



BIOTECHNOLOGY

PATHWAY



PATHWAY OVERVIEW

The Biotechnology Research pathway introduces students to the science of living organisms and how biotechnology is used to solve real-world problems.

Students gain knowledge in genetics, microbiology, laboratory techniques, and biotechnology applications while preparing for industry credentials, postsecondary education, and work-based learning experiences.



CAREER CLUSTER

Healthcare & Human Services

COURSE SEQUENCE + WORK-BASED LEARNING

1

Introduction to Healthcare Science

Explores healthcare systems, employability skills, medical terminology, and the foundations of the healthcare environment.



2

Essentials of Biotech

Introduces the principles of biotechnology, cell biology, genetics, and laboratory safety.



3

Applications of Biotech

Applies advanced biotechnology techniques, bioprocessing, and research methods to develop solutions to real-world problems.



Work-Based Learning (Capstone Experience)

Participate in laboratory internships, research projects, or biotechnology industry experiences under professional supervision.

LEADERSHIP + INDUSTRY CONNECTIONS

CAREER & TECHNICAL STUDENT ORGANIZATION



COMPETITION OPPORTUNITIES



- Biotechnology
- Genetics
- Biomedical Equipment Technician
- Medical Law & Ethics
- Biomedical Debate
- Pathophysiology

CHAPTER ACTIVITIES



- Health education initiatives
- HOSA Bowl
- Community service projects
- Officer Jump Start
- Guest speakers
- HOSA leadership conferences

CO-CURRICULAR / INDUSTRY EXPERIENCES



- Biotechnology Assessment
- Clinical observations
- Medical skills labs
- Job shadowing
- Community outreach
- Hospital/healthcare facility tours
- Industry panel

SCHOOLS OFFERING THIS PATHWAY

Global Impact Academy | Innovation Academy

CAREER OPPORTUNITIES

CAREERS

Biotechnology Technician

Biomedical Engineer

Biochemist

ATLANTA-AREA EMPLOYERS



POSTSECONDARY OPPORTUNITIES

LOCAL / REGIONAL INSTITUTIONS



- Georgia State University
- Kennesaw State University
- University of Georgia
- Atlanta Technical College
- Gwinnett Technical College

DUAL ENROLLMENT



Metro-area dual enrollment options may include biology, chemistry, biotechnology, and related opportunities. Health science courses. Verify current offerings through Georgia Futures.

