ABOUT OUR STUDENTS*

Enrollment: 2,584  
Undergraduate: 1,920  
Graduate: 664  
Freshman SAT average: 1315  
Freshman high school average: 94  
Transfer GPA: 3.45  

*Fall 2012

ABOUT THE THOMAS J. WATSON SCHOOL OF ENGINEERING AND APPLIED SCIENCE

The Thomas J. Watson School of Engineering and Applied Science at Binghamton University, State University of New York, offers innovative, accredited curricula to teach the fundamentals of engineering and computer science and the application of those principles to solve real-world problems. The Princeton Review ranks Watson among the “Great Schools for Computer Science/Computer Engineering Majors.”

ENGINEERING AND COMPUTER SCIENCE

Watson students can major in engineering or computer science -- two fast-growing fields that lead to some of the highest paid professionals today.

Engineering students start out in a common core of first-year courses that provide a broad introduction to the various disciplines before choosing one of five majors leading to a Bachelor of Science degree:

- Bioengineering
- Computer Engineering
- Electrical Engineering
- Industrial and Systems Engineering
- Mechanical Engineering
- Sustainability Engineering (minor)

Senior year, engineering students apply technical knowledge to actual engineering problems through a comprehensive design project. This experience helps bridge the gap between academic and professional careers through exposure to realistic design processes, teamwork and the expectations of practicing engineers.
RESEARCH OPPORTUNITIES

Watson School research awards exceed $10 million, with nearly 20 percent funded by industry. Areas of research include:

- Applied nanomaterials
- Applied soft computing and fuzzy logic
- Bio-MEMS/NEMS
- Computer security
- Control systems
- Electronics manufacturing
- Electronics packaging (thermal, fluids, structural, electrical, materials, reliability)
- Electronics, photonics
- Health systems engineering
- Human factors
- Information hiding and digital imagery
- Information systems
- Materials synthesis and characterization
- Microfluidic devices
- Multi-core computer algorithms
- Networking, virtual machines
- Robotic swarms and swarm chemistry
- Signal processing and communications
- Simulation
- Speech communication
- Solar power, photovoltaic devices
- Supply chain management

STATE-OF-THE-ART FACILITIES

The Watson School has some of the newest and finest facilities in New York state. The $66 million Engineering and Science building provides state-of-the-art space for faculty, students and research program. Future expansions include a $30 million Center of Excellence and a $70 million Smart Energy Research Center, an academic and research space for energy-related disciplines and incubation space for start-up businesses.

ENGINEERING AND COMPUTER SCIENCE

Students who major in computer science enter a field of study that stresses the design, analysis, implementation, management and application of large software systems, as well as systems combining both hardware and software. The Watson School offers a rich set of courses in software design, programming, hardware design and everything in between.

Motivated students may also pursue the Watson Fast-Track in Business Administration Combined Degree program. The program increases a student’s marketability and earning potential, and graduating with an MBA with one additional year of study instead of two saves time and money.

DISTINGUISHED FACULTY

Watson faculty members bring considerable industry and research expertise to the classroom where they mentor students as individuals in small classes. In the lab, they encourage student involvement and make breakthrough discoveries. Engineering faculty research includes complex systems, nanotechnology, information security, electronic packaging and energy and health systems. Computer science faculty research includes improving energy efficiencies of microprocessors and cache memory systems.

CAREER AND ALUMNI CONNECTIONS

The Watson School’s Career and Alumni Connections program is designed to prepare engineering and computer science students to embrace new challenges, adapt the skills needed for a global workforce and help promote a fulfilling and successful future. This program engages alumni and industry partners to create connections, networking opportunities, internships, jobs and research experiences both in the U.S. and abroad.

EMPLOYMENT OPPORTUNITIES

Binghamton University’s 100,000+ alumni impress the world over. Elite employers, such as Microsoft, Apple, IBM, Bloomberg, Amazon, Goldman-Sachs, Lockheed-Martin, Intel, Cisco, Facebook, Google, Ernst and Young, S&P, Citibank, ConEd and Fidessa consistently praise Watson’s programs for producing graduates who have impressive skills and leadership qualities.