College-in-High School Stanford University

Introduction to Bioengineering

Stanford University, in partnership with the National Education Equity Lab is pleased to offer, *Introduction to Bioengineering* to high-school students. Students who successfully complete the course will **receive 3 widely transferable undergraduate credits** from Stanford University.

Course Overview

It's 2032! And you live in a world increasingly without cancer, where there are fewer and fewer shortages of quality food, and your favorite sneakers are grown using mushrooms. You're working for a new US Federal Department, the Department of Awesome, because... this is the age where you can make just about everything awesome, especially by partnering with biology to grow new and incredible things. Your mission, should you choose to accept it, is to figure out: What would you next like to help make awesome?

You'll learn how to be a Protagonist of that Future! You'll learn ways of thinking about engineering living matter to benefit all people and the planet. We're going to tackle some pretty fun, and pretty complex, concepts- but, with the right tools, which we will provide you, you will be able to deconstruct complicated problems, understand microbial human anatomy, conceptualize the engineering of biological systems, and much more.

Who Should Enroll?

- ★ Students entering 10th, 11th or 12th grade
- Students interested in earning college credits in high school!
- Students interested in exposure to college content and ways of thinking
- ★ Students interested in answering: What will be the major health challenges (and potential solutions) humanity will face in 2032?

Meet the Professor



Drew Endy is a world-renowned bioengineer and educator at Stanford University. He has a long history of making bioengineering accessible to learners at all levels - from launching undergraduate majors in bioengineering at both MIT and Stanford, co-founding the iGEM competition (a global genetic engineering "olympics" engaging high school students), to being the BioBricks Foundation president, to even creating science comic books. Drew's efforts have been widely recognized including by the White House for his efforts on open-source biotechnology and by the New York Times.

