Towson University is one of the few colleges in the country that introduces secure coding from the first programming course to ensure that students learn secure and responsible coding.

The SPLASH program includes security modules from the Security Injections @ Towson project (www.towson.edu/securityinjections) to introduce secure coding concepts such as:

- Integer error
- Input validation
- Buffer overflow
- Secure Software Development Lifecycle

SPLASH is an introductory programming logic course that prepares students to program in any language. Upon completion, students will be able to:

- Understand and apply the software development process.
- Analyze problems and design structured solutions.
- Understand, create, and apply simple data types and arrays.
- Create algorithmic solutions using basic control structures (sequence, decisions, loops) and functions.
- Compile, execute, and run simple programs (in C++).
- Understand the importance of secure programming.

Student receive four college credits upon completion.

Poem by Heidi Ngo:

Buffer Overflow:
The data overrides.
Limited space coincides.
Range is all over the place.
Since there is not enough space.

To participate in the program, rising juniors or seniors must have a B average and either an SAT score of 500 on each section of the SAT, a 50 on the PSAT, or at least a 21 on the ACT.

Prior Computer Science and computer programming experience is not necessary.

More at www.towson.edu/splash

Testimonials

“The GenCyber SPLASH program was an incredible opportunity for me. This course played an instrumental role in jump starting my education in the world of computer science. While the topics and pace were challenging & very mentally demanding, the teachers were always easy to reach when I had questions. I would definitely recommend this course to any high school student who is serious about their education and looking to get started in coding!”

- Cyndee Castro

“The GenCyber SPLASH program was a great opportunity and helpful introduction to coding. It was challenging and fun, and progressed at a good pace. The teachers were always helpful, as well as the other students. This course is perfect for anyone who has no previous experience with computer programming.”

- Holly Fromm

“My experience at the GenCyber SPLASH program was an extremely positive one. I went into this course, thinking it would simply be a way for me to practice coding over the summer. I came out of the course having acquired a good grasp of C++, Safe programming, and careers I could go into if I wanted to continue learning about secure coding. The class was challenging, but never to the point where I was horribly lost. I'd highly recommend this course for anyone even slightly interested in programming, regardless of prior experience!”

- Hannah Hellerstein