

# MoMEntum

Department of  
Mechanical Engineering  
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## Andy Mech Urges Students to Leave More Than a Gravestone Behind

When Andy Mech teaches his students about renewable energy, heat transfer, and thermodynamics, he isn't just giving them lessons on scientific principles. The veteran professor also tries to impart some wisdom that goes beyond the standard mechanical engineering curriculum: the concept of legacy.

But he says he'd never really broached the subject directly until he joined a multidisciplinary team of faculty who tackled the topic of appropriate technologies. While talking to students from the Home for Environmentally Responsible Engineering (HERE) program, he recalls, "I just felt at that moment that it was an opportunity."



Students in Dr. Mech's classes are challenged to think beyond classroom lessons, and into what they can offer society.

On the white board that day, he drew a gravestone with 'RIP' on it. "That may be all that's left of you unless you think of things differently," he told the group before segueing into the idea of one's life legacy.

"I was told by the humanities instructor [who was present] that he was kind of stunned," Mech adds. But for the mechanical engineering professor, the topic is—or should be—very much ingrained in the engineering discipline. Looking back on his former career as a consulting engineer, Mech recalls the role he played in bringing the first hospital to a small town in Illinois.

Even though no one in that community knows who he is, he says that helping build a facility that provides life-saving care exemplifies the inherent benevolence that is part of engineering. And, he adds, "That's worth more than money."

The concept doesn't only apply to engineers, of course. That's just Mech's classroom audience. We all have the opportunity to leave a legacy, and it doesn't take feats of engineering, like a hospital, to do so.

Investing in the lives of those around us, even with so little as a few encouraging words, can make a lasting impact. And, he adds, it feels good to do, too.

"We have so much potential here—even the student who feels like they have nothing to offer has so much to offer," Mech says. "One of the greatest feelings as a professor is knowing that there's somebody out there who was struggling to get through Rose, and you picked them up."

A legacy is not like a trophy, he says.

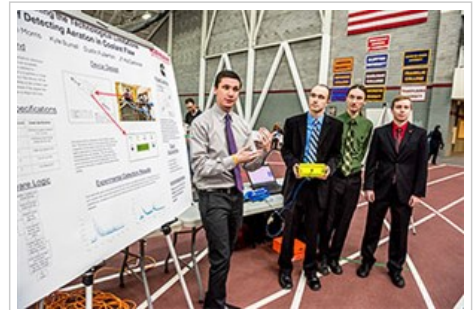
"You don't do it for the applause, but you do it because people need something and you can help them. It doesn't really matter if people know our name or not, as long as we leave something positive behind."

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### Mechanical Engineering Seniors Show Off Their Skills to Potential Employers

It isn't always easy for employers to get a sense of a candidate's abilities based on a resume alone. Even more so when the candidate in question is still a college student. But at this year's Winter Career Fair, 14 mechanical engineering senior design teams had an opportunity to showcase their work to recruiters from more than 125 companies.

"Here, they're around practicing engineers who are worried about things like implementation and ease of use [in designs] ...it's a great way for students to be exposed to those questions," explains Associate Professor of Mechanical Engineering Allen White. "And it gives employers a chance to see the students' engineering approach as opposed to just looking at a resume."



Fourteen mechanical engineering senior design teams had an opportunity to showcase their work to recruiters from more than 125 companies at this year's Winter Career Fair.

Kyle Burrell, Dustin Fullerton, and JT McCammon hoped the opportunity to talk about their project for Cummins would help them land interviews. Sharing the details of the device they developed to improve the engine maker's recommended de-aeration process gave the trio a chance to show their problem-solving skills to potential employers.

Team member Austin Morris, who has already accepted a job offer from Allison Transmission, says that Cummins wanted to eliminate the potential for human error, and make the process more efficient. "Everything is very user-friendly, all the data gets exported to the computer. We're eliminating all the guesswork in the system," he says.

It's the type of real-world experience that employers are looking for in graduates. But presenting the projects as a part of the career fair serves another purpose, according to Assistant Professor of Mechanical Engineering Ashley Bernal.

"It allows students to give back to the school, by showing employers how valuable their experience has been," she says. "It helps pave the way for future Rose-Hulman students as well."

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### Jerry Fine Retiring

When Dr. Jerry Fine retires at the end of the spring quarter, he'll celebrate his new-found freedom on an Alaskan cruise with his wife, Julie. Over his 30-year career at Rose-Hulman, Dr. Fine has worked under the leadership of three different department heads: Bob Steinhauser, David Purdy, and Lori Olson. Each of whom, he says, "has been wonderful to me."

And he's witnessed a lot of changes, the most significant of which was the institute's transition to co-education, an event he calls "a watershed" for the school.

He is looking forward to having more time to think and read, continue his work on a biomedical fluid mechanics book he's authoring with colleague Lee Waite, and especially spend more time visiting his daughters. He admits, however, "I'm gonna miss this place. It's been very, very good to me."



Dr. Fine will conclude 30 years in the classroom at Rose-Hulman at the end of this quarter.

### David Fisher Splits Time Between ME & CSSE Departments

Associate Professor of Mechanical Engineering and 2000 alumnus David Fisher is parlaying his passion for robotics into a crossover role that has him teaching both ME and CSSE courses. Fisher co-directs Rose-Hulman's growing robotics minor and is striving to make programming course materials, developed by the institute's faculty, available online through the Rosebotics.org project.

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### Rick Stamper Returns to the Classroom



Dr. Stamper is looking forward to returning to the classroom full time next fall.



Dr. Fisher, who co-directs Rose-Hulman's growing robotics minor, is splitting his time between ME and CSSE.

Over nearly a decade, Rick Stamper has been a steady hand serving in a variety of administrative roles. He spent two years each as the head of engineering management and interim head of Rose-Hulman Ventures, three years as dean of faculty, and most recently, one year as the interim vice president for academic affairs. During that time, he's only had time to teach a handful of classes.

With the hiring of Dr. Anne Houtman as the institute's new vice president of academic affairs, Dr. Stamper will be free to return to the classroom full-time next fall.

He left industry for the classroom, so although he's enjoyed these various roles, Stamper says he's "thrilled" to get back to teaching.

"As VPAA, if you're doing the job right, you're looking out for future students," Stamper says. A teaching role, he adds, includes the joy of getting to know the students he's serving.

"There's a level of [student] engagement being a faculty member that you don't get as an administrator, that's really rewarding and fun."

