



The College of Computing and Software Engineering at Kennesaw State University is home to **more than 3200 students studying Computer Science, Software Engineering, Computer Game Design and Development, and Information Technology within six undergraduate, three masters, ten certificate, and four minors programs.** With emphasis on theory and practice, students have experiential learning opportunities and partner with companies through internships, co-ops, sponsored capstone projects, and theoretical and applied research. Our faculty are experts in a wide range of cutting-edge topics including usability, requirements elicitation, health informatics, cybersecurity, robotics, simulation and modeling, virtual and augmented reality, and high performance computing.

Going Beyond

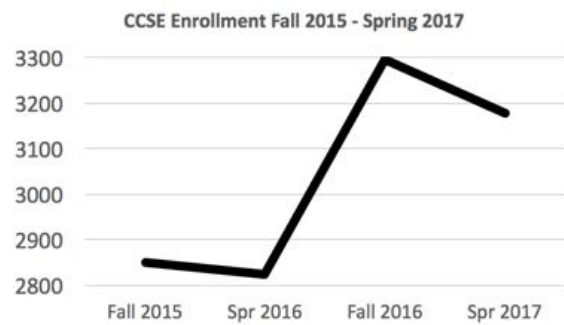


The Bachelors of Science in Information Technology, Computer Science, and Computer Game Design and Development undergraduate programs are accredited by the Computing Accreditation Commission and the Bachelor of Science in Software Engineering is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>.

2017 Presidential Report

Beyond Expectation: Enrollment

CCSE has grown by over 65% in the past five years and grown by over 13% in the past year.



In 2016, CCSE generated 41,257 student credit hours and awarded 274 undergraduate degrees. The average CCSE course is at 83% capacity.

CCSE Faculty by the Numbers

(Full / Part-Time Faculty)

Computer Science	20 / 18
Computer Game Design & Dev	6 / 4
Information Technology	9 / 18
Software Engineering	7 / 5

Beyond the Norm: Innovation

In Fall of 2016, CCSE created the **Innovations in Computing Courses** program that brings the latest, cutting-edge topics into new courses within the college. Faculty submit competitive proposals and receive support to transfer their research expertise into new special-topics courses. This year, the following were offered:

- Advanced Software Engineering in Virtual Reality and Augmented Reality Application Design and Development
- Practical Big Data Analytics
- Bioinformatics
- Intelligent Computing and Logic Deduction
- Undergraduate Research in Computing



Jacob Holloway, Ian Jones, Gavin Barnes and Robert Forbes working with Amy Dillon at Sawyer Road Elementary School

Beyond Classes: Community

CCSE students and faculty are actively engaged in our community. Students volunteer through many CCSE clubs and as part of CCSE service-learning courses. Capstone teams work with local non-profit organizations, and CGDD teams work with local elementary schools to promote STEM and teach Georgia Learning Standards (featured in the AJC May, 2016).

Student Clubs/Organizations

- Association of Computing Machinery (ACM)
- IEEE Computer Society
- Robotics and Automation Society (RAS)
- Association of Information Technology Professionals (AITP)
- College of Computing Club (3C)
- Georgia Game Developers Association (GGDA)

CCSE hosts a welcome cookout for all students in the fall and graduation receptions each semester to celebrate our students' accomplishments.



C-Day

Computing Showcase (C-Day) is a biannual event at the end of fall and spring semesters where students **showcase some of the richest activity within CCSE**. As students prepare for graduation, they present posters highlighting their achievements within internships, team projects, capstone, and theses work.



Internship Networking Night

Twice a year, in both spring and summer semesters, CCSE hosts companies and 150+ students eager to learn more and connect. Companies who attend are pleased to **find top talent** for internships, part-time, and full-time positions, and students appreciate the opportunity to build their resumes with **valuable experience and new jobs**.

Beyond the Everyday: Labs and Equipment

CCSE has invested in the tools and support that students need to succeed in the modern computing workforce. Beyond excellence within the classroom, we have cutting-edge software and hardware that students can use to fine tune their knowledge. In support of our CGDD program, we have one of the few Sony PS4 Development labs in the country. In the past year, **CCSE has invested over \$200k in supplemental instruction and over \$400k in student-facing lab hardware and software**, including:

- New lab PCs and virtual machine (VM) server infrastructure
- EEG hardware/software for biofeedback to detect system vulnerabilities
- Motion capture hardware/software
- Robotics hardware for real-time embedded systems and interaction
- Usability equipment for teaching efficacy
- Internet-of-Things (IoT) hardware and software tools
- Mobile platforms (tablets and phones) for development
- High performance computing (HPC) and visualization cluster PCs

New Horizons: Research and Scholarship

The research portfolio of CCSE faculty continues to increase year over year. Since 2014, CCSE has received over **\$939k in six federally-funded grants** and currently has over **\$846k under review**. In 2016, CCSE faculty received over **\$117k in internally-funded grants** and have an active portfolio of **over \$750k in private contracts and grants**.

In 2016, CCSE faculty contributed **151 published papers, conference proceedings, journal articles, invited talks, and presentations** and have submitted 24 research papers for consideration in 2017. This is a more than 50% increase from 94 scholarly contributions in 2015.

CCSE has hosted numerous international research collaborators in 2016.



CCSE has the largest Masters program (MSIT) and generated 18% of all graduate hours at KSU in 2016.

CCSE generated over \$1.6 million in revenue to KSU in 2016.



Beyond KSU: Industry

CCSE students and faculty partner with a broad range of companies through internships, co-ops, capstone projects, and funded research. Some of the companies that employ our students and with whom we are working:

Accenture, ADP, Anthem, AT&T, CareerBuilder, CTS, EY, Fiserv, FORTINET, General Motors, Georgia Tech Research Institute, Georgia-Pacific, HA&W, Hewlett Packard Corporation, Hi-Rez Studios, Honeywell, IBM, InComm, Intel, IntelliTeach, Kiz Studios, Lexis Nexis, Lockheed Martin, Macy's, McKenney's, NCR Corporation, Object Frontier, OnePath, Pega Systems, Printpack, ProArch, Publix Supermarkets, RelayHealth, Savant, Shaw Industries, Slalom, State Farm, SunTrust, Tata Consulting, TekStream, The Coca-Cola Company, The Home Depot, Tilted Wheel Interactive, TravelPort, Turner Broadcasting Systems



Beyond Today: 2017 Goals

- Increase graduate enrollment
- Improve retention and progression rates
- Increase research and external funding
- Increase industry partnerships