

CSM Students Preparing for Energy Jobs

CENG Nuclear Power Plant Provides Summer Hands-on Training

Driving under the high tension lines just inside the gates of the power plant was as ‘energizing’ as it was motivational for 18 College of Southern Maryland (CSM) students arriving for their first day of hands-on training at the Constellation Energy Nuclear Group, plant in Calvert County.

The students, many completing their first year of CSM’s Nuclear Engineering Technology: Instrumentation and Control (NET) associate’s degree program, spent the summer connecting their classroom instruction at CSM’s Center for Nuclear Energy Training in Prince Frederick to training experiences inside a working nuclear facility.

Over the six-week summer cooperative education/internship program, students toured the CENG Calvert Cliffs facility, attended lectures and courses led by CENG instructors, and rotated through electrical and mechanical maintenance, instrumentation and control, chemistry and radiation protection systems to get a flavor of the work conducted in those shops. During the final two weeks of the program, students chose their preferred field among the systems shops and were matched with CENG mentors who they accompanied on job assignments. “You will get a feel for not only the equipment but the organization and procedures,” CENG Supervisor of Technical Training Al Fissel told students.

Tara Wille, a Midwesterner who moved to Calvert County last winter to begin the NET program, said that CSM’s NET program is a dream come true for her. “I’ve been fascinated by nuclear energy since the seventh grade—something about the study of radiation, the core and the chemistry,” she said, adding that she didn’t initially pursue nuclear energy studies because there were no power plants in her area.

With an associate of science degree, Wille had just begun a bachelor’s degree program in geology at Colorado State University when she learned of the NET program from CSM Board of Trustees Member Julie Sickler, a Maryland cousin.

Wille said that although she had never worked on electronics, she didn't feel awkward or intimidated in any of her NET courses at CSM and that her classmates who had experience in electronics were a great help. It is challenging, she said, but she believes that women who are interested in the field should "go for it."

Driving onto the Calvert Cliffs Plant grounds for the first time was exciting for Wille, who recalled thinking, "Oh, my gosh, I'm actually going to get to do this. I knew that [CENG qualified technicians] were going to tell us what to do and what not to do, so I wasn't worried about anything."

One year from completing the program and Wille has already set her sights on a bachelor's degree in nuclear engineering technology.

"My hobbies now are reading up more on nuclear energy," Wille said. "Is that sad?"

George Douglas, 50, of Waldorf, was working as an air traffic controller in Jamaica about the time that Wille was first discovering nuclear energy in school. He didn't have Wille's passion for nuclear energy, but he did have an interest in science. After coming to the U.S. 10 years ago, Douglas earned an engineering technology degree from CSM. He began the NET program last fall with no apprehension on mastering the curriculum and only a little apprehension on fitting in as the most senior student in the program. Douglas' classmates have shared their knowledge of computer programs and technology and he has, in turn, offered historical perspective on nuclear events such as Chernobyl and Three Mile Island, which he remembers well, he said.

Douglas said that even with those disasters as well as the recent Fukushima plant in Japan in mind, he had not expected the training that he received through NET and CENG to be as intensive and in-depth. "The atmosphere of trying to instill a culture of safety [at the plant] has been a good thing [to witness first-hand]," Douglas said. "There is an overwhelming security presence that I appreciate."

On returning to college and entering a new field, Douglas said that his wife has been supportive and the force behind the career change. His twin teenage sons have watched him striving to reach his goals—including studying when there were infinitely more interesting things to do, he said. He keeps a desk in his quiet basement where he studies most nights from 8 p.m. until midnight. He hopes that his example will be recalled by his sons when they are in college.

Douglas is on track to earn his associate's degree this spring and plans to apply to CENG.

With their associate's degrees in nuclear engineering technology, CSM's NET students may also qualify to receive a certificate of completion signed by Calvert Cliffs Nuclear Power Plant and the National Academy of Nuclear Training, which is recognized at nuclear and other power plant facilities around the country.

The opportunity for Calvert Cliffs' employees to mentor and train has been a phenomenal experience," said George Gellrich, Calvert Cliffs Nuclear Power Plant Site Vice President. "Everyone was very eager to share their knowledge and experience with this next generation of nuclear workers and the student's energy and enthusiasm has invigorated the team and they are looking forward to working with more CSM students in the future."

For information on CSM's NET program, visit www.csmd.edu/BAT/NETInstrumentation/.