


BioBuilder



BioBuilder was developed by an award-winning team at MIT with the goal of bringing synthetic biology into middle and high school classrooms throughout the country. BioBuilder takes a comprehensive approach, providing exceptional programming for students and educators alike.

PROFESSIONAL DEVELOPMENT



Our two-week online workshops combine classroom, laboratory, and design activities that are both accessible and inspiring. You'll leave with ready-to-teach lessons that bring engineering into your biology classrooms, labs, or science clubs. Participating teachers will have access to BioBuilder's online lectures, readings, and activities to cover at their own pace over two weeks, and then can join two live laboratory sessions taught by BioBuilder instructors to synchronously prep and run the BioBuilder experiment. Professional Development workshops are scheduled throughout the summer.



IDEA ACCELERATOR



Our introductory program provides a 3-week online guided learning community for teams of high school students who want to design biotechnologies to make the world a better place. Includes five hours of asynchronous lectures by Dr. Natalie Kuldell, biodesign assignments, reference materials, feedback on projects, live Office Hours, and a Project Showcase. The program is offered regularly throughout the academic year.



BIOBUILDERCLUB



Open to all high school students, the BioBuilderClub is a place for student inventors to combine engineering and science to design, build, and test their own biodesign ideas. Teams work at their schools from mid- October to mid-March and can take advantage of 10 hours of mentoring from a practicing bioengineer. Teams can communicate with each other, receive research-grade lab materials, and present their research at the Final Assembly in March.





"BioBuilder was a turning point with my experience with science. Before coming and taking the BioBuilder part of my freshman biology, I just sort of saw science like a thing I had to do. But then afterwards with BioBuilder, it became a personal interest in science and seeing what more I could do." [Ria K.](#)



"I 100% recommend this to anyone who wants to or is considering taking it. It's not like a normal class where you sit down, you listen to the teacher lecture, you take notes and then you take tests every now and then. It's a final project for us. But you realize that you have fun when you're doing it, because it's a problem you sought out and you chose and you're trying to solve." [Aiden M.](#)



"At first glance, before BioBuilder, when I was looking at biology, I just thought, oh, it's another industry in the medical field. But after doing BioBuilder, I realized the real-world implications that biology and bioengineering can have. So now that BioBuilder has entered my life, I feel like I can achieve more." [Lyle M.](#)

