

# DISCOVERY POLYTECH EARLY COLLEGE HIGH SCHOOL



Through its distinct wall-to-wall early college model, Discovery Polytech Early College High School provides students in grades 9-12 the opportunity to live out their college, career, and wage potential in the Springfield, MA region.

In partnership with Worcester State University, Western New England University, Springfield Technical Community College, Quinsigamond Community College, and Holyoke Community College, students earn at least six college credits each semester, beginning in their freshman year. Students can choose to defer graduation for a fifth year to complete 60 credits toward a Bachelor's degree or a full Associate's degree, along with their high school diploma. In the three founding years, Discovery students earned over 1500 college credits.

DHS maximizes career and wage opportunities through its "pathways" model, in which students specialize their learning and internships in one of several technology-centered majors, including Cybersecurity, Mechanical Engineering, Optics and Photonics, Interactive Medias, BioTech, and IT Systems Engineering. In its rigorous, engaging, hands-on environment — with industry-grade technology in a dedicated Advanced Manufacturing Lab — Discovery has particular success in supporting multilingual learners through the universal languages of coding, tinkering, and designing.

- Over 1500 college credits earned in 3 years
- 240 Students Served in grades 9-12
- 7:1 Student to Teacher Ratio
- 92% Students of Color
- 96% Educators of Color



## Overview

Discovery Polytech Early College High School was founded in 2021 within the Commerce Family of Schools in Springfield, MA. Discovery will celebrate its first graduating class in 2025 and serves a total of 240 students in grades 9-12. Springfield is the fourth largest city in New England in which 77% of the students are classified as economically disadvantaged with the median household income is \$41,000 (\$22,000 less than national average). Because of this disparity, 100% of our students receive free/reduced lunch.



## Academics

CEEB Code: 222053\*

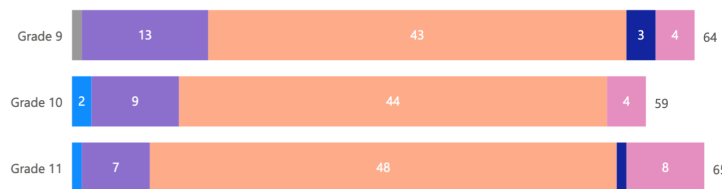
\*Discovery is located within Commerce

### Minimum Graduation Requirements:

- 24-60 College Credits in a specific major
- 4 Units of English (HS and/or College)
- 4 Units of Math (HS and/or College)
- 3 Units of Science (HS and/or College)
- 3 Units of History/Social Science (HS and/or College)
- 2 Units of World Language
- 4 Units of Physical Education
- 1 Unit of Fine Arts

## Enrollment Demographics

● (Blank) ● ASIAN ● BLACK ● LATINX ● MULTI ● WHITE



## Grading and Quality Points

HS Competency Scale	Grade	HS Course GPA	Early College Course GPA
3.80 – 4.00	A+	4.33	5.00
3.60 – 3.79	A	4.00	4.67
3.50 – 3.59	A-	3.67	4.33
3.30 – 3.49	B+	3.33	4.00
3.10 – 3.29	B	3.00	3.67
3.00 – 3.09	B-	2.67	3.33
2.80 – 2.99	C+	2.33	3.00
2.60 – 2.79	C	2.00	2.67
2.50 – 2.59	C-	1.67	2.33
2.30 – 2.49	D+	1.33	2.00
2.10 – 2.29	D	1.00	1.67
2.00 – 2.09	D-	0.67	1.33
0.00 – 1.99	F	0.00	0.00

## College Course Grade Distribution 2021-2023

A- to A+	218
B- to B+	100
C- to C+	65
D	24

## MCAS Pass Rates 2023

ELA 2023	94%
Math 2023	94%

## Academic Progression: Mechanical Engineering Major Sample



### Freshman Year

English Language Arts 9  
Integrated Math I  
Tech/Engineering 9  
Health and Fitness 9  
ENG101 English Composition I (College)  
ART140 Intro to Painting (College)  
MET101 Intro to Engineering (College)  
MET160 Engineering Graphics with SolidWorks (College)

### Junior Year

Integrated Math III  
Spanish I  
Health and Fitness 11  
ENG102 English Comp II (College) OR ELA 11 (HS)  
PHY101 Intro to Astronomy (College) OR Physics 11 (HS)  
MET121 Fundamentals of CMM (College)  
MET155 Intro to CNC (College)  
MET161 Solid Modeling (College)

### Fifth Year Option

MET142 Manufacturing Processes (College)  
MET224 Statics and Strength of Materials (College)  
MET227 Quality Concept (College)  
MET230 CAM II (College)  
MET240 Manufacturing Planning and Control (College)  
MET267 Advanced Engineering Applications (College)  
MET280 Mechanical Engineering Internship (College)

*NOTE: Each year above includes both fall and spring semester courses. Most college courses specific to the major are 4-credit college lab courses.*

### Sophomore Year

English Language Arts 10  
Integrated Math II  
Biology 10  
Health and Fitness 10  
PO110 American Government (College)  
SOC100 Intro to Sociology (College)  
MET124 Technical Math (College)  
MET120 Metrology and Geometrics (College)

### Senior Year

Spanish II  
Health and Fitness 12  
MA125 Technical Math II (College)  
MA150 Statistics (College)  
CM110 Public Speaking OR (College) OR ELA 12 (HS)  
UR220 Immigrant City (College) OR World History 12 (HS)  
PHY221 Physics I (College)  
MET130 CAM I (College)  
MET261 Solid Modeling for Mechanical Design (College)

### Co-Curricular Activities

- Discovery Polybots Robotics Team
- Athletics: Football, Soccer, Basketball, Indoor/Outdoor Track, Cross Country, Volleyball, Baseball, Softball, Wrestling, Golf, Tennis, Swimming, and Lacrosse

*(Athletics Programs are offered through the High School of Commerce, Sci-Tech, and Central High School city-wide)*

**Dr. Declan O'Connor**  
*Founding Executive Principal*  
**Farrika Turner**  
*Founding Assistant Principal*  
**James Taylor**  
*Assistant Principal*  
**Stefanie Kro**  
*School Counselor/Department Chair*

