Facing the global challenge
Why complacency is not an option

THE OUTSOURCING OF BLUE COLLAR JOBS OVERSEAS has been going on for quite some time. However, a more recent phenomenon has been the outsourcing of white collar jobs.

It is estimated that China will be producing nearly one million BS engineering degrees per year in the relatively near future. This, coupled with growing pressure from India, Brazil, the EU, and others, makes it imperative that the relatively few engineering graduates in the United States (currently ~65,000 per year) are the very best in the world.

Frank Pavlis has provided $2 million to do just that. His generous gift will initiate a four-year global leadership program at Michigan Tech.

When Pavlis graduated from Michigan Tech in 1938, he was the first in his family to make it through college, graduating at the top of his class with a BS in Chemical Engineering. That education enabled his highly successful career, which began in 1940 at Air Products and Chemicals Inc., a Fortune 500 company with annual revenues exceeding eight billion dollars, half of which are derived from over 30 foreign countries. He retired in 1980 as its vice president for international world trade.

In a global economy, it won’t be enough to be just an engineer, notes Pavlis. With much of the world’s manufacturing moving to Asia, it’s imperative that American universities respond. “The current global challenge is frightening, and will gradually affect the entire United States. American higher education institutions need to adapt, or opportunity will pass them by.”

Creating a program for global leadership at Michigan Tech is just the sort of adaptation required. “We can’t stand still as the world is constantly advancing, and education is no different.” Pavlis stresses that complacency is not an option. Throughout history, nations have risen and fallen on the world scene, and with the ascendency of China, “the future of the world is likely to be in the East.”

American engineers will need a broader set of skills to compete—skills similar to those Pavlis drew upon to help Air Products become a leader in the global industrial gas and specialty chemical market. “My goal is to persuade others to contribute suggestions, personal time, and funds in support of a global leadership program at Michigan Tech,” he says, adding: “I want to demonstrate leadership by investing in it.”

After graduating from Michigan Tech, Pavlis earned an MS in Chemical Engineering from the University of Michigan and later completed the Harvard Business School’s Advanced Management Program. After turning down a job with Shell Oil, he became one of the first employees at Air Products, then in Detroit, where he was paid $3 a day as chief engineer. He helped design an affordable oxygen generator, which became the foundation of the company’s product line.

“Air Products was often looked down upon in the early years because we were the little guy and were competing against the big companies,” Pavlis recalls. “Now, Air Products dominates some of those markets.” Like Air Products in 1940, Michigan Tech is “the little guy,” Pavlis says, at least compared to the other two universities he attended. “That’s why I chose to invest in Tech. I like the little guy.”