SEVERAL YEARS after he joined the senior professional staff at the Johns Hopkins Applied Physics Laboratory (APL) in 1973, Allan W. Bjerkaas began teaching in the Hopkins programs for working engineers, now known as the Whiting School’s Engineering and Applied Science Programs for Professionals (EPP). He has taught in the programs in Applied Physics, in Applied and Computational Mathematics, and in Technical Management and has chaired the programs in Applied Physics and in Information Systems and Technology. In 2001, Bjerkaas became the associate dean for EPP while still keeping his responsibilities as an APL group supervisor. In 2005, he retired from APL to devote full-time to EPP as associate dean.

Today, Bjerkaas oversees EPP’s $15-million operating budget and helps manage the 14 master’s degree programs. EPP has about 2,200 students enrolled at any one time and more than 400 faculty members teaching approximately 460 courses.

Abby Lattes, director of marketing and communications for the Whiting School, sat down with Bjerkaas to talk about his vision for EPP, the challenges he faces, and what his priorities are for the coming years.

**Q: (Abby Lattes): Can you expand on the critical success factors as adopted in EPP’s long-term strategic plan, to be “the best provider in the country of graduate education for working engineers and applied scientists”?**

**A: (Allan W. Bjerkaas):** Our commitment to academic excellence is critical to both our mission and success—this excellence can be found in the quality of our faculty, our academic offerings, and our responsiveness to student and employer needs.

Our faculty are more than talented instructors. They are also working professionals—practicing engineers and applied scientists—who are leaders in their fields. These faculty teach at EPP because they want to be there to share their knowledge and serve as mentors.

In addition, the breadth and depth of our classes are superb and are an important aspect of our reputation for excellence. And finally, and most important, the quality of our curriculum enables our students to remain at the leading edge of knowledge and innovation.

To provide the best, most relevant classes and degree programs, we are very data-dependent, as most engineers will appreciate. It’s an ongoing process that includes surveying our students, graduates, and faculty about their needs and what classes and degrees they’d like us to offer. Our Advisory Council, with members from academia and industry, helps guide our decisions. In addition, we talk with top management in companies and government agencies to ensure that we’re aware of trends in the marketplace and can remain ahead of the curve in terms of courses’ relevancy and preparation for the demands of industry and government.

**Q: What is the typical profile of EPP students and how are their needs different than those of full-time graduate students?**

**A: Our students are highly qualified academically, are very focused on why they’re in school, and are aggressive learners. They are working engineers who have real-world, practical knowledge of their fields and of the skills they need to acquire to remain competitive and achieve professional advancement. Convenience is also critical to our students. Most of them work full-time, and because they tend to be older than full-time graduate students, they’re often balancing the demands of family life as well. Among the ways we respond to these particular needs are offering courses at multiple locations throughout the region and providing a growing number of online classes and programs.**

**Q: What are your highest priorities right now for the EPP programs?**

**A: Our number-one priority is to increase our online offerings, as this is both something our students are requesting as well as an area with tremendous growth potential. We now have 29 online classes in four areas: Environmental Engineering, Science, and Management; Computer Science; Electrical and Computer Engineering; and Information Systems and Technology. Beginning next year, we will offer 33 online classes and, in collaboration with the Krieger School of Arts and Sciences, a new online master’s degree in Bioinformatics, starting this fall.**

**Q: How are EPP alumni involved with the Whiting School and what plans do you have for this community?**

**A: Alumni play a very direct role in EPP, often as faculty and mentors for students. We are actively looking for new ways to get alumni more involved in program initiatives as well as in the alumni activities of the Whiting School.**

We want all EPP graduates to know that they are members of the Whiting School’s Society of Engineering Alumni (SEA), which provides access to a wide range of professional and networking opportunities, programming, and support for the School.

In addition, the Whiting School alumni office is working with EPP to better establish and maintain the connections among all
A long-time educator tells why the region’s practicing engineers and applied scientists turn to the Whiting School—despite the growing competition—for the programs they need to stay on the leading edge.

Engineering graduates. Among the initiatives we’re exploring are building an alumni network that will help strengthen connections between EPP and the corporate world; augmenting our enrollment activities; and providing enrichment opportunities, such as guest lecturers for our students and faculty.

In order to do this, we’re planning a series of events for current EPP students and graduates to educate them about the SEA’s work, the community of Engineering alumni that they are or will soon be a part of, and the many ways they can be involved in the life of the Whiting School.

Q: What changes do you see regionally that may affect EPP?
A: The U.S. Department of Defense’s Base Realignment and Closure (BRAC) process will certainly have an impact on EPP. The military base closures from other states are expected to bring 10,000 military personnel and 30,000 civilian contractors to this region, many of whom are engineers who will need further training, particularly in computer science and electrical engineering. Most of these people will be located near Aberdeen Proving Ground in Harford County and Fort Meade in Anne Arundel County, and we are working closely with the counties’ economic development councils as they conduct needs assessments. We can help educate this workforce, plan to market our offerings to this group, and we will be well-positioned to provide these new residents with educational opportunities tailored to their needs.

Q: What are your funding priorities right now, in terms of potential gifts to EPP and the Whiting School?
A: I would direct funding where the gift would have the greatest impact—facilities and course development to support our online offerings.

Clearly, philanthropy is important to the growth of EPP. Without the boundaries of the traditional classroom and campus, there is increased competition for students in distance education programs, and now we’re not just competing with local and regional schools, but with schools across the country. What differentiates us is that our online classes are more interactive, and we believe better prepare students for the workplace.

To provide the best possible experience for our students, one of the first things we need is to create well-equipped multimedia classrooms where instructors can record lectures that are then made available through streaming video as another content delivery mode in our already content-rich online courses. We also need to invest in the development of new classes and new curricula that respond to changes in technology and the marketplace.

Q: What role do you see corporations playing in EPP’s continued growth and success?
A: Corporations have always played an important role since the vast majority of our students have their tuition costs reimbursed by their employers. We also have a great track record with educational partnerships and understand how our special corporate relationships can be mutually beneficial. The breadth of our programs and the convenience we offer make us very attractive to employers. In return, they keep us abreast of trends, provide students, and educate us about new offerings we need to provide.

Right now, we’re developing new marketing strategies specifically geared toward corporate management. They know of our reputation, but we can do a better job of telling them about the breadth of our programs and the opportunities for education we can provide to their employees.

Q: Any additional comments?
A: Academia often touts the PhD as the pinnacle of education, but that’s true only if the focus of your career is on research or teaching. The world is full of working engineers and applied scientists who use their skills every day to develop new products and find solutions to pressing problems in government and industry. These professionals need to continue learning new technologies and broadening their skills, and for them a master’s degree or advanced certificate makes the most sense. EPP will continue to develop and refine programs to meet their needs—in keeping with the overarching Johns Hopkins mission of lifelong learning.

For more information on Engineering and Applied Science Programs for Professionals, visit www.epp.jhu.edu.