Collaboration Builds Excellence at the University of Maryland

“You can be the smartest engineer in the world but if you can’t execute you can’t be successful.”

~ John H. Cable, RA, PMP, Executive Director, Project Management Center of Excellence, University of Maryland, USA

John Cable joined the Civil and Environmental Engineering department at the University of Maryland, A. James Clark School of Engineering (UMD) in 1999 with a charge to set up a project management program that would meet the needs of all engineers on campus, not just those based in his department.

Under his stewardship, the school launched a project management master’s degree and an undergraduate minor. In 2005 the program became the first housed in an engineering school to be accredited by PMI’s Global Accreditation Center for Project Management Education Programs (GAC) and today the UMD Project Management Center for Excellence offers 23 courses plus a MS designed to lead students towards doctoral study and a full PhD program.

SUPPORTING STUDENTS AND THEIR EMPLOYERS

The typical UMD graduate student is a full-time working professional in an engineering field, so the choice to return to education is a significant one. The student body comes from a blend of different sectors: a third from design, construction and capital assets, a third from systems engineering and the final third from computer science. Course electives have to appeal to a wide range of interests and be applicable in the workplace. As many students receive funding from their employers towards their studies, it’s important the courses be recognized and credible. “GAC accreditation is like having the Good Housekeeping seal of approval,” Professor Cable says. “It also gives the program a competitive advantage and lets employers know they are sending their employees to a legitimate program.”

On top of the standard curriculum, Professor Cable and his team work with selected local employers to better support students and improve project management practice in the Washington, DC metropolitan area. “We create
specialized courses in order to be responsive to customers,” he says. He gives the example of a local government department where the project management skills of the staff did not match their level of engineering excellence. “The head of department wanted a short project management course so we did the research and put together a three-day workshop,” says Cable. After beta testing, 250 engineers went through the workshop in groups of 20. “It dramatically improved their ability to perform in their project management roles,” Professor Cable added.

By working collaboratively with students, employers, practitioners and academics UMD has created a world-class program that is responsive, flexible and academically rigorous. Students graduate with a competitive advantage and the ability to balance their engineering with proven project management techniques to help them execute their ideas successfully.

EVALUATING AND IMPROVING

Part of ensuring the courses remain relevant for the needs of students is a robust approach to curriculum development. “We take the concept of continuous improvement very seriously,” says Cable. One of the areas he looks for feedback is from the employers who send their students to UMD. “I met the Navy officer responsible for placing students with us to discuss the course,” he says. “She told me that officers really like the program and it got strong feedback but that they really needed more background in sustainability.” Taking this feedback into consideration, Cable initiated some analysis into what it would take to launch a rigorous sustainability module. The team spent a semester analyzing the appropriate course content and surveyed the student body about their interest in the proposed course. An incredible 72% said they would absolutely or most likely take this new elective so Cable created a heavyweight addition to the syllabus which launched in the summer of 2014.

The faculty at UMD works collaboratively to constantly evolve and improve the curriculum. Professor Cable has designed class evaluation forms distinct from the standard ones provided by the university with the aim of getting targeted, qualitative feedback. The results are shared each semester with all faculty members so everyone can see the responses to all classes. “This builds in competition amongst the faculty, which is a good thing,” Cable says.

Students are also surveyed at graduation and then again three years after graduation where they reflect on their experience at the school and how this has helped them professionally. “Teachers also talk honestly to students so if anyone senses an issue or a need that has gone unaddressed that is taken back to the faculty,” Cable adds. “We are all active in our own professional and international communities.” This immersion in real world practice serves to continually improve and refresh the curriculum content.

BRINGING TOGETHER PRACTITIONERS AND ACADEMICS

The school’s annual project management symposium is one of the activities that demonstrates just how the faculty works collaboratively in the local and international community. “The symposium exceeded our expectations in 2014,” Cable explains. “The strapline is ‘academically rigorous and practically applied’ and we brought together students, graduates, employers and professionals over a two-day event. We wanted to attract the thinking members of our community; those people who are always trying to do things better.”

The symposium, which has received sponsorship from PMI’s Global Accreditation Center for Project Management Education Programs (GAC) and support from a local Chapter of PMI, was initially conceived to support practitioners in the area. “I wanted to create a good dialogue,” Cable says. “There are plenty of professional activities available locally but there wasn’t anything that moved the academic material forward.” In the first year of the symposium around 10% of delegates came from overseas and another 10% from outside the Washington, DC metro area, showing that an event originally focused on the local population had international appeal.
UMD Faculty: A World-Class Program Starts with People

The Project Management Center of Excellence at UMD has 4 full-time and 14 part-time faculty. “Students appreciate that they are taught by practitioners at the top of their field,” Cable explains. “They do their day job and then teach at the university in the evenings. We see the value students put on this in the course evaluation forms at graduation time. They really feel that it adds credibility to the school and their studies.”

Faculty members actively seek out best practices from other courses and universities, regularly bringing back ideas after collaborating with other academics through informal exchanges or conferences. In addition UMD’s project management faculty reflects a rich combination of PhDs, project management professionals and industry executives.

At-A-Glance: The University of Maryland A. James Clark School of Engineering’s Project Management Center for Excellence

Location:
- College Park, Maryland, USA

Program Offerings:
- Master of Engineering in Project Management*
- Master of Science in Civil Engineering (major in Project Management)*
- Doctor of Philosophy in Civil Engineering (major in Project Management)*
- Graduate Certificate in Engineering
- Undergraduate minor in Project Management*

* GAC accredited

Delivery methods:
- On campus
- Online

For more information, visit http://pm.umd.edu.

About the PMI Global Accreditation Center for Project Management Education Programs (GAC):

GAC is the world’s leading specialized accrediting body for project management and related degree programs. GAC accreditation serves two fundamental purposes:

- It confirms that a program has been carefully assessed and that it meets comprehensive international quality and scope standards.
- It makes a public statement about the commitment of the institution to ongoing evaluation and continuous improvement.

GAC accredits degree programs at the bachelor’s, postgraduate and doctorate program levels. GAC also assists faculty and universities in the improvement of project management degree programs.

For more information, visit www.GACPM.org.