

Computer Engineering (CPE) Major

Combines **Electrical Engineering (EE)** and **Computer Science (CS)** majors

- Fewer courses than a CS+EE double major
- Focus on systems that combine hardware and software (e.g., embedded systems)
- More job options than CS or EE alone

Computer Engineering (CPE) Major

COMPUTER ENGINEERING (CPE)						
	ENGINEERING			UK CORE	MATH/SCIENCE	
FRESHMAN	First Year Engineering (3 courses)			Comm. 1	Calc. 1	Chem. 1
	Programming 1			Comm. 2	Calc. 2	Phys. 1 (with lab)
SOPHOMORE	EE	CPE	CS		Calc. 3	Phys. 2 (with lab)
	Circuits 1	CPE Professions Digital Logic Embedded Computing	Programming 2 Sys. Programming Discrete Math		Calc. 4	
JUNIOR	Circuits 2	Comp. Design 1 Comp. Design 2 CPE Elective Technical Elective	Algorithms	Social Science Humanities	Statistics	
	Signal Processing Electronic Devices					
SENIOR	Technical Elective			Citizenship		
	CPE Electives (1 Hardware, 1 Software, 2 CPE)			Global Dynamics		
	Capstone Design (2 courses)					

This is a **Computer Engineering Research Laboratory**

- Research tries to **make computer system hardware and software work together to improve performance, add new abilities**
- Not just for graduate students:
~60 CS, EE, & CPE undergrads are involved in research projects in this lab each year

Ongoing Computer Engineering Research in this lab

- Making parallel supercomputing cheap
 - Quantum & adiabatic computing
 - Digital imaging & computational photography
 - IoT and embedded systems
 - Smarter software for 3D printing
- ... and much more; ask Prof. Dietz or Thapliyal