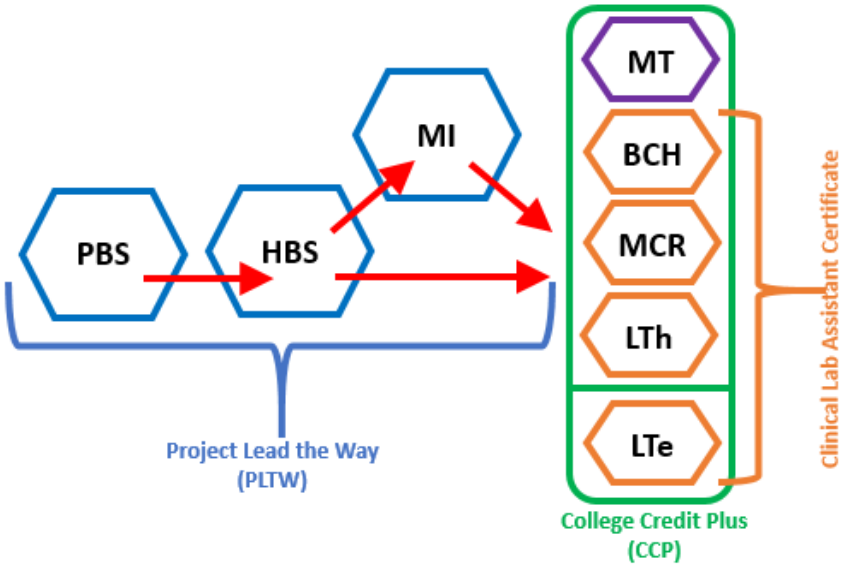
Career Pathways

Career Pathways give students an opportunity to learn more about their interests before committing to a particular career path after high school. They also allow students to earn an industry credential that may lead to the start of a career while completing a degree program. Westerville City Schools and Columbus State Community College partner to offer students pathway opportunities leading to credentials in **Health, Business/Logistics**, and **Engineering**, all high-need industries located in Central Ohio.

Please note that core high school courses are required for graduation. These pathways showcase only those courses within the path. Consult with your school counselor to ensure that your course plan is a best fit and meets all graduation requirements.

Health Pathway

- Students investigate the roles of biomedical professionals as they study the concepts of human medicine, physiology, genetics, microbiology, and public health.
- Students work collaboratively to understand and design solutions to the most pressing health challenges of today and the future by: investigating the death of a fictional person to learn content in the context of real-world cases; examining structures and interactions of human body systems; and exploring the prevention, diagnosis, and treatment of disease.
- The Health Pathway uses Project Lead the Way lessons, activity-, project-, and problem-based curricula to allow high school students to apply what they know, identify problems, find unique solutions, and lead their own learning.
- College Credit Plus courses allow students to earn a Clinical Lab Assistant Certificate through Columbus State Community College.



Foundational Courses	Specialized Courses
Principles of Biomedical Science Human Body Systems	Medical Interventions Medical Terminology + Basic Concepts in Health Care + Introduction to Medical Coding and Reimbursement + Lab Theory for Health Industries +

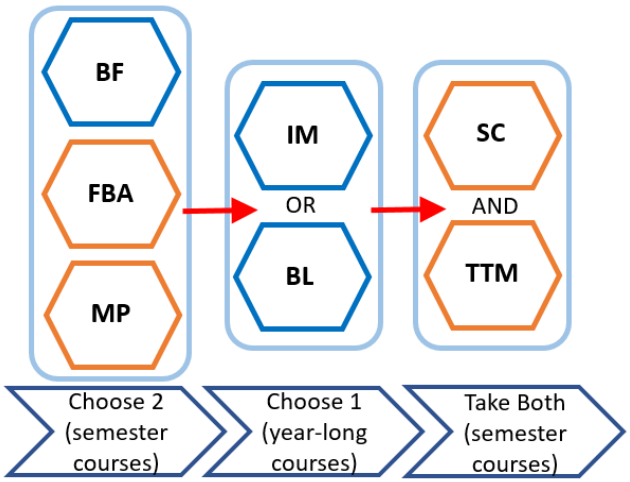
+ Students can earn college credit through the College Credit Plus program. See page 24 for more information.

See Appendix C on pages 71 - 72 to learn more about the Health

Business and Logistics Pathway

- Logistics is the science of managing the movement of objects – food, materials, animals, equipment and liquids – as well as time, information, and energy.
- The Business/Logistics Pathway program for students with an interest in science and technology, as well as problem solving.
- Participating in the Business/Logistics Pathway teaches students to solve real world problems that businesses face everyday, such as saving money and boosting productivity.

See Appendix D on pages 73 - 74 to learn more about the Business and Logistics Pathway.

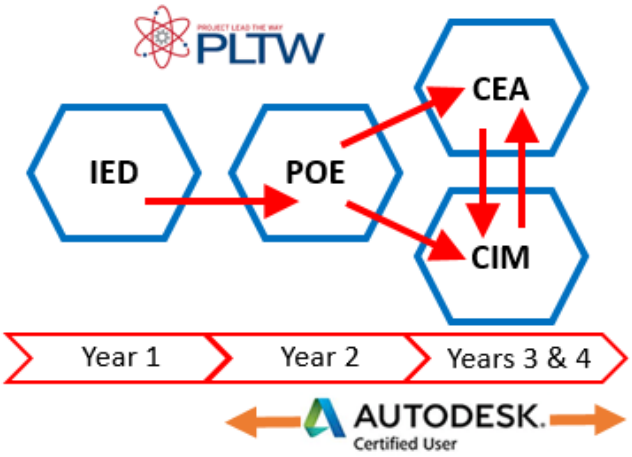


Foundational Courses	Specialized Courses
Business Foundations Fundamentals of Business & Administrative Services +	Business Law 1 Business Law 2 Introduction to Management Marketing Principles + Supply Chain Management + Transportation & Traffic Management +

+ Students can earn college credit through the College Credit Plus program. See page 24 for more information.

Engineering Pathway

- Engineers and engineer technologists apply principles of science and mathematics to develop economical solutions to technical problems.
- The Engineering Pathway uses Project Lead the Way lessons, activity-, project-, and problem-based curricula to allow high school students to apply what they know, identify problems, find unique solutions, and lead their own learning.
- Participating in the Engineering Pathway teaches students to apply science, math, and technology to solve complex, open-ended problems in a real-world context.
- The opportunities to develop highly transferable skills in collaboration, communication, and critical thinking make the Engineering Pathway relevant to all students, even those who do not plan to pursue engineering after high school.



- Students can become an Autodesk Certified User through Credit Flex Options.

Foundational Courses	Specialized Courses
Introduction to Engineering Design Principles of Engineering	Civil Engineering and Architecture Computer Integrated Manufacturing

See Appendix E on pages 75 - 76 to learn more about the Engineering Pathway.

Global Scholars Program

Possessing the knowledge, skills, and mindset to thrive in our global society is a critical component to responsible citizenship or successful employment. The Global Scholars Program, a “global education for all” program that thrives on inclusivity, equity, and access for all, develops globally competent students with the knowledge, skills, and mindset necessary for leadership, citizenship, and careers in an interconnected, global society.

In partnership with The Columbus Council on World Affairs, Westerville’s Global Scholars program incorporates

- innovative, interactive, and experiential approaches,
- global community partnerships, and
- collaboration with business, governmental, and academic leaders.

Columbus Council on World Affairs

Students typically begin the program in their sophomore year, but the requirements can be completed in two years. Students successfully completing the program will receive a Global Scholars distinction on their diploma.

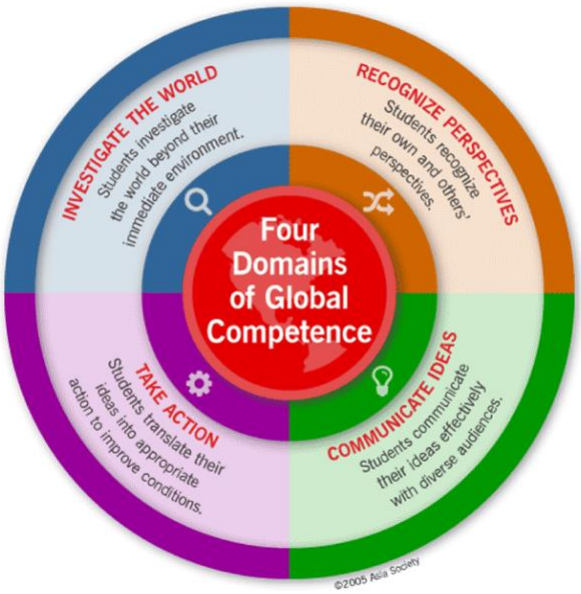
Global Scholars Diploma Requirements

Level 1	**Face-to-Face Experiences:** Cross-Cultural, Global Issues, Global Careers, Culminating **Enrichment Experiences:** Investigate the World, Recognize Perspectives, Communicate Ideas, Take Action
Level 2	**Face-to-Face Experiences:** Cross-Cultural, Global Issues, Global Careers, Culminating **Cross-Cultural eCourse:** Learning Summaries, Assessment
Level 3	**Capstone:** Presentation of a Take Action Project that demonstrates a deep understanding of a global issue **College and Career Readiness:** Applications, Essays, Profiles

Contact a building coordinator for more information:

Central: Don Ogle (ogled@wcsoh.org)
North: Brandon Allen (allenb@wcsoh.org)
South: Mary Fuchs (fuchs@wcsoh.org)

GLOBAL SCHOLARS DIPLOMA



See Appendix F on pages 77 - 78 to learn more about the Global Scholars Program.

Appendix D: Business Logistics Pathway

Business Logistics Pathway

Westerville City Schools

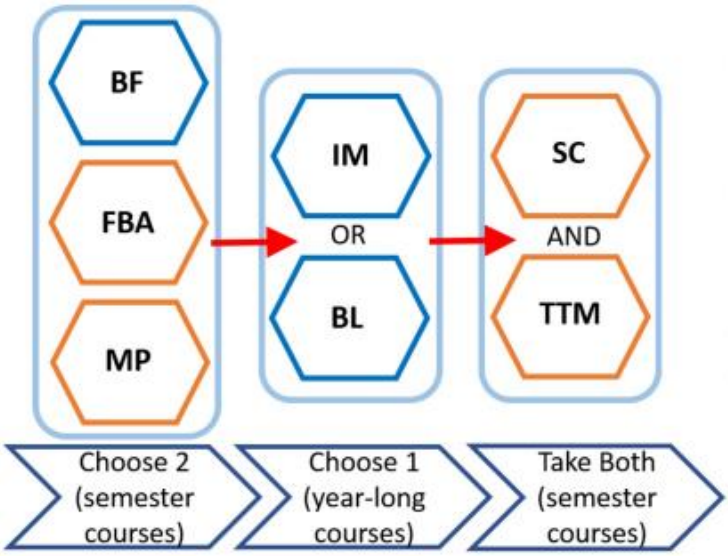
47,000
number of logistics/distribution operations in Central Ohio - so many job opportunities!

$71,160
median annual salary for Logisticians in Ohio

47%
of the US population is within a 10 hour drive of the Columbus Region

Logistics is the science of managing the movement of objects - food, materials, animals, equipment, and liquids - as well as time, information, and energy. If you enjoy collaborating with, and communicating with others, designing innovative solutions to problems, taking risks, leading others, and starting projects, this pathway may be a great fit for you!

Pathway Course Options



Business Foundations (BF)
Build a foundation and learn the building blocks of business and economics.

Fundamentals of Business & Administrative Services (FBA)
Gain a college-level overview and understanding of business functions and activities.

Marketing Principles (MP)
Learn valuable customer service skills that come in handy for any profession.

Introduction to Management (IM)
Want to be a leader? A CEO? Understand principles and theories of management.

Business Law 1 & 2 (BL)
Master a fundamental understanding of the legal system and business law.

Supply Chain Management Principles (SC)
Build your business expertise and understand supply chain.

Transportation and Traffic Management (TTM)
Understand how transportation plays a vital role in the supply chain.

Certification

While enrolled in the Supply Chain Management Principles and Transportation & Traffic Management courses, students will have an opportunity to earn industry recognized credentials as a Certified Logistics Associate and Technician.

MSSC MANUFACTURING SKILL STANDARDS COUNCIL

Content provided by:

Career Technical Education Standards (CTE)

CTE provides students with the academic and technical skills, knowledge and training necessary to success in future careers and to become lifelong learners. CTE prepares these learners for the world of work by introducing them to workplace competencies, and makes academic content accessible to students by providing it in a hands-on context.

College Credit Plus Partner: Columbus State Community College

Students have the potential to earn 12 college credit hours through Columbus State Community College.

COLUMBUS STATE Community College

Pathway Instructors

Central
Susan Bailey
Brick Davis
Richard Heeren

North
Brick Davis
Amanda Mosely

South
Cindy Calvin
Linda Mapes
Laurie Marburger

Complementary Courses

AP Computer Science Principles
AP Computer Science A
AP Statistics
AP Calculus
Computer Concepts & Applications

Career Tech Student Organization

BUSINESS professionals OF AMERICA

Where can this path lead to after high school?

Supply Chain Management Associate Degree at CSCC

Logistics Engineering Technology Associate Degree at CSCC

Bachelor of Science in Operations and Supply Chain Management at Franklin University

Master of Business Logistics Engineering at OSU's Fisher College of Business

Employment at one of the 4,400 logistics/distribution operations in Central Ohio as a CLA and CLT

Appendix E: Engineering Pathway

Engineering Pathway

Westerville City Schools

$77,900
median annual salary for engineering occupations

86,000
number of people employed by more than 1,700 manufacturers in Central Ohio

193,200
new jobs across the nation in the engineering field to be created by 2026

Graduates from **engineering programs** often pursue work involving conceptual design or research and development including architectural, civil, mechanical, or industrial systems.

Graduates of **engineering technology programs** often pursue work involving application and implementation including construction, manufacturing, product design, testing, or technical services.

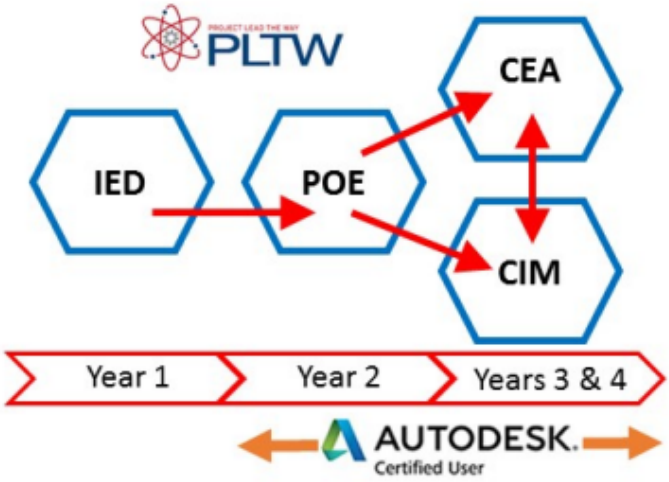
Pathway Course Descriptions

Introduction to Engineering Design (IED)
Dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects like designing a new toy or improving an existing product.

Principles of Engineering (POE)
Explore a broad range of engineering topics including mechanisms, strength of structure and materials, and automation, and then apply what you know to take on challenges like designing a self-powered car.

Civil Engineering and Architecture (CEA)
Learn important aspects of building and site design and development, and then apply what you know to design a commercial building.

Computer Integrated Manufacturing (CIM)
Learning about manufacturing processes, product design, robotics, and automation, students produce products using a Computer Numerical Controlled (CNC) mill.



Certification

AUTODESK.

Autodesk® Inventor Certified User (ACU)
Earn credentials for successfully demonstrating digital design skills including creating, modifying, formatting, and sharing 2D sketches, creating parts, viewing, and animating assemblies, and creating presentations and drawings.

Content provided by:

Project Lead the Way

Courses engage students in compelling, real-world challenges that help them become better collaborators and thinkers.

Certiport

Through WCS' Credit Flex Option, students complete a half-credit independent study to become an Autodesk Certified User (ACU), confirming their credentials in digital design.

Pathway Instructors:

Central
David Elliott (CIM)
Jeff Mengerink (POE, CEA)
Kent Scharff (IED)

North
Laura Ferguson (POE, IED)
Matt Whistle (CIM)

South
Blake Holderman (POE, CEA)
Jeff Owdom (IED)

Complementary Courses:

AP Computer Science Principles
AP Computer Science A
AP Statistics
AP Calculus
AP Physics 1, 2, and C
IB Physics

Career Tech Student Organization:

SkillsUSA

According to students, the engineering pathway...

"...builds your teamwork skills and gives you a head start in a growing career field."

"...tests our ability to work with others and think outside the box."

"...teaches skills that are useful even if you don't pursue a career in it."

"...incorporates many fields of math and science."

According to students, the coolest activity done in class was...

- "...making a robot!"
- "...designing a model train using CAD!"
- "...constructing a Rube Goldberg machine!"
- "...wiring a circuit!"
- "...3D printing!"

Appendix F: Global Scholars Program

Global Scholars Program

Westerville City Schools

60,661
people employed in the Central Ohio area by Columbus' 20 largest foreign-owned companies

32
number of local companies operating 1,828 establishments in more than 85 countries around the world

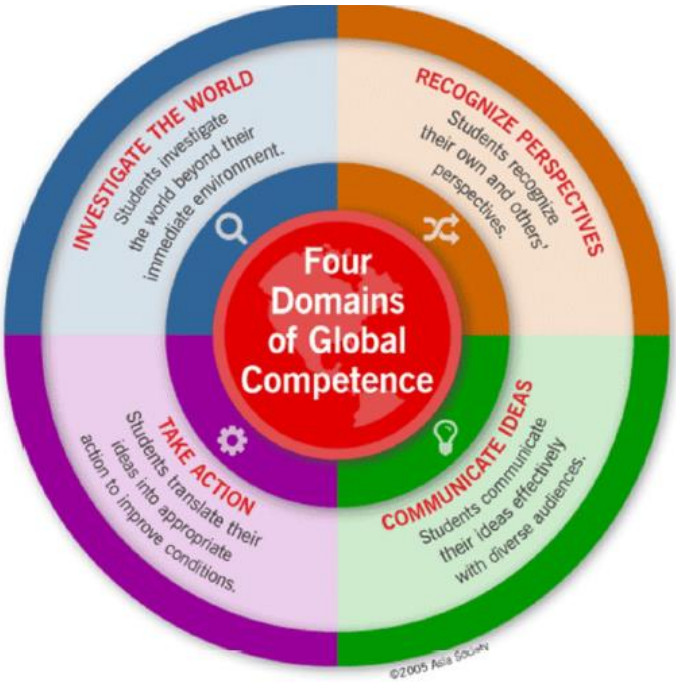
1000
number of Central Ohio students working toward earning a Global Scholars diploma

Graduates from the Global Scholars Program often pursue work in the law, international business, information technology, business logistics, health services or education fields.

---

a necessity for successfully living in an increasingly interconnected world

GLOBAL COMPETENCE
the disposition and knowledge to understand and act on issues of global significance



Columbus Council on World Affairs

In partnership with The Columbus Council on World Affairs, Westerville high school students have the opportunity to participate in the Global Scholars Diploma Program characterized by:

- innovative, interactive, and experiential approaches
- global community partnerships
- collaboration with business, governmental, and academic leaders

GLOBAL SCHOLARS DIPLOMA

Visit columbusworldaffairs.org for more information.

Global Scholars Diploma Requirements

1

Level 1
Face-to-Face Experiences: Cross-Cultural, Global Issues, Global Careers, Culminating
Enrichment Experiences: Investigate the World, Recognize Perspectives, Communicate Ideas, Take Action

2

Level 2
Face-to-Face Experiences: Cross-Cultural, Global Issues, Global Careers, Culminating
Cross-Cultural eCourse: Learning Summaries, Assessment

3

Level 3
Capstone: Presentation of a Take Action Project that demonstrates deep understanding of a global issue
College & Career Readiness Tools: Applications, Essays, Profiles

Course Alignment

World Languages

Humanities
Cultural Studies in Literature

Modern World History 1 & 2
Contemporary World Issues

Program Coordinators

Central	North	South
Don Ogle	Brandon Allen	Mary Fuchs

According to Students . . .

"Global Scholars gives me the opportunity to meet people from other places and have different experiences."

"The more you know about the world, the better you can be at helping change the world and being proactive in your education and career and country."

"It's slowly changing my perspective to be more understanding and more open than I was before."

"The Global Scholars Program was a great opportunity for me to learn about the world and meet experts who succeeded while doing international work."

"Global Scholars gives students more confidence and they feel better about themselves, better about the world, like they can make a difference."