

Donor Spotlight

Internships: Building Pipelines and Relationships

Bucks County Community College (BCCC) places a strong accent on “community” as it continually works with area businesses to build synergy and profitable partnerships that benefit the school, the company, and most important, the students.

Tobi Bruhn, Executive Director BCCC Foundation and Alumni Relations, said the college is seeking ways to work with community businesses and organizations that go beyond financial donations such as internships, mentorships, and filling equipment needs. “We are looking for more opportunities to engage and educate our students,” he explained. “And we are always looking to develop more partnerships.”

Lockheed Martin Space Systems Company—Newtown is one example of a win-win partnership involving student engagement in the form of internships. The Newtown facility is a major unit of Lockheed Martin Corporation, a global security and aerospace company headquartered in Bethesda, Maryland.

While Lockheed Martin has offered internships to college students for many years, the program has been weighted to four-year educational institutions. Expanding the program to a community college is new, with BCCC being the first two-year college internship program at the Newtown unit. Throughout the entire Delaware Valley operations this past summer, Lockheed Martin employed 30 interns, and three students who worked at the Newtown operation in mechanical and software engineering as well as finance hailed from BCCC.

“The relationship with Lockheed Martin started about four or five years ago,” Bruhn noted. “Recently, the foundation appointed a board member from the company.”

Bruhn is referring to Dr. Dana “Keoki” Jackson, Vice President of Navigation Systems at Lockheed Martin Space Systems Company—Newtown, who has been with the company for 15 years and moved from the San Francisco area to Bucks County in January 2010.

“Lockheed Martin was looking to become engaged with the Delaware Valley community, particularly Bucks County,” Jackson said about his arrival to Newtown. “At that time, the BCCC Foundation had an opening on its board and was looking to increase the diversity of its members. Marshall Case, Vice President of Infrastructure Services at Lockheed Martin Space Systems Company, suggested I get involved with the Foundation. It’s a fantastic opportunity to help the college and aligns with the things Lockheed Martin is doing. Certainly, from Lockheed Martin’s perspective, the internships build a pipeline of new employees and a strong workforce for the future. We are trying to recruit people earlier and keep them several years, and then retain them as full-time employees. The internships are not just for grooming employees for future work; the interns really contribute now. They have a great deal of energy and current skills.”

All three BCCC interns worked on the Global Positioning System III (GPS III) program, which will provide the next-generation of navigation satellites for the U.S. Air Force. Jackson noted, “Lockheed Martin is currently responsible for two-thirds of today’s satellites for GPS.”

John G. Swearer, who studied general engineering at BCCC and transferred to Drexel University this fall, spent the summer gaining hands-on experience as an intern with Lockheed Martin’s parts, materials, and processes team. He helped to resolve hardware and parts issues with the U.S. Air Force’s technical representatives while working on the GPS III system.

“The internship really provides nice real-world applications to classroom instruction,” Swearer said. “It is one thing to learn concepts and formulas in class, and another to apply them in the real world.”

Swearer reported to Jeff Reifsnyder, Senior Manager of Specialty Engineering with the GPS III program and an employee of the company for 32 years. “We found the internship program to be valuable,” Reifsnyder said. “It is a great thing for building a relationship with the community college. And for the students, it gives them the opportunity for on-the-job training and helps them determine whether what we do is of interest to them. We try to give the interns meaningful work assignments so that they can get a good feel about the true nature of our business.”



Pictured from left to right:
Andrew D. McGalliard, John G.
Swearer, and John J. Ramirez.



Lockheed Martin – Newtown campus

A third Bucks student who has participated in the internship program with Lockheed Martin–Newtown is Andrew D. McGalliard. He has spent the past two summers working with the company, and is currently working part-time at the Newtown facility while in his second year at Temple University as a computer science major.

McGalliard's responsibilities have included testing satellite functionality and tool construction. His supervisor, Tom Caro, who as Software Engineering Manager manages the GPS III satellite simulation team, had high praises for the internship program in general, and McGalliard in particular.

"Andrew had a real desire to learn and a willingness to pick up any task that we gave him. He worked on software that allows for automatic updates, whereas before, the updates were done manually." Caro, who has been with Lockheed Martin for 10 years, added, "Andrew's presence off-loaded the team's key developers, lightening their workload."

McGalliard noted, "Professor Christine Delahanty had encouraged me to apply for the internship. At Lockheed Martin, I was able to utilize the Java I learned at Bucks. I enjoy what I'm doing at the company and would be more than happy to stay with Lockheed Martin for a while after graduating."

Jackson complimented the college's efforts on identifying outstanding students for the internship program. "We are pleased with the quality of interns," he said. "And we are looking forward to working with next year's group. Our hope is to make this a long-term partnership."

Lockheed Martin Corporation employs around 123,000 people worldwide, and its net sales in 2011 were \$46.5 billion; the Newtown facility employs about 1,000 people. According to Dee Vallera, Manager of Communications & Public Affairs, "The unit designs and develops, tests, manufactures, and operates a full spectrum of advanced-technology systems for national security and military, civil government, and commercial customers. The Space Systems Company portfolio includes a full range of remote sensing, navigation, meteorological, and communications satellites and instruments; space observatories and interplanetary spacecraft; laser radar; ballistic missiles; missile defense systems; human space flight systems; and nanotechnology research and development."

Vallera also noted, "The Newtown facility builds components for Lockheed Martin government programs, such as the Advanced Extremely High Frequency system, which provides global, highly secure, and protective communications for war fighters operating on ground, sea, and air platforms. Another program is the Mobile User Objective System, which greatly expands the capacity of UHF communications and aid the U.S. military as it increasingly relies on more agile and mobile forces."

Bucks County Community College, founded in 1964, is a two-year public institution that offers nearly 90 wide-ranging academic programs, services and facilities at three campuses: its main campus in Newtown as well as an Upper Bucks Campus in Perkasie and a Lower Bucks Campus in Bristol.

Written by freelance writer Barbara Long, who also works as an academic tutor and assists with the garden restoration at Bucks County Community College.

John J. "Joey" Ramirez, an Actuarial Science major who transferred to Temple University this fall, just completed his second summer internship with Lockheed Martin in the finance department for the GPS III program. "A lot of people don't realize that there are satellites being built in Newtown," Ramirez noted. He started his internship in the area of audit preparedness to help make sure Lockheed Martin is ready for a government audit.

"You gain experiences that you can't gain in the classroom," Ramirez said of the internship program. "You also set yourself apart when transferring to another institution and on your resume when applying for a job."