The BBC recently published a thoughtful story on women in engineering. The writer, Helen Briggs, spoke with "three people with bright ideas for breaking stereotypes" about engineering. Among them was Yannis Yortsos, dean of the USC Viterbi School of Engineering. Below is an excerpt from the story that presents Dean Yortsos' insights.

BBC

Breaking the mould in a male-dominated workplace

Yannis Yortsos: Engineering is a chance to make the world a better place. *Photo courtesy of USC*
The first female lego scientists were launched only four years ago (*left*). *Photo/Getty Images*

By Helen Briggs

The professor of engineering

One university that is making inroads into encouraging more women to study engineering is the University of Southern California (USC) in the US.

Yannis Yortsos, Dean of the Viterbi School of Engineering, has set out to "change the conversation" about what engineers do, who they are, and what they look like.

This year 44% of engineering students entering the school were women.

"How do you shatter stereotypes about what scientists and engineers do?" he asks. "Fundamental change that has to happen."

A key part of the solution, he says, is changing perceptions of engineering as "a very dry profession, a nerdy profession" to a career that has important societal benefits.

He cites the 14 Grand Challenges for Engineering in the US as an example of how engineering can be a force for societal good, with challenges ranging from reverse-engineering the brain to securing cyberspace.

He believes engaging more women in engineering is essential in a changing world where technologies like AI and quantum computing will become ever more important.

"It's an economic imperative," he says. "To be competitive as a nation you need to engage all of your resources in that competition."

His drive comes from his upbringing on the Greek island of Rhodes. He studied in Athens, then went to the US to study for a PhD in chemical engineering at the California Institute of Technology, before joining USC.