BY 2018, THERE WILL BE 1.4 MILLION COMPUTER SPECIALIST JOB OPENINGS.

U.S. UNIVERSITIES WILL HAVE GENERATED ENOUGH GRADUATES TO FILL ABOUT 1/3 OF THESE OPENINGS.

-NCWIT
By the Numbers, 2009

The gap between supply and demand of CS specialists has widened with declining CS major enrollment and fewer high school students displaying interest in CS courses.

You can help reverse these unfortunate trends by becoming a Computer Science educator. Inspire the next generation to meet the Computer Science challenges of the 21st century!

Brought to you by
the CS4EDU project team at

PURDUE
UNIVERSITY

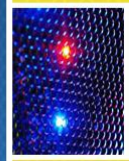
http://cs4edu.cs.purdue.edu

COMPUTER SCIENCE EDUCATION ENDORSEMENT

for Secondary Education Majors

CS4EDU

Funded by the
National Science Foundation



COMPUTER SCIENCE EDUCATION ENDORSEMENT

Although computer science is an established discipline at the collegiate and post-graduate levels, its integration into the K-12 curriculum has not kept pace in the U.S. As a result, a serious shortage of information technologists exists at all levels.

-CSTA
ACM K-12 Model Curriculumn, 2006

THE CURRENT SITUATION:

15,000
The number of U.S. high school students who take the Computer Science Advanced Placement (CS AP) exam annually

2,000
The number of teachers who are qualified to teach the CS AP course nationally

THE CHALLENGE:

10,000
The number of well-qualified teachers the NSF's CS/10,000 project aims for in schools nationwide

WHAT DOES THE ENDORSEMENT ENTAIL?

- Prepares Purdue University Education majors to teach computer science in secondary schools
- Fulfills Indiana requirements for supplemental licensure standards in computer education and ISTE secondary computer science education standards

WHAT ARE THE BENEFITS?

- Enriches the pedagogical content knowledge of future CS teachers
- Prepares teachers for high school CS AP courses
- Certifies professional training experiences of CS teachers

WHO WILL BENEFIT FROM THIS PROGRAM?

- Secondary Education majors, particularly those pursuing primary licensure in STEM fields
- In-service teachers in need of more background in CS pedagogy
- Mathematics or Science Education majors seeking teaching licensure in CS

WHAT WE OFFER

This endorsement includes 19-21 credits in Education and Computer Science.

- ⌘ Contemporary Issues in Computing
- ⌘ Problem Solving and Object-Oriented Programming in Java
- ⌘ One elective in CS or ECE programming
- ⌘ One elective in math-related courses of CS, ECE, or MA
- ⌘ One elective in Data Structures and Algorithms of CS or ECE
- ⌘ Methods of Teaching CS in Secondary Schools
- ⌘ Supervised Teaching

VISIT OUR WEBSITE

http://cs4edu.cs.purdue.edu/endorsement