FACULTY SPOTLIGHT

5 Questions with Dr. Nicole Johnson-Glauch

General Engineering Program Director
Materials Engineering Department Assistant Professor

How long have you been teaching at Cal Poly?

I have been teaching at Cal Poly since 2019 as a lecturer in the Materials Engineering Department. It was my first job after earning my Ph.D. from the University of Illinois.

Tell me about your research interests and why you are passionate about this topic.

A college education profoundly impacts the lives of our students and those they go on to help in their careers. In my research, I aim to make sure what we do at Cal Poly sets them up for success no matter what they want to do. Specifically, I study how professional development activities and authentic assessments in engineering courses can help increase graduation rates for students from different backgrounds.

How do you encourage engineering students to make an impact on the community?

I incorporate empathy-building into my course assignments. For example, every homework assignment has one problem asking students to explain how people are impacted by products based on the concepts in the course. Then I ask students to propose a way to use what we learned in class to positively impact a different group of people.

What do you want to accomplish in your role as General Engineering director?

First and foremost, I want to create a supportive and thriving community for general engineering students. It's important to have a support system throughout their time at college. While the flexibility of the general engineering degree is amazing, I do think students miss out on developing relationships with others in the major. I plan to host social and professional events throughout the year to build the GENE community.

Second, I want to showcase the power of a multidisciplinary engineering degree. Many societal problems require skills from a variety of STEM and non-STEM disciplines. I plan to establish concentrations that prepare students to be leaders in California's major industries, such as computing infrastructure, sustainability and health care.

What is your favorite part of your job?

Oh, definitely the students. Their energy and excitement are infectious. They give me a lot of hope for our future. Also, sometimes they ask a question I don't know the answer to, and then I get to spend an hour learning something new.