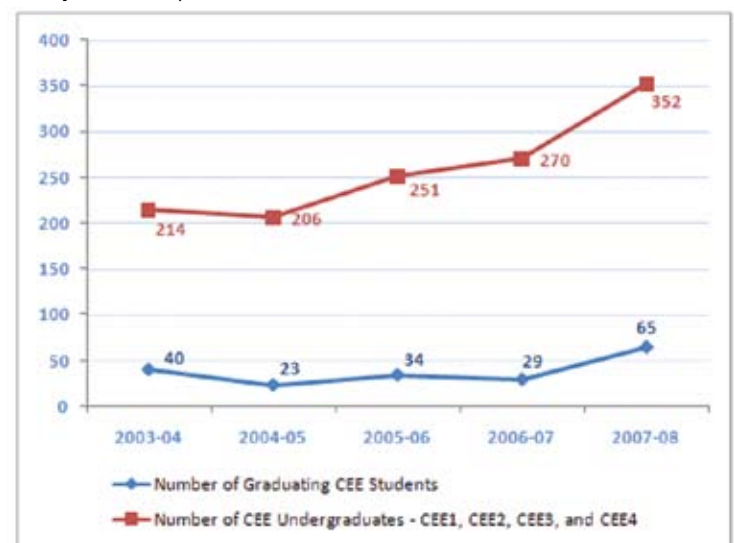
According to surveys conducted by Student Affairs, Civil Engineering rates the second highest salary among engineers in multinational and regional companies. Fresh Civil Engineering graduates can earn up to \$3000 in such companies, while the maximum salary they can reach with accumulated experience is much higher.

The flourishing Gulf region, now competing with the most developed countries is driving a massive demand for talented engineers that superior universities, such as the American University of Beirut can produce. The upcoming job fair provides a small sample of the escalating demand,

with over 20 companies from all over the world in the fields of Civil Engineering and Engineering Construction aiming to recruit future talents who can shoulder the responsibilities of major projects.

The booming job opportunities and expectations for Civil Engineers are reflected in the increasing trend in the number of applicants for this major. The number of applicants to AUB with a stated first choice for Civil Engineering has doubled since 2004. Enrollment in this major has reached 124 sophomore students this year. In addition, a clear trend is emerging with the increasing number of female sophomores.

While Civil Engineers will find plenty of challenging jobs within their discipline, they are also being tapped for jobs outside their field, such as with Market and specialized consulting companies, as well as several business firms who find great value in civil engineering graduates and their analytical and practical skills.



Dr. Shadi Najjar Joins the CEE Department

Roula Rbeiz



The Civil and Environmental Engineering Department welcomed a new addition to its family when Dr. Shadi Najjar joined it in fall 2007-08 as an Assistant Professor in the area of Geotechnical Engineering, following a search which yielded a number of excellent candidates for this position.

Dr. Najjar joined AUB back in 1995 as a CE undergraduate student. Directly after earning his BE, he was appointed as a Research Assistant for Prof. Bilal Hamad for a two-month period. This experience made him eager to pursue a Masters degree in Structural Engineering at AUB.

Throughout his graduate years at AUB, the geotechnical engineering courses Dr. Najjar took aroused his interest in the field. It was particularly the uncertainty associated with this area and thus the constant need for research in the field that caught his attention.

After completing his MS degree in 2001, Dr. Najjar headed to the University of Texas (UT) at Austin to pursue his PhD in Geotechnical Engineering. When asked about the difference between the AUB and the UT Austin experiences, Dr. Najjar commented: «in general, there is a lot of similarity in the two programs keeping in mind the difference in the departments' scales; part of the reason for the observed

similarity is related to the fact that a number of the CEE professors at AUB hold a degree from UT Austin; however, the lecturing component in foreign universities generally lacks interaction with students, particularly in graduate classes that are dominated by foreign students».

After receiving his Doctorate degree in 2005, Dr. Najjar received more than one job offer from leading Geotechnical firms in the United States; however, he was resolute on returning to Lebanon, where he accumulated a teaching experience as a part-time faculty member in three universities (NDU, LAU & AUB) while working at the same time as a full-time consultant in Dar Al Handasah.

In addition to the courses he is teaching this semester, Dr. Najjar is working on two lines of research. The first is a follow up of his PhD work on reliability-based design of shallow and deep foundations, whereas the second is experimental and is related to the behavior of soft clay deposits that are reinforced with sand columns.

As a final word, when asked about his main reasons for joining AUB and his experience so far, Dr. Najjar said: «Since I have had the chance to teach in a number of universities, I have come to realize the difference between the standards of education at AUB and that in other universities with regards to both students and faculty. So far AUB has been a great experience».

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FEA Student Conference – An Ongoing Tradition

Amir Salam



The Faculty of Engineering and Architecture (FEA) at the American University of Beirut (AUB) is holding its 7th FEA Student Conference (FEASC) this spring semester on May 21 and 22, 2008. The FEASC is a gathering of talents which consolidates a tradition that was initiated and nurtured by the Dean of FEA, Dr. Ibrahim Hajj since he joined the Faculty in 2001. The involvement of students in research and technical presentations reinforces educational rigor, improves communication and presentation skills, encourages students to become self learners, and reinforces the practice of independent and organized thinking.

The Dean and faculty members espouse this thinking and are continuously encouraging students to participate in projects, research papers, and exhibition material. "Writing abstracts and papers is in itself an excellent training exercise, even without a conference, and the experience and the record will help you in securing good jobs or admission to graduate schools after graduation." says Dean Hajj in an e-mail on the subject.

Since 2002, the FEASC has seen continuous progress. More students and professors are involved and more papers are accepted. "I'm very

impressed by students" expressed Dean Hajj in an interview with "CivilNews". The presentations are now organized in three parallel sessions to accommodate the large number of papers presented. In addition to recognizing and awarding worthy contributions, this year monetary prizes will also be allocated to these works.

It should be noted that besides student papers and presentations, the annual FEA student conference features presentations from distinguished AUB alumni who have had significant contributions in their careers. FEA recognizes those distinguished guests of honor who are all happy to visit their alma mater and are pleased to maintain a strong link with AUB.

This year, there is increased enthusiasm from professors and students to attend the sessions in their fields of interest and maximize their participation in this important event. Student bodies and, among them, the Civil Engineering Society, are also assisting the organizing committee through their representatives by encouraging the participation of students and providing their feedback on different issues. All students are encouraged to look for the details online and attend the conference sessions. FEASC's website is accessible through the link <http://webfea-lb.fea.aub.edu.lb/feasc/> and contains details of all student conferences that took place at AUB since 2002 such as the organizing committees, plenary speakers, programs, proceedings, awards, photo galleries and the like. See you at the conference! ❖

CEE Alumnus Letter AUB - a First Step toward Success

Dr. Nabil Qaddumi



One of the happiest days in my life was in the spring of 1972 when I received my letter of acceptance to the Civil Engineering department at AUB. It came as a great relief as I only applied to AUB and could not think of studying anywhere else!

My days at AUB were full of academic challenge, constant interaction with students of different cultures and backgrounds, and continuous exposure to political activism with Lebanon and the Arab region witnessing major political, social, and economic changes.

In January of 1976, I, reluctantly, had to leave Lebanon due to campus closure, a worsening political situation, and the uncertainty about the resumption of classes. It was with great sorrow that I had to forfeit and miss graduating from AUB. Instead, I transferred to the University of Texas at Austin where I received my BSc degree in the summer of 1976, joined Stanford University during the fall, and received an MSc in Civil Engineering/Construction Management in June of 1977.

After working for a year at a structural firm in San

Francisco, I joined MIT in 1978, and eventually received a PhD in Civil Engineering/Construction Management in Feb. of 1982.

Since then, I combined academic and professional careers in Kuwait, where I taught at the Civil Engineering Department of Kuwait University with a visiting stint at Stanford, and founded PROJACS, a project and construction management firm.

PROJACS today employs more than 1000 professionals, manages about 200 projects with over \$20 billion of construction value, and operates in 17 countries (www.projacs.com). Several of our engineers are AUB graduates who are contributing to its success.

The engineers our company strives to employ, have a solid education such as the one received at AUB, combined with a knack for working hard, integrity in dealing with others, and excellent communication skills. The above set of qualities is a prerequisite for success.

I have also learned, the hard way, to be flexible and adapt to changing conditions, as life in general is full of uncertainties, and always have a Plan B!

Enjoy your life and education to the fullest at AUB; these will be days you will always look upon with fondness and happiness. ❖