planes, trains, and automobiles have fascinated Ram Ganeshan since he was a child. Adding warehouses, manufacturing facilities, and suppliers to the mix led him to a dynamic field of study in graduate school -- supply chain management.

“Getting products and services from Point A to Point B in the best possible way” is how Ganeshan, a professor in the Operations & Technology Group at the Mason School, describes his field. His research in large part asks a simple question -- how can companies be smart and sustainable?

The answers are complex and have great repercussions for both business and the environment. “Do more with less may seem like a cliché, but it’s good business practice,” Ganeshan says. “To keep competitive, companies need to add value by making a better product cheaper, and at the same time be sensitive to environmental and social concerns.”

As an example, Ganeshan offers the slim new Apple MacBook Pro on his desk. It’s smaller, thinner, lighter than the previous version, uses a recyclable aluminum unibody instead of dozens of mined materials, contains fewer toxic substances, uses less electricity, and is faster and cheaper than the previous incarnation.

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In his classes, he likewise breaks down products such as iPods with his students, and assembles an entire miniature automobile to get a sense of the hundreds of parts and how they come together. “We try to see where the parts are from all around the world,” he says. “We want to know what kind of margins the manufacturers are making so we can understand the processes involved to make a product like, say, a $200 iPod.”

A firm believer in learning by doing, Ganeshan makes sure there are plenty of live cases and simulations in his classes. He puts students in situations where they’re actually managing supply chains. They have to figure out to design and determine quantity, as well as planning, sourcing, manufacturing, and delivering to the customer.

His students likewise help in his research and consulting projects. “They run the numbers for me and get to see a live situation where they learn what the client really wants,” he says. “It’s a good way for me to transfer knowledge into the classroom.”

Ganeshan writes the blog Operations Buzz, which explores how companies can build smart and sustainable operations. As part of the blog, he interviews leaders in industry and small business to get insights into managing operations. As he builds it, he hopes the blog will become a resource for students on the latest goings-on in supply chain management.

With his field changing quickly, Ganeshan has to likewise sprint to keep his courses up to date. He’s looking this year at Toyota, one of the most innovative manufacturers in the world, and discovering why they are having so many problems. “It’s always a mix of what’s going on around you,” he says. “I truly love what I do.”

And, not surprisingly, he’s good at puzzles, too.