



San Diego Section Special Edition MESA Newsletter



Presented by San Diego PECG Section 2011



2011 Caltrans Training Academy



Caltrans hosted the MESA Training Academy on March 18, 2011 from 9:00 – 3:30 pm for 20 students from the MESA programs at San Diego State University, San Diego City College, and Southwestern College.



Section Officers **Naser Ghaderi, Abu-Bakr Al Jafri, Robert Lumahan and Roy Flores** met with the students.





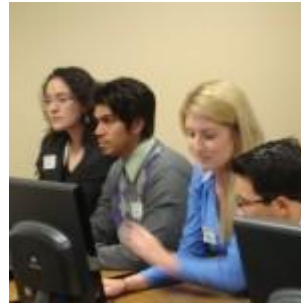
Caltrans PECG officer' Abu-Bakr Al-Jafri & member **Chris Thomas** provided an introduction to transportation engineering at their district office in Old Town, fielding questions from students as well as discussing topics such as, 'what is transportation engineering', 'what skills are needed', 'how does a project get built', and 'what needs to be considered when designing a project.



Together, MESA and SPSS create a partnership of educational, industry, and government organizations forming a pipeline from community college to university to STEM industry. The goals of SPSS are to:

1. increase the number of students who pursue STEM academic and career pathways,

2. increase retention in STEM disciplines,
3. And promote opportunities in STEM post-graduate studies.



Dimitar Peev led hands on design exercise that allowed students to design a six lane freeway using CADD.



The Mathematics, Engineering, and Science Achievement (MESA) Program enables educationally disadvantaged students graduate from four-year institutions with a math-based major. MESA focuses on student groups who historically have had low levels of attainment.



Students were provided with lunch provided by PEGC & MESA, then continued the training academy at the traffic management center (TMC) site in Kearny Mesa where Everett Townsend gave students a tour of the TMC and facilitated a hands on activity that demonstrated real time monitoring and traffic operations strategies, such as incident management, ramp metering and reversible/managed lanes.



Caltrans, via their headquarters and traffic management center shared with CHP, provided 'in-house' training; students learned technical skill sets and gained professional development to enhance their professional development and further their employment opportunities.



The National Science Foundation (NSF)-supported STEP Partnership of San Diego (SPSD) incorporates the successful MESA model at each partner campus (San Diego State University, San Diego City College, and Southwestern College), enhancing essential services that help students excel.

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