

MAJOR IN COMPUTER ENGINEERING, EMBEDDED AND IOT SYSTEMS CONCENTRATION

Approaching innovation from a holistic perspective is key to advancing our hyper-connected world. The interdisciplinary embedded and IoT computing concentration takes a bird's eye view of computer engineering to help students understand how electronic devices, software, and networks function together to enable end-to-end solutions. Take a smart home, for example. Rather than designing one aspect of the solution, such as the temperature sensors on a thermostat, this concentration will help students design and optimize software and hardware technologies across the entire spectrum to enable an integrated, smart system. Centering on the science and design of both hardware and software for computing systems across applications ranging from medical imaging tools to wearable electronic devices, students will work on complex engineering problems such as improving energy-efficiency in mobile devices, integrating artificial intelligence into computing platforms, and developing solutions for reliability and security in safety critical applications. Coursework focuses on applications of key computer engineering principles in the areas of computer architecture, embedded systems, internet-of-things (IoT), machine learning, computer security, software algorithms, and more.