IST Corporate Associates
Council for Student Engagement
2014 - 2015
Message from the Interim Dean

It has been an eventful year for the College of Information Sciences and Technology (IST). As most of you know, Dave Hall recently returned to his role as a research faculty member, as did Senior Associate Dean Mike McNeese. On August 1, I became interim dean and I am honored to serve the college and work with our partners during the coming academic year. With new leadership at both the college and University levels, I know that I will find both challenges and opportunities ahead!

Speaking of opportunities, many of our students are supported by your generous contributions as Corporate Associates. These contributions allow our students to explore their interests and prepare for their future careers in many ways. For example, they fund scholarships to cover internship credit fees, send students abroad or on other travel related to professional development, and enable a range of student-proposed enrichment activities. At a more specific level, your support has been critical for the IST Diplomat Leadership Academy, which is already playing a major role in developing young leaders and student ambassadors in IST.

Looking ahead, IST is continuing to enhance our online education program. As you know, we have a unique presence in the University’s online education programs—we are the only college that offers all of its undergraduate curriculum online. We strive to give our online students the same experience as they would receive in our classrooms and your contributions are funding novel experiments with teaching technology that will give IST an edge in delivering high-quality learning experiences online. At the same time, we welcome suggestions about online education topics or formats that can better support your own organization’s professional development needs.

Furthermore, your input has encouraged us to reach out to a broad range of faculty for classroom interaction. We are very excited about new initiatives relating to big data analytics, spreadsheet modeling of a wide range of problems, and agile development methods. Many of our professors are delighted to have guest speakers in their classrooms, and we are always happy to make connections when possible.

President Barron recently emphasized the importance of Engaged Scholarship for all undergraduates. This has been a core feature of IST’s undergraduate education from the beginning, but we are continually in search of new ways to provide these experiences, whether as internships, service learning, undergraduate research, or global experiences. We look forward to a continued collaboration with you in these efforts!

Finally, thank you once again for your support of our students and the college.
For our Corporate Associates, we help businesses maintain their talented workforce by offering pathways for professional development or advanced education credentials that satisfy employee and industry needs. We’d like the opportunity to learn more about how the College of Information Sciences and Technology (IST) can complement your organizational professional development needs with our online degrees and certificates.

IST recognizes that the economic and workforce needs of today’s business environment are driving professionals to return to the classroom. These learners seek a convenient and flexible learning environment, which allows for the maintenance of current personal or career responsibilities without relocation.

To support these students, IST has dedicated significant financial and human resources to extend our learning environments beyond the physical walls of IST. We offer a comprehensive portfolio of graduate and undergraduate degree and certificate programs delivered online. These degrees and certificates, taught by resident IST faculty, offer learners the opportunity to earn a high-quality degree with the same academic rigor and quality as our resident degrees.

IST launched its online initiative in 2004, six years after the start of the World Campus. From an initial class of 100, the program has grown to a combined 1,000 graduate and undergraduate matriculated students. IST is only the Penn State academic college that has its entire undergraduate curriculum online, represented by the B.S. in information sciences and technology (BS-IST) and the B.S. in security and risk analysis (SRA).
IST also offers three masters of professional studies (MPS) programs which include degrees in information sciences with an option in cybersecurity and information assurance (MPS-IS), enterprise architecture (EA), and homeland security with an option in information security and forensics (ISF).

Embedded certificates are offered in the BS-IST, SRA, the MPS–IS, and EA options. Additionally, students who earn the undergraduate SRA degree or graduate degree in Information Sciences or Homeland Security earn National Security Agency and Department of Homeland Security certification as professionals in information security, reflecting our college’s commitment to corporate-government partnerships.

Students who graduate from these programs have not only mastered the material, but have also developed strong critical thinking and problem-solving skills, honed through the self-discipline and self-management of the virtual learning environment. Students refine their leadership skills in managing teams at a distance through collaborative projects and teamwork exercises required in the curricula. These projects enable our students to directly apply skills learned in class to real-world problems.

Furthermore, IST has developed two “mini-MOOCs,” online service modules, addressing pertinent issues such as enterprise architecture and personal and small business computer security in the cyber age. IST is also collaborating with Penn State’s Techcelerator to offer a module on understanding intellectual property.
For Jules Dupont, a sophomore at IST, the highlight of his freshman year was traveling to Seoul, South Korea, to present research on social network deviance at a prestigious international conference.

Dupont assisted Anna Squicciarini, assistant professor of IST, with a research project that focuses on abusive behavior in social networks. Towards the end of the fall 2013 semester, Squicciarini submitted a proposal describing the project to the 23rd Annual International World Wide Web Conference (WWW 2014), which was held April 7-11 in Seoul, Korea. The international conference addresses the future direction of the World Wide Web.

The trip to Seoul for the WWW2014 conference was an “exceptional opportunity” in several ways, Dupont said. He was able to attend presentations on a variety of topics and met “several prominent individuals, including a few Penn State alumni who now work at Microsoft Labs.”

Dupont’s involvement in faculty research at IST is an example of the type of engaged scholarship that Penn State wants to elevate in undergraduate education. Engaged scholarship, which encompasses a wide variety of out-of-classroom academic learning experiences that complement in-classroom learning, is recognized as an important component for student success, both while earning a degree and after graduation.
Greenhouses were constructed as models for others to see and become interested in starting a greenhouse business. The greenhouses are affordable, and almost all of the materials used to construct them come from the local area. They provide an extended growing season along with the ability to grow plants people otherwise would not be able to grow.

Another student who pursued and took advantage of engaged scholarship in IST is Greg Wenner, a participant in a Humanitarian Engineering & Social Entrepreneurship (HESE) trip to Sierra Leone.

The Penn State HESE program contributed to the development of a medical device for testing and evaluation of patients in low-resource environments for the Mashavu program. In these areas unpaid, government-trained community health workers provide basic health services to their communities, rather than doctors.

Of his trip, Wenner said, “I would like to give my sincerest thanks to the Corporate Associates for giving me the ability to have such an amazing experience. Without your financial assistance, I would not have been able to go. Words cannot describe how lucky I feel to have been able to participate in this trip.”

Students work on the data collection process with Community Health Workers (CHWs). CHWs are unpaid, government-trained health workers who provide very basic health services in their communities.
The College of IST has great numbers!

Since IST’s inception, our student success statistics have been overwhelmingly positive, and since 2007, on average, 86 percent of our graduates have been placed in jobs or accepted into graduate programs before they even graduate.

Salaries have also held steady for our students as indicated on the salary chart. This information has been beneficial to many individuals, from current students to prospective students, administration, and corporate partners.

Both the administration and our corporate partners are interested in seeing where our students are locating after graduation. It is no surprise to see that 78 percent of our students are being placed in the Northeast, with the heaviest concentration of students going to Pennsylvania, Virginia, and Washington, D.C.

Industry sector information is beneficial to our students and faculty as well. One of the first questions we hear from students is, “What kinds of jobs can I apply for with this degree?” The industry sector information has been very valuable in understanding what graduates with an IST or SRA degree can do. We have the ability to further dig into the information to see what the titles are for these students and specifically which degrees, IST or SRA, are landing where.
Average Annual Salaries*

<table>
<thead>
<tr>
<th>Year</th>
<th>Salary</th>
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<tbody>
<tr>
<td>2013 - 2014</td>
<td>$62,704</td>
</tr>
<tr>
<td>2012 - 2013</td>
<td>60,132</td>
</tr>
<tr>
<td>2011</td>
<td>63,776</td>
</tr>
<tr>
<td>2010</td>
<td>57,705</td>
</tr>
<tr>
<td>2009</td>
<td>58,580</td>
</tr>
<tr>
<td>2008</td>
<td>55,676</td>
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<tr>
<td>2007</td>
<td>56,677</td>
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</tbody>
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*Statistics shown on this page were collected from the voluntary, self-reported survey completed by graduating seniors. Also note that stats are now being collected and compiled by academic year instead of by calendar year.

Student Employment by Region
(cumulative 2012-2014)

- WEST: 5%
- MIDWEST: 5%
- SOUTH: 12%
- NORTH EAST: 78%

Employment by Industry Sector
(2013-2014)

<table>
<thead>
<tr>
<th>Industry Sector</th>
<th>Employment (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consulting</td>
<td>35</td>
</tr>
<tr>
<td>Financial</td>
<td>17</td>
</tr>
<tr>
<td>Technology / Energy</td>
<td>19</td>
</tr>
<tr>
<td>Government / Defense Contracting</td>
<td>14</td>
</tr>
<tr>
<td>Insurance / Healthcare</td>
<td>6</td>
</tr>
<tr>
<td>All Other Employers</td>
<td>9</td>
</tr>
</tbody>
</table>
The Office of Career Solutions & Corporate Engagement is committed to providing comprehensive services and resources designed to educate students in the areas of self-assessment, career exploration, and career planning. The Corporate Associates have been strong partners in providing outstanding professional internship opportunities to our IST and SRA students while at the same time benefitting from the first-class skills and knowledge that these students bring to their employers. These internships lead to full-time career opportunities where our students can grow professionally and become successful in their life-long endeavors.

We are always looking for ways to highlight these outstanding students and the unique projects on which they work. By showcasing their work, we provide examples to first and second year students as they navigate the process of finding their own internships. Please feel free to contact us if you have an outstanding intern or new hire that you would like for us to highlight.

“Here at HP, I enjoy the people and the culture most. Everyone is very helpful and willing to answer any questions you have. The culture of HP is “The HP Way.” This includes trust and respect for individuals, high level achievement and contribution, uncompromising integrity, teamwork, and more.”

Marilynn Zayan, ’16 IST
2014 summer intern, HP
“The project I am working on is a multi-million dollar Oracle ERP System Implementation affecting many of their business units such as automotive paints industrial coatings. I have really enjoyed the cultural diversity that is a large part of my project team. I have gained experience working with many cultures and effectively communicating with them. Additionally, all of the employees and people that I have interacted with have been nice and are always willing to help.”

Christopher Grega (left), ’15 IST/SRA 2014 summer intern, PPG

“During my summer internship at Air Products, I’ve been working on a transformation that will affect all of IT and many areas of the business. I have been writing user stories (an Agile concept that represents requirements) and planning change management for this pivot towards Agile.”

Kelly Costello, ’17 IST 2014 summer intern, Air Products
The University is committed to equal access to programs, facilities, admission, and employment for all persons. It is the policy of the University to maintain an environment free of harassment and free of discrimination against any person because of age, race, color, ancestry, national origin, religion, creed, service in the uniformed services (as defined in state and federal law), veteran status, sex, sexual orientation, marital or family status, pregnancy, pregnancy-related conditions, physical or mental disability, gender, perceived gender, gender identity, genetic information, or political ideas. Discriminatory conduct and harassment, as well as sexual misconduct and relationship violence, violates the dignity of individuals, impedes the realization of the University’s educational mission, and will not be tolerated. Direct all inquiries regarding the nondiscrimination policy to Dr. Kenneth Lehrman III, Vice Provost for Affirmative Action, Affirmative Action Office, The Pennsylvania State University, 328 Boucke Building, University Park, PA 16802; Email: kfl2@psu.edu; Tel 814-863-0471.

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