What characteristics or skills define today’s global engineer?

If there is only one mathematical solution to an engineering problem, how can two engineers both faced with the same problem come up with two different answers? The answer to this riddle is that they viewed the result through the prism of their own culture and language. A “global engineer” is conversant in this universal dialect and understands *si* doesn’t always mean “I understand.” It could mean that your counterpart in Mexico doesn’t want to offend you.

Globalization is affecting the engineering field in two main ways: First, there is severe global competition for engineering talent; second, today’s engineer must work and think globally, whether this is to design a product for foreign countries or to work within an international team. In this environment, there is no question that engineers need to be technically strong, possess problem solving and critical thinking skills so essential for innovation, and demonstrate leadership and entrepreneurship. In addition, oral communication and interpersonal skills in a global context, that is with the ability to understand and respect other disciplines, languages and cultures, are crucial for today’s global engineer. I believe that CIT, which is revising its curriculum to ensure these very skills are instilled in each student, is at the forefront of preparing the next generation of global engineering leaders.

Today a global engineer needs more than just technical and theoretical expertise. He has to have knowledge of basic economics and business, global cultures, perhaps political situations, and be very concerned with the environmental implications of everything he does. Of course, being multilingual is also useful in that by itself, it helps engineers understand other cultures!