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CEAS directs engineering sessions for KAMSC students

About 130 high school students from the Kalamazoo Area Math and Science Center (KAMSC) held classes for two days last semester at WMU's College of Engineering and Applied Sciences' Parkview Campus. Several CEAS faculty provided the KAMSC juniors and seniors with sessions on a variety of topics related to engineering and applied sciences.

Dr. Osama Abudayyeh, CEAS associate dean, and **Scot Conant**, CEAS student outreach and recruitment coordinator, arranged the event with **Dr. John Goudie**, director of KAMSC research. The activity was the first of what could become an ongoing event. "The students were very happy with the sessions," Abudayyeh said.



Dr. Pavel Ikonov (IME) demonstrates the CNC machine's engraving capabilities for the KAMSC students.

Dr. Brad Bazuin, Department of Electrical and Computer Engineering (ECE), lectured on recent research on Radio Frequency Identification (RFID), the automatic identification method that stores data and retrieves it remotely. **Drs. Frank Severance, Damon Miller, John Gesink, and Raghe Gejji**, all ECE faculty, coordinated sessions that provided an activity in which student built and tested an electronic coin tosser.

KAMSC students use GPS to locate their position in a session headed by **Dr. Hubo Cai** (CCE)



Dr. Dean Johnson (ECE) led a session on iPod Deconstruction and **Dr. Janos Grantner** (ECE) presented a session on digital logic.

Dr. Jan Pekarovic - Department of Paper Engineering, Chemical Engineering, and Imaging (PCI) - offered



Dr. Damon Miller (ECE) (standing) watches KAMSC students build a small circuit board that, with battery support, can serve as a coin tosser - randomly turning on or off and producing the same head or tail effect as a coin toss.

sessions on paper testing. Other PCI-directed sessions included fiber microscopy by **Dr. Matt Stoops** and thermo response by **Dr. Harold Hladky**.

Dr. Pavel Ikonov, Department of Industrial and Manufacturing Engineering (IME) demonstrated the CNC machine, and **Slobodan Urdarevik** (IME) presented sessions on 3D Solid Modeling in AutoCAD.

Dr. Karlis Kaugars, CAE director, introduced games programming.

Dr. Jun-Seok Oh, Department of Civil and Construction Engineering (CCE), directed sessions in the Intelligent Transportation in Civil Engineering. **Dr. Hubo Cai** (CCE) offered an activity in rapid global positioning.

Dr. Jan Pekarovic (PCI) and KAMSC students discuss the origin, morphological characteristics, and uniqueness of lingo cellulosic fibers and the use of microscopy analysis in paper science and research.



Department of Mechanical and Aeronautical Engineering (MAE) faculty provided several sessions. **Dr. Parviz Merati** and MAE grad student **Charles Davis** presented fluid measurements with pulse lasers, and **Dr. Koorosh Naghshineh** demonstrated concepts in the Noise and Vibration lab. **Dr. Murali Ghantasala** participated in sessions in the Micro/Nano Technology lab.

Abudayyeh is looking forward to future exchanges with KAMSC. "Since this one involved juniors and seniors, we would have to either do younger students next year or wait two years and invite juniors and seniors again," he said. For more information, email osama.abudayyeh@wmich.edu

Send your thoughts or suggestions for future topics to the editor at jerrie.fiala@wmich.edu Thank you.