

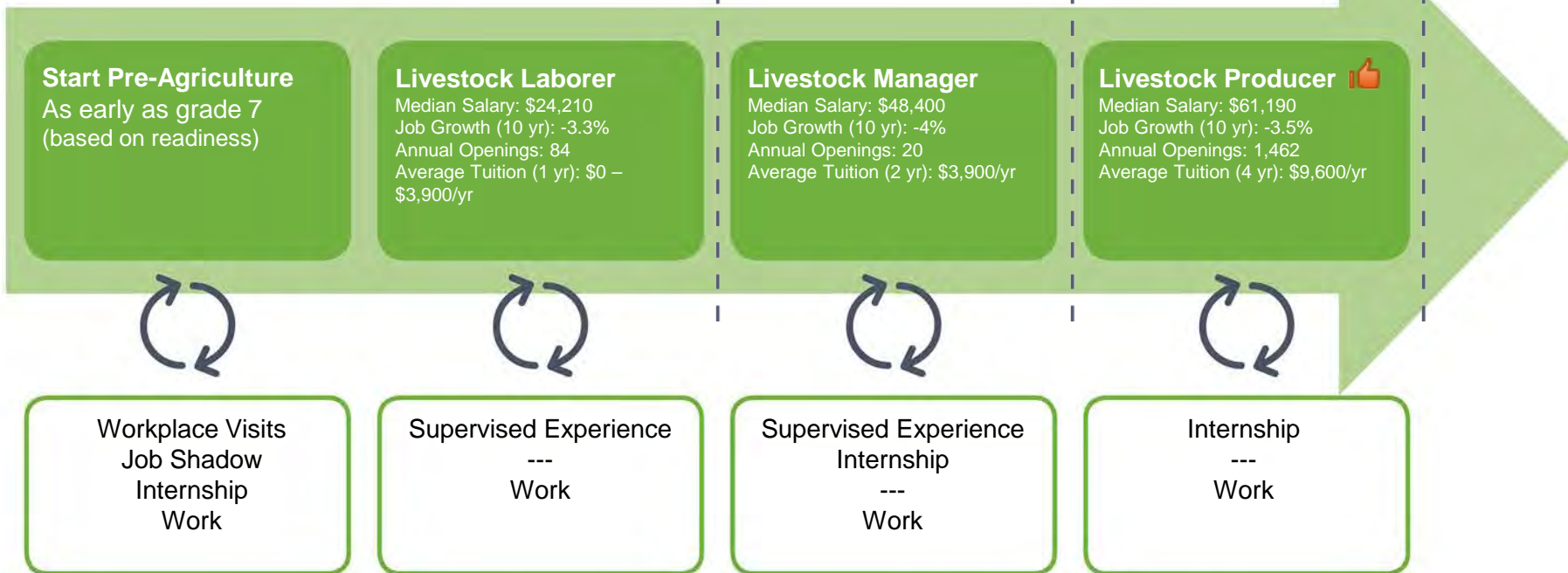


Agriculture and Environmental Systems Career Pathway

Certificate

Associate Degree,
Agricultural Business

Bachelor's Degree,
Agricultural Systems
Management



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Agriculture and Environmental Systems Career Pathway

Secondary Pathway: **Animal Science and Management**

Postsecondary Program: **Livestock Management**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Animal & Plant Science	Ag, Food, & Natural Resources	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Livestock Selection, Nutrition, & Mgt	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Animal Health	World Languages		
	12	English IV	Trigonometry/ Calculus	Animal Anatomy & Physiology	U.S. Government	Business Management	A&E Capstone		
Postsecondary	Year 1 1st Semester	Technical Writing	Technical Math	Biology	Computer Applications	Introduction to Animal Production	Livestock Operations Management		
	Year 1 2nd Semester	Economics	Humanities Elective	Animal Anatomy & Physiology	Reproductive Management	Livestock Health	Livestock Selection & Evaluation	Agri-Business Co-Op Experience	
	Year 2 1st Semester	Business Communication	Social Science Elective	Records & Analysis	Operations Leadership	Animal Nutrition	Manure Management	Elective	
	Year 2 2nd Semester	Reproduction & Marketing Leadership	Livestock Genetics	Small Animal Production	Ruminant Nutrition	Farm Business Management	Elective		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

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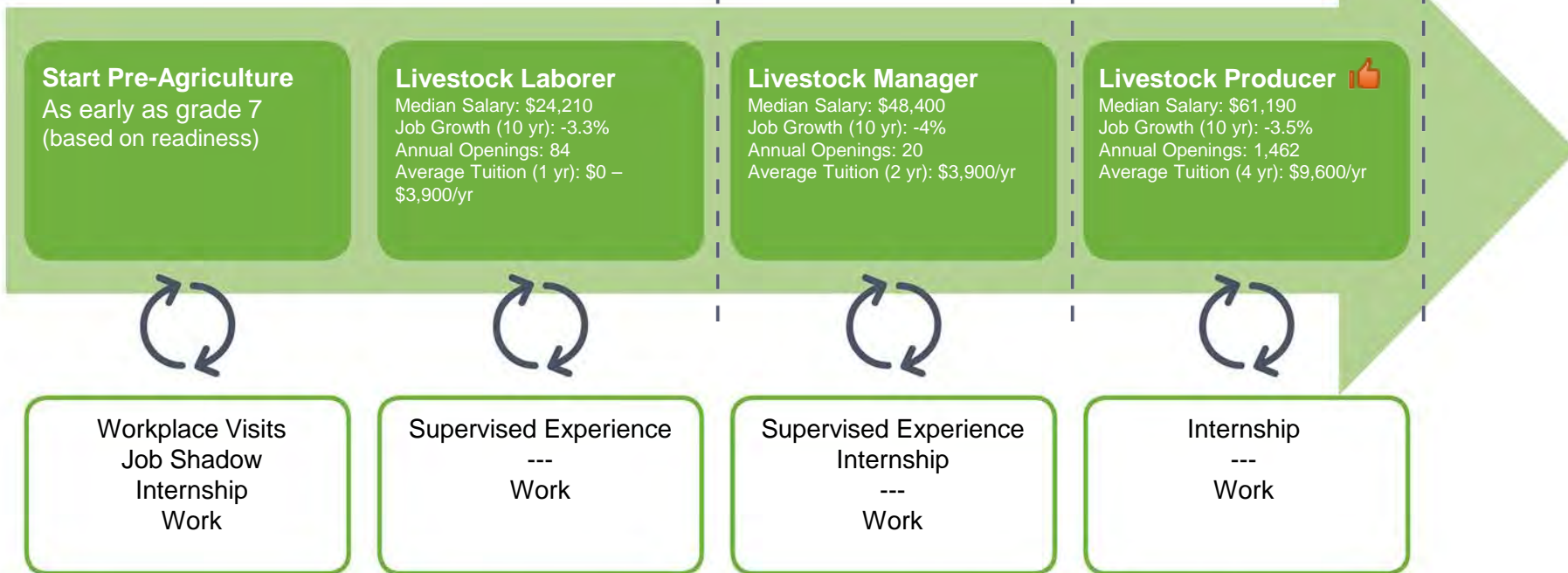


Agriculture and Environmental Systems Career Pathway

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Agricultural Business

Bachelor's Degree,
Agricultural Systems
Management



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Agriculture and Environmental Systems Career Pathway

Secondary Pathway: **Animal Science and Management**

Postsecondary Program: **Livestock Management**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Animal & Plant Science	Ag, Food, & Natural Resources	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Livestock Selection, Nutrition, & Mgt	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Animal Health	World Languages		
	12	English IV	Trigonometry/ Calculus	Animal Anatomy & Physiology	U.S. Government	Business Management	A&E Capstone		
Postsecondary	Year 1 1st Semester	Technical Writing	Technical Math	Biology	Computer Applications	Introduction to Animal Production	Livestock Operations Management		
	Year 1 2nd Semester	Economics	Humanities Elective	Animal Anatomy & Physiology	Reproductive Management	Livestock Health	Livestock Selection & Evaluation	Agri-Business Co-Op Experience	
	Year 2 1st Semester	Business Communication	Social Science Elective	Records & Analysis	Operations Leadership	Animal Nutrition	Manure Management	Elective	
	Year 2 2nd Semester	Reproduction & Marketing Leadership	Livestock Genetics	Small Animal Production	Ruminant Nutrition	Farm Business Management	Elective		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

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Course titles and sequences will vary between schools.

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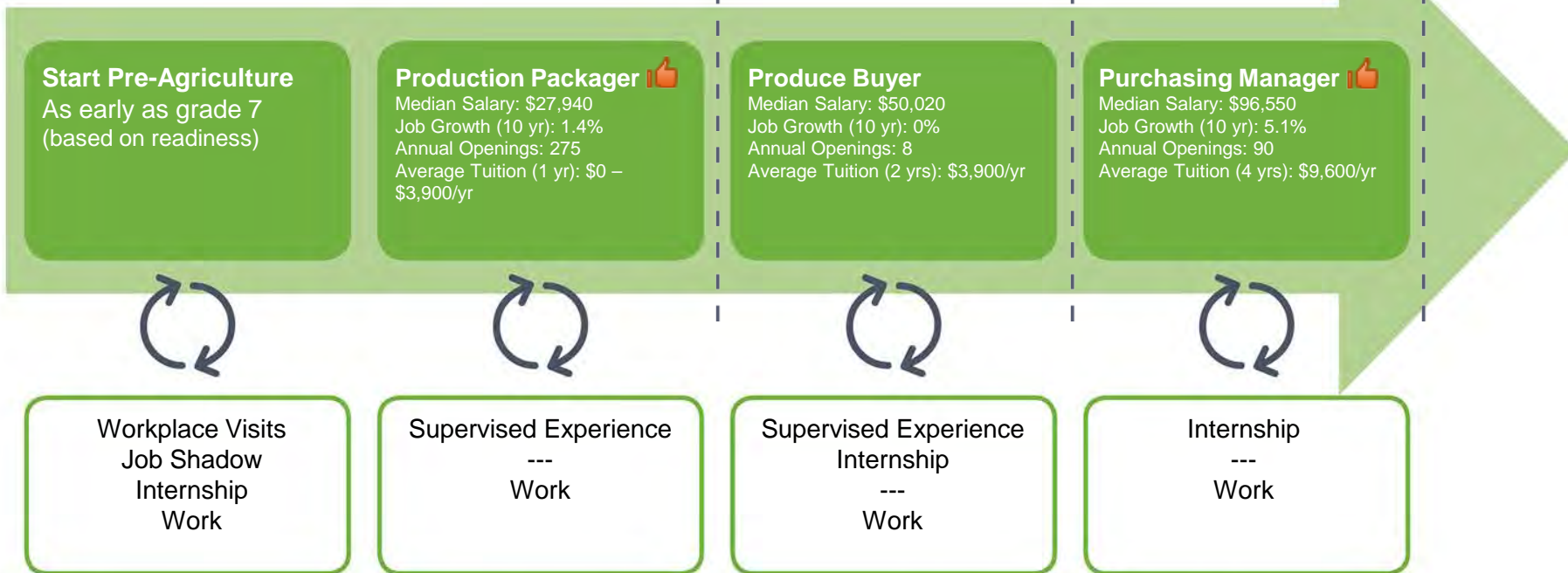


Agriculture and Environmental Systems Career Pathway

Certificate

Associate Degree,
Agricultural Business

Bachelor's Degree,
Food Business
Management



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
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Ohio In-demand Occupations

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Agriculture and Environmental Systems Career Pathway

Secondary Pathway: **Agribusiness and Production Systems**

Postsecondary Program: **Agricultural Business**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Ag, Food, & Natural Resources	Animal & Plant Science	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Animal & Plant Biotechnology	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Livestock Selection, Nutrition & Mgt	Science & Technology of Food	World Languages	
	12	English IV	Trigonometry/Calculus	Anatomy & Physiology	U.S. Government	Business Management for A & E	Agronomic Systems	Global Economics & Food Markets	
Postsecondary	Year 1 1st Semester	English Composition	Exploring Business	Personal Selling	U.S. History	College Orientation	Food & Resource Economics		
	Year 1 2nd Semester	Agricultural Communication	College Algebra	Chemistry	Management Records & Analysis	Human Resources Management			
	Year 2 1st Semester	World Literature	Business Calculus	Bioscience	Rural Sociology	Humanities Elective			
	Year 2 2nd Semester	Marketing	Small Business Management	Business Finance	Microbiology	Agricultural Issues in Society			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

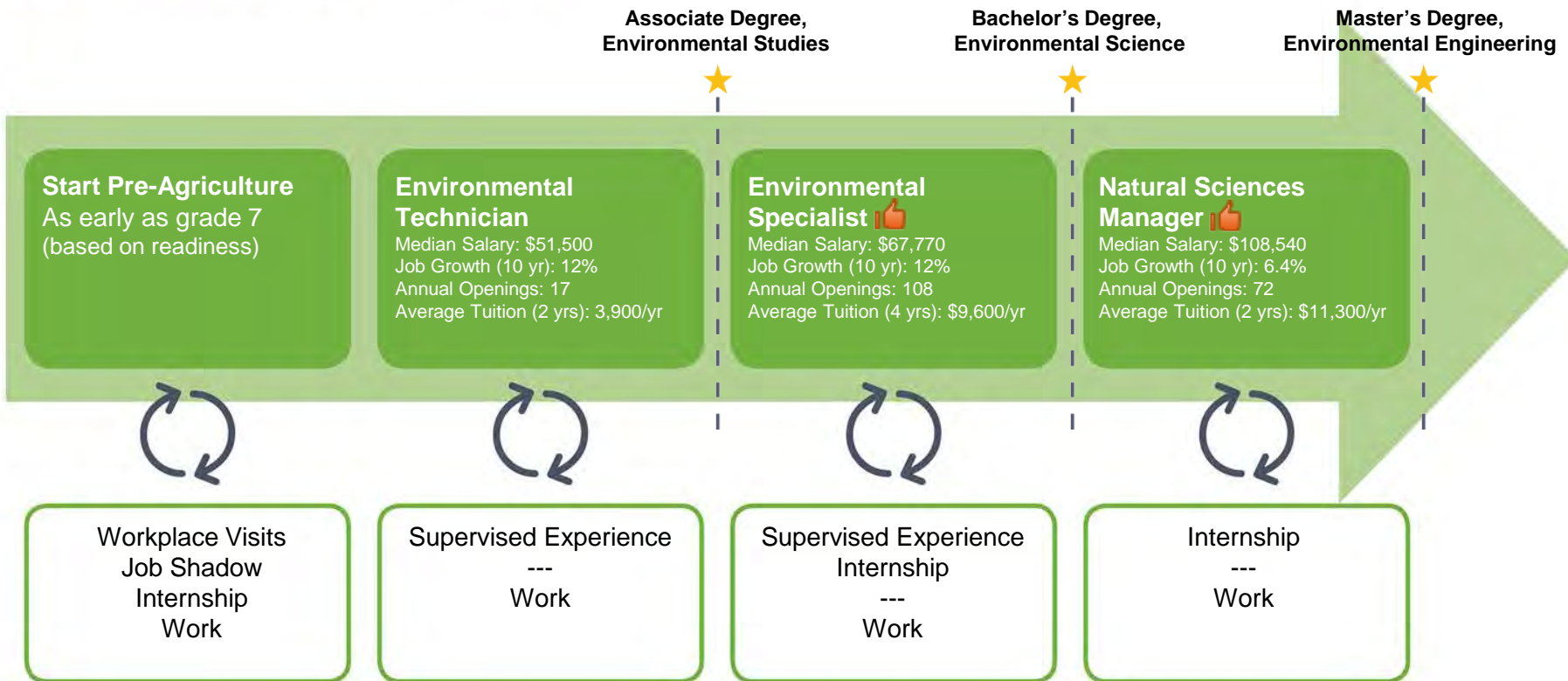
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Course titles and sequences will vary between schools.

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Agriculture and Environmental Systems Career Pathway



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Ohio In-demand Occupations

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Agriculture and Environmental Systems Career Pathway

Secondary Pathway: **Natural Resource Management**

Postsecondary Program: **Environmental Science**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Ag, Food, & Natural Resources	Natural Resources	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Environmental Science	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Environmental Systems Management	Forestry & Woodland Ecosystems	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Park & Recreational Management	Urban Forestry		
Postsecondary	Year 1 1st Semester	English Composition I	Biology I	College Algebra	Intro to Environmental Science	Environmental Laws & Regulations	Health & Safety for Water Operation		
	Year 1 2nd Semester	Technical Writing	Chemistry I	Physical Geology	Environmental Aspects of Soils	Environmental Site Assessment	Pollution Control	Drinking Water Treatment	
	Year 2 1st Semester	Introduction to Psychology	Hazardous Materials Management	Environmental Hydrology	Environmental Sampling	Safety & Loss Prevention	OSHA General Industrial Safety & Health		
	Year 2 2nd Semester	Cultural Anthropology	Environmental Analytical Methods	Applied Environmental Engineering	Air Pollution & Monitoring	Environmental Restoration			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

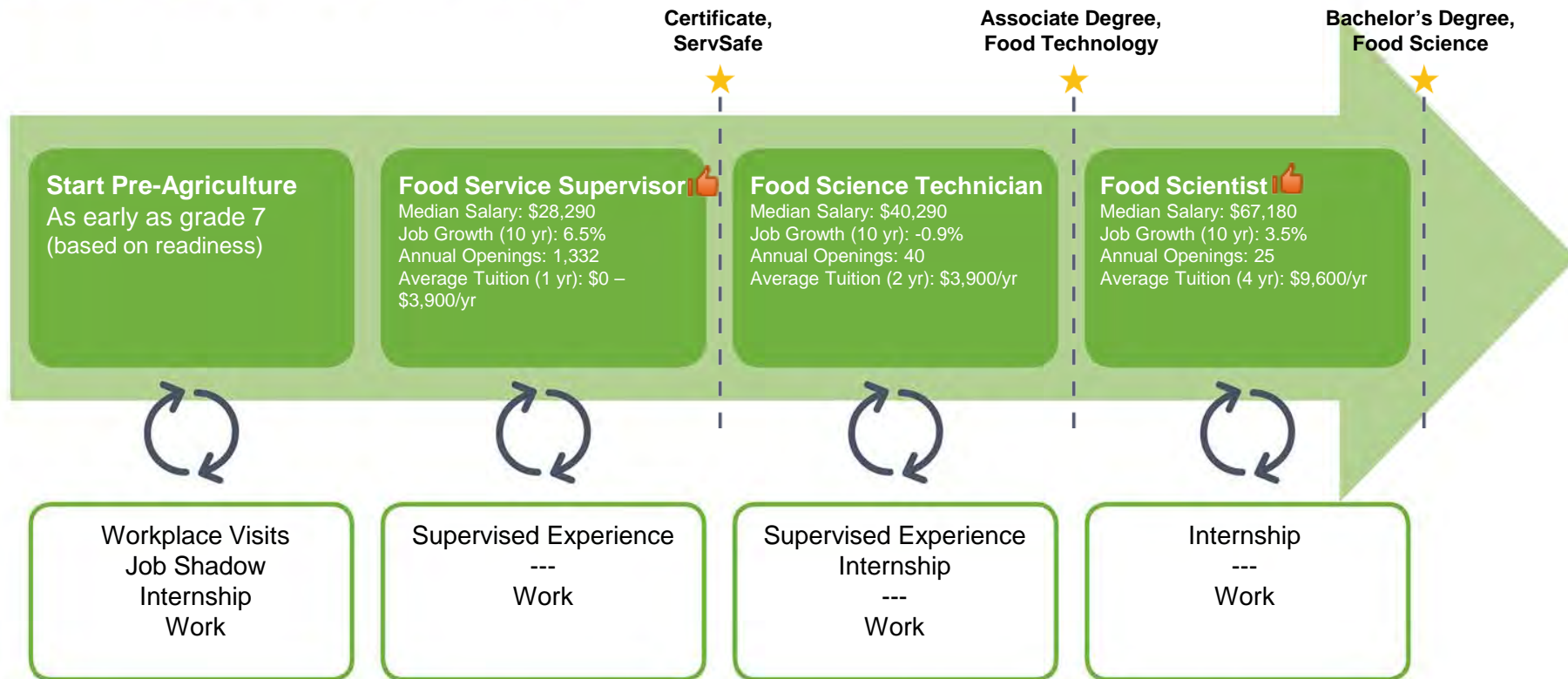
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Course titles and sequences will vary between schools.

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Agriculture and Environmental Systems Career Pathway



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Ohio In-demand Occupations

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Agriculture and Environmental Systems Career Pathway

Secondary Pathway: **Food Science and Technology**

Postsecondary Program: **Food Science and Technology**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Science and Technology of Food	Ag, Food, & Natural Resources	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Applications of Food Science & Safety	Principles & Practices of Bioscience	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Meat Science/ Genetics	World Languages		
	12	English IV	Trigonometry/ Calculus	Anatomy & Physiology	U.S. Government	Food Marketing & Research	A&E Capstone	Agriculture Communication & Leadership	
Postsecondary	Year 1 1st Semester	English Composition	Intro to Food Science	Chemistry I	Human Nutrition				
	Year 1 2nd Semester	Public Speaking	Food Safety	Chemistry II	Biology I	Food Regulations			
	Year 2 1st Semester	Ethics	Technical Math	Advanced Food Science	Microbiology	Sensory Evaluation	Seminar		
	Year 2 2nd Semester	Product Development	HACCP Safety Training	Food Chemistry	Product Processing	Food Production			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

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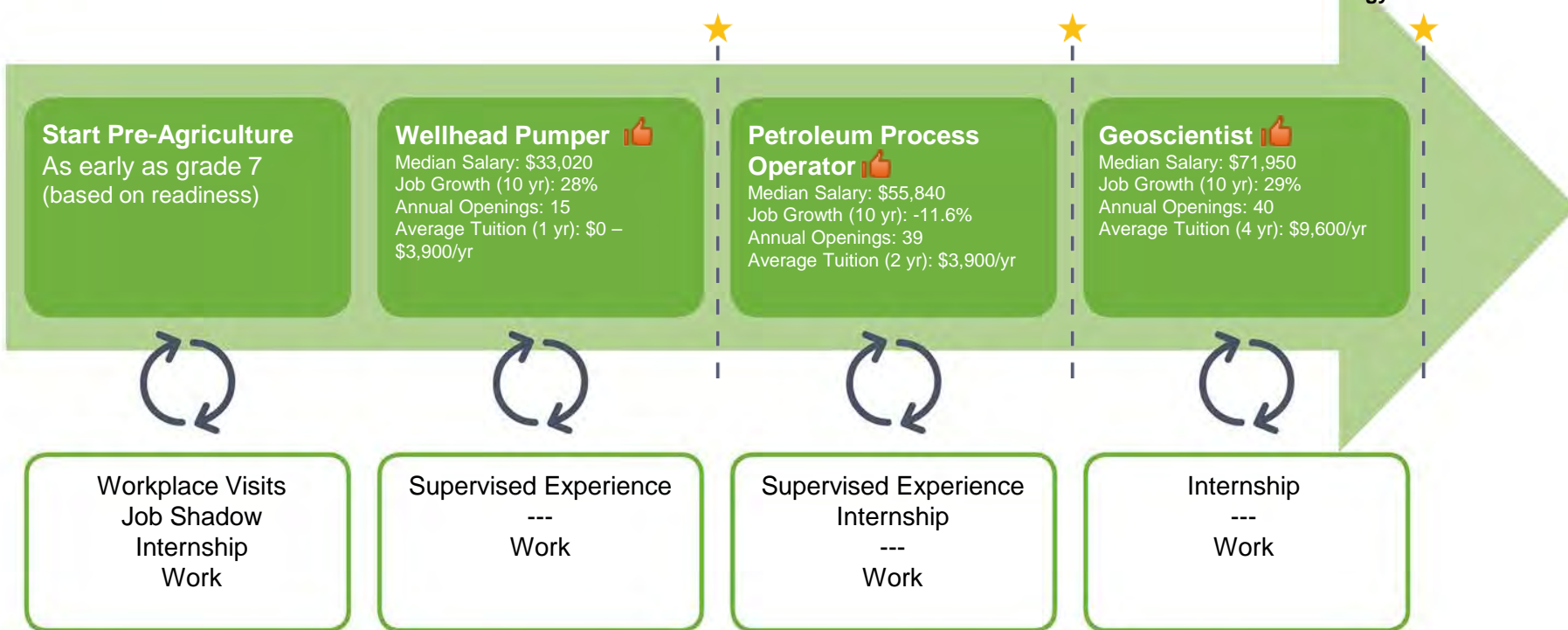


Agriculture and Environmental Systems Career Pathway

Certificate

Associate Degree,
Natural Resources

Bachelor's Degree,
Geology/Earth Science



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
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Ohio In-demand Occupations

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Agriculture and Environmental Systems Career Pathway

Secondary Pathway: **Natural Resource Management**

Postsecondary Program: **Natural Resources**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Ag, Food, & Natural Resources	Natural Resources	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Energy Systems Management	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Environmental Science for Agriculture	Environmental Systems Management	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Oil & Gas Operations	A & E Systems Capstone		
Postsecondary	Year 1 1st Semester	English Composition	Algebra	Environmental Science	College Orientation	Humanities Elective			
	Year 1 2nd Semester	American History	Chemistry I	Soil Science	Society & Natural Resources	Communicating Environmental Information			
	Year 2 1st Semester	World Literature	Bio Science	Rural Sociology	Data Analysis in Sciences	Food & Resource Economics			
	Year 2 2nd Semester	Ecology	Chemistry II	Geographic Information Systems	Environmental Policy	Elective			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

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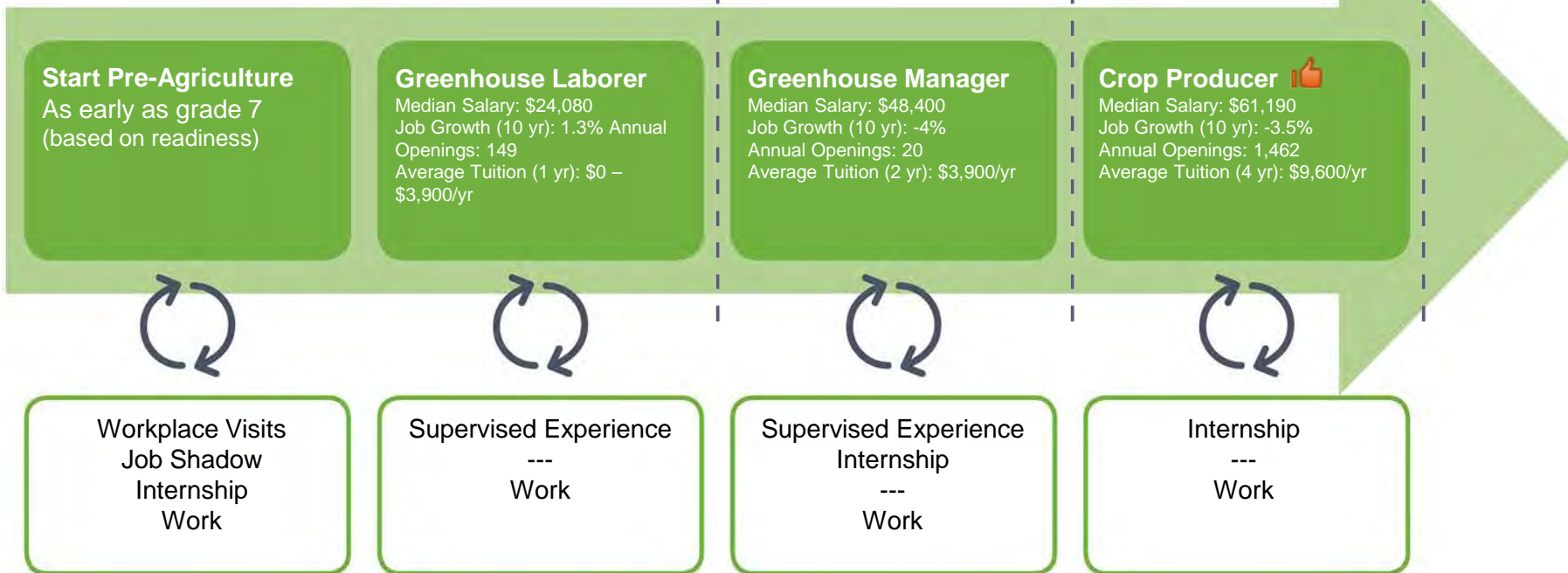


Agriculture and Environmental Systems Career Pathway

Certificate

Associate Degree,
Crop Management

Bachelor's Degree,
Agronomy



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Agriculture and Environmental Systems Career Pathway

Secondary Pathway: **Horticulture**

Postsecondary Program: **Horticultural Science**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Ag, Food, & Natural Resources	Animal & Plant Science	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Greenhouse & Nursery Management	Agronomic Systems	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Business Management	World Languages		
	12	English IV	Trigonometry/ Calculus	Anatomy & Physiology	U.S. Government	Ag Econ, International/ Commodities	A&E Capstone		
Postsecondary	Year 1 1st Semester	English I	Soil Science	Agriculture Survey	Animal Agriculture				
	Year 1 2nd Semester	English II	Technical Math	Biology	Soil Fertility	Ag Elective	Agri-Business Co-Op		
	Year 2 1st Semester	Public Speaking	Sales Management	Business Management	Plant Pests	Crop Production			
	Year 2 2nd Semester	Agriculture Seminar	Ag Marketing & Trade	Pest Management	Equipment Management	Humanities/ Social Science Elective			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014



Agriculture and Environmental Systems Career Pathway

Certificate

Associate Degree,
Food Science

Bachelor's Degree,
Agricultural and Food
Products Processing



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
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Ohio In-demand Occupations

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Agriculture and Environmental Systems Career Pathway

Secondary Pathway: **Food Science and Technology**

Postsecondary Program: **Food Science and Technology**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Science and Technology of Food	Ag, Food, & Natural Resources	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Applications of Food Science & Safety	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Meat Science/ Genetics	Principles & Practices of Bioscience	World Languages	
	12	English IV	Trigonometry/ Calculus	Anatomy & Physiology	U.S. Government	Food Marketing & Research	A&E Capstone	Agriculture Communication & Leadership	
Postsecondary	Year 1 1st Semester	English Composition	Food Science	Chemistry I	Human Nutrition	Anatomy & Physiology			
	Year 1 2nd Semester	Public Speaking	Food Safety	Chemistry II	Biology I	Food Regulations	Psychology		
	Year 2 1st Semester	Ethics	College Algebra	Advanced Food Science	Microbiology	Sensory Evaluation	Seminar		
	Year 2 2nd Semester	Product Development	HACCP Safety Training	Food Chemistry	Product Processing	Food Production			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

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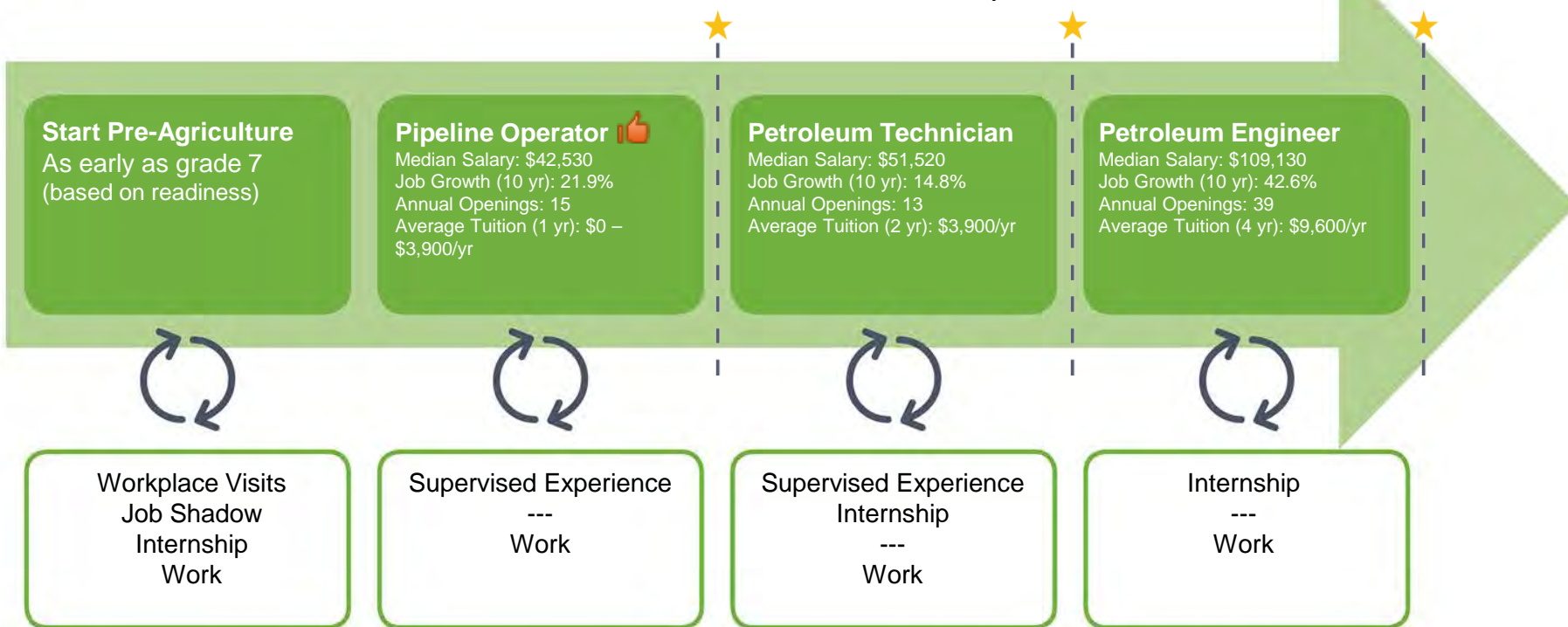


Agriculture and Environmental Systems Career Pathway

Certificate

Associate Degree,
Pipeline Technician

Bachelor's Degree,
Petroleum Engineering



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
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Ohio In-demand Occupations

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Agriculture and Environmental Systems Career Pathway

Secondary Pathway: **Natural Resource Management**

Postsecondary Program: **Petroleum Technology**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Science	Social Studies	Fine Arts	Ag, Food, & Natural Resources		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Environmental Science	Natural Resources	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Oil & Gas Operations	World Languages		
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Hydraulics & Pneumatics	Electronic & Electrical Systems		
Postsecondary	Year 1 1st Semester	Interpersonal Communication	Regulations & Compliance	Introduction to Petroleum Industry	Electrical Circuits & Devices	Mechanical Drive Components	Supervisory Control & Data Acquisition		
	Year 1 2nd Semester	Corrosion Basics	Petroleum Instrumentation	Gas Compression & Flow Dynamics	Pipeline Operations	Basic Pumps	Engineering Co-Op		
	Year 2 1st Semester	Physical Geology	College Algebra	College Composition	Chemistry				
	Year 2 2nd Semester	Computer Applications	Physics	Arts & Humanities Elective					

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

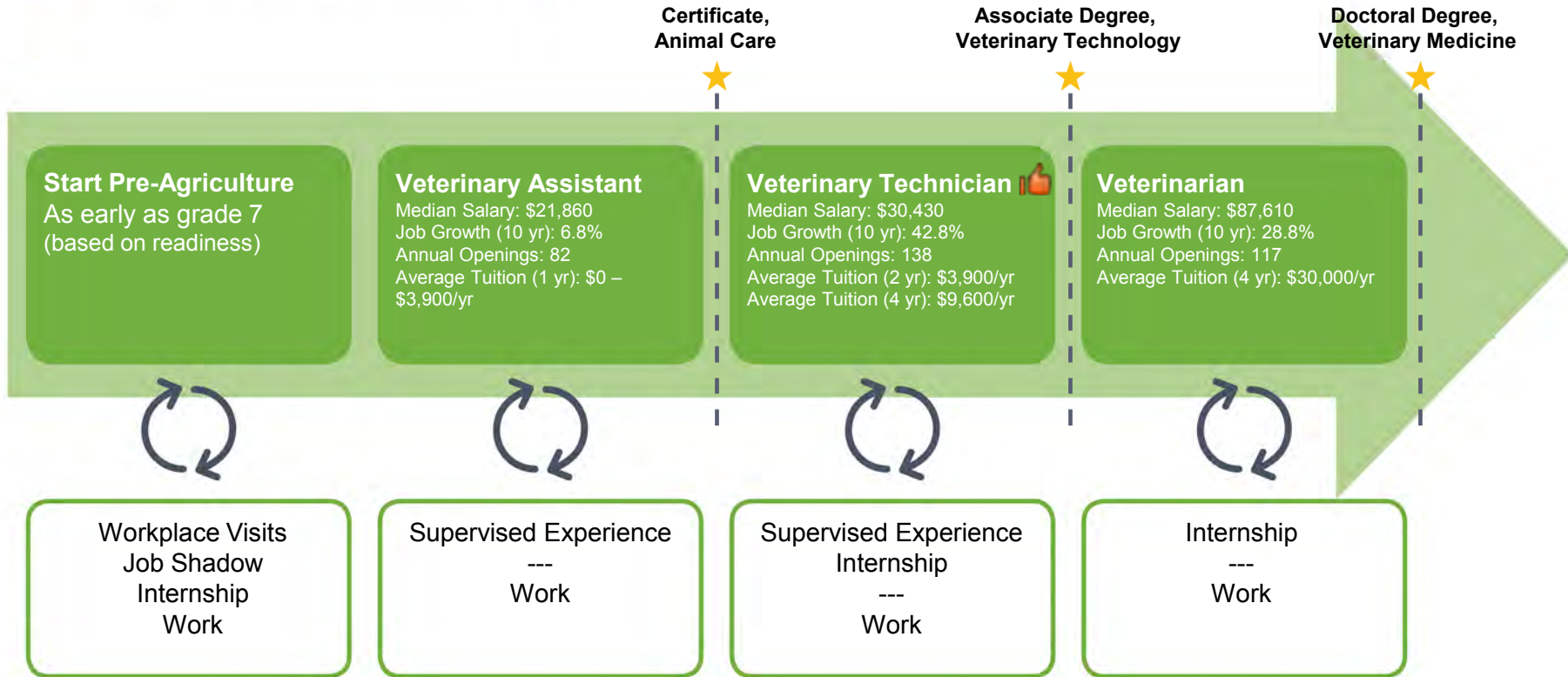
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Agriculture and Environmental Systems Career Pathway



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Ohio In-demand Occupations

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Agriculture and Environmental Systems Career Pathway

Secondary Pathway: **Animal Science and Management**

Postsecondary Program: **Veterinary Technology**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Animal Science & Technology	Ag, Food, & Natural Resources	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Animal Selection, Nutrition, & Mgt	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Animal Health	World Languages		
	12	English IV	Trigonometry/ Calculus	Animal Anatomy & Physiology	U.S. Government	Veterinary Science	A&E Capstone		
Postsecondary	Year 1 1st Semester	College Seminar	Algebra II	Anatomy & Physiology I	Anatomy & Physiology II	Small Animal Medicine	Veterinary Parasitology	Social Science Elective	
	Year 1 2nd Semester	Interpersonal Skills	Clinical Pathology I	Veterinary Anatomy & Physiology	Advanced Medical Terminology	Veterinary Radiography	Veterinary Anesthesia	Veterinary Surgical Techniques	
	Year 2 1st Semester	English Composition I	Ethics	Biochemistry	Veterinary Nutrition	Animal Medicine	Small Animal Health & Disease	Clinical Applications I	
	Year 2 2nd Semester	Clinical Pathology II	Veterinary Pharmacology	Large Animal Health & Disease	Veterinary Seminar I & II	Veterinary Practicum I & II	Humanities Elective	Clinical Applications II & III	

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

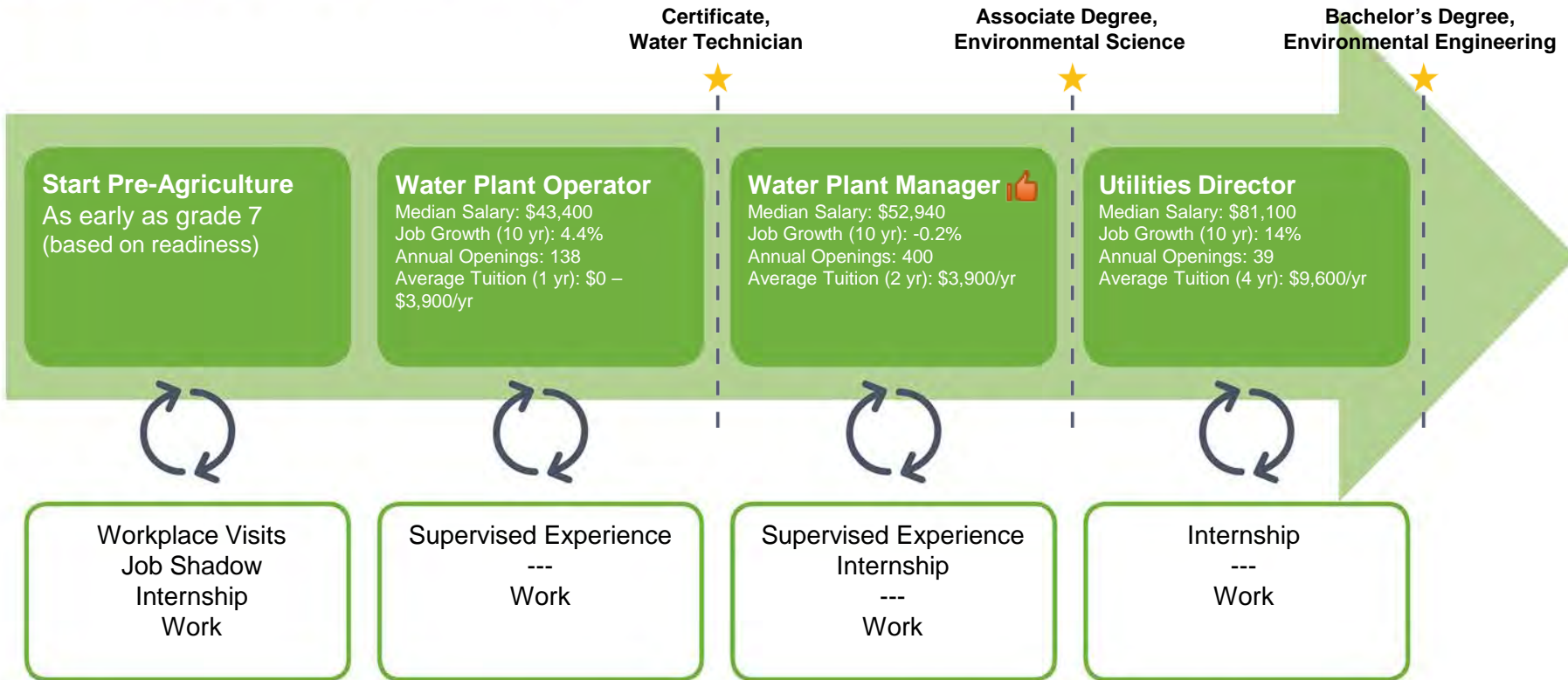
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Course titles and sequences will vary between schools.

10/2015



Agriculture and Environmental Systems Career Pathway



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Preparing students for multiple options after high school:
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Ohio In-demand Occupations

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Agriculture and Environmental Systems Career Pathway

Secondary Pathway: **Natural Resource Management**

Postsecondary Program: **Environmental Science**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Ag, Food, & Natural Resources	Natural Resources	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Environmental Science	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Environmental Systems Management	World Languages		
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Bio Energy	Hydraulics & Pneumatics		
Postsecondary	Year 1 1st Semester	English Composition I	Biology I	College Algebra	Public Speaking	Wastewater Treatment			
	Year 1 2nd Semester	English Composition II	Biology II	Environmental Sustainability	Water Resources	Environmental Field Biology			
	Year 2 1st Semester	Introduction to Psychology	Chemistry I	Trigonometry	Water Collection	Water Distribution			
	Year 2 2nd Semester	Technical Writing	Utility Management	Statistics	Environmental Policy, Law & Ethics				

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

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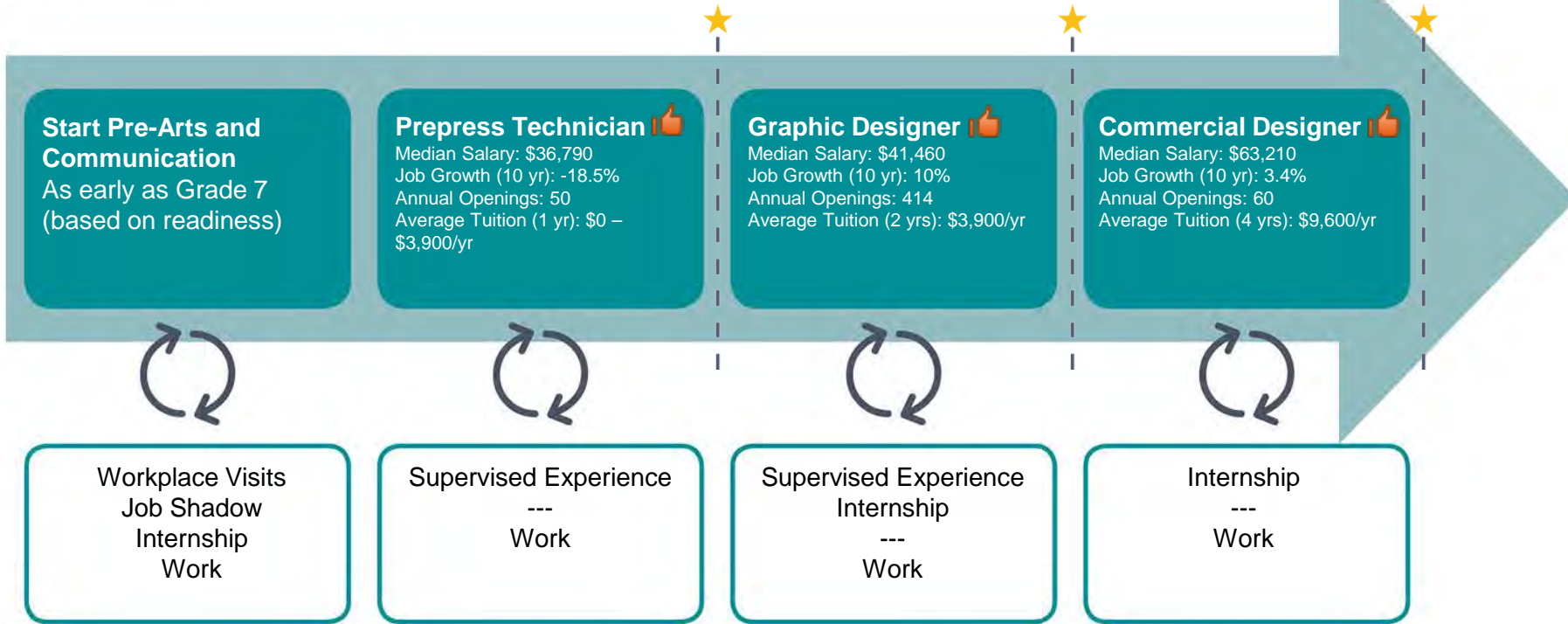


Arts and Communication Career Pathway

Certificate

Associate Degree,
Graphic Design

Bachelor's Degree,
Commercial Design



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
 gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Arts and Communication Career Pathway

Secondary Pathway: **Visual Design and Imaging**

Postsecondary Program: **Graphic Design**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Science	Social Studies	Fine Arts	Arts & Communication Primer		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Intro to Visual Design	Business of Arts and Communication	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Visual Creation	Digital Print Design	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Multi-Media Web Production	Photographic Composition		
Postsecondary	Year 1 1st Semester	English Composition I	College Algebra	Computer Applications for Mac	Digital Imaging	Drawing I	Vector Graphic Design		
	Year 1 2nd Semester	English Composition II	Multicultural Diversity	Digital Design	Graphic Fundamentals	2D Design	Electronic Page Layout		
	Year 2 1st Semester	Public Speaking	Accounting	Digital Video	Digital Photography	Interactive Media	Web Design		
	Year 2 2nd Semester	Advanced Graphic Design	History of Western Art	Advanced Graphic Design & History	Technical Communication	Physical Science for Technology	3D Graphics		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

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Course titles and sequences will vary between schools.

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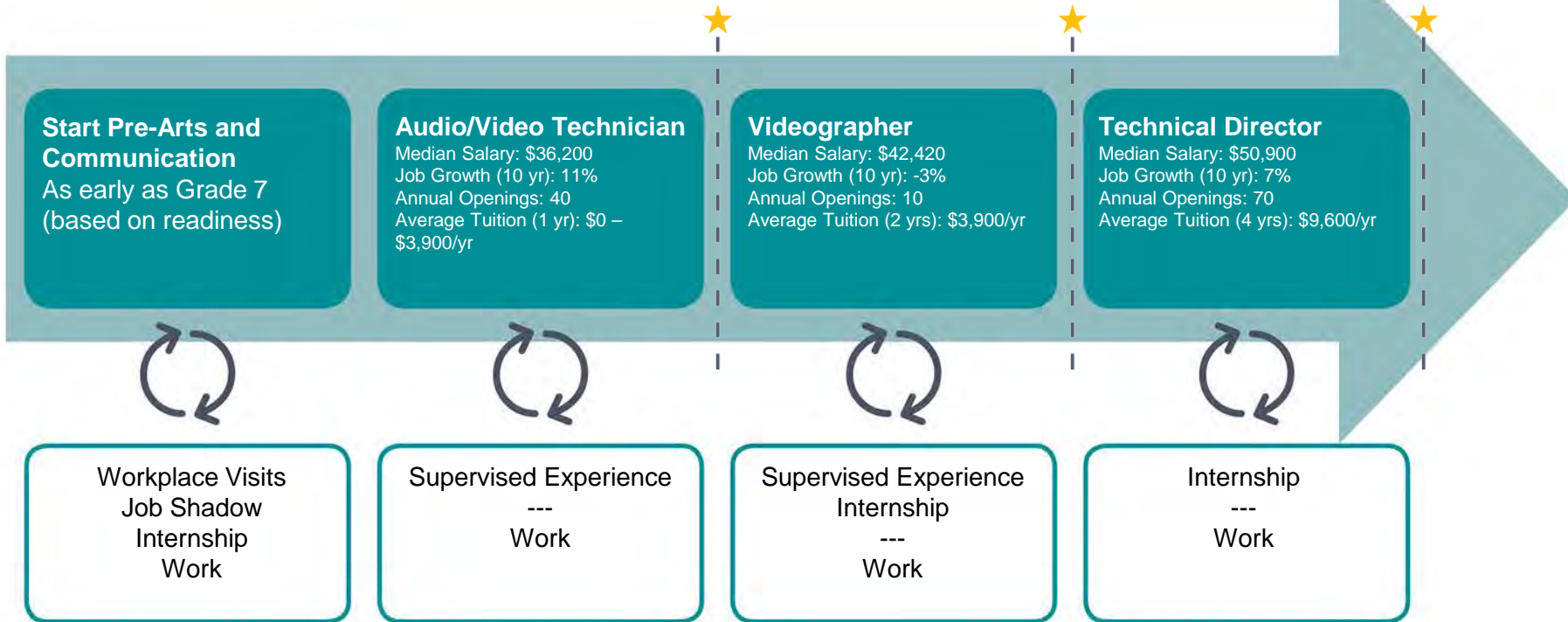


Arts and Communication Career Pathway

Certificate

Associate Degree,
Interactive Media

Bachelor's Degree,
Cinematography



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Arts and Communication Career Pathway

Secondary Pathway: **Media Arts**

Postsecondary Program: **Interactive Media**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Arts & Communication Primer		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Media Arts Introduction	Video Production	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Digital Cinema	World Languages		
	12	English IV	Trigonometry/ Calculus	Environmental Science	U.S. Government	Multi-Media Web Production	Arts & Communication Capstone		
Postsecondary	Year 1 1st Semester	English	Interactive Design Principles	Basics of Video & Sound	Intro to Computer Design	HTML	Biology		
	Year 1 2nd Semester	Storyboarding	Visual Communication	Intro to Humanities	CSS	Branding	Media & Graphics Optimization	Audio Production	
	Year 2 1st Semester	Statistics	Flash I & II	Sociology	Java-script Fundamentals	Content Management & Integration	Video Production		
	Year 2 2nd Semester	Web Design	Advanced Flash III	Interactive Portfolio	Interactive Media Practicum	Interactive Media Seminar	DVD Creation		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

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Course titles and sequences will vary between schools.

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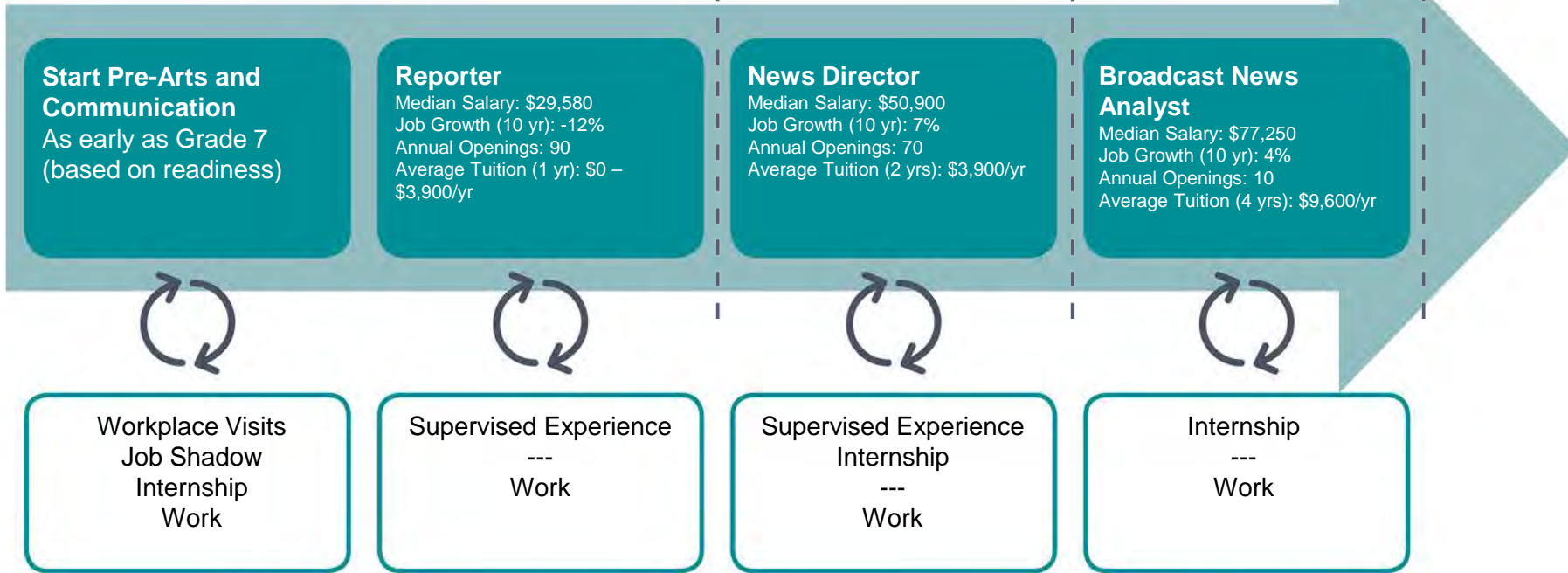


Arts and Communication Career Pathway

Certificate

Associate Degree,
Film/Video Production

Bachelor's Degree,
Journalism



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Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Arts and Communication Pathway Model

Secondary Pathway: **Media Arts**

Postsecondary Program: **Film/Video Production**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Arts & Communication Primer		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Introduction to Media Arts	Video Broadcast	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Media Arts Writing	World Languages		
	12	English IV	Trigonometry/ Calculus	Environmental Science	U.S. Government	Business of Arts & Communication	Video Production		
Postsecondary	Year 1 1st Semester	English	Digital Media Concepts	Intro to Audio/Visual Production	Market Research for Multimedia	Multimedia Information Design			
	Year 1 2nd Semester	Public Speaking	Videography	2D Graphics	English Composition	Technical Communication	Math for Technology		
	Year 2 1st Semester	Multimedia Information Design	Digital Video Editing	Applied 2D Graphics	Graphic Imaging Tech. Co-op	Audio Production & Sound Design	Video Editing & Compositing		
	Year 2 2nd Semester	Internship	Humanities Elective	Multi Camera Production & Lighting	Motion Graphics- After Effects	Audio/Video Capstone	Social Science Elective	Audio/Visual Elective	

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014

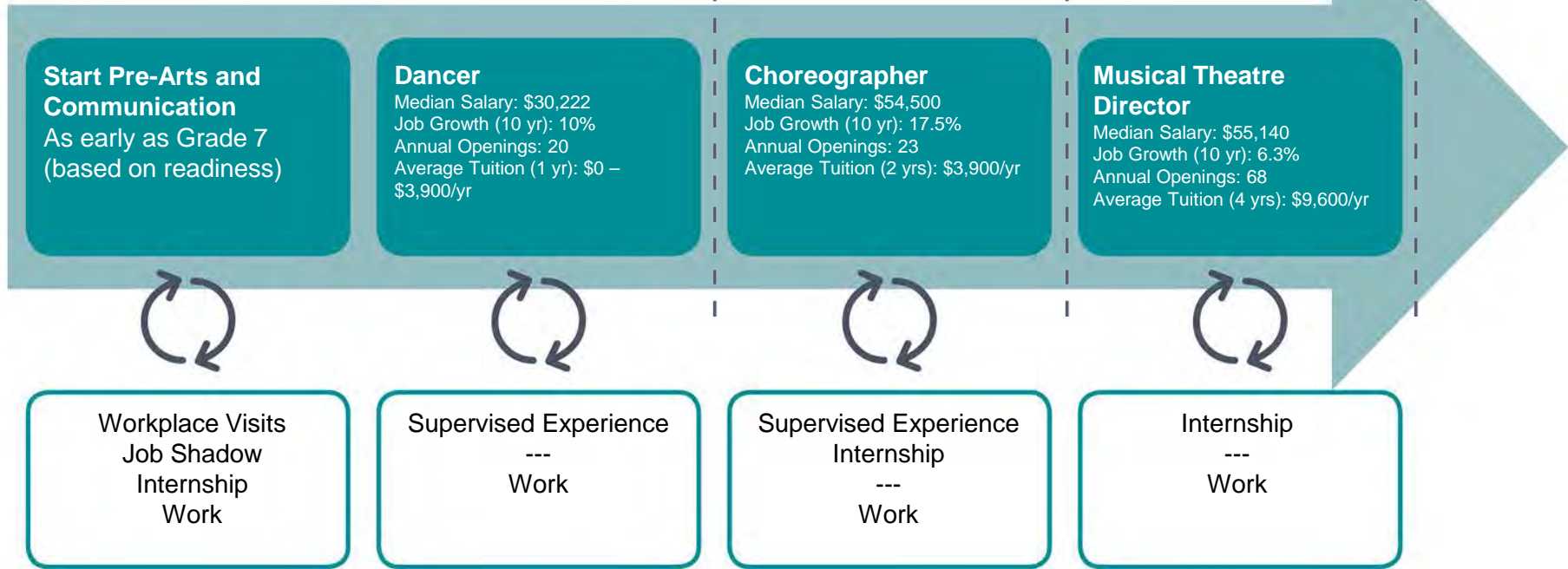


Arts and Communication Career Pathway

Certificate

Associate Degree,
Dance

Bachelor's Degree,
Theatre Arts



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Arts and Communication Career Pathway

Secondary Pathway: **Performing Arts**

Postsecondary Program: **Dance**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Arts & Communication Primer		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Performing Arts Introduction	Dance I	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Choreography	Dance II	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Business of Arts & Communication	Dance III		
Postsecondary	Year 1 1st Semester	English Composition	College Algebra	Public Speaking	Introduction to Dance	Theatre I	Fundamentals of Music		
	Year 1 2nd Semester	Sociology	Chemistry	Introduction to Stagecraft	Dance Pedagogy	Script Analysis	Jazz and Hip Hop		
	Year 2 1st Semester	World Languages	Social Media Marketing	Performing Arts Business	Dance History	Modern Dance	Audition Techniques		
	Year 2 2nd Semester	World Languages	Musical Theatre	Theatre Management	Ballet	Choreography	Character Design		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014

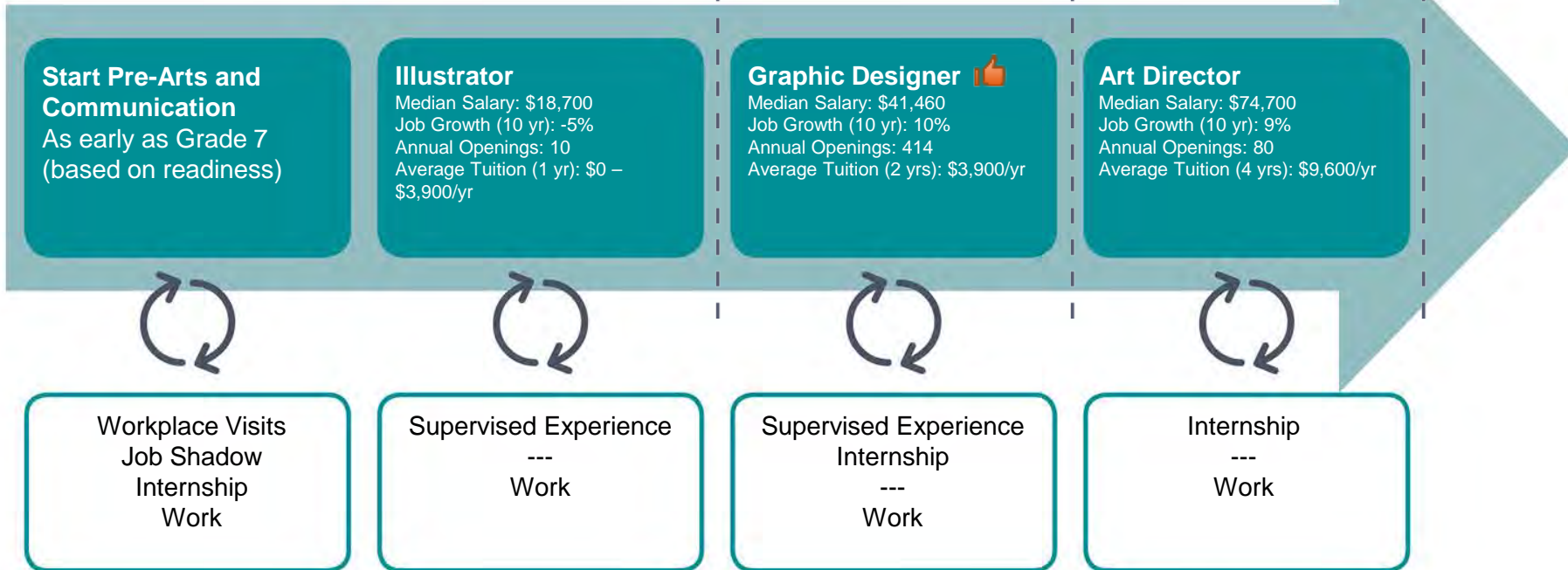


Arts and Communication Career Pathway

Certificate

Associate Degree,
Graphic Design

Bachelor's Degree,
Graphic Design



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Arts and Communication Career Pathway

Secondary Pathway: **Visual Design and Imaging**

Postsecondary Program: **Graphic Design**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Science	Social Studies	Fine Arts	Arts & Communication Primer		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Intro to Visual Design	Business of Arts and Communication	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Visual Creation	Digital Print Design	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Multi-Media Web Production	Photographic Composition		
Postsecondary	Year 1 1st Semester	English	College Algebra	Computer Applications for Mac	Digital Imaging	Drawing I	Vector Graphic Design		
	Year 1 2nd Semester	English	Multicultural Diversity	Digital Design	Graphic Fundamentals	2D Design	Electronic Page Layout		
	Year 2 1st Semester	Public Speaking	Accounting	Digital Video	Digital Photography	Interactive Media	Web Design		
	Year 2 2nd Semester	Advanced Graphic Design	History of Western Art	Advanced Graphic Design & History	Technical Communication	Physical Science for Technology	3D Graphics		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

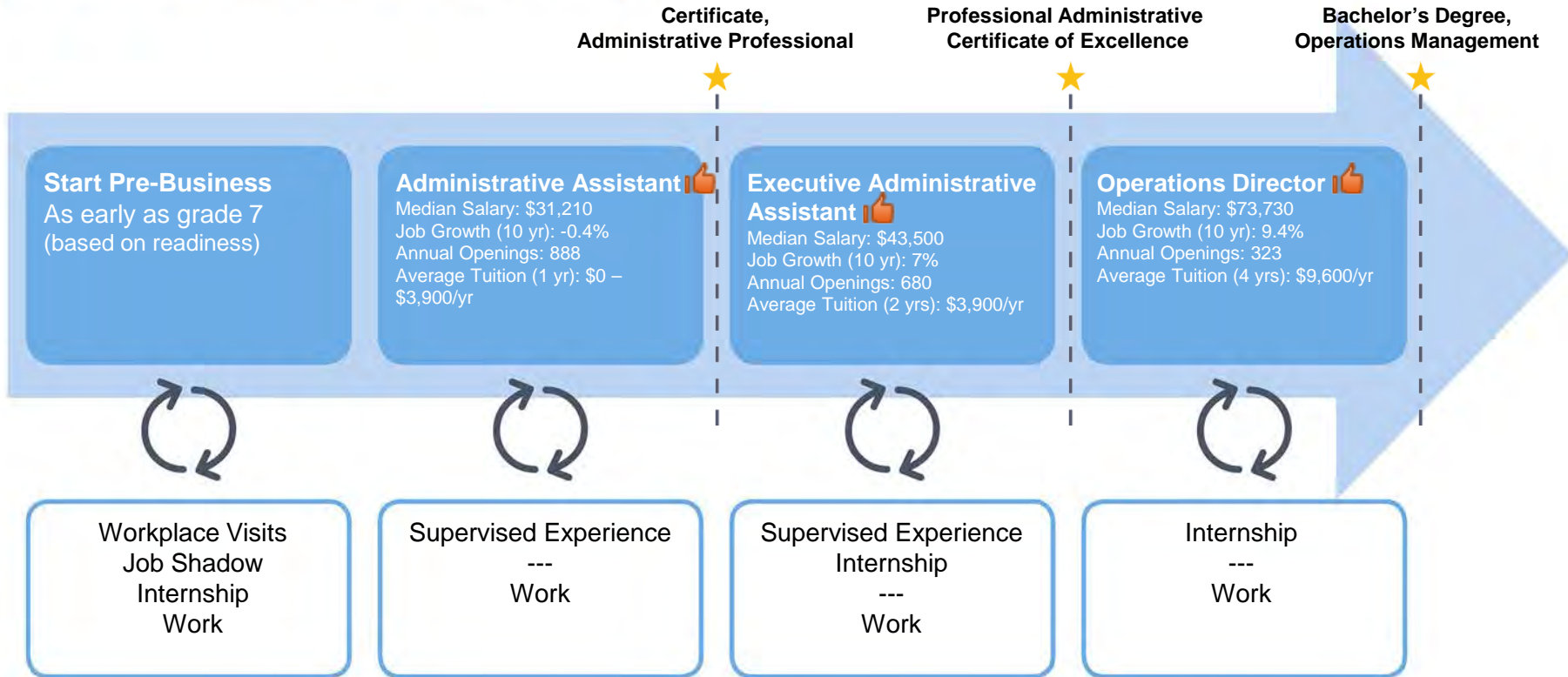
Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014



Business and Administrative Services Career Pathway



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Business and Administrative Services Career Pathway

Secondary Pathway: **Business and Administrative Services**

Postsecondary Program: **Business Management**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Business Foundations	Fundamentals of Business & Admin.	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Management Principles	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Office Management	World Languages		
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Financial Accounting	Operations Management		
Postsecondary	Year 1 1st Semester	English I	Business Math	Document Production	Beginning Spreadsheet	Office Procedures	Information Technology Basics		
	Year 1 2nd Semester	English II	Accounting Concepts	Document Production II	Intermediate Spreadsheet	Beginning Database	Presentation Graphics	Contemporary American Business	Social Science Elective
	Year 2 1st Semester	Business Communication	Public Speaking	Employability Skills	Organizational Behavior	Intermediate Database	Principles of Management	Web Design	
	Year 2 2nd Semester	Interpersonal Communication	Human Resource Management	Office Simulation	HR Co-Op Experience	Business Management Elective			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014

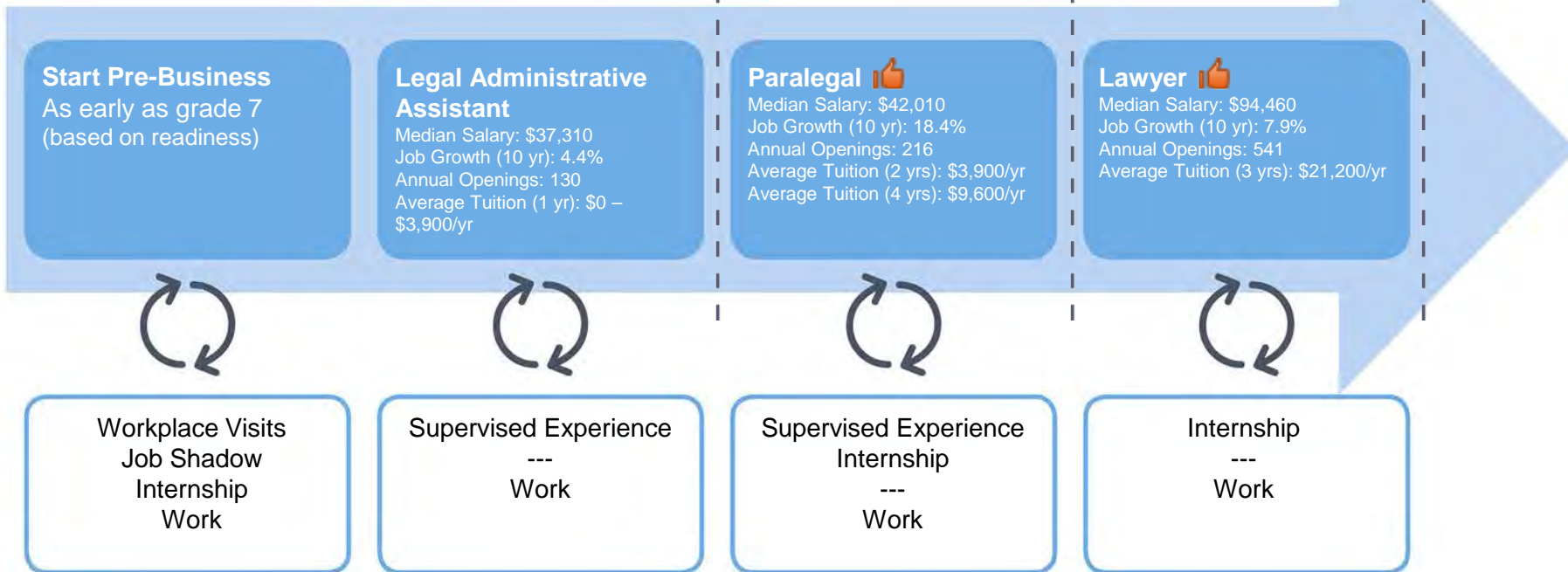


Business and Administrative Services Career Pathway

Certificate

Associate Degree,
Paralegal Studies

Doctoral Degree,
Law



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Business and Administrative Services Career Pathway

Secondary Pathway: **Business and Administrative Services**

Postsecondary Program: **Paralegal Studies**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Business Foundations	Fundamentals of Business & Admin.	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Management Principles	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Office Management	Financial Accounting	World Languages	
	12	English IV	Trigonometry/ Calculus	Environmental Science	U.S. Government	Legal Office Management	Business Capstone		
Postsecondary	Year 1 1st Semester	English	Algebra	College Seminar	Intro to Paralegal Studies/Ethics	Law Office Technology			
	Year 1 2nd Semester	English	Computer Applications	Legal Research & Writing	Torts & Contracts	Intro to Environmental Science	Intro to Sociology	Administrative Law	Business Organizations
	Year 2 1st Semester	Communication	Advanced Legal Research	Civil Practice & Procedure	Technical Elective	Technical Elective			
	Year 2 2nd Semester	Psychology	Family Law	Legal Practicum	Humanities Elective	Technical Elective			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

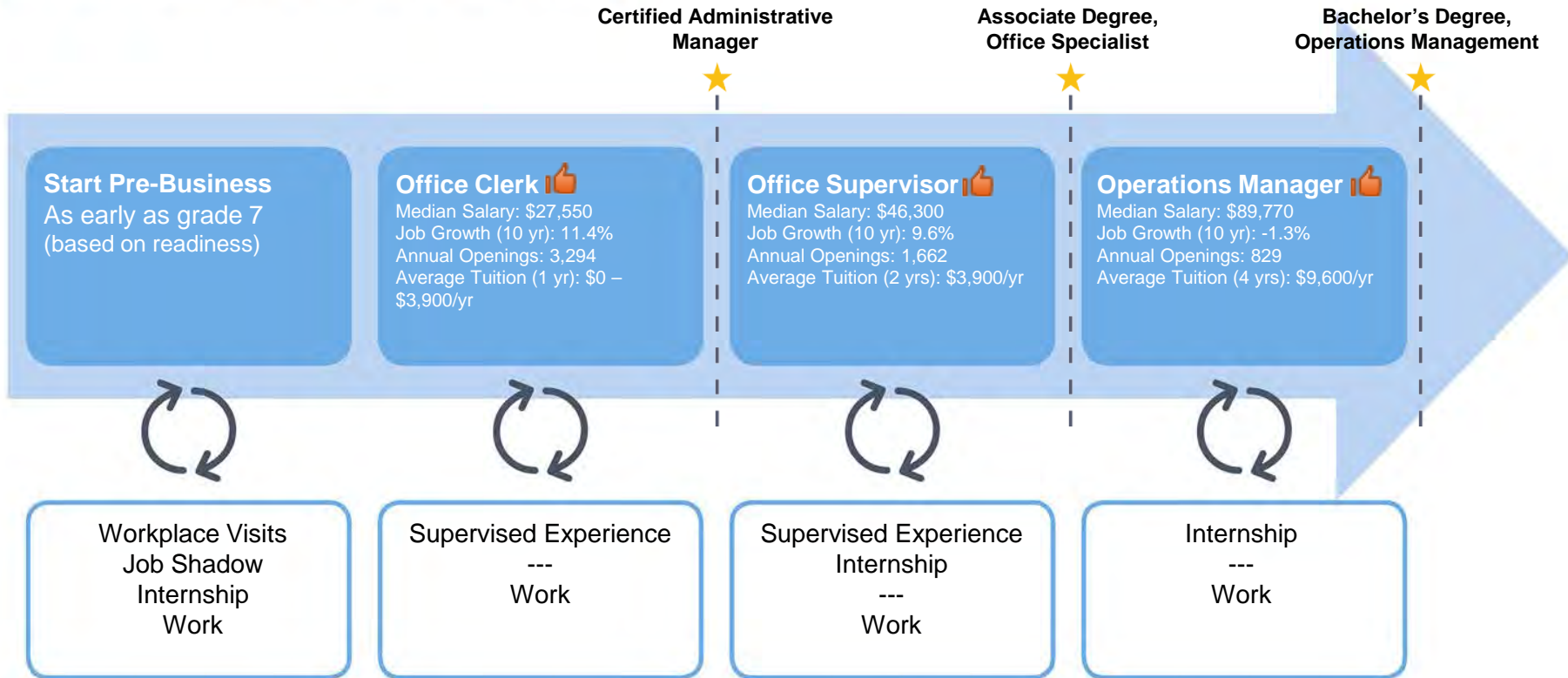
Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014



Business and Administrative Services Career Pathway



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
 gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Business and Administrative Services Career Pathway

Secondary Pathway: **Business and Administrative Services**

Postsecondary Program: **Business Management**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Business Foundations	Fundamentals of Business & Admin.	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Management Principles	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Office Management	Financial Accounting	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Operations Management	Business Capstone		
Postsecondary	Year 1 1st Semester	English I	Business Math	Intro to Financial Accounting	Foundations of Business	Micro-economics	Management Elective		
	Year 1 2nd Semester	English II	Computer Applications	Managerial Accounting	Marketing Principles	Arts & Humanities Elective			
	Year 2 1st Semester	Public Speaking	Statistics	International Business	Organizational Behavior	Business Law	Intro to Supervision		
	Year 2 2nd Semester	Business Capstone or Internship	Management Information Systems	Macro-economics	Business Communication	Natural Sciences Elective			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

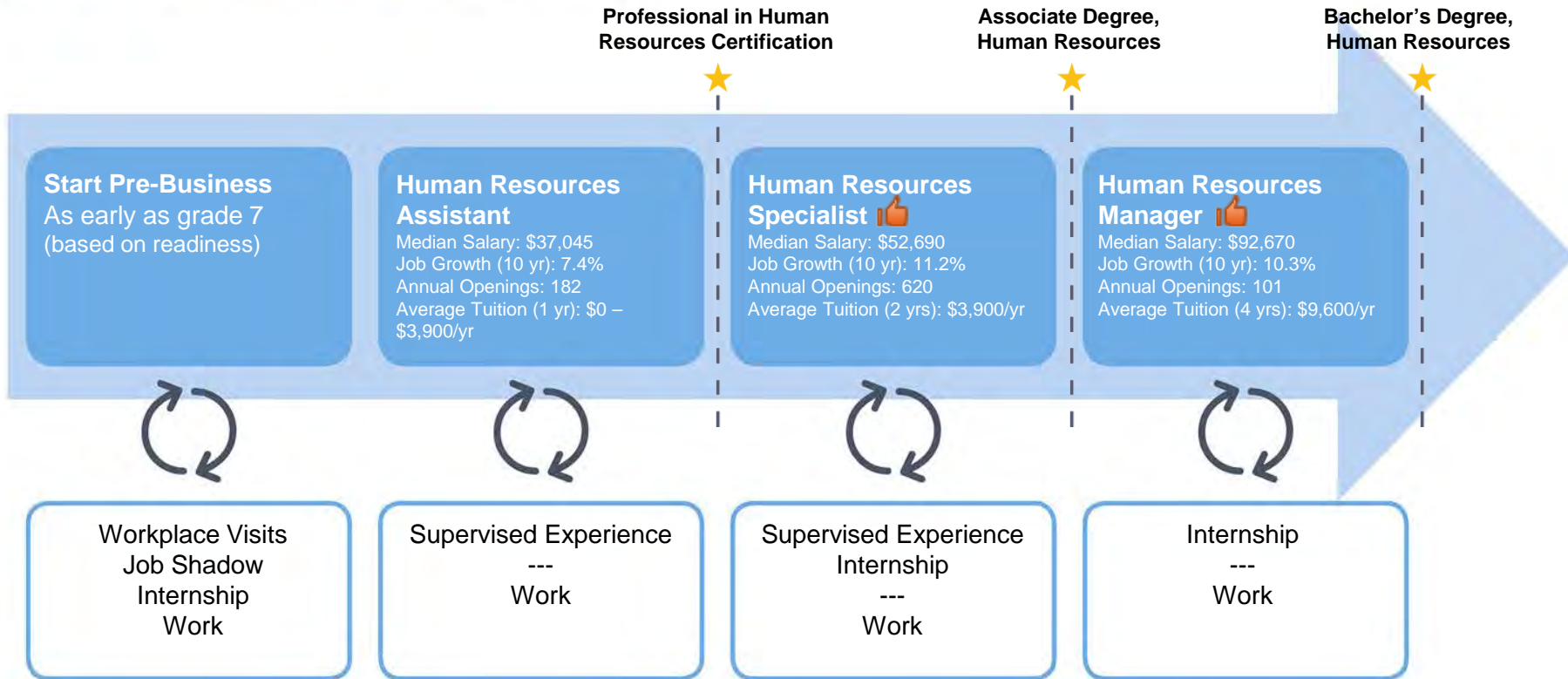
Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014



Business and Administrative Services Career Pathway



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Business and Administrative Services Career Pathway

Secondary Pathway: **Business and Administrative Services**

Postsecondary Program: **Human Resources**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Business Foundations	Fundamentals of Business & Admin.	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Management Principles	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Operations Management	World Languages		
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Human Resources Management	Business Capstone		
Postsecondary	Year 1 1st Semester	English	Business Language	Business Applications	Human Resources Management	Computer Applications	Management		
	Year 1 2nd Semester	Statistics	Personnel Interviewing	Employee Training	Labor Relations	HR Policy & Procedure Writing	Legal Environment of Business	Benefits & Compensation	
	Year 2 1st Semester	Intercultural Communication	Micro-economics	HR Records Management	Workplace Safety	Staffing and the Law	Payroll		
	Year 2 2nd Semester	American Government	Administration of Human Resources	Voluntary Benefits	HRM Practicum	Natural Sciences Elective			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

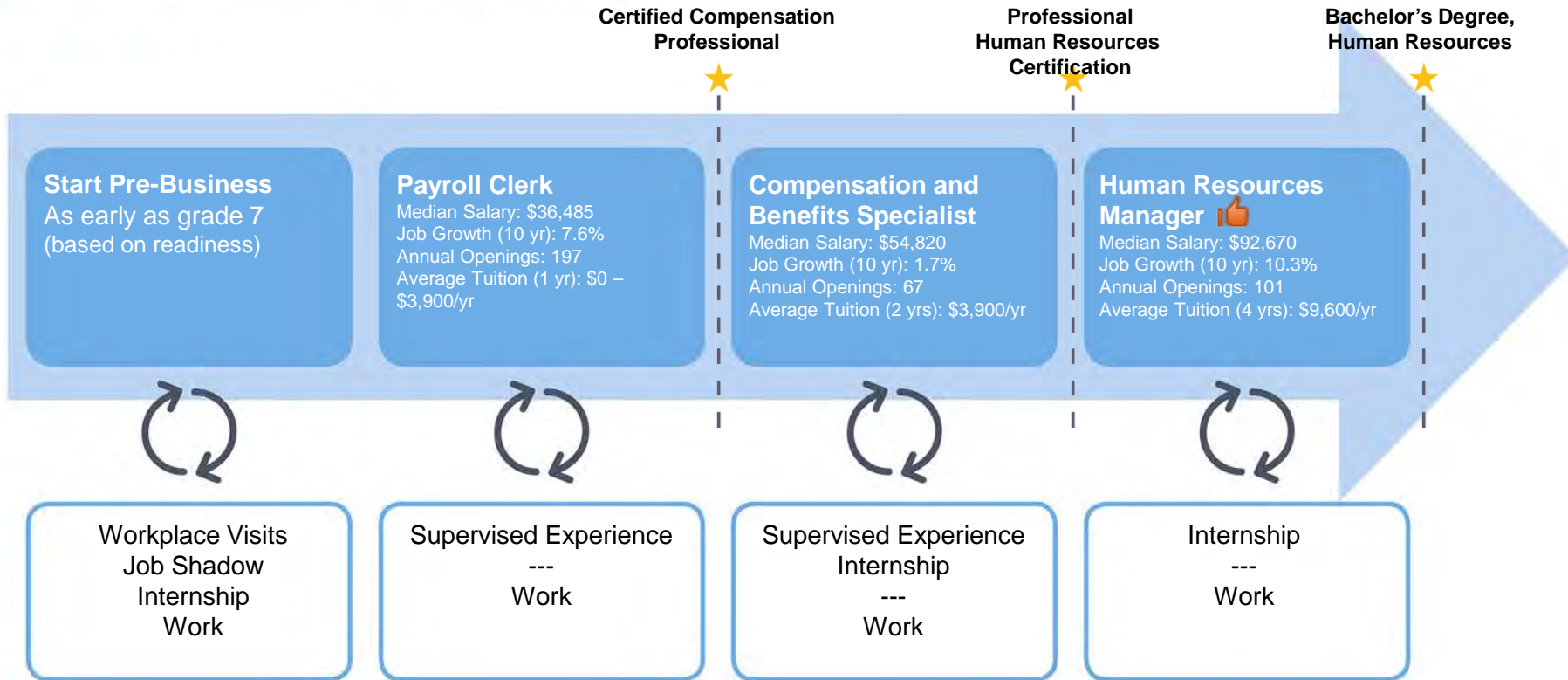
Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014



Business and Administrative Services Career Pathway



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Business and Administrative Services Career Pathway

Secondary Pathway: **Business and Administrative Services**

Postsecondary Program: **Human Resources**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Business Foundations	Fundamentals of Business & Admin.	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Management Principles	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Managerial Accounting	Operations Management	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Human Resources Management	Business Capstone		
Postsecondary	Year 1 1st Semester	English	Business Language	Business Applications	Human Resources Management	Computer Applications	Management		
	Year 1 2nd Semester	Statistics	Personnel Interviewing	Employee Training	Labor Relations	HR Policy & Procedure Writing	Legal Environment of Business	Benefits & Compensation	
	Year 2 1st Semester	Intercultural Communication	Micro-economics	HR Records Management	Workplace Safety	Staffing & the Law	Payroll		
	Year 2 2nd Semester	American Government	Administration of Human Resources	Voluntary Benefits	HRM Practicum	Natural Sciences Elective			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014



Business and Administrative Services Career Pathway

Certificate,
Medical Office

Associate Degree,
Health Information Technology

Bachelor's Degree,
Health Care Administration



Start Pre-Business

As early as grade 7
(based on readiness)

Medical Secretary 👍

Median Salary: \$29,350
Job Growth (10 yr): 31.3%
Annual Openings: 1,602
Average Tuition (1 yr): \$0 – \$3,900/yr

Medical Records Technologist 👍

Median Salary: \$33,370
Job Growth (10 yr): 14.6%
Annual Openings: 246
Average Tuition (2 yrs): \$3,900/yr

Health Administration Manager 👍

Median Salary: \$85,520
Job Growth (10 yr): 16%
Annual Openings: 555
Average Tuition (4 yrs): \$9,600/yr



Workplace Visits
Job Shadow
Internship
Work

Supervised Experience

Work

Supervised Experience
Internship

Work

Internship

Work

Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:

gainful employment and/or postsecondary study.

 Ohio In-demand Occupations

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Business and Administrative Services Career Pathway

Secondary Pathway: **Business and Administrative Services**

Postsecondary Program: **Medical Management**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Business Foundations	Fundamentals of Business & Admin.	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Management Principles	Medical Terminology	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Office Management	Business Informatics	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Medical Office Management	Business Capstone		
Postsecondary	Year 1 1st Semester	English	College Seminar	Office Procedures I	Word I	Excel I	PowerPoint I	Keyboarding & Document Formatting	
	Year 1 2nd Semester	Business Language	Introduction to Health Care	Office Procedures II	Word II	Advanced Document Formatting	PowerPoint II	Medical Terminology	Access I
	Year 2 1st Semester	Business Math	Bookkeeping I	Advanced Medical Terminology	Excel II	Health Data Management	Office Integration		
	Year 2 2nd Semester	Business Capstone	Medical Reimbursement	Computer Transcription	Business Practicum	Natural Sciences Elective	Technical Elective		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

12/2014

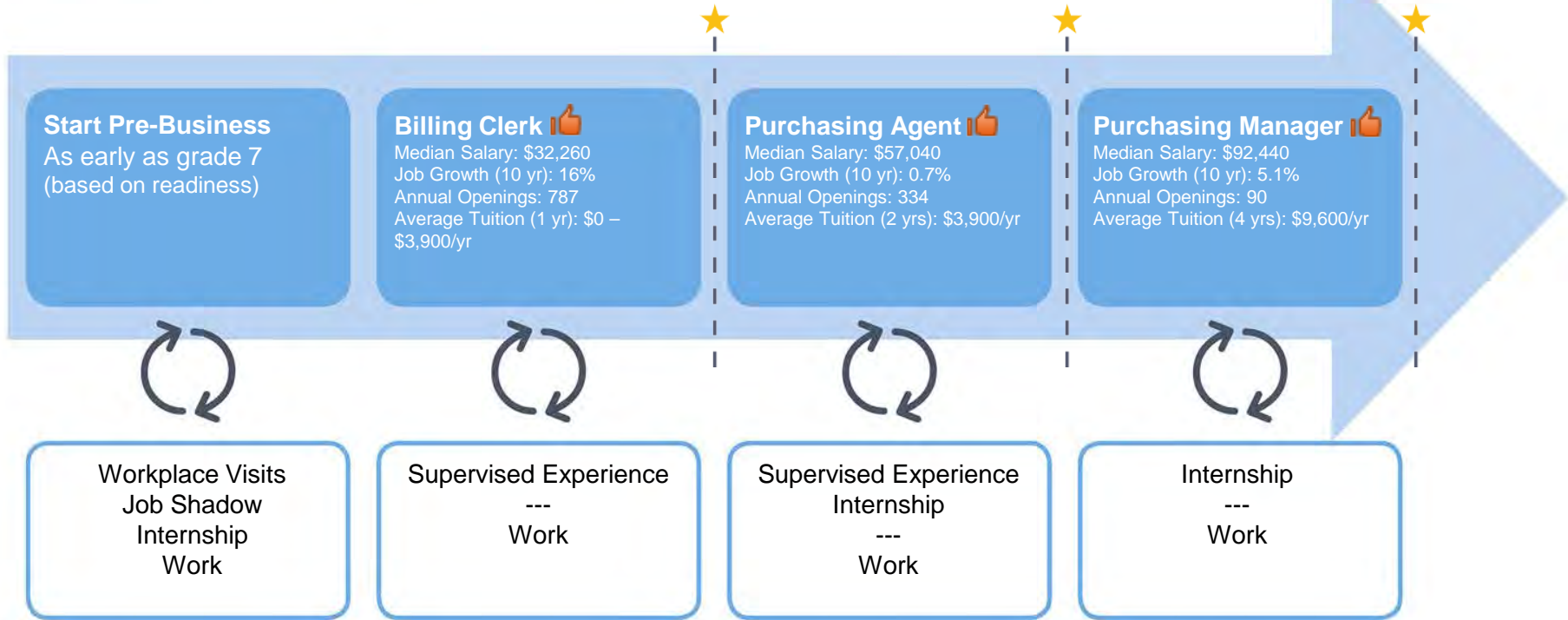


Business and Administrative Services Career Pathway

Certificate

Associate Degree,
Marketing Operations

Bachelor's Degree,
Finance



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Business and Administrative Services Career Pathway

Secondary Pathway: **Business and Administrative Services**

Postsecondary Program: **Marketing Operations**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Business Foundations	Fundamentals of Business & Admin. Svcs.	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Financial Accounting	Supply Chain Management	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Managerial Accounting	World Languages		
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Logistics Management	Business Capstone		
Postsecondary	Year 1 1st Semester	English	College Seminar	Financial Accounting	Software Applications	Personal Finance	Business Language		
	Year 1 2nd Semester	Business Applications	Investments	Statistics	Managerial Accounting	Management	Micro-economics	Natural/ Physical Science	
	Year 2 1st Semester	Macro-economics	Legal Environment of Business	Money & Banking	International Finance	Finance Elective	Arts & Humanities Elective		
	Year 2 2nd Semester	Marketing Principles	Finance Capstone	Finance Practicum	Finance Elective	Social/ Behavioral Science			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

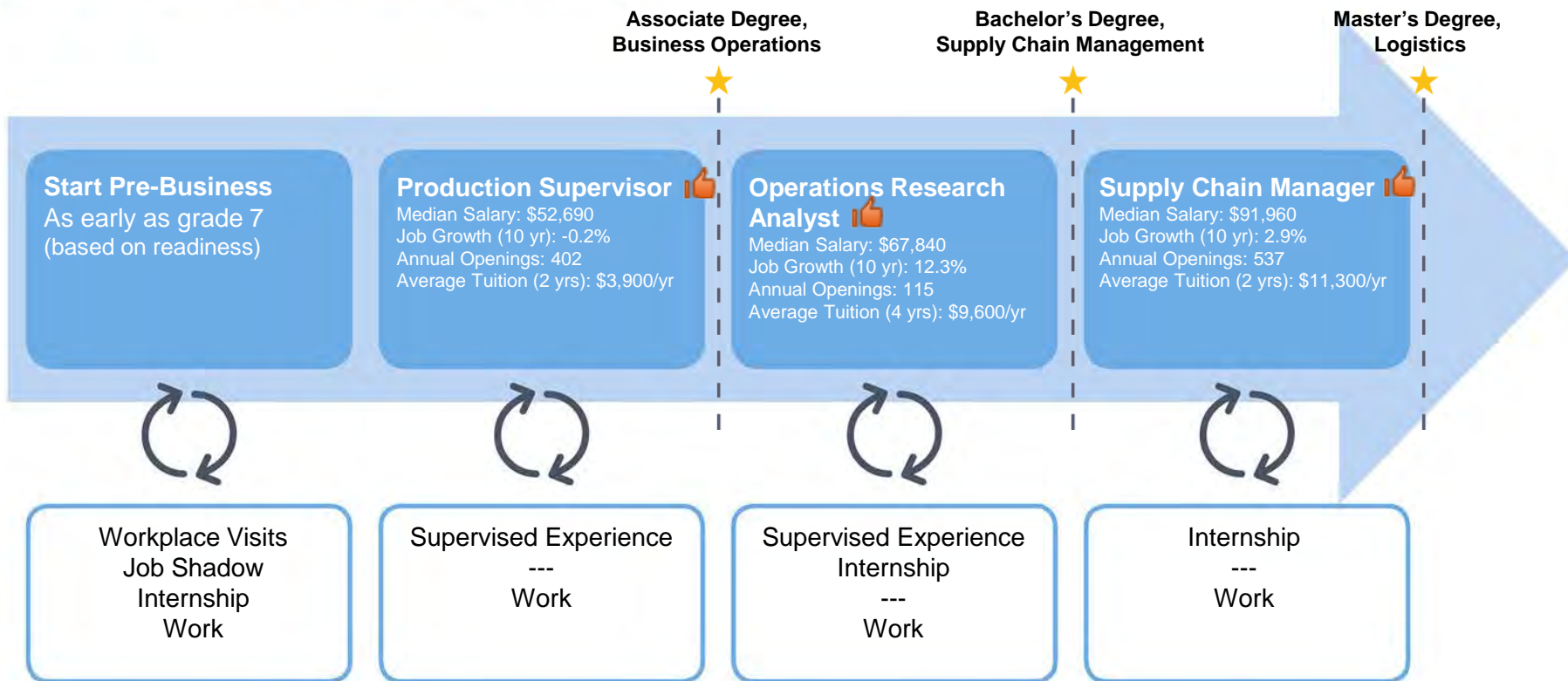
Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014



Business and Administrative Services Career Pathway



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Business and Administrative Services Career Pathway

Secondary Pathway: **Business and Administrative Services**

Postsecondary Program: **Supply Chain Management**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Business Foundations	Fundamentals of Business and Admin.	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Management Principles	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Supply Chain Management	Operations Management	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Foreign Language	Logistics Management	Business Capstone	
Postsecondary	Year 1 1st Semester	English	College Seminar	Financial Accounting	Supply Chain Management Principles	Micro-economics			
	Year 1 2nd Semester	Statistics	Transportation & Traffic Management	Strategic Procurement	IT in Logistics	Customer Service & Sales	Marketing Principles	International Management	
	Year 2 1st Semester	Managerial Accounting	Warehouse Management	Inventory Management	International Business	Import/ Export Regulations & Compliance	Humanities Elective		
	Year 2 2nd Semester	Performance Management	Project Management	SCM Seminar	SCM Practicum	Natural Science Elective			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014

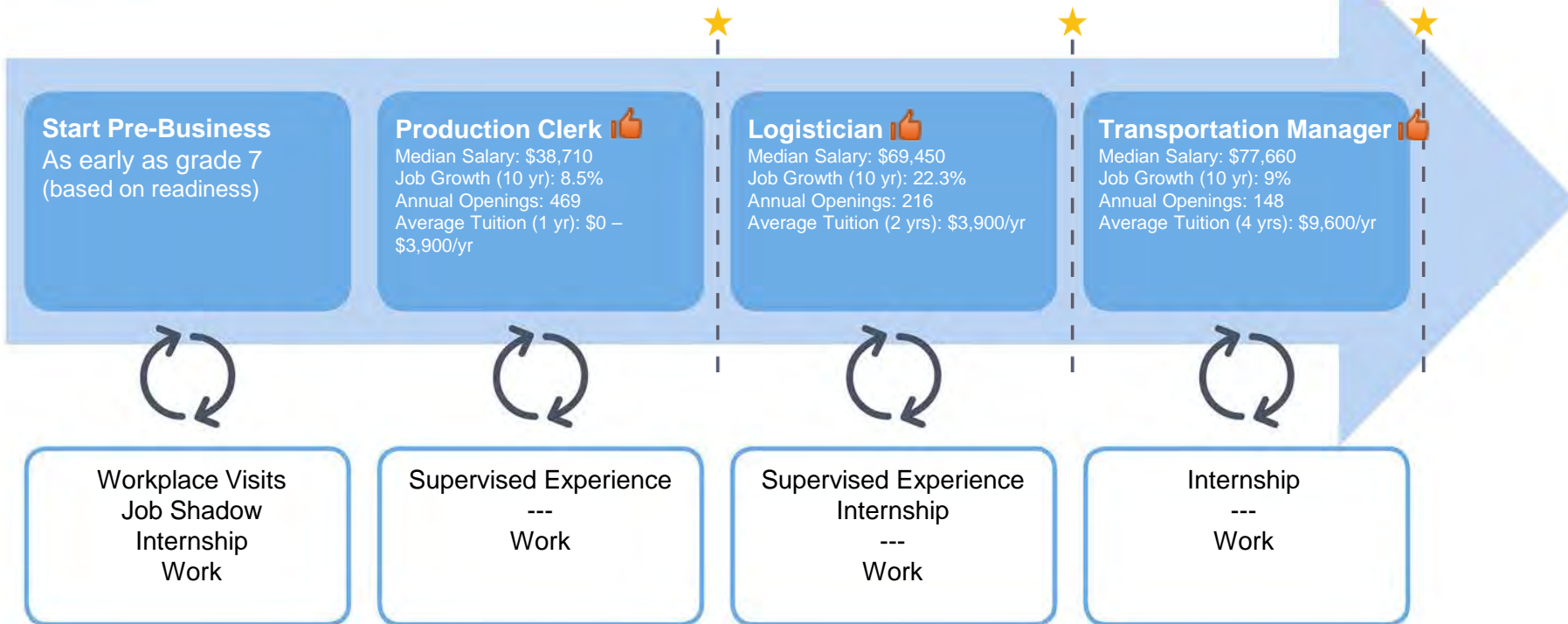


Business and Administrative Services Career Pathway

Certificate

Associate Degree,
Supply Chain Management

Bachelor's Degree,
Operations Management



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Business and Administrative Services Career Pathway

Secondary Pathway: **Business and Administrative Services**

Postsecondary Program: **Supply Chain Management**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Business Foundations	Fundamentals of Business and Admin.	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Management Principles	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Supply Chain Management	Operations Management	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Logistics Management	Business Capstone		
Postsecondary	Year 1 1st Semester	English	College Seminar	Financial Accounting	Supply Chain Management Principles	Micro-economics			
	Year 1 2nd Semester	Statistics	Transportation & Traffic Management	Strategic Procurement	IT in Logistics	Customer Service & Sales	Marketing Principles	International Management	
	Year 2 1st Semester	Managerial Accounting	Warehouse Management	Inventory Management	International Business	Import/ Export Regulations & Compliance	Humanities Elective		
	Year 2 2nd Semester	Performance Management	Project Management	SCM Seminar	SCM Practicum	Natural Science Elective			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

1/2015



Business and Administrative Services Career Pathway

Certificate

Associate Degree,
Human Resources

Bachelor's Degree,
Human Resources
Administration



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
 gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Business and Administrative Services Career Pathway

Secondary Pathway: **Business and Administrative Services**

Postsecondary Program: **Human Resources**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Business Foundations	Fundamentals of Business & Admin.	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Management Principles	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Managerial Accounting	Operations Management	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Human Resources Management	Business Capstone		
Postsecondary	Year 1 1st Semester	English	Business Language	Business Applications	Human Resources Management	Computer Applications	Management		
	Year 1 2nd Semester	Statistics	Personnel Interviewing	Employee Training	Labor Relations	HR Policy & Procedure Writing	Legal Environment of Business	Benefits & Compensation	
	Year 2 1st Semester	Intercultural Communication	Micro-economics	HR Records Management	Workplace Safety	Staffing & the Law	Payroll		
	Year 2 2nd Semester	American Government	Administration of Human Resources	Voluntary Benefits	HRM Practicum	Natural Sciences Elective			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

6/2015

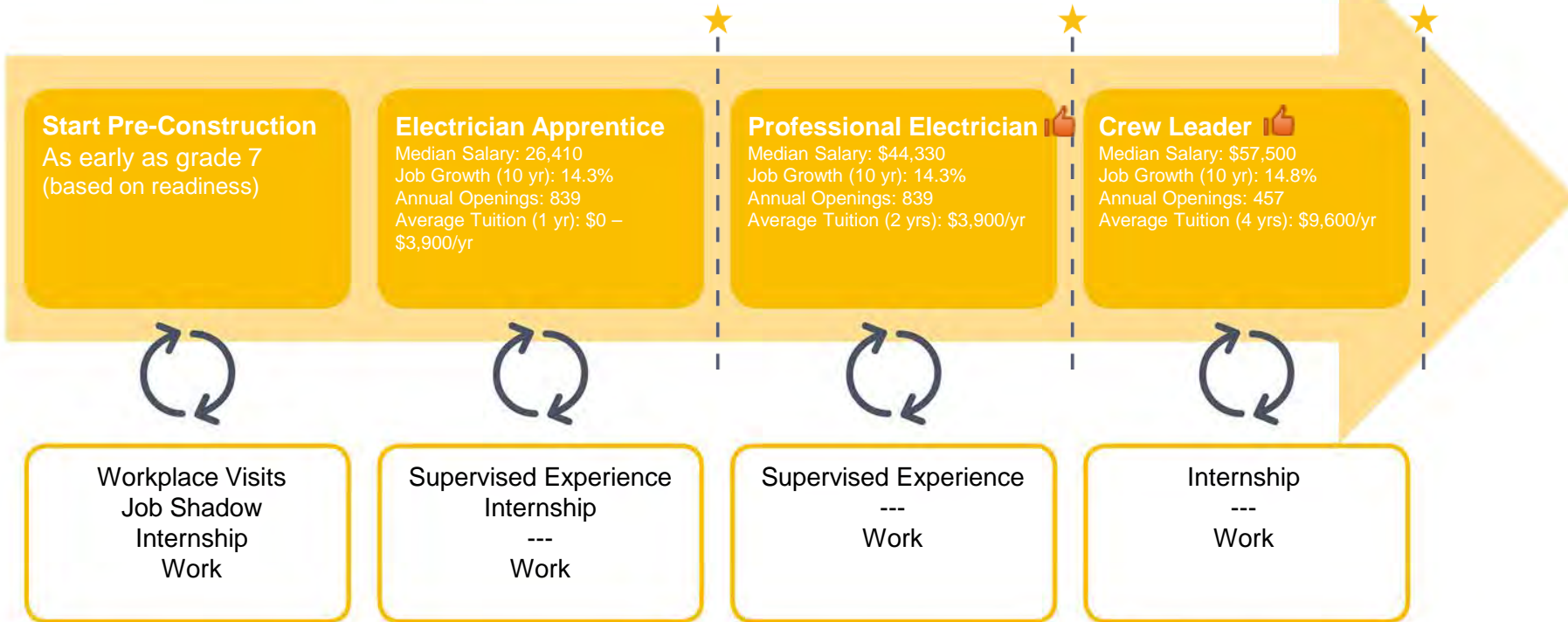


Construction Technologies Career Pathway

Apprenticeship

Associate Degree,
Skilled Trades

Bachelor's Degree,
Operations Management



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Construction Technologies Career Pathway

Secondary Pathway: **Mechanical, Electrical and Plumbing**

Postsecondary Program: **Electrical Trades**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Core & Sustainable Construction		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Mechanical, Electrical, & Plumbing Sys.	Construction Electrical Systems	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Commercial & Industrial Systems	World Languages		
	12	English IV	Trigonometry/ Calculus	Environmental Science	U.S. Government	Alternative Power Generation	Construction Safety & Leadership		
Postsecondary	Year 1 1st Semester	English Composition I	College Algebra	Industrial Computing	CAD	Industrial Electricity I			
	Year 1 2nd Semester	English Composition II	Trigonometry	Industrial Wiring	Hydraulics I	Industrial Electricity II	Environmental Science		
	Year 2 1st Semester	Interpersonal Communication	HVAC I	Industrial Electronics	Motors & Controls	Programmable Controller I			
	Year 2 2nd Semester	Psychology	Electrical Prints & Troubleshooting	Instrumentation & Controls	Industrial Fluid Power II	Robotics	Hydraulics II		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

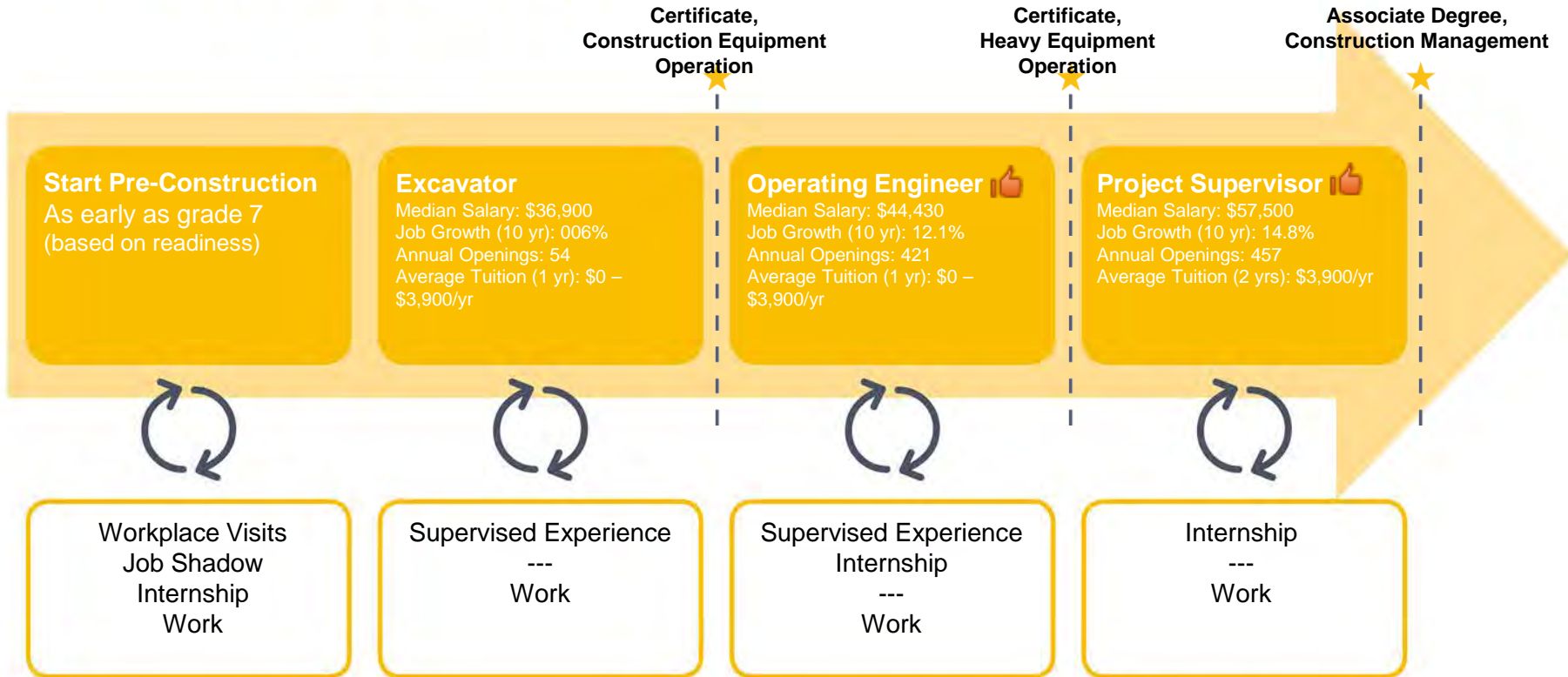
Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014



Construction Technologies Career Pathway



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Construction Technologies Career Pathway

Secondary Pathway: **Structural Systems**

Postsecondary Program: **Construction Management**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Core & Sustainable Construction		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Plan Reading	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Construction Safety & Leadership	Construction Management	World Languages	
	12	English IV	Trigonometry/ Calculus	Environmental Science	U.S. Government	Heavy Equipment Operations	Construction Site Preparation		
Postsecondary	Year 1 1st Semester	English	College Seminar	Construction Documents	Construction Methods	Construction Material Science	Construction Drawings		
	Year 1 2nd Semester	Business	Basic CAD	Quantity Survey	OSHA 30-hour Safety & Health	Basic Mechanical Drafting	Safety & Loss Prevention	Environmental Science	
	Year 2 1st Semester	Intermediate Algebra	Cost Control	Intro to Surveying	Estimating	Residential Computer Estimating	Company Management		
	Year 2 2nd Semester	Statistics	Project Management	Psychology	Business Management	Humanities Elective			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

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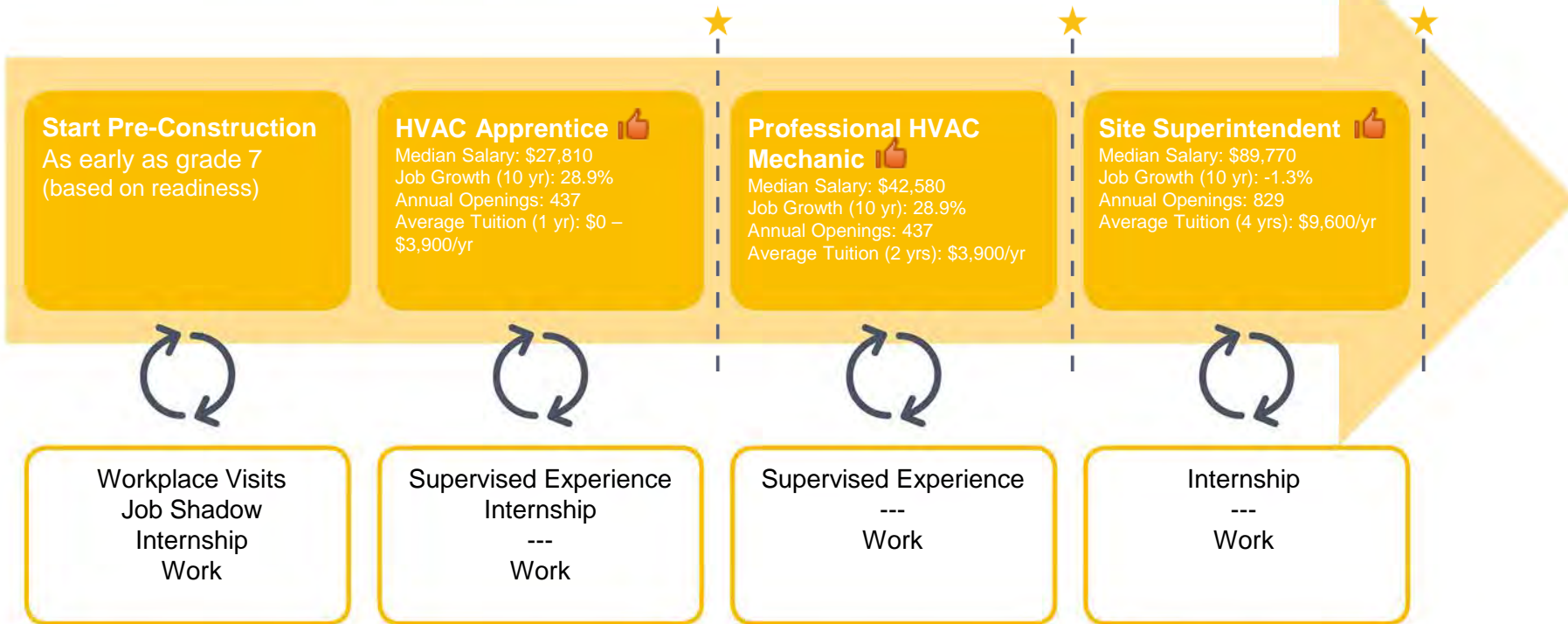


Construction Technologies Career Pathway

Apprenticeship

Associate Degree,
Skilled Trades

Bachelor's Degree,
Operations Management



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Construction Technologies Career Pathway

Secondary Pathway: **Mechanical, Electrical and Plumbing**

Postsecondary Program: **HVAC**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Core & Sustainable Construction		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Mechanical, Electrical, & Plumbing Sys.	Heating & Cooling Systems	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	HVAC Refrigeration	World Languages		
	12	English IV	Trigonometry/ Calculus	Environmental Science	U.S. Government	Sheet Metal	Construction Safety & Leadership		
Postsecondary	Year 1 1st Semester	English	Technical Math	College Seminar	Electricity	Basic Refrigeration	Intro to Computers		
	Year 1 2nd Semester	Interpersonal Communication	Heating Systems I	Installation Fundamentals	Refrigeration Control Systems	Refrigeration Handling	Social Science Elective		
	Year 2 1st Semester	Business Law	Heating Systems II	CAD	Duct Layout & Prints	Basic Refrigeration II	Environmental Science		
	Year 2 2nd Semester	Capstone	Climate Control	HVAC Design	Workplace Safety	Humanities Elective			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

10/2014



Construction Technologies Career Pathway

Certificate

Associate Degree,
Construction Management

Bachelor's Degree,
Construction Management



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
 gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Construction Technologies Career Pathway

Secondary Pathway: **Construction Design and Management**

Postsecondary Program: **Construction Management**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Core & Sustainable Construction		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Plan Reading	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Architecture Design I	Construction Management	World Languages	
	12	English IV	Trigonometry/ Calculus	Environmental Science	U.S. Government	Architecture Design II	Construction Safety & Leadership		
Postsecondary	Year 1 1st Semester	English	College Seminar	Construction Documents	Construction Methods	Construction Material Science	Construction Drawings		
	Year 1 2nd Semester	Business	Basic CAD	Quantity Survey	OSHA 30-hour Safety & Health	Basic Mechanical Drafting	Safety & Loss Prevention	Environmental Science	
	Year 2 1st Semester	Intermediate Algebra	Cost Control	Intro to Surveying	Estimating	Residential Computer Estimating	Company Management		
	Year 2 2nd Semester	Statistics	Project Management	Psychology	Business Management	Humanities Elective			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

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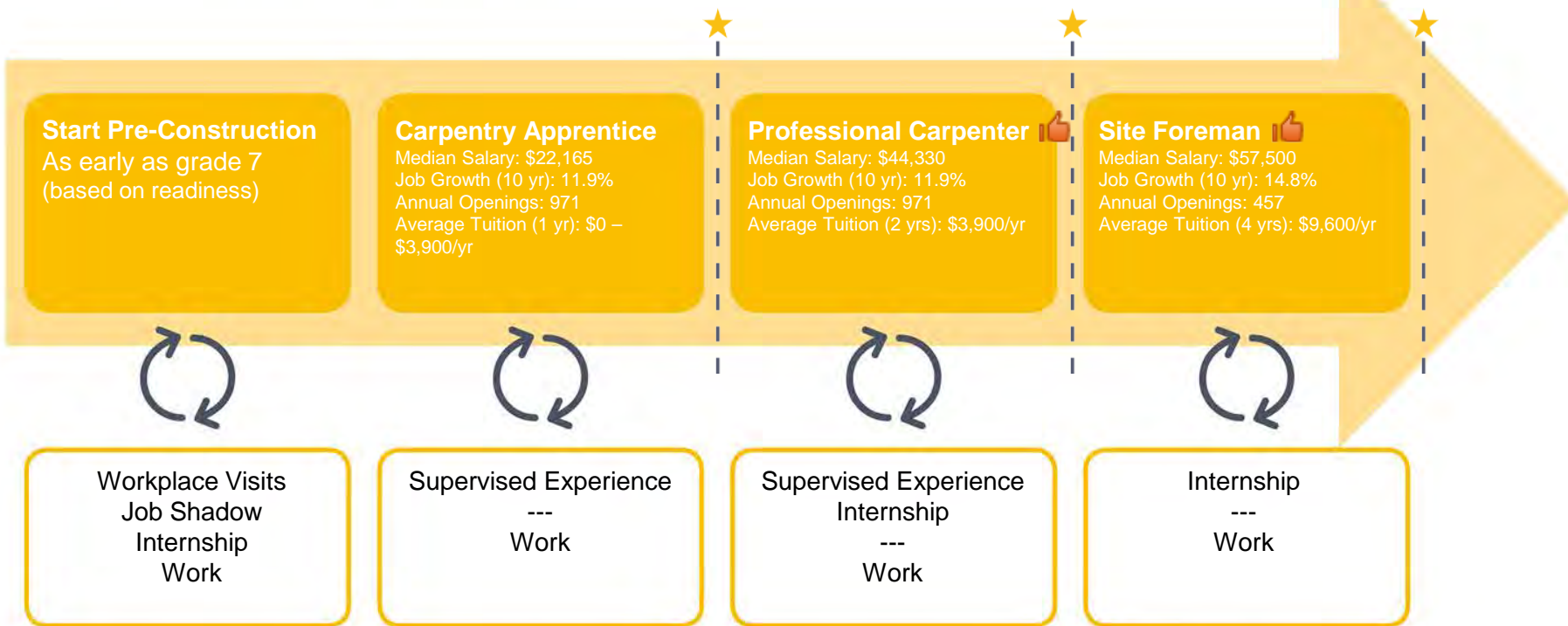


Construction Technologies Career Pathway

Certificate

Associate Degree,
Carpentry

Bachelor's Degree,
Construction Management



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Construction Technologies Career Pathway

Secondary Pathway: **Construction Design and Management**

Postsecondary Program: **Construction Management**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Core & Sustainable Construction		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Plan Reading	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Architecture Design I	Construction Management	World Languages	
	12	English IV	Trigonometry/ Calculus	Environmental Science	U.S. Government	Architecture Design II	Construction Safety & Leadership		
Postsecondary	Year 1 1st Semester	English	College Seminar	Construction Documents	Construction Methods	Construction Material Science	Construction Drawings		
	Year 1 2nd Semester	Business	Basic CAD	Quantity Survey	OSHA 30-hour Safety & Health	Basic Mechanical Drafting	Safety & Loss Prevention	Environmental Science	
	Year 2 1st Semester	Intermediate Algebra	Cost Control	Intro to Surveying	Estimating	Residential Computer Estimating	Company Management		
	Year 2 2nd Semester	Statistics	Project Management	Psychology	Business Management	Humanities Elective			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

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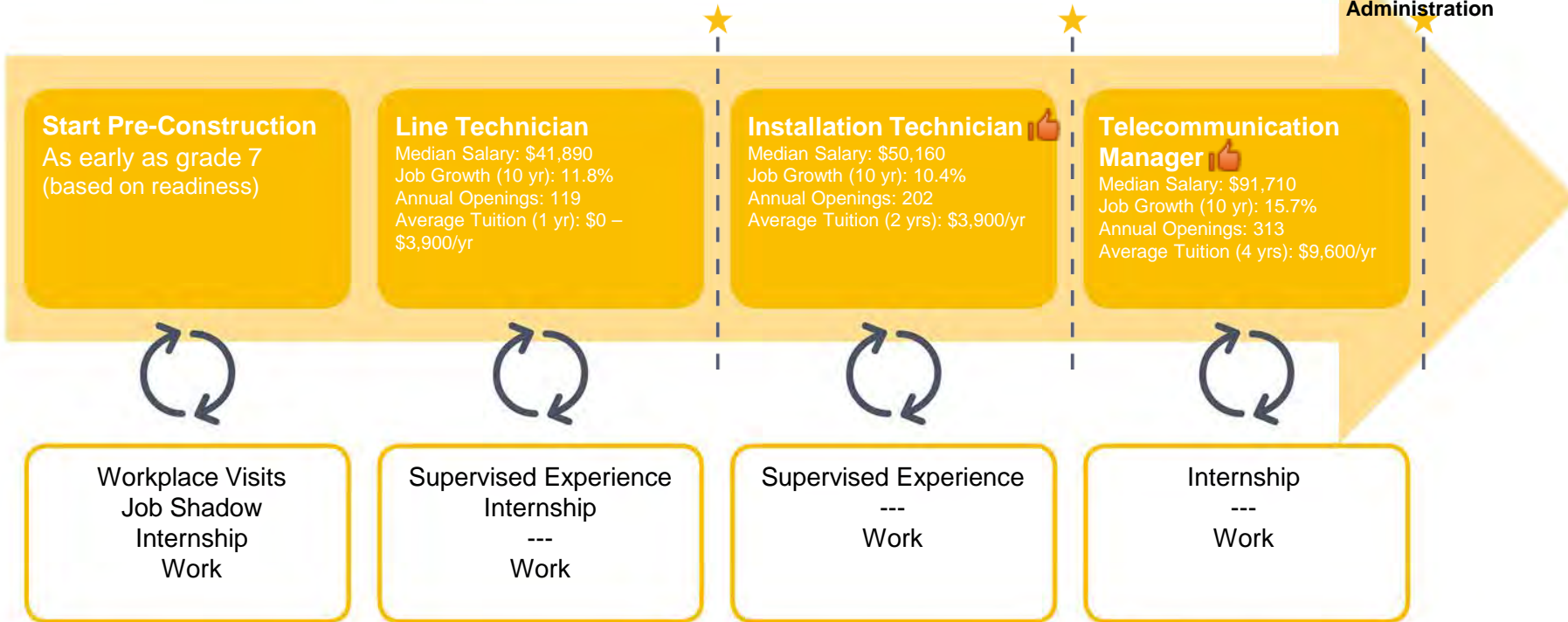


Construction Technologies Career Pathway

Certificate

Associate Degree,
Telecommunications

Bachelor's Degree,
Network and Systems
Administration



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Construction Technologies Career Pathway

Secondary Pathway: **Mechanical, Electrical and Plumbing**

Postsecondary Program: **Telecommunications**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Core & Sustainable Construction		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Mechanical, Electrical, & Plumbing Sys.	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Tele-communication / Low Voltage	Construction Electrical Systems	World Languages	
	12	English IV	Trigonometry/Calculus	Physics	U.S. Government	Alternative Power Generation	Powerline / High-Voltage Power		
Postsecondary	Year 1 1st Semester	English Composition I	College Algebra	Circuit Analysis I	Digital Systems I	Networking Systems I			
	Year 1 2nd Semester	Psychology	Calculus	Circuit Analysis II	Tele-communication	Networking Systems II	Electronic Circuits		
	Year 2 1st Semester	Humanities Elective	Physics	Communication Trans Concepts	Data Communication	Fiber Optics			
	Year 2 2nd Semester	Capstone Project	Engineering Technology	Internship					

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

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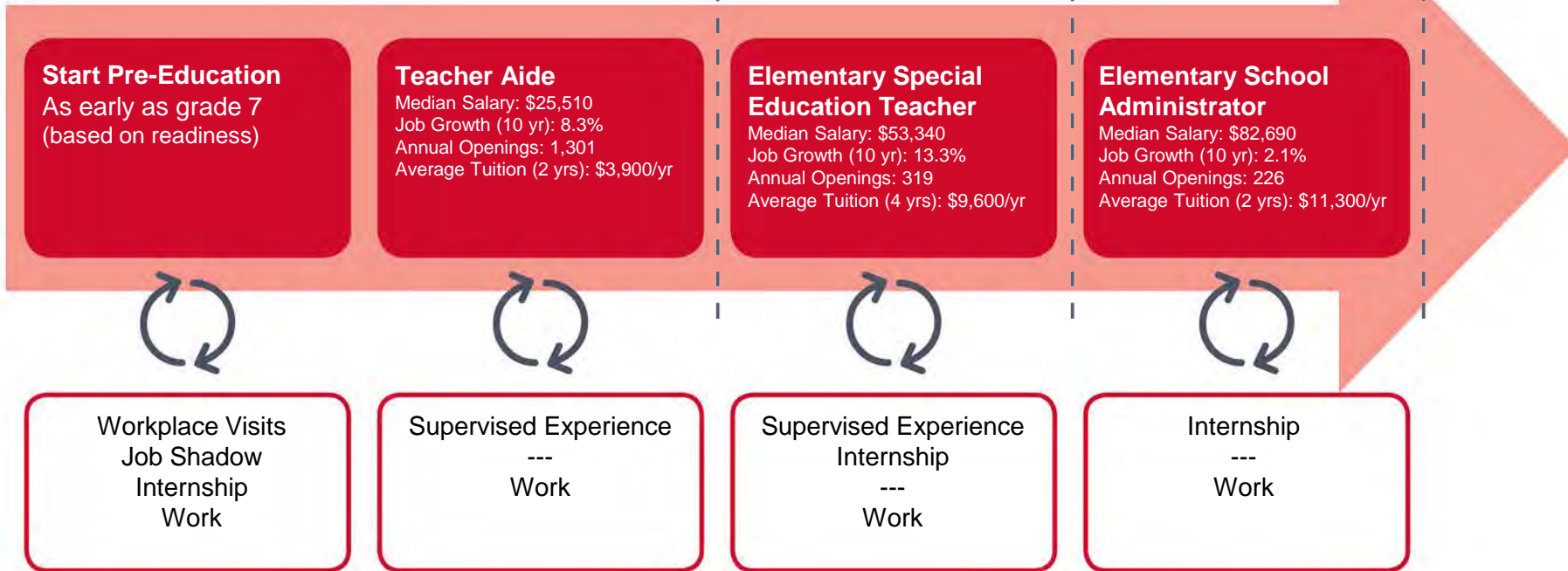


Education and Training Career Pathway

Associate Degree,
Teacher Assistant

Bachelor's Degree,
Education

Master's Degree,
Education



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Education and Training Career Pathway

Secondary Pathway: Teaching Professions

Postsecondary Program: Teacher Assistant

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Introduction to Education & Training		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	World Languages		
	11	English III	Algebra II	Chemistry	U.S. History	Teaching Professions I	World Languages		
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Teaching Professions II			
Postsecondary	Year 1 1st Semester	English Composition I	Intro to Education	Observing, Recording, Assessment	Childhood Guidance	Intro to Psychology	Early Education Seminar	Early Education Practicum	
	Year 1 2nd Semester	English Composition II	Biology	Child Development & Curriculum	Creative Curriculum	Language & Literacy Experiences	Human Development	Elementary Curriculum	Cognitive Curriculum
	Year 2 1st Semester	Business Math	Educational Psychology	Children with Exceptionalities	Families, Communities, & Schools	Practicum I	Seminar I		
	Year 2 2nd Semester	History	Educational Technology	Health, Safety, & Nutrition	Administration & Staff Dynamics	Education Capstone	Practicum II	Seminar II	

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

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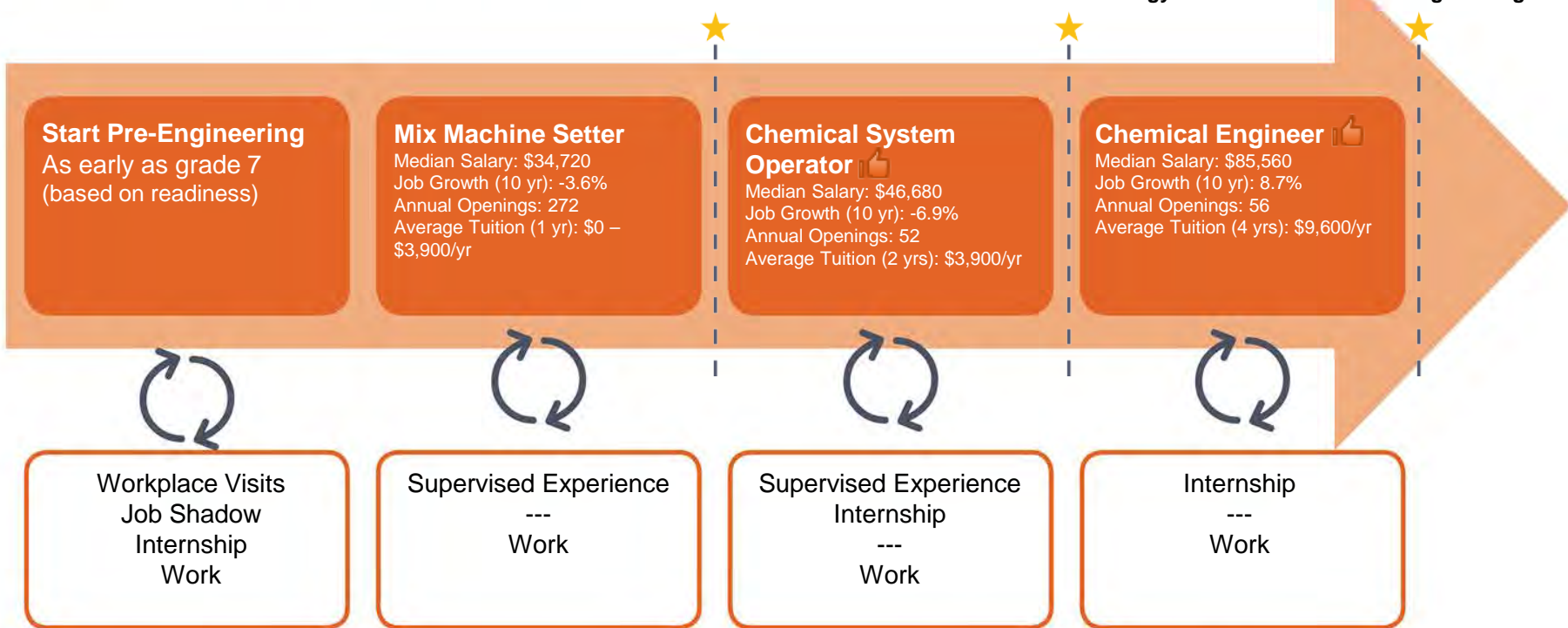


Engineering and Science Technologies Career Pathway

Certificate

Associate Degree,
Chemical Technology

Bachelor's Degree,
Chemical Engineering



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Engineering and Science Technologies Career Pathway

Secondary Pathway: **Engineering and Design**

Postsecondary Program: **Chemical Technology**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Pre-Engineering Technologies		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Manufacturing Operations	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Computer Integrated Manufacturing	Engineering Principles	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Manufacturing Capstone			
Postsecondary	Year 1 1st Semester	English Composition I	Calculus I	General Chemistry I	Chemistry Lab	Intro to Science Professions			
	Year 1 2nd Semester	Humanities Elective	Calculus II	General Chemistry II	Chemistry Lab II				
	Year 2 1st Semester	History Elective	Physics I	Organic Chemistry I	Organic Chem Lab I				
	Year 2 2nd Semester	English Composition II	Physics II	Organic Chemistry II	Organic Chem Lab II	Social Science Elective			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

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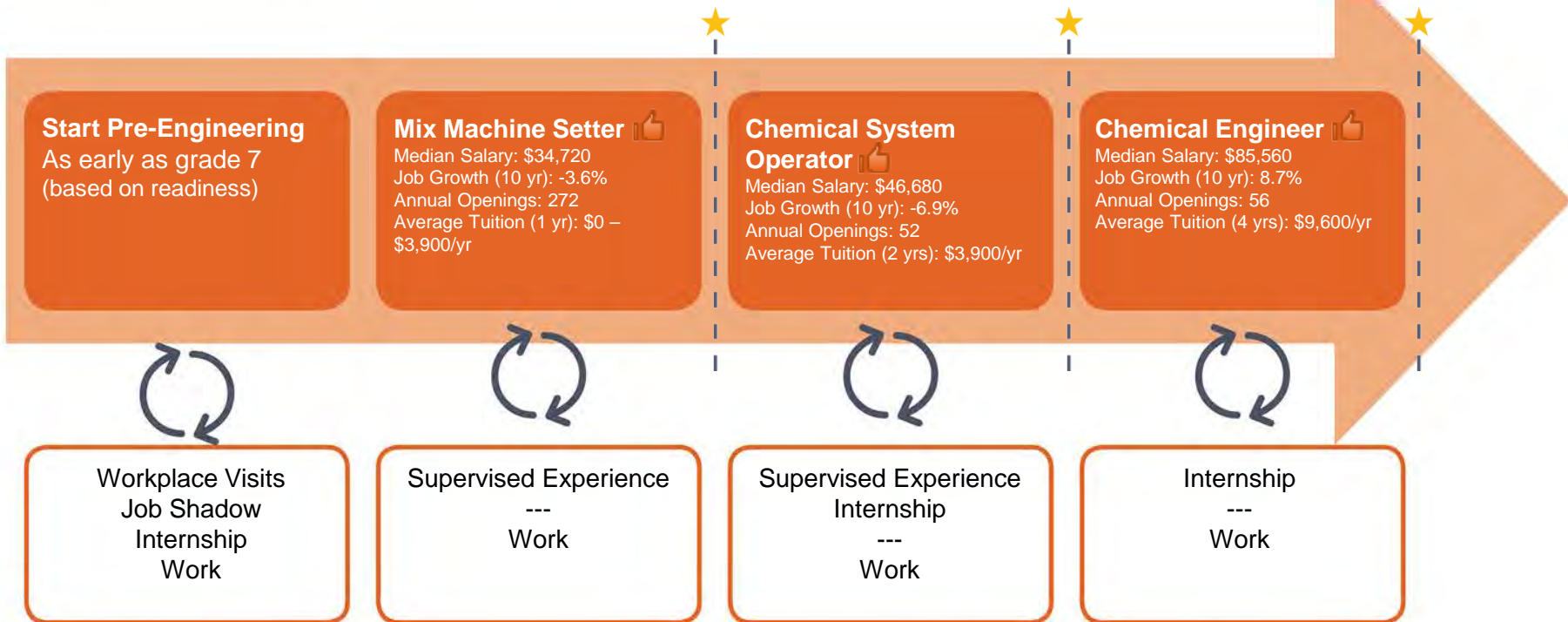


Engineering and Science Technologies Career Pathway

Certificate

Associate Degree,
Chemical Technology

Bachelor's Degree,
Chemical Engineering



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
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Ohio In-demand Occupations

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Engineering and Science Technologies Career Pathway

Secondary Pathway: **Engineering and Design**

Postsecondary Program: **Chemical Technology**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Pre-Engineering Technologies		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Manufacturing Operations	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Computer Integrated Manufacturing	Engineering Principles	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Manufacturing Capstone			
Postsecondary	Year 1 1st Semester	English Composition I	Calculus I	General Chemistry I	Chemistry Lab	Intro to Science Professions			
	Year 1 2nd Semester	Humanities Elective	Calculus II	General Chemistry II	Chemistry Lab II				
	Year 2 1st Semester	History Elective	Physics I	Organic Chemistry I	Organic Chem Lab I				
	Year 2 2nd Semester	English Composition II	Physics II	Organic Chemistry II	Organic Chem Lab II	Social Science Elective			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

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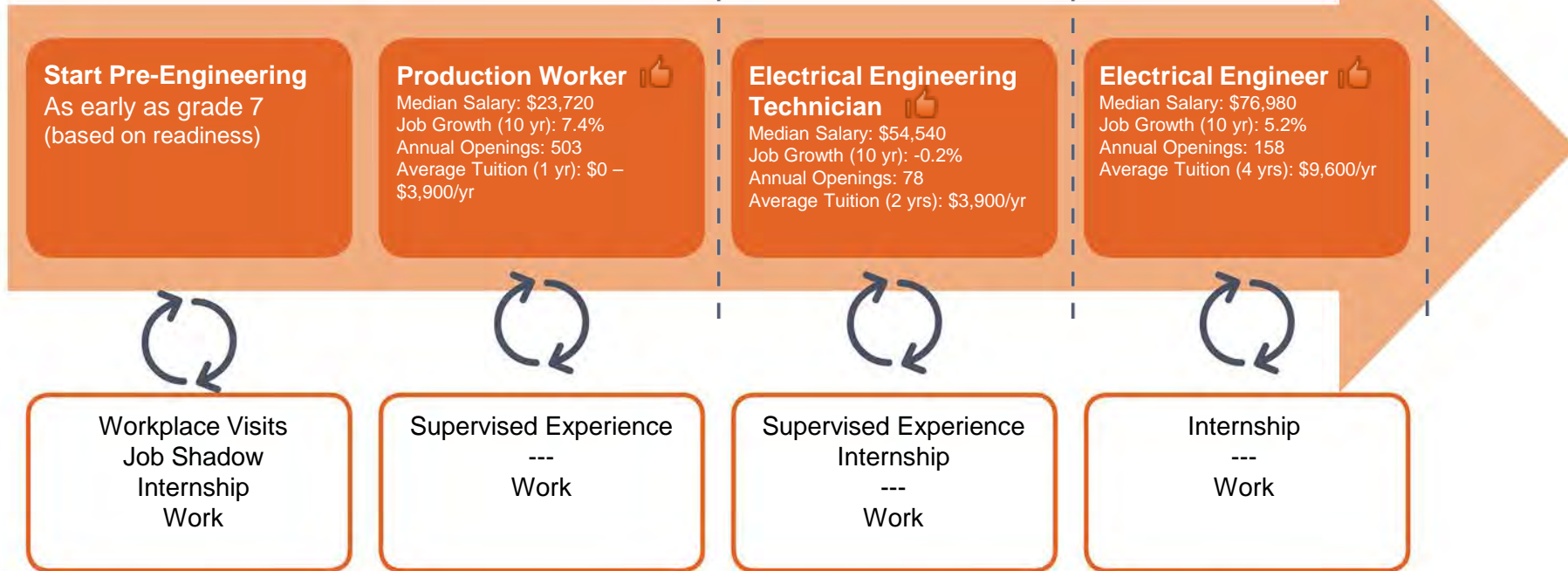


Engineering and Science Technologies Career Pathway

Certificate

Associate Degree,
Electrical Engineering
Technology

Bachelor's Degree,
Electrical Engineering



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Engineering and Science Technologies Career Pathway

Secondary Pathway: **Engineering and Design**

Postsecondary Program: **Electrical Engineering Technology**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Pre-Engineering Technologies		
	9 10	English II	Algebra II	Biology	World History	Health (.5) PE (.5)	Engineering Principles	DC & AC Electronic Circuits	World Languages
	11	English III	Geometry	Chemistry	U.S. History	Analog-Based Electronic Circuits	Digital Electronics	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Robotics	Engineering Capstone		
Postsecondary	Year 1 1st Semester	English Composition I	Computer Applications	Digital Systems	DC Electronic Systems	PC Tech Essentials			
	Year 1 2nd Semester	College Algebra	AC Electronic Systems	Switching & Amplifier Systems	AC Electronic Systems	Data Communications			
	Year 2 1st Semester	Physics I	Micro Economics	Data Acquisition Systems	Embedded Micro-controller Systems	Advanced Digital Systems			
	Year 2 2nd Semester	Physics II	Technical Writing	Small Group Communication	Capstone	Ethics			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

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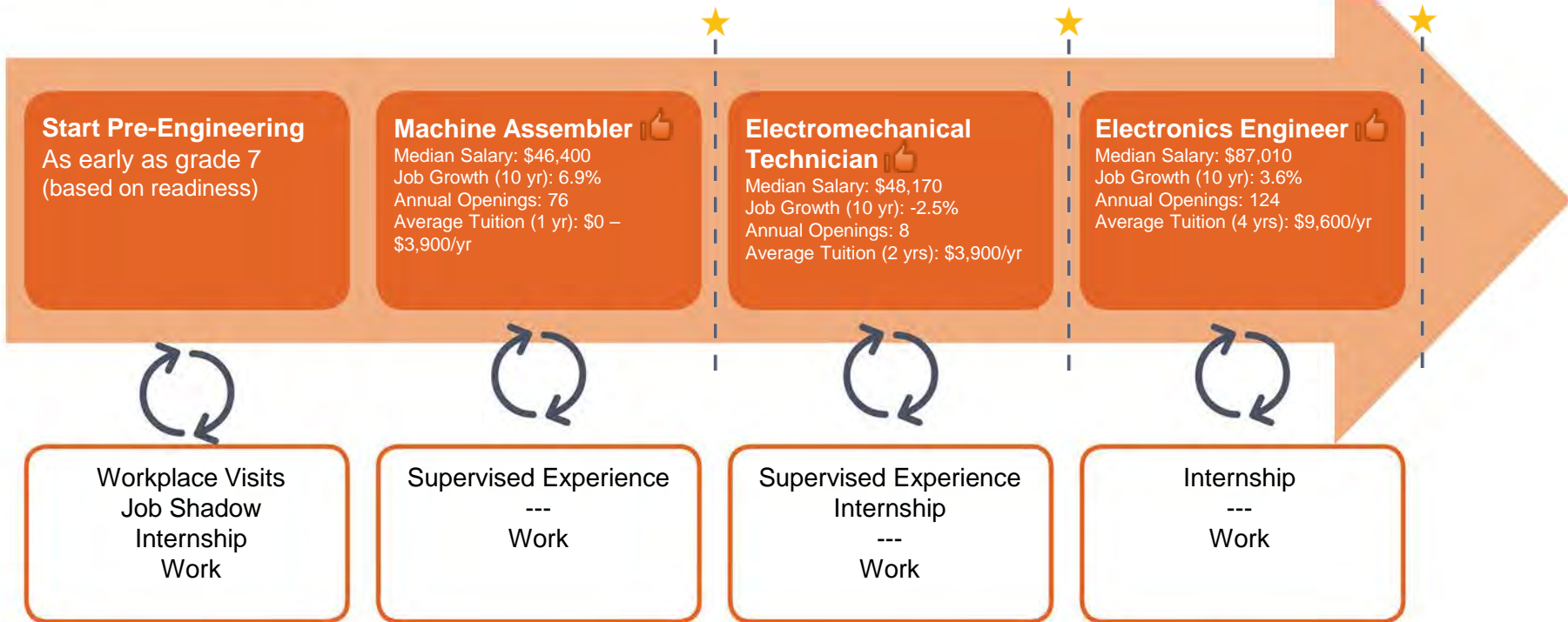


Engineering and Science Technologies Career Pathway

Certificate

Associate Degree,
Electromechanical Technology

Bachelor's Degree,
Electronics Engineering



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Engineering and Science Technologies Career Pathway

Secondary Pathway: **Engineering and Design**

Postsecondary Program: **Electromechanical Technology**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Pre-Engineering Technologies		
	9 10	English II	Algebra II	Biology	World History	Health (.5) PE (.5)	Engineering Principles	Engineering Design	World Languages
	11	English III	Geometry	Chemistry	U.S. History	Analog Based Electronic Devices	DC & AC Electronic Circuits	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Robotics	Digital Electronics		
Postsecondary	Year 1 1st Semester	Computer Applications	College Algebra	Intro to Engineering Technology	Engineering Design & Graphics	Electric Circuits	Basic Metrology		
	Year 1 2nd Semester	English Composition	Statistics	Physics	CAD I	Electronic Circuits	Fluid Power Transmission		
	Year 2 1st Semester	Interpersonal Communication	Energy, Power & Controls	Metallic Materials & Processes	Digital Electronic Systems	Ethics	Motors and Control Logic		
	Year 2 2nd Semester	Technical Writing	Electric Machinery & Controls	Electrical Measurement & Instruments	Lean Processing & Systems	Robotics	Micro Economics		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

6/2015

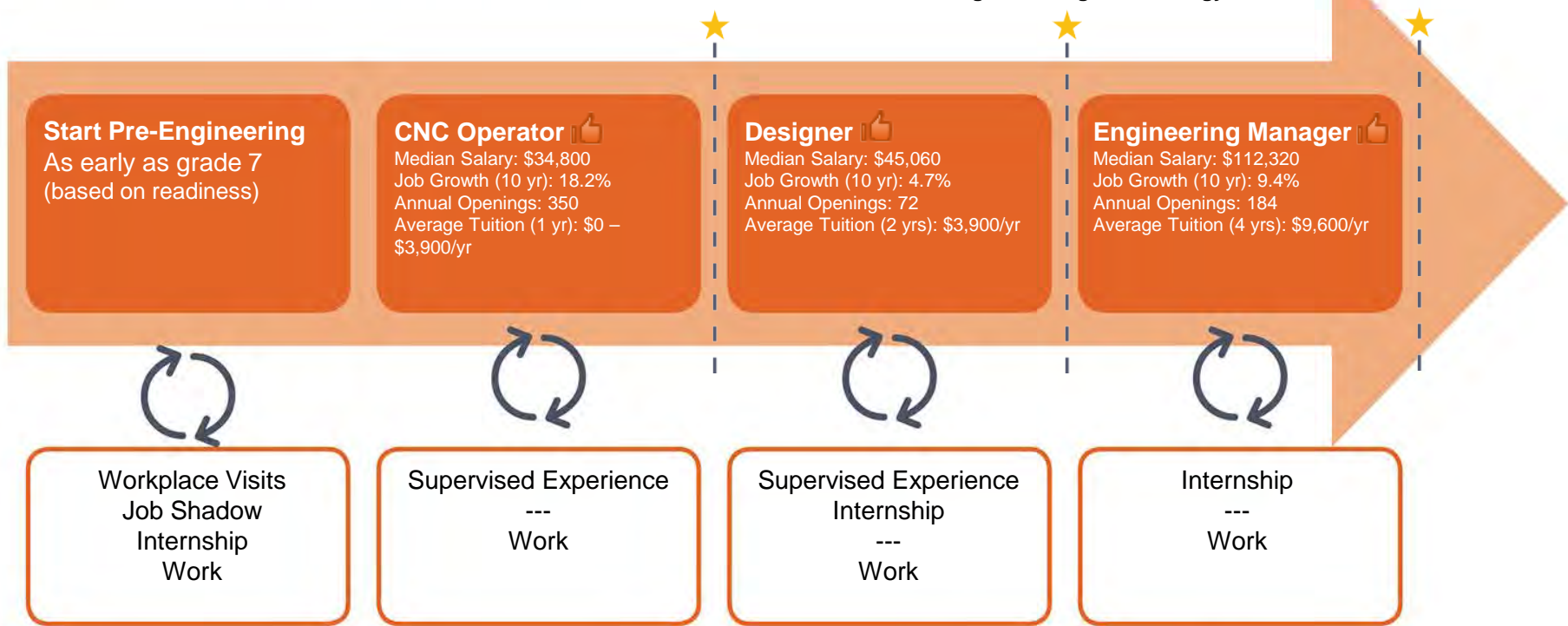


Engineering and Science Technologies Career Pathway

Certificate

Associate Degree,
Drafting and Design Technology

Bachelor's Degree,
Engineering



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Engineering and Science Technologies Career Pathway

Secondary Pathway: **Engineering and Design**

Postsecondary Program: **Engineering Technology**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Pre-Engineering Technologies		
	9 10	English II	Algebra II	Biology	World History	Health (.5) PE (.5)	Engineering Principles	Engineering Design	World Languages
	11	English III	Geometry	Chemistry	U.S. History	Manufacturing Operations	Digital Electronics	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Robotics	Alternative Energy		
Postsecondary	Year 1 1st Semester	English Composition I	Technical Math I	Intro to Engineering	Manufacturing Processes	Engineering Design			
	Year 1 2nd Semester	English Composition II	Technical Math II	Physics I	CAD I	Hydraulics & Pneumatics	Statics		
	Year 2 1st Semester	Chemistry	Strength of Materials	Physics II	CAD II	Ethics			
	Year 2 2nd Semester	Group Communication	Mechanical design Project	Engineering Economics & Organization	Programmable Logic Control	Robotics	Alternative Energy		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

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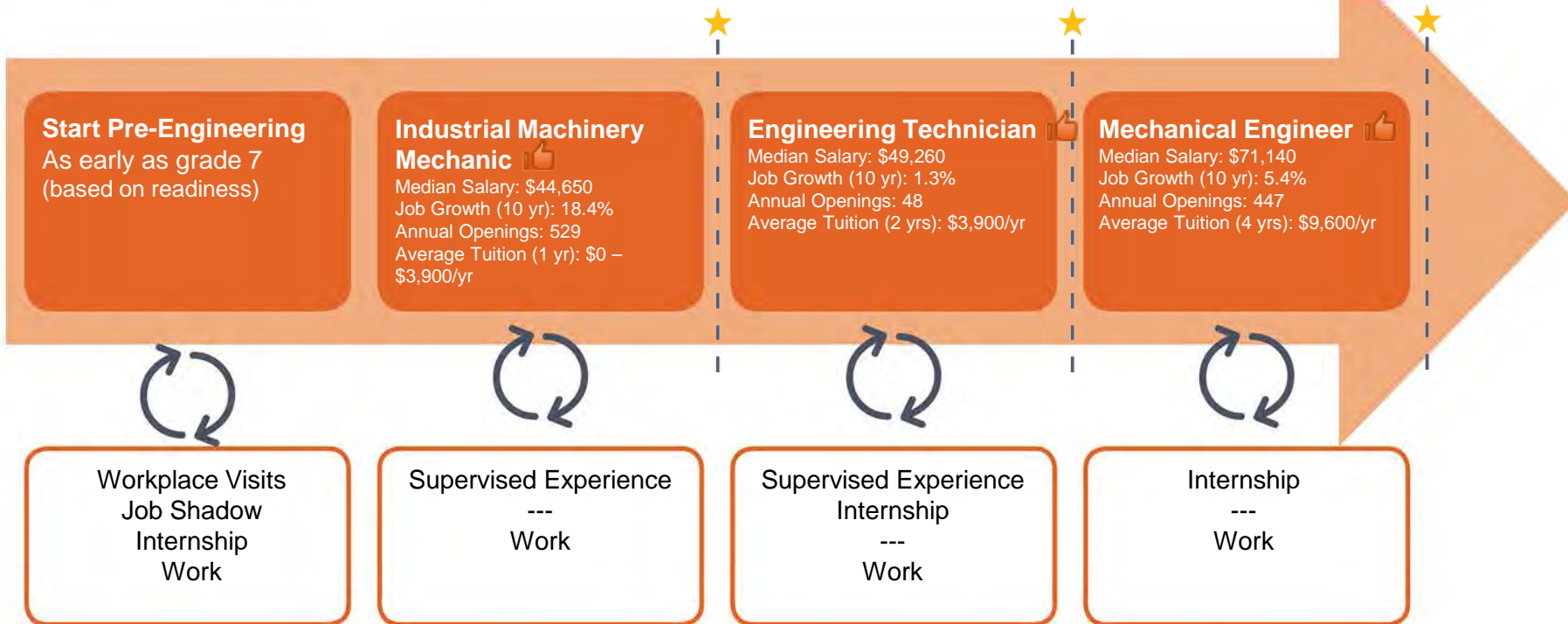


Engineering and Science Technologies Career Pathway

Certificate

Associate Degree,
Engineering Technology

Bachelor's Degree,
Mechanical Engineering



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Engineering and Science Technologies Career Pathway

Secondary Pathway: **Engineering and Design**

Postsecondary Program: **Mechanical Engineering Technology**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Pre-Engineering Technologies		
	9 10	English II	Algebra II	Biology	World History	Health (.5) PE (.5)	Engineering Principles	Engineering Design	World Languages
	11	English III	Geometry	Chemistry	U.S. History	Manufacturing Operations	Digital Electronics	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Robotics	Alternative Energy		
Postsecondary	Year 1 1st Semester	Computer Applications	Technical Math	Intro to Engineering Technology	Manufacturing Materials & Processes	Engineering Graphics			
	Year 1 2nd Semester	English Composition	Statics	Physics	CAD I	Machine Tools Lab			
	Year 2 1st Semester	Interpersonal Communication	Strength of Materials	Basic Mechanisms and Drives	CAD II	Ethics	Motors and Control Logic		
	Year 2 2nd Semester	Technical Writing	Machine Design/CAM	Engineering Statistics	CNC	Robotics	Micro Economics		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

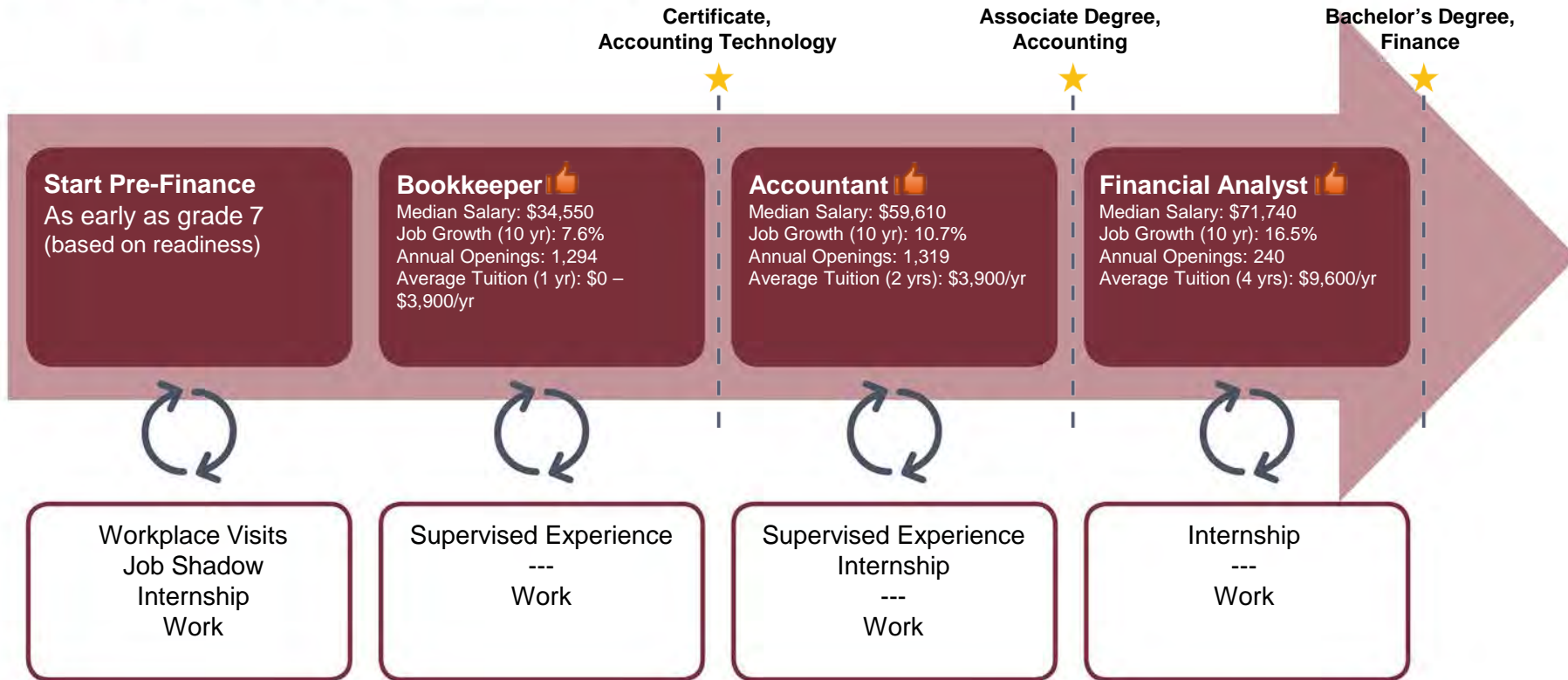
Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014



Finance Career Pathway



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Finance Career Pathway

Secondary Pathway: **Finance**

Postsecondary Program: **Accounting**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Business Foundations		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Finance Foundations	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Financial Accounting	Corporate Finance	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Management Principles	Finance Capstone		
Postsecondary	Year 1 1st Semester	English	Algebra	Financial Accounting	Software Applications	Micro-economics			
	Year 1 2nd Semester	Public Speaking	Business Statistics	Intro to Managerial Accounting	Macro-economics	Computer Accounting Systems			
	Year 2 1st Semester	Intermediate Accounting I	Cost Accounting	Federal Taxes	Intro to Business	Marketing Management	Natural/ Physical Science		
	Year 2 2nd Semester	Intermediate Accounting II	Managerial Accounting & Finance	Auditing	Business Law	Accounting Elective	Arts & Humanities Elective		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

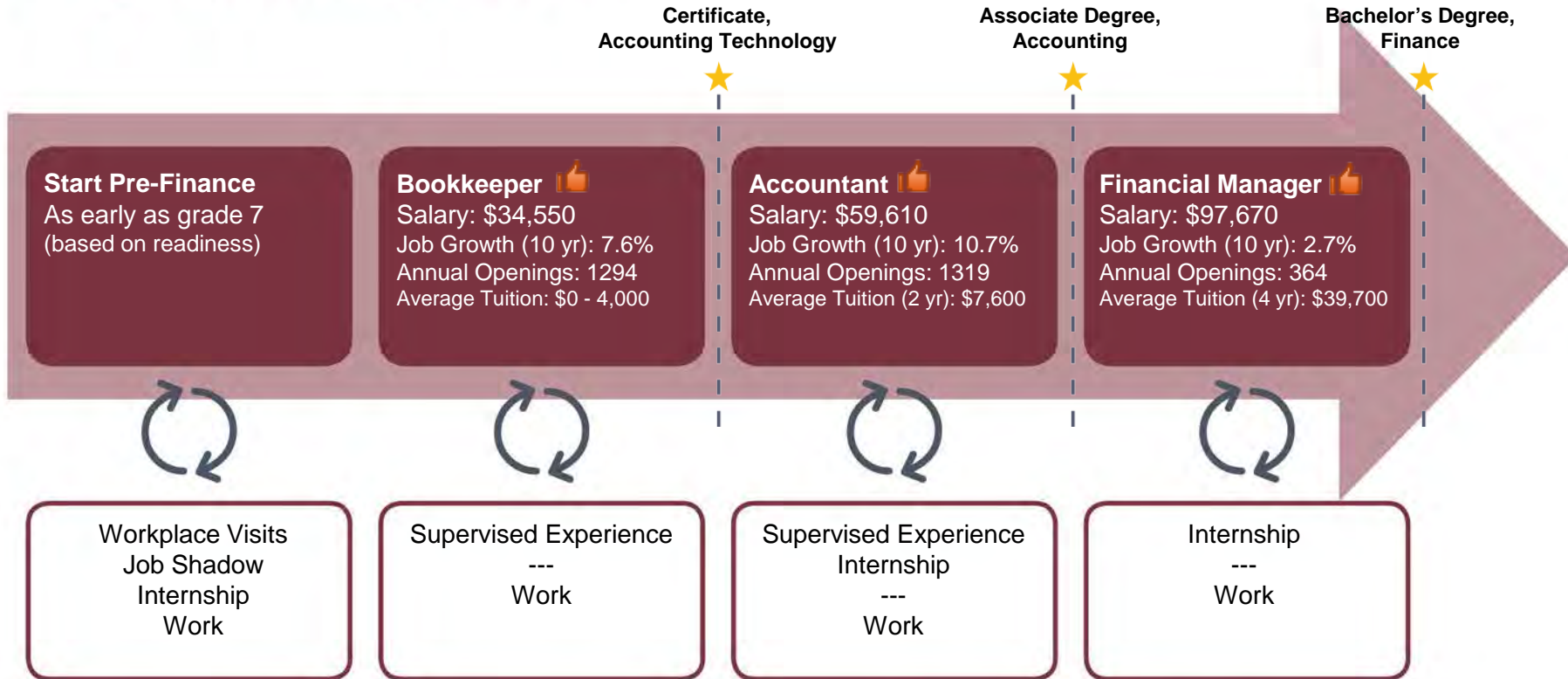
Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014



Finance Pathway Model



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.



Finance Pathway Model

Secondary Pathway: **Accounting**

Postsecondary Program: **Accounting**

Courses with Secondary and Post-Secondary Credits

Secondary	7 8	English	Algebra I	Science	Social Studies	Fine Arts			
	9 10	English	Geometry	Biology	US History	Health (.5) PE (.5)	Finance Foundations	Business Foundations	
	11	English	Algebra II	Chemistry	US Government & Economics	Foreign Language	Financial Accounting	Corporate Finance	
	12	English	Trigonometry	Physics	Psychology	Foreign Language	Strategic Entrepreneurship	Finance Capstone	
Post-Secondary	Year 1 1st Semester	English	Algebra	Financial Accounting	Software Applications	Micro-economics			
	Year 1 2nd Semester	Public Speaking	Business Statistics	Intro to Managerial Accounting	Macro-economics	Computer Accounting Systems			
	Year 2 1st Semester	Intermediate Accounting I	Cost Accounting	Federal Taxes	Intro to Business	Marketing Management	Natural/Physical Science		
	Year 2 2nd Semester	Intermediate Accounting II	Managerial Accounting & Finance	Auditing	Business Law	Accounting Elective	Arts & Humanities Elective		

High School CTE Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

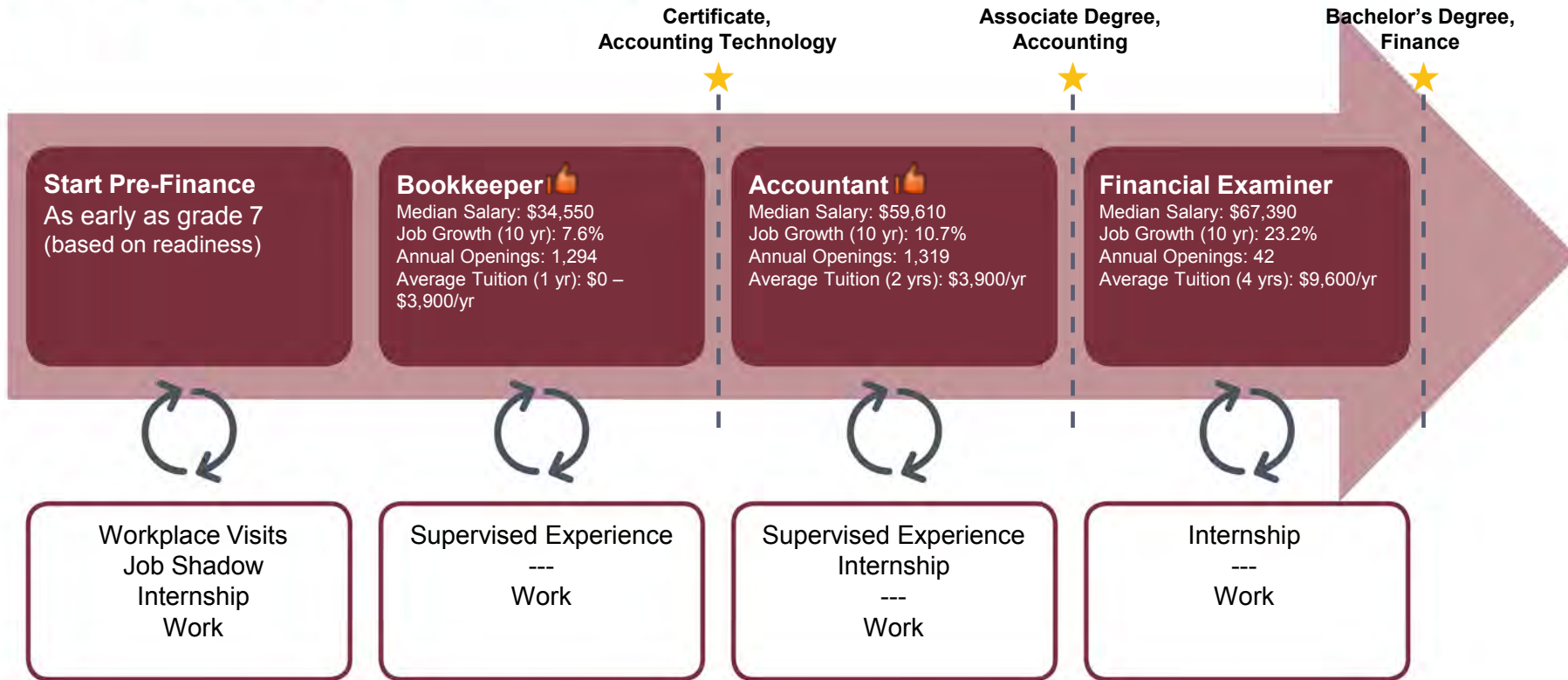
Recommend Electives

Visit education.ohio.gov/CareerConnections for reference information

5.2014



Finance Career Pathway



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Finance Career Pathway

Secondary Pathway: **Finance**

Postsecondary Program: **Accounting**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Business Foundations		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Finance Foundations	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Financial Accounting	Corporate Finance	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Management Principles	Finance Capstone		
Postsecondary	Year 1 1st Semester	English	Algebra	Financial Accounting	Software Applications	Micro-economics			
	Year 1 2nd Semester	Public Speaking	Business Statistics	Intro to Managerial Accounting	Macro-economics	Computer Accounting Systems			
	Year 2 1st Semester	Intermediate Accounting I	Cost Accounting	Federal Taxes	Intro to Business	Marketing Management	Natural/ Physical Science		
	Year 2 2nd Semester	Intermediate Accounting II	Managerial Accounting & Finance	Auditing	Business Law	Accounting Elective	Arts & Humanities Elective		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

6/2015

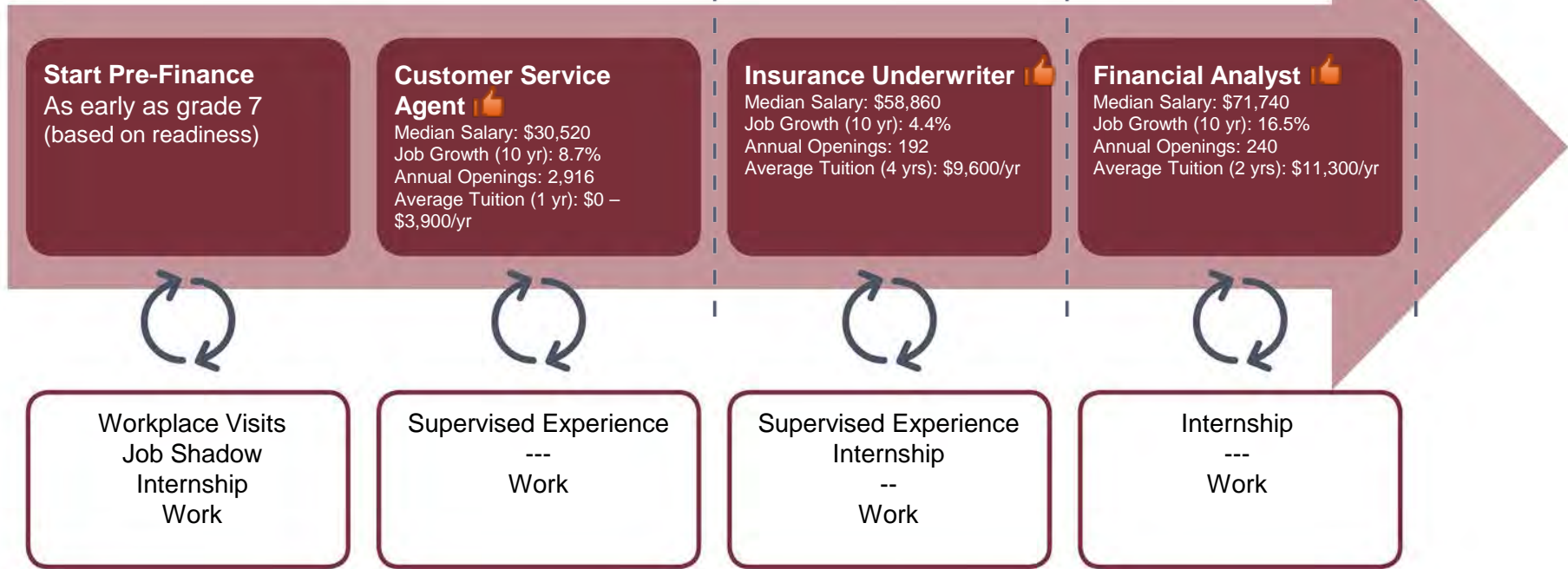


Finance Career Pathway

Certificate

Bachelor's Degree,
Insurance

Master's Degree,
Finance



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Finance Career Pathway

Secondary Pathway: **Finance**

Postsecondary Program: **Insurance**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Business Foundations		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Finance Foundations	Fundamentals of Financial Services	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Financial Accounting	Financial Services Operations	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Management Principles	Finance Capstone		
Postsecondary	Year 1 1st Semester	English I	Insurance Principles	Claims Handling	Software Applications	Organizational Behavior			
	Year 1 2nd Semester	Principles of Management	Property Coverages	Loss Adjustment	Insurance Claims Software	Customer Service in Insurance			
	Year 2 1st Semester	English II	Business Math	Micro-economics	Marketing Management	Employability Skills			
	Year 2 2nd Semester	Negotiation Skills	Statistics	Financial Accounting	Legal Environment of Business	Business Policy			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

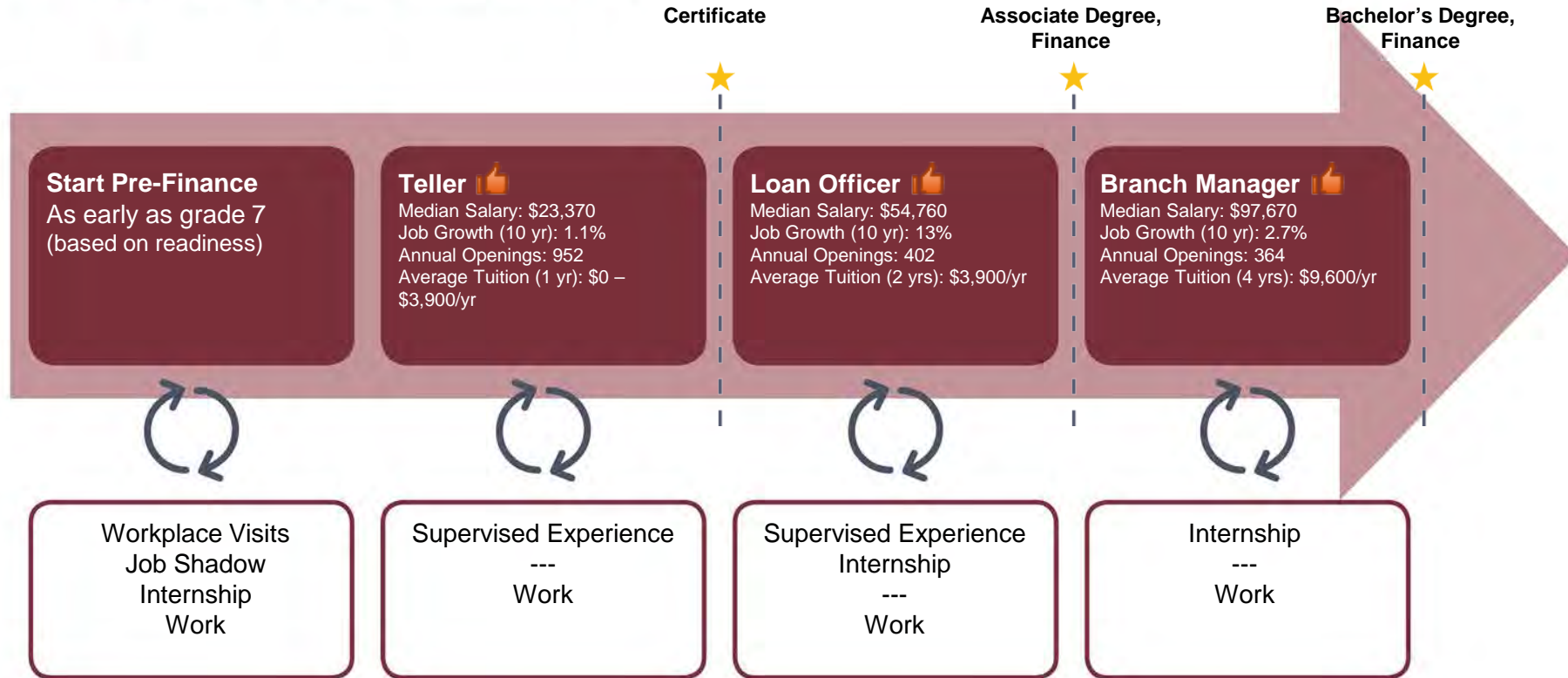
Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

5/2015



Finance Career Pathway



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Finance Career Pathway

Secondary Pathway: **Finance**

Postsecondary Program: **Financial Services**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Business Foundations		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Finance Foundations	Management Principles	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Financial Accounting	Fundamentals of Financial Services	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Financial Services Operations	Finance Capstone		
Postsecondary	Year 1 1st Semester	English	College Seminar	Financial Accounting	Software Applications	Personal Finance	Business Language		
	Year 1 2nd Semester	Business Applications	Investments	Statistics	Managerial Accounting	Management	Micro-economics	Natural/ Physical Science	
	Year 2 1st Semester	Macro-economics	Legal Environment of Business	Money & Banking	International Finance	Finance Elective	Arts & Humanities Elective		
	Year 2 2nd Semester	Marketing Principles	Finance Capstone	Finance Practicum	Finance Elective	Social/ Behavioral Science			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014

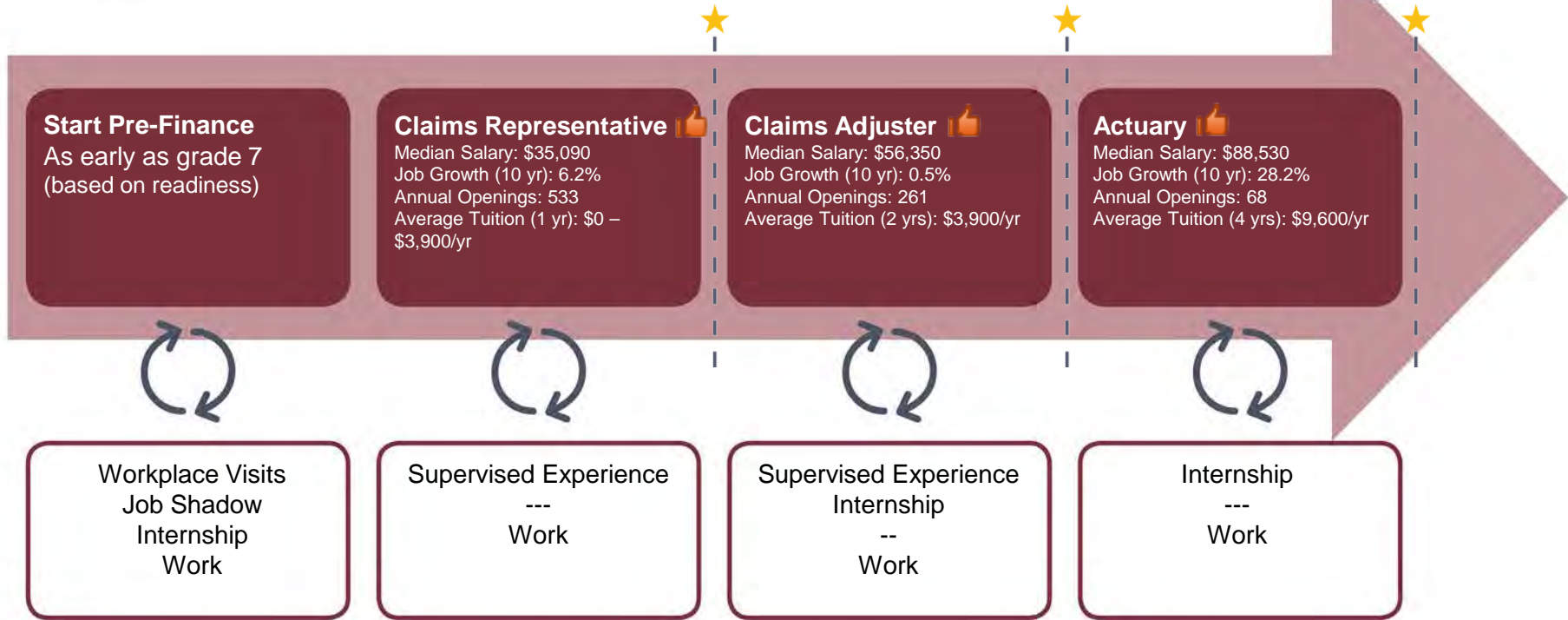


Finance Career Pathway

Certificate

Associate Degree,
Insurance

Bachelor's Degree,
Actuarial Science



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Finance Career Pathway

Secondary Pathway: **Finance**

Postsecondary Program: **Insurance**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Business Foundations		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Finance Foundations	Fundamentals of Financial Services	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Financial Accounting	Financial Services Operations	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Management Principles	Finance Capstone		
Postsecondary	Year 1 1st Semester	English I	Insurance Principles	Claims Handling	Software Applications	Organizational Behavior			
	Year 1 2nd Semester	Principles of Management	Property Coverages	Loss Adjustment	Insurance Claims Software	Customer Service in Insurance			
	Year 2 1st Semester	English II	Business Math	Micro-economics	Marketing Management	Employability Skills			
	Year 2 2nd Semester	Negotiation Skills	Statistics	Financial Accounting	Legal Environment of Business	Business Policy			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

5/2015



Finance Career Pathway

Associate Degree,
Financial Services

Bachelor's Degree,
Finance

Master's Degree,
Finance

Start Pre-Finance
As early as grade 7
(based on readiness)

Investment Sales Assistant 🍷
Median Salary: \$30,520
Job Growth (10 yr): 8.7%
Annual Openings: 2,916
Average Tuition (2 yrs): \$3,900/yr

Investment Sales Agent 🍷
Median Salary: \$51,490
Job Growth (10 yr): 7.3%
Annual Openings: 401
Average Tuition (4 yrs): \$9,600/yr

Financial Advisor 🍷
Median Salary: \$64,840
Job Growth (10 yr): 22.1%
Annual Openings: 208
Average Tuition (2 yrs): \$11,300/yr



Workplace Visits
Job Shadow
Internship
Work

Supervised Experience

Work

Supervised Experience
Internship
--
Work

Internship

Work

Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

🍷 Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Finance Career Pathway

Secondary Pathway: **Finance**

Postsecondary Program: **Financial Services**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Business Foundations		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Finance Foundations	Fundamentals of Financial Services	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Financial Accounting	Financial Services Operations	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Management Principles	Finance Capstone		
Postsecondary	Year 1 1st Semester	English Composition I	Financial Accounting	Legal Environment of Business	Microcomputer Applications I	Macro-economics			
	Year 1 2nd Semester	English Composition II	Managerial Accounting	Principles of Banking	College Algebra	Micro-economics			
	Year 2 1st Semester	Sociology	Business Finance	Principles of Management	Science Elective				
	Year 2 2nd Semester	Business Communication	Principles of Insurance	Fundamentals of Investments	Principles of Marketing				

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

6/2015

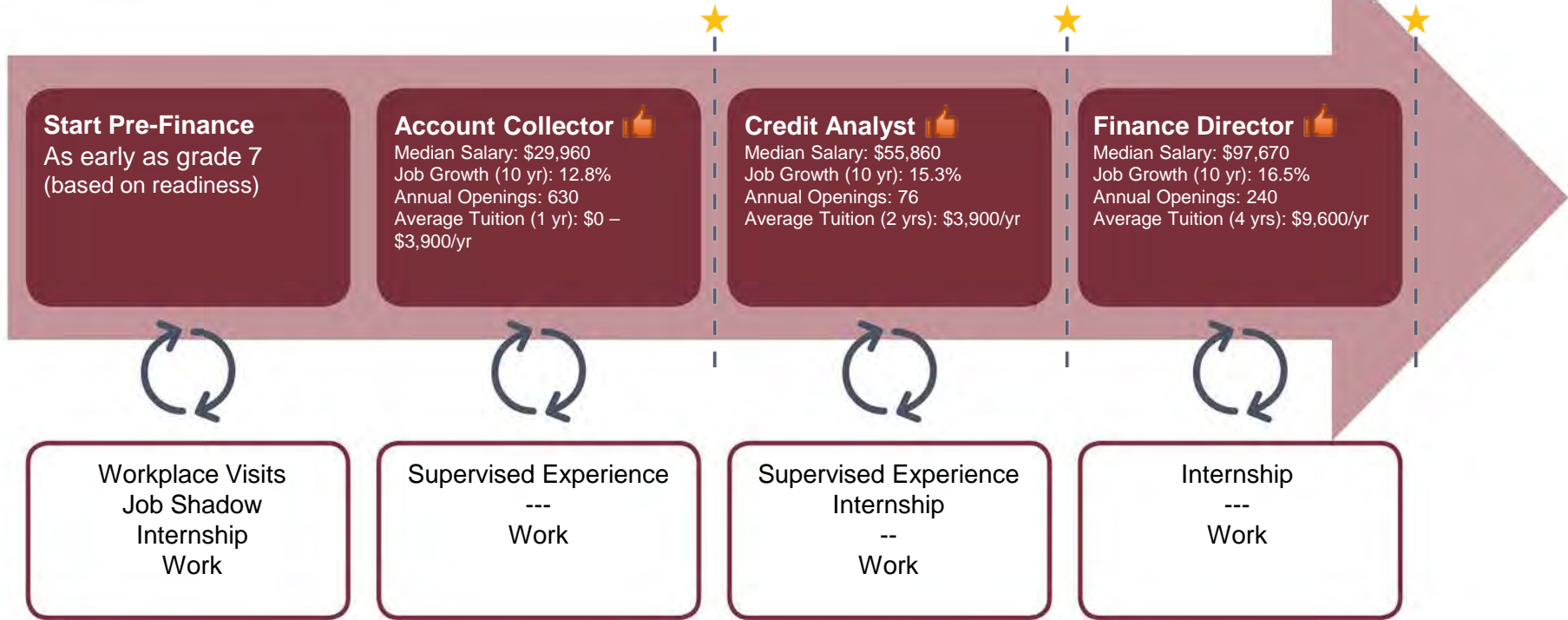


Finance Career Pathway

Certificate

Associate Degree,
Finance

Bachelor's Degree,
Financial Management



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Finance Career Pathway

Secondary Pathway: **Finance**

Postsecondary Program: **Financial Services**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Business Foundations		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Finance Foundations	Management Principles	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Financial Accounting	Fundamentals of Financial Services	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Financial Services Operations	Finance Capstone		
Postsecondary	Year 1 1st Semester	English	College Seminar	Financial Accounting	Software Applications	Personal Finance	Business Language		
	Year 1 2nd Semester	Business Applications	Investments	Statistics	Managerial Accounting	Management	Micro-economics	Natural/ Physical Science	
	Year 2 1st Semester	Macro-economics	Legal Environment of Business	Money & Banking	International Finance	Finance Elective	Arts & Humanities Elective		
	Year 2 2nd Semester	Marketing Principles	Finance Capstone	Finance Practicum	Finance Elective	Social/ Behavioral Science			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014

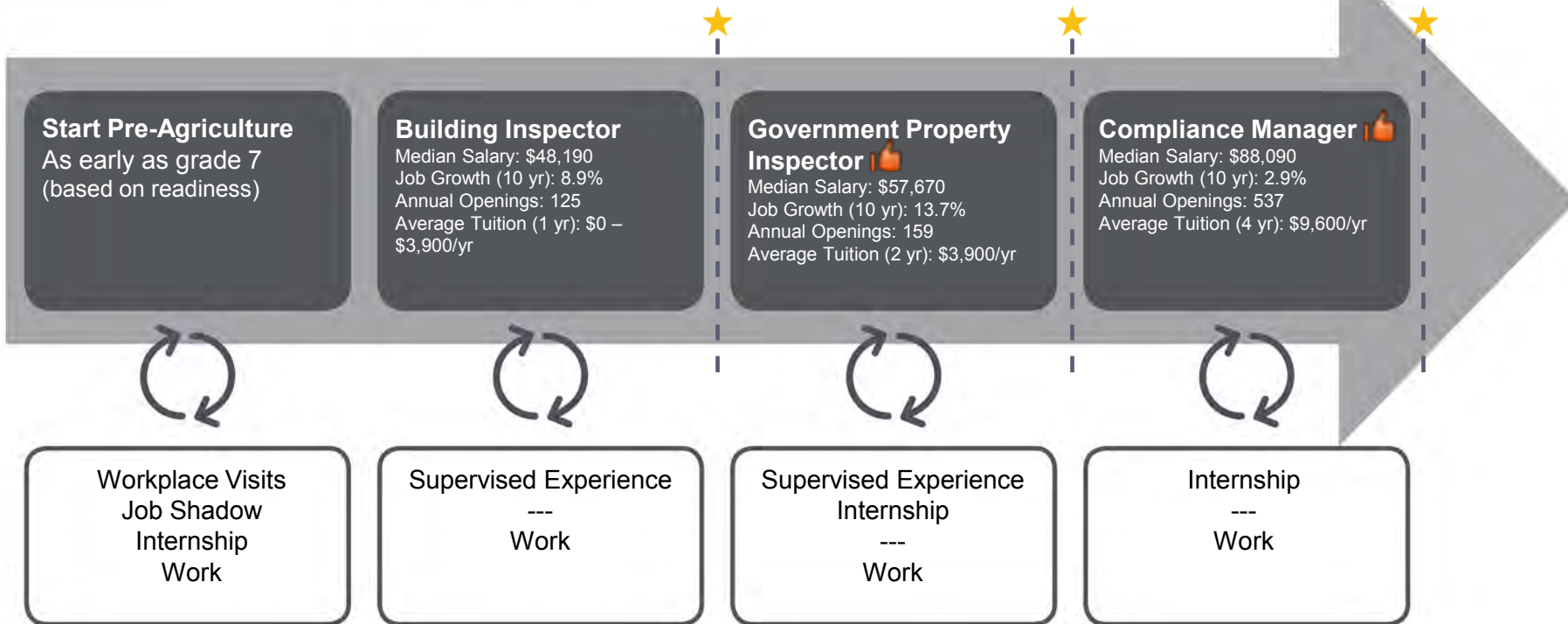


Government and Public Administration Career Pathway

Certificate

Associate Degree,
Organizational Leadership

Bachelor's Degree,
Public Affairs



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Government and Public Administration Career Pathway

Secondary Pathway: Government and Public Administration

Postsecondary Program: Organizational Leadership

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts			
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Civics	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Ethics	World Languages		
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Psychology	Intro to Public Affairs		
Postsecondary	Year 1 1st Semester	English Composition	Accounting I	Business Law	Public Affairs	Business Ethics	Construction Documents		
	Year 1 2nd Semester	Communication	Accounting II	Macro-economics	Organizational Behavior	Leadership: Theory & Application	OSHA Safety & Health		
	Year 2 1st Semester	Calculus	Corporate Finance	Micro-economics	Non-Profit Management	Construction Drawings	Safety & Loss Prevention		
	Year 2 2nd Semester	Group Dynamics & Team Building	Contemporary Issues in Leadership	Statistics	Principles of Marketing	Construction Methods			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

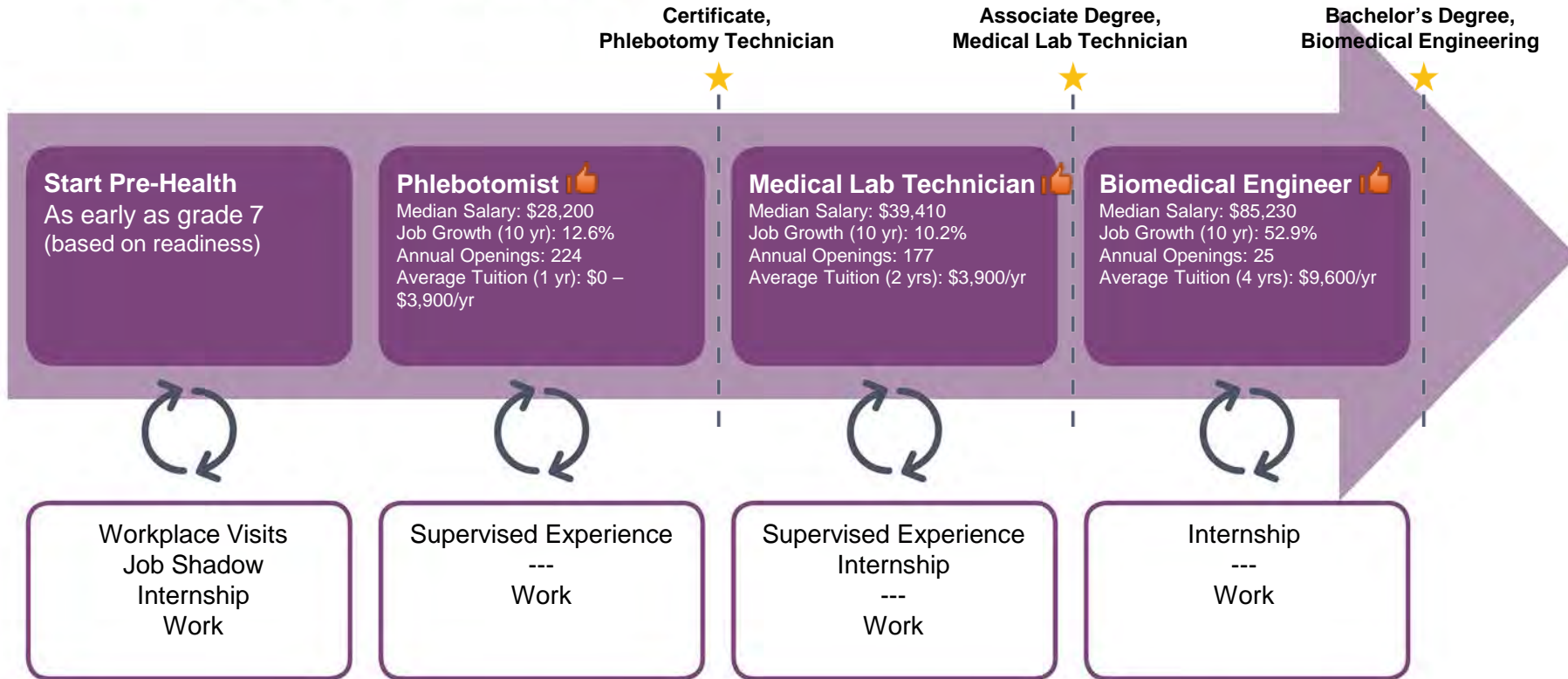
Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2015



Health Science Career Pathway



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Health Science Career Pathway

Secondary Pathway: **Medical Bioscience**

Postsecondary Program: **Medical Laboratory Technology**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Health Science & Technology		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Principles of Biomedical Technology	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Medical Terminology	Biomedical Engineering	World Languages	
	12	English IV	Trigonometry/ Calculus	Anatomy & Physiology	U.S. Government	Biochemistry of Health	Genetics of Disease		
Postsecondary	Year 1 1st Semester	English Composition	College Algebra	Human Anatomy	Intro to Medical Lab Technology	Hematology I	Medical Terminology		
	Year 1 2nd Semester	Immunology	Microbiology	Clinical Chemistry	Human Physiology				
	Year 2 1st Semester	Statistics	Psychology	Intro to Humanities	Body Fluids	Venipuncture for HC Providers			
	Year 2 2nd Semester	Healthcare Resource Management	Medical Lab Case Studies	Immuno-hematology	Hematology II	Clinical Practicum			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

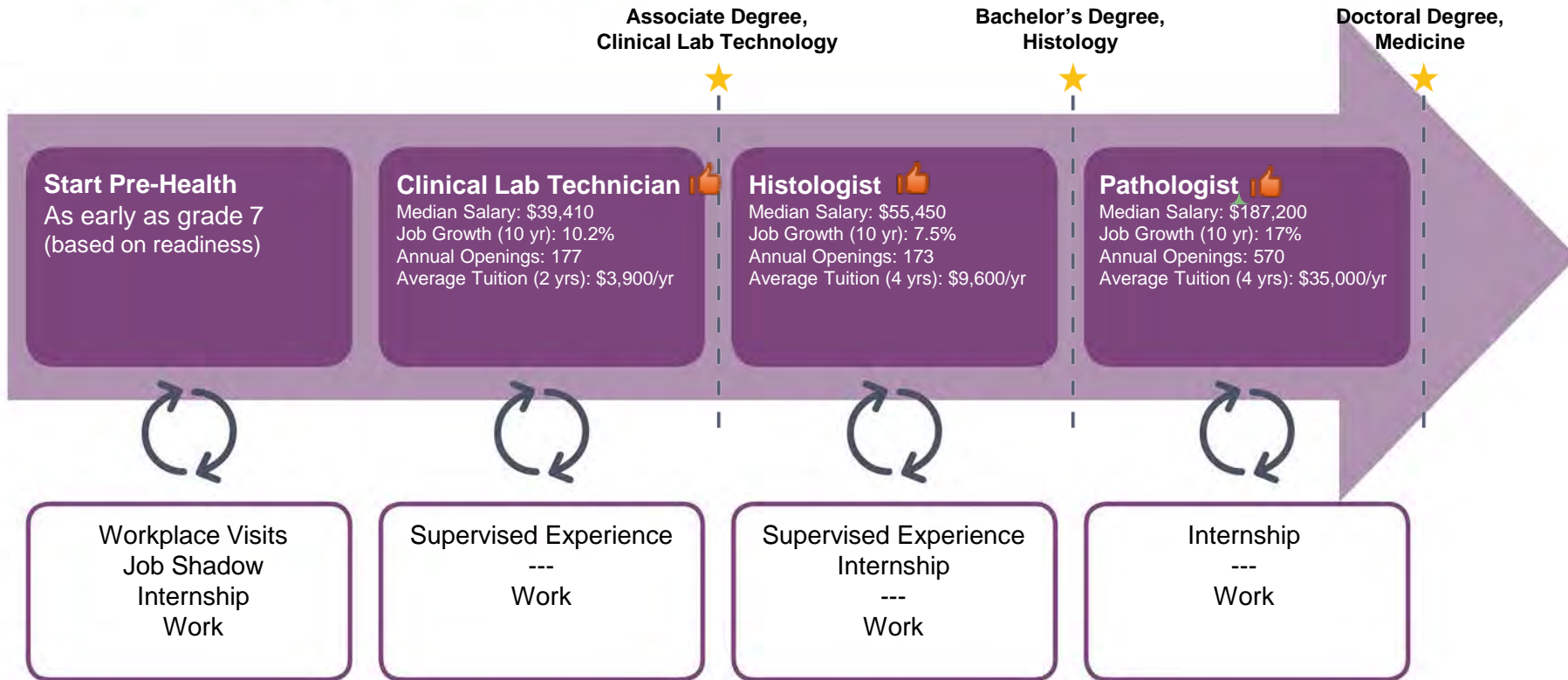
Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

6/2015



Health Science Career Pathway



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Health Science Career Pathway

Secondary Pathway: **Medical Bioscience**

Postsecondary Program: **Medical Laboratory Technology**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Health Science & Technology		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Principles of Biomedical Technology	Biomedical Engineering	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Medical Terminology	World Languages		
	12	English IV	Trigonometry/ Calculus	Anatomy & Physiology	U.S. Government	Biochemistry of Health	Genetics of Disease		
Postsecondary	Year 1 1st Semester	Statistics	College Seminar	Human Anatomy	Intro to Medical Lab Technology	Hematology I	Medical Terminology		
	Year 1 2nd Semester	Immunology	Microbiology	Clinical Chemistry	Human Physiology	Intro to Humanities			
	Year 2 1st Semester	English	Psychology	Biochemistry	Body Fluids	Venipuncture for HC Providers			
	Year 2 2nd Semester	Healthcare Resource Management	Medical Lab Case Studies	Immuno-hematology	Hematology II	Clinical Practicum			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

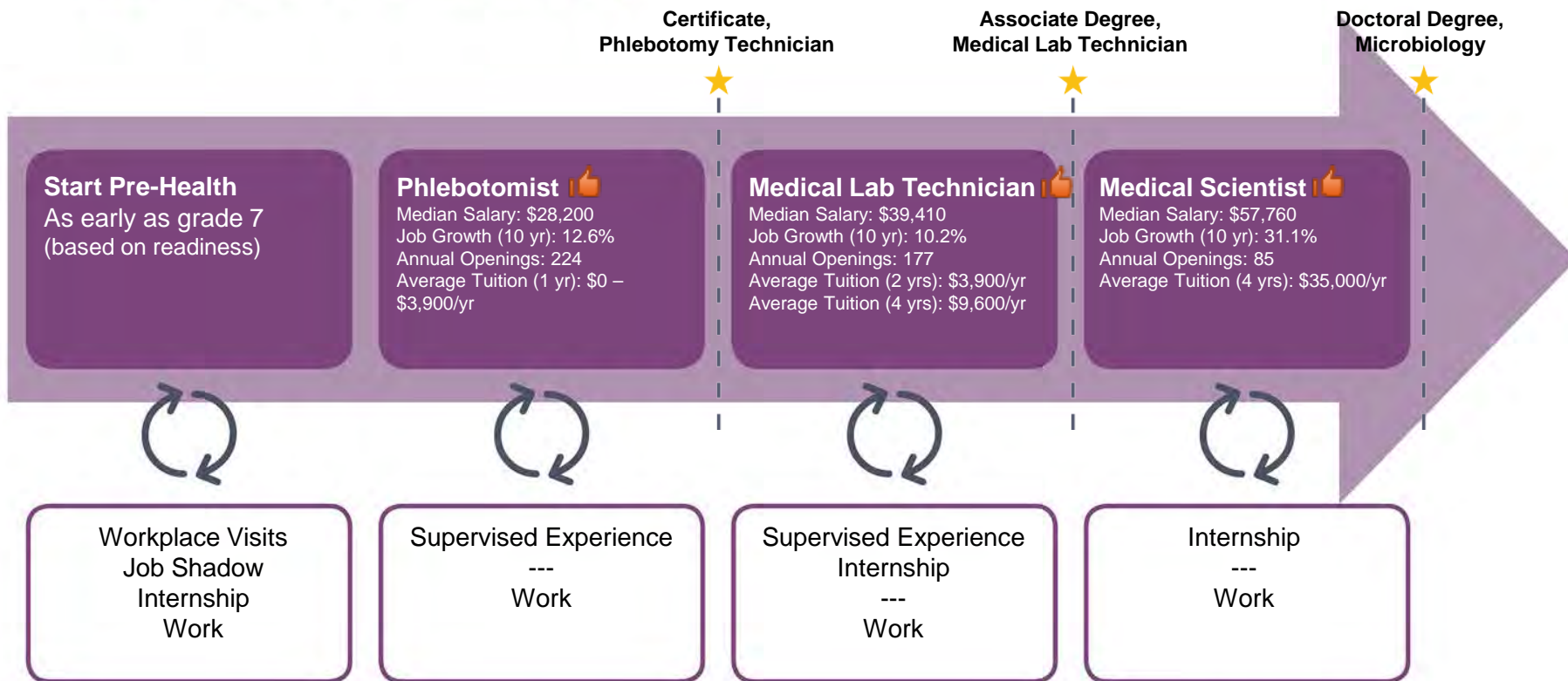
Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

6/2015



Health Science Career Pathway



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Health Science Career Pathway

Secondary Pathway: **Medical Bioscience**

Postsecondary Program: **Medical Laboratory Technology**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Health Science & Technology		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Principles of Biomedical Technology	Biomedical Engineering	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Medical Terminology	Biotechnology for Health & Disease	World Languages	
	12	English IV	Trigonometry/ Calculus	Anatomy & Physiology	U.S. Government	Biochemistry of Health	Genetics of Disease		
Postsecondary	Year 1 1st Semester	English Composition I	College Algebra	Anatomy & Physiology I	Elementary Chemistry	Hematology & Coagulation	Medical Terminology		
	Year 1 2nd Semester	English Composition II	Microbiology	Anatomy & Physiology II	Organic Chemistry	Urinalysis	Body Fluids		
	Year 2 1st Semester	Interpersonal Communication	Clinical Microbiology	Electronic Health Records	Clinical Chemistry	Clinical Immunology	Blood Collection Techniques		
	Year 2 2nd Semester	Psychology	Immuno-hematology	Clinical Practicum	Medical Lab Tech Seminar				

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

6/2015

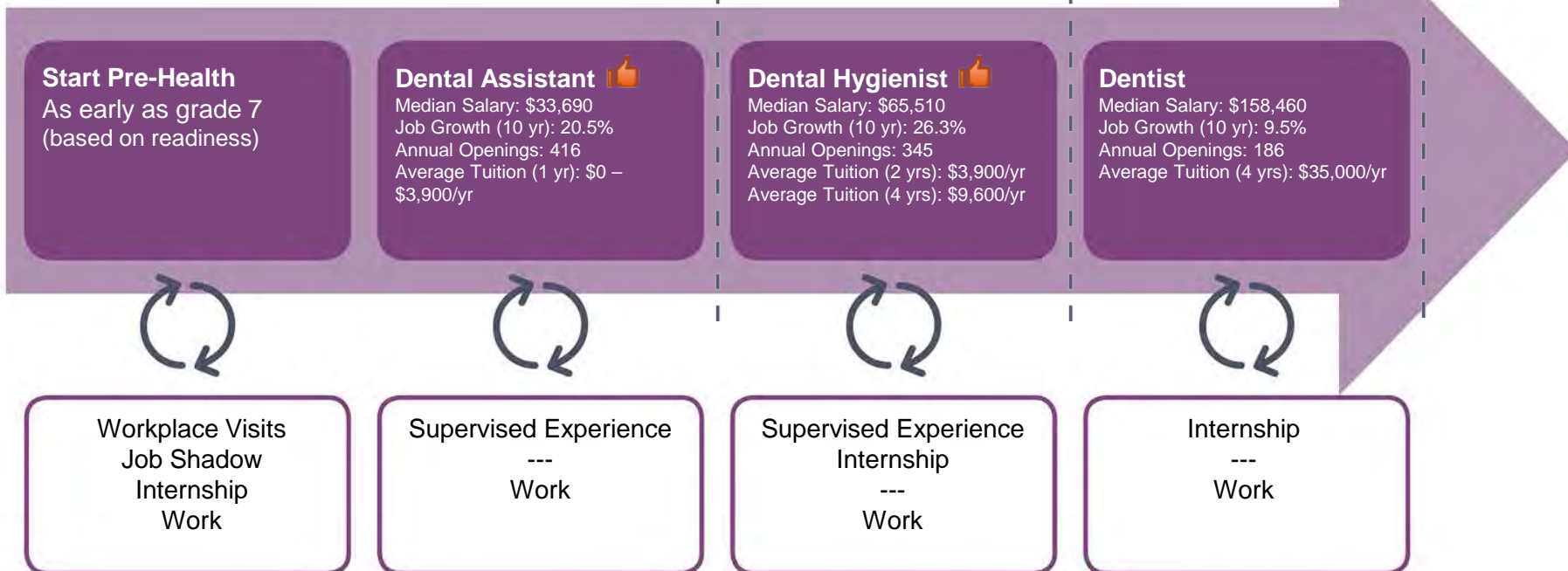


Health Science Career Pathway

Certificate,
Dental Assisting

Associate or Bachelor's
Degree, Dental Hygiene

Doctoral Degree,
Dentistry



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Health Science Career Pathway

Secondary Pathway: **Allied Health and Nursing**

Postsecondary Program: **Dental Hygiene**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Health Science & Technology		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Principles of Allied Health	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Dental Technology	Medical Terminology	World Languages	
	12	English IV	Trigonometry/ Calculus	Anatomy & Physiology	U.S. Government	Dental Radiography	Oral Diagnosis & Treatment Planning		
Postsecondary	Year 1 1st Semester	College Seminar	Human Pathophysiology	Dental Anatomy & Physiology	Dental Hygiene Pre-Clinic	Intro to Dental Hygiene	Periodontology I	Preventive Concepts	Techniques I
	Year 1 2nd Semester	English	Intro to Microbiology	Techniques II	Clinic I	Oral Pathology	Periodontology II	Community Health Concepts	Dental Radiography
	Year 2 1st Semester	Interpersonal Communication	Community Health	Techniques III	Clinic II	Sociology	Pharmacology	Dental Materials	Pain Management
	Year 2 2nd Semester	Oral Communication	College Algebra	Techniques IV	Clinic III	Psychology	Dental Hygiene Case & Concepts	Humanities Elective	

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014



Health Science Career Pathway

Certificate,
Medical Assisting

Bachelor's Degree,
Respiratory Therapy

Master's Degree,
Physician Assistant

Start Pre-Health

As early as grade 7
(based on readiness)

Medical Assistant 🍑

Median Salary: \$27,620
Job Growth (10 yr): 21.5%
Annual Openings: 793
Average Tuition (1 yr): \$0 – \$3,900/yr

Respiratory Therapist 🍑

Median Salary: \$52,490
Job Growth (10 yr): 23.6%
Annual Openings: 245
Average Tuition (4 yrs): \$9,600/yr

Physician Assistant 🍑

Median Salary: \$88,040
Job Growth (10 yr): 21.2%
Annual Openings: 93
Average Tuition (3 yrs): \$11,300/yr



Workplace Visits
Job Shadow
Internship
Work

Supervised Experience

Work

Supervised Experience
Internship

Work

Internship

Work

Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

 Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Health Science Career Pathway

Secondary Pathway: **Allied Health and Nursing**

Postsecondary Program: **Medical Assisting**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Health Science & Technology		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Principles of Allied Health	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Nutrition and Wellness	Medical Terminology	World Languages	
	12	English IV	Trigonometry/ Calculus	Anatomy & Physiology	U.S. Government	Clinical Laboratory Techniques	Patient Centered Care	Mental Health	
Postsecondary	Year 1 1st Semester	English	Anatomy & Physiology I	Intro to U.S. Healthcare	Medical Terminology	Ethical/ Legal Issues in Health	Computer Applications	Customer Service in Healthcare	
	Year 1 2nd Semester	English	Anatomy & Physiology II	Pharmacology	Intro to Medical Assisting	Psychology	Phlebotomy	Medical Office Insurance	
	Year 2 1st Semester	Interpersonal Communication	Patho-physiology	Basic Electro-cardiogram	Clinical Medical Assisting	Surgical Procedures	Physician Office Lab	Advanced Medical Terminology	
	Year 2 2nd Semester	Medical Assisting Practicum	Phlebotomy Clinical Practicum	Phlebotomy Seminar	Medical Assisting Seminar	Arts & Humanities Elective	Social/ Behavioral Science	General Elective	

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

10/2014



Health Science Career Pathway

Certificate,
Medical Assisting

Associate or Bachelor's
Degree, Nursing
(RN or BSN)

Master's Degree,
Nursing

Start Pre-Health

As early as grade 7
(based on readiness)

Medical Assistant 👍

Median Salary: \$27,620
Job Growth (10 yr): 21.5%
Annual Openings: 793
Average Tuition (1 yr): \$0 – \$3,900/yr

Registered Nurse 👍

Median Salary: \$60,010
Job Growth (10 yr): 20.4%
Annual Openings: 5,016
Average Tuition (2 yrs): \$3,900/yr
Average Tuition (4 yrs): \$9,600/yr

Family Nurse Practitioner 👍

Median Salary: \$87,270
Job Growth (10 yr): 21%
Annual Openings: 21
Average Tuition (2 yrs): \$11,300/yr



Workplace Visits
Job Shadow
Internship
Work

Supervised Experience

Work

Supervised Experience
Internship

Work

Internship

Work

Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Health Science Career Pathway

Secondary Pathway: **Allied Health and Nursing**

Postsecondary Program: **Nursing**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Health Science & Technology		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Principles of Allied Health	Nutrition and Wellness	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Mental Health	Medical Terminology	World Languages	
	12	English IV	Trigonometry/ Calculus	Anatomy & Physiology	U.S. Government	Clinical Laboratory Techniques	Patient Centered Care		
Postsecondary	Year 1 1st Semester	English	College Algebra	College Seminar	Nursing Foundations	Human Growth & Development	Human Anatomy	Patient Care	
	Year 1 2nd Semester	Statistics	Health Maintenance & Restoration I	Pharmacology	Human Physiology	Family & Community Health	Human Pathophysiology	Biochemistry	
	Year 2 1st Semester	Interpersonal Communication	Microbiology	Health Maintenance & Restoration II	Psychiatric & Mental Health Nursing	Psychology			
	Year 2 2nd Semester	Nursing, Leadership, & Management	Humanities Elective	Technical Elective					

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

10/2014



Health Science Career Pathway

Certificate,
Practical Nursing
(LPN)

Associate or Bachelor's
Degree, Nursing
(RN or BSN)

Master's Degree,
Nurse Anesthetist
(CRNA)

Start Pre-Health
As early as grade 7
(based on readiness)

Licensed Practical Nurse 👍
Median Salary: \$39,910
Job Growth (10 yr): 17.1%
Annual Openings: 1,831
Average Tuition (1 yr): \$0 – \$3,900/yr

Registered Nurse 👍
Median Salary: \$60,010
Job Growth (10 yr): 20.4%
Annual Openings: 5016
Average Tuition (2 yrs): \$3,900/yr
Average Tuition (4 yrs): \$9,600/yr

Nurse Anesthetist
Median Salary: \$139,270
Job Growth (10 yr): 25%
Annual Openings: 4910
Average Tuition (2 yrs): \$11,300/yr



Workplace Visits
Job Shadow
Internship
Work

Supervised Experience

Work

Supervised Experience
Internship

Work

Internship

Work

Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Health Science Career Pathway

Secondary Pathway: **Allied Health and Nursing**

Postsecondary Program: **Nursing**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Health Science & Technology		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Principles of Allied Health	Nutrition and Wellness	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Mental Health	Medical Terminology	World Languages	
	12	English IV	Trigonometry/ Calculus	Anatomy & Physiology	U.S. Government	Clinical Laboratory Techniques	Patient Centered Care		
Postsecondary	Year 1 1st Semester	English	College Algebra	College Seminar	Nursing Foundations	Human Growth & Development	Human Anatomy	Patient Care	
	Year 1 2nd Semester	Statistics	Health Maintenance & Restoration I	Pharmacology	Human Physiology	Family & Community Health	Human Pathophysiology	Biochemistry	
	Year 2 1st Semester	Interpersonal Communication	Microbiology	Health Maintenance & Restoration II	Psychiatric & Mental Health Nursing	Psychology			
	Year 2 2nd Semester	Nursing, Leadership, & Management	Humanities Elective	Technical Elective					

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014



Health Science Career Pathway

Certificate,
Nurse Aide

Associate or Bachelor's
Degree, Nursing
(RN or BSN)

Master's Degree,
Nursing

Start Pre-Health

As early as grade 7
(based on readiness)

Nurse Aide 🍑

Median Salary: \$23,350
Job Growth (10 yr): 13.3%
Annual Openings: 1,968
Average Tuition (1 yr): \$0 – \$3,900/yr

Registered Nurse 🍑

Median Salary: \$60,010
Job Growth (10 yr): 20.4%
Annual Openings: 5,016
Average Tuition (2 yrs): \$3,900/yr
Average Tuition (4 yrs): \$9,600/yr

Family Nurse Practitioner 🍑

Median Salary: \$87,270
Job Growth (10 yr): 21%
Annual Openings: 21
Average Tuition (2 yrs): \$11,300/yr



Workplace Visits
Job Shadow
Internship
Work

Supervised Experience

Work

Supervised Experience
Internship

Work

Internship

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Preparing students for multiple options after high school:
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Ohio In-demand Occupations

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Health Science Career Pathway

Secondary Pathway: **Allied Health and Nursing**

Postsecondary Program: **Nursing**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Health Science & Technology		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Principles of Allied Health	Nutrition and Wellness	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Mental Health	Medical Terminology	World Languages	
	12	English IV	Trigonometry/ Calculus	Anatomy & Physiology	U.S. Government	Clinical Laboratory Techniques	Patient Centered Care		
Postsecondary	Year 1 1st Semester	English	College Algebra	College Seminar	Nursing Foundations	Human Growth & Development	Human Anatomy	Patient Care	
	Year 1 2nd Semester	Statistics	Health Maintenance & Restoration I	Pharmacology	Human Physiology	Family & Community Health	Human Pathophysiology	Biochemistry	
	Year 2 1st Semester	Interpersonal Communication	Microbiology	Health Maintenance & Restoration II	Psychiatric & Mental Health Nursing	Psychology			
	Year 2 2nd Semester	Nursing, Leadership, & Management	Humanities Elective	Technical Elective					

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014



Health Science Career Pathway

Certificate,
Exercise Specialist

Associate Degree,
Occupational Therapy Assistant

Bachelor's Degree,
Occupational Therapy

Start Pre-Health

As early as grade 7
(based on readiness)

Personal Trainer

Median Salary: \$27,310
Job Growth (10 yr): 13.2%
Annual Openings: 221
Average Tuition (1 yr): \$0 – \$3,900/yr

Occupational Therapy Assistant

Median Salary: \$53,420
Job Growth (10 yr): 28.9%
Annual Openings: 66
Average Tuition (2 yrs): \$3,900/yr

Occupational Therapist

Median Salary: \$78,170
Job Growth (10 yr): 23.4%
Annual Openings: 183
Average Tuition (4 yrs): \$9,600/yr



Workplace Visits
Job Shadow
Internship
Work

Supervised Experience

Work

Supervised Experience
Internship

Work

Internship

Work

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Preparing students for multiple options after high school:
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Ohio In-demand Occupations

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Health Science Career Pathway

Secondary Pathway: **Exercise Science and Sports Medicine**

Postsecondary Program: **Occupational Therapy**

Courses with Secondary and Post-Secondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Health Science & Technology		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Exercise & Athletic Training	Nutrition & Wellness	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Bio-statistics in Exercise Science	Exercise Physiology & Biochemistry	World Languages	
	12	English IV	Trigonometry/Calculus	Anatomy & Physiology	U.S. Government	Fitness Evaluation & Assessment	Athletic Inquiries & Prevention	Health Science Capstone	
Post-Secondary	Year 1 1st Semester	English Composition I	Anatomy & Physiology I	Intro to Occ. Therapy Assisting	Occupational Therapy Techniques	Theory of Occupational Therapy			
	Year 1 2nd Semester	Intro to Psychology	Intro to Sociology	Pediatric Concepts and Skills	Therapeutic Media: Pediatrics	Occ. Therapy Assisting Field Experience I			
	Year 2 1st Semester	Interpersonal Communication	Anatomy & Physiology II	Psychosocial Concepts and Skills	Therapeutic Media: Psychosocial	Occ. Therapy Assisting Field Experience II			
	Year 2 2nd Semester	English Composition II	Kinesiology	Physical Disability Concept/Skills	Therapeutic Media: Physical Dis.	Occ. Therapy Assisting Field Experience III			

High School CTE Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommend Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

5/2015



Health Science Career Pathway

Certificate,
Patient Care

Bachelor's Degree,
Respiratory Therapy

Doctoral Degree,
Medicine

Start Pre-Health

As early as grade 7
(based on readiness)

Patient Care Technician

Median Salary: \$37,420
Job Growth (10 yr): 18.5%
Annual Openings: 264
Average Tuition (1 yr): \$0 – \$3,900/yr

Respiratory Therapist

Median Salary: \$52,490
Job Growth (10 yr): 23.6%
Annual Openings: 245
Average Tuition (4 yrs): \$9,600/yr

General Practitioner

Median Salary: \$150,230
Job Growth (10 yr): 20.3%
Annual Openings: 176
Average Tuition (4 yrs): \$35,000/yr



Workplace Visits
Job Shadow
Internship
Work

Supervised Experience

Work

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Internship

Work

Internship

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Preparing students for multiple options after high school:
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Ohio In-demand Occupations

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Health Science Career Pathway

Secondary Pathway: Allied Health and Nursing

Postsecondary Program: Respiratory Care

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Health Science & Technology		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Principles of Allied Health	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Medical Terminology	Human Patho-physiology	World Languages	
	12	English IV	Trigonometry/ Calculus	Anatomy & Physiology	U.S. Government	Patient Centered Care	Pharmacology		
Postsecondary	Year 1 1st Semester	English	College Seminar	Algebra	Intro to Clinical Experience	Human Anatomy	Intro to Respiratory Care	Medical Terminology	
	Year 1 2nd Semester	Organic & Biochemistry	Human Physiology	Therapeutic Procedures I	Clinical Practice I	Patient Assessment I	Respiratory Pharmacology	Respiratory Equipment	Cardio Anatomy & Physiology
	Year 2 1st Semester	Microbiology	Respiratory Patho-physiology I	Therapeutic Procedures II	Clinical Practice II	Patient Assessment II	Sociology	Respiratory Equipment II	
	Year 2 2nd Semester	Clinical Practicum	Respiratory Patho-physiology II	Therapeutic Procedures III	Clinical Practice III	Ethics			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2015



Health Science Career Pathway

Certificate,
Pharmacy Technician

Bachelor's Degree,
Chemistry

Doctoral Degree,
Pharmacy

Start Pre-Health

As early as grade 7
(based on readiness)

Pharmacy Technician

Median Salary: \$26,740
Job Growth (10 yr): 19.5%
Annual Openings: 541
Average Tuition (1 yr): \$0 – \$3,900/yr

Chemist

Median Salary: \$64,180
Job Growth (10 yr): 0.6%
Annual Openings: 102
Average Tuition (4 yrs): \$9,600/yr

Pharmacist

Median Salary: \$114,520
Job Growth (10 yr): 15.1%
Annual Openings: 478
Average Tuition (4 yrs): \$31,500/yr



Workplace Visits
Job Shadow
Internship
Work

Supervised Experience

Work

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Internship

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Internship

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Ohio In-demand Occupations

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Health Science Career Pathway

Secondary Pathway: **Medical Bioscience**

Postsecondary Program: **Chemical Technology**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Health Science & Technology		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Principles of Biomedical Technology	Biomedical Engineering	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Human Patho-physiology	World Languages		
	12	English IV	Trigonometry/ Calculus	Anatomy & Physiology	U.S. Government	Biochemistry of Health	Genetics of Disease		
Postsecondary	Year 1 1st Semester	English Composition	Statistics I	Chemistry I	Chemical Technology I	Social Science Elective			
	Year 1 2nd Semester	Statistics II	Calculus I	Chemistry II	Chemical Technology II	Bio-Organic Chemistry	Chemical Technology Co-Op I		
	Year 2 1st Semester	Composition II	Public Speaking	Calculus II	Analytical Chemistry	Biology I			
	Year 2 2nd Semester	Capstone	Social Science Elective	Calculus III	Instrumental Analysis	Biology II	Chemical Technology Co-Op II		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014



Health Science Career Pathway

Certificate,
Exercise Specialist

Associate or Bachelor's
Degree, Physical Therapy

Doctoral Degree,
Physical Therapy

Start Pre-Health

As early as grade 7
(based on readiness)

Personal Trainer

Median Salary: \$27,310
Job Growth (10 yr): 13.2%
Annual Openings: 221
Average Tuition (1 yr): \$0 – \$3,900/yr

Physical Therapist Assistant

Median Salary: \$52,520
Job Growth (10 yr): 29.1%
Annual Openings: 162
Average Tuition (2 yrs): \$3,900/yr
Average Tuition (4 yrs): \$9,600/yr

Physical Therapist

Median Salary: \$79,340
Job Growth (10 yr): 25.7%
Annual Openings: 302
Average Tuition (3 yrs): \$31,500/yr



Workplace Visits
Job Shadow
Internship
Work

Supervised Experience

Work

Supervised Experience
Internship

Work

Internship

Work

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Preparing students for multiple options after high school:

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 Ohio In-demand Occupations

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Health Science Pathway Model

Secondary Pathway: **Exercise Science and Sports Medicine**

Postsecondary Program: **Physical Therapy Assistant**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Health Science & Technology		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Exercise & Athletic Training	Medical Terminology	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Sports Exercise Psychology	Human Anatomy & Physiology	World Languages	
	12	English IV	Trigonometry/Calculus	Anatomy & Physiology	U.S. Government	Athletic Inquiries & Prevention	Exercise Physiology & Biochemistry	Nutrition & Wellness	
Postsecondary	Year 1 1st Semester	English I	Intro to Physical Therapy	Physical Therapy Procedures I	Medical Terminology	Anatomy & Physiology I			
	Year 1 2nd Semester	English II	Rehabilitation I	Physical Therapy Procedures II	Psychology	Anatomy & Physiology II	First-Year Capstone		
	Year 2 1st Semester	Calculus	Rehabilitation II	Physical Therapy Procedures III	PT Trends & Issues	Directed Practice I	Seminar I		
	Year 2 2nd Semester	Human Growth & Development	PT Special Topics	Directed Practice II & III	Seminar II & III				

High School Career-Technical Education Program Courses
High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses
Required Courses
Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

4/2015



Health Science Career Pathway

Certificate

Associate Degree,
Bioscience Technology

Master's Degree,
Orthotics and Prosthetics



Start Pre-Health

As early as grade 7
(based on readiness)

Medical Appliance Tech

Median Salary: \$31,800
Job Growth (10 yr): 2%
Annual Openings: 10
Average Tuition (1 yr): \$0 – \$3,900/yr

Biomedical Technician

Median Salary: \$50,600
Job Growth (10 yr): 22%
Annual Openings: 100
Average Tuition (2 yrs): \$3,900/yr
Average Tuition (4 yrs): \$9,600/yr

Orthotist/Prosthetist 👍

Median Salary: \$65,210
Job Growth (10 yr): 2.9%
Annual Openings: 8
Average Tuition (2 yrs): \$11,300/yr



Workplace Visits
Job Shadow
Internship
Work

Supervised Experience

Work

Supervised Experience
Internship

Work

Internship

Work

Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:

gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Health Science Career Pathway

Secondary Pathway: **Medical Bioscience**

Postsecondary Program: **Bioscience Technology**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Health Science & Technology		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Principles of Biomedical Technology	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Medical Terminology	Biomedical Engineering	World Languages	
	12	English IV	Trigonometry/ Calculus	Anatomy & Physiology	U.S. Government	Biochemistry of Health	Genetics of Disease		
Postsecondary	Year 1 1st Semester	English Composition I	College Algebra	Biology I	Bioscience Lab Skills	Bio-manufacturing	Bio-informatics		
	Year 1 2nd Semester	English Composition II	Chemistry	Biology II	Bioscience Lab Methods	Psychology			
	Year 2 1st Semester	Public Speaking	Organic Chemistry	Molecular Genetics	Scientific Literacy	Protein Purification & Analysis			
	Year 2 2nd Semester	Ethics	Statistics	Human Genetics	Bioscience Capstone				

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

6/2015

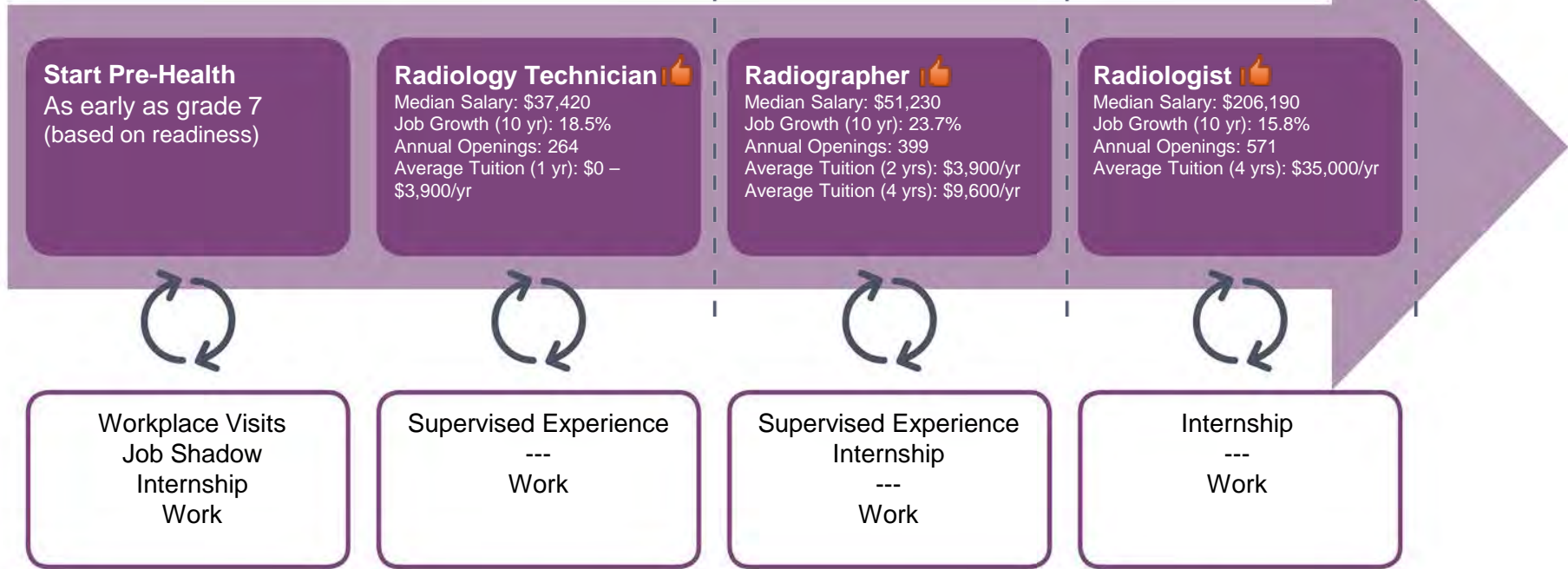


Health Science Career Pathway

Certificate

Associate or Bachelor's Degree,
Radiologic Technology

Doctoral Degree,
Medicine



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Health Science Career Pathway

Secondary Pathway: Allied Health and Nursing

Postsecondary Program: Radiology

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Health Science & Technology		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Principles of Allied Health	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Medical Terminology	Human Patho-physiology	World Languages	
	12	English IV	Trigonometry/ Calculus	Anatomy & Physiology	U.S. Government	Clinical Laboratory Techniques	Patient Centered Care & Diagnostics		
Postsecondary	Year 1 1st Semester	English Composition I	Human Anatomy & Physiology I	Medical Terminology	Imaging Science I	Radiologic Procedures I	Clinical Practicum		
	Year 1 2nd Semester	English Composition II	Algebra	Human Anatomy & Physiology II	Imaging Science II	Radiologic Procedures II	Clinical Practicum		
	Year 2 1st Semester	Speech	Legal Aspects of Healthcare	Imaging Science III	Radiologic Procedures III	Clinical Practicum			
	Year 2 2nd Semester	Humanities Elective	Sociology	Imaging Science IV	Radiologic Procedures IV	Clinical Practicum			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

6/2015



Health Science Career Pathway

Certificate

Associate Degree,
Surgical Technology

Doctoral Degree,
Medicine



Start Pre-Health

As early as grade 7
(based on readiness)

Surgical Assistant



Median Salary: \$37,420
Job Growth (10 yr): 18.5%
Annual Openings: 264
Average Tuition (1 yr): \$0 – \$3,900/yr

Surgical Technologist



Median Salary: \$40,000
Job Growth (10 yr): 12.9%
Annual Openings: 106
Average Tuition (2 yrs): \$3,900/yr
Average Tuition (4 yrs): \$9,600/yr

Surgeon



Median Salary: \$187,200
Job Growth (10 yr): 19.4%
Annual Openings: 100
Average Tuition (4 yrs): \$35,000/yr



Workplace Visits
Job Shadow
Internship
Work

Supervised Experience

Work

Supervised Experience
Internship

Work

Internship

Work

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Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

 Ohio In-demand Occupations

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Health Science Career Pathway

Secondary Pathway: **Allied Health and Nursing**

Postsecondary Program: **Surgery Technology**

Courses with Secondary and Post-Secondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Health Science & Technology		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Principles of Allied Health	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Medical Terminology	Human Patho-physiology	World Languages	
	12	English IV	Trigonometry/ Calculus	Anatomy & Physiology	U.S. Government	Patient Centered Care	Surgical Support		
Post-Secondary	Year 1 1st Semester	English Composition I	Anatomy & Physiology I	Medical Terminology I	Survey of Surgical Technology	Introduction to Pharmacology	Introduction to Surgery		
	Year 1 2nd Semester	Microbiology	Anatomy & Physiology II	General Surgery	Clinical Experience I	Clinical Experience II	Surgery Lab		
	Year 2 1st Semester	College Algebra	Surgical Specialties	Medical Terminology II	Clinical Experience III				
	Year 2 2nd Semester	Interpersonal Communication	Bioethics	Clinical Experience IV					

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014

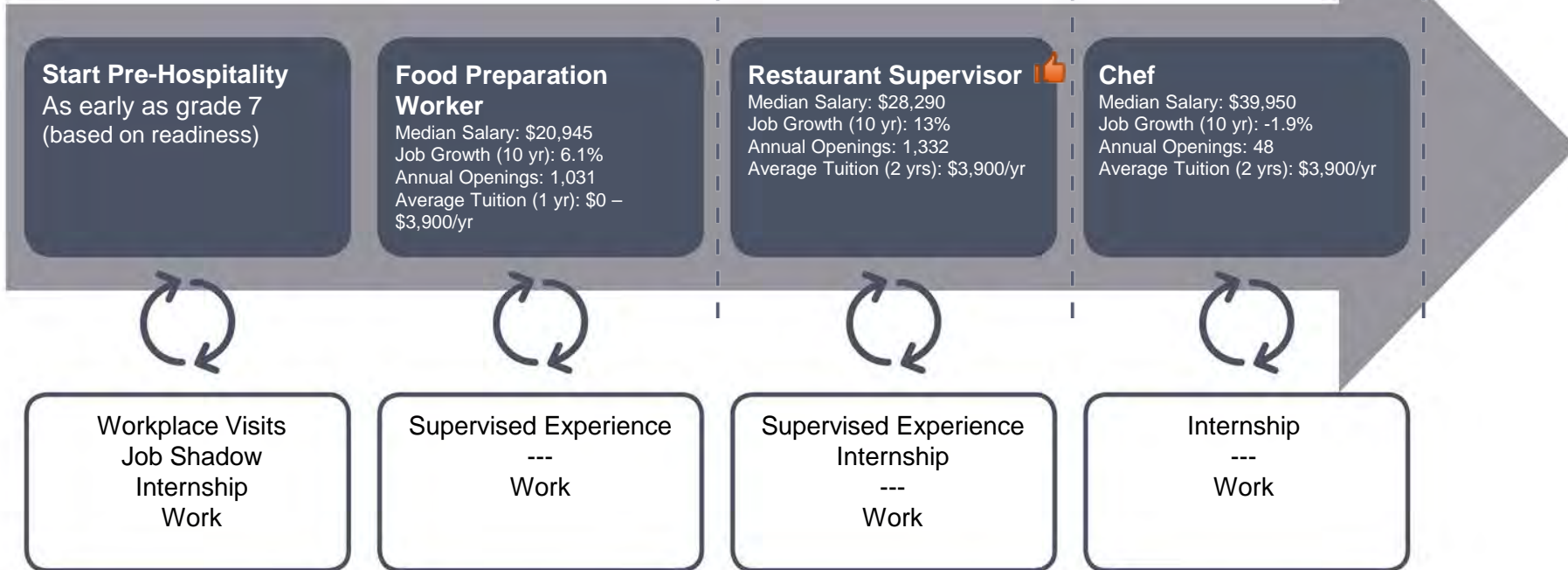


Hospitality and Tourism Career Pathway

Certificate,
ServSafe

Associate Degree,
Restaurant Management

Associate Degree,
Culinary Arts



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Hospitality and Tourism Career Pathway

Secondary Pathway: **Culinary Arts and Food Service Operations**

Postsecondary Program: **Culinary Arts**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts			
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Introduction to Hospitality & Tourism	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Intro to Hospitality/ ServSafe	Nutrition & Wellness	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Quantity Food Preparation	Hospitality Capstone		
Postsecondary	Year 1 1st Semester	English I	Basic Nutrition	Dining Room & Beverage Management	Mixology	College Seminar			
	Year 1 2nd Semester	English II	College Math	Computer Applications	American Regional Cuisine	Menu Development	Risk Mgmt. in Hospitality Industry	Hospitality Elective	
	Year 2 1st Semester	Business Communication	Career & Professional Development	Healthy Cooking Techniques	Essentials of Supervision	Garde Manger	International Cuisine	Arts & Humanities Elective	
	Year 2 2nd Semester	Social Diversity	Purchasing & Cost Controls	Hospitality Facilities Design	Catering & Banquet Operations	Hospitality Elective	Culinary Arts Co-Op		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014



Human Services Career Pathway

Certificate

Bachelor's Degree,
Social Work

Master's Degree,
Mental Health
Counseling

Start Pre-Human Services

As early as grade 7
(based on readiness)

Social Services Assistant 👍

Median Salary: \$27,450
Job Growth (10 yr): 15.7%
Annual Openings: 456
Average Tuition (1 yr): \$0 – \$3,900/yr

Mental Health Social Worker 👍

Median Salary: \$35,630
Job Growth (10 yr): 23.2%
Annual Openings: 326
Average Tuition (4 yrs): \$9,600/yr

Mental Health Counselor 👍

Median Salary: \$42,690
Job Growth (10 yr): 28.7%
Annual Openings: 199
Average Tuition (2 yrs): \$11,300/yr



Workplace Visits
Job Shadow
Internship
Work

Supervised Experience

Work

Supervised Experience
Internship

Work

Internship

Work

Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.

Secondary Pathway: Human Services

Postsecondary Program: Human and Social Services

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Introduction to Human Services		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Health Science & Technology	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Psychology	Nutrition & Wellness	World Languages	
	12	English IV	Trigonometry/ Calculus	Anatomy & Physiology	U.S. Government	Medical Terminology	Mental Health		
Postsecondary	Year 1 1st Semester	English Composition I	Principles of Social Work	Psychology I	Chemical Dependency I	Direct Practice Skills			
	Year 1 2nd Semester	English Composition II	Sociology	Developmental Psychology	Case Management	Group Practice Skills	Social Welfare and Policy		
	Year 2 1st Semester	Fundamentals of Communication	College Algebra	Family Systems	Introduction to Ethics	Human Services Practicum I			
	Year 2 2nd Semester	Abnormal Psychology	Anatomy & Physiology	Chemical Dependency II	Human Services Practicum II	Human Services Capstone			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

4/2015



Human Services Career Pathway

Certificate

Bachelor's Degree,
Social Work

Master's Degree,
Social Work

Start Pre-Human Services

As early as grade 7
(based on readiness)

Human Service Assistant

Median Salary: \$27,450
Job Growth (10 yr): 15.7%
Annual Openings: 456
Average Tuition (1 yr): \$0 – \$3,900/yr

Family Social Worker

Median Salary: \$38,100
Job Growth (10 yr): 12.4%
Annual Openings: 382
Average Tuition (4 yrs): \$9,600/yr

Healthcare Social Worker

Median Salary: \$48,070
Job Growth (10 yr): 28.2%
Annual Openings: 339
Average Tuition (2 yrs): \$11,300/yr



Workplace Visits
Job Shadow
Internship
Work

Supervised Experience

Work

Supervised Experience
Internship

Work

Internship

Work

Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:

gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.

Secondary Pathway: **Human Services**

Postsecondary Program: **Human and Social Services**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Introduction to Human Services		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Health Science & Technology	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Psychology	Nutrition & Wellness	World Languages	
	12	English IV	Trigonometry/ Calculus	Anatomy & Physiology	U.S. Government	Medical Terminology	Mental Health		
Postsecondary	Year 1 1st Semester	English Composition I	Principles of Social Work	Psychology I	Chemical Dependency I	Direct Practice Skills			
	Year 1 2nd Semester	English Composition II	Sociology	Developmental Psychology	Case Management	Group Practice Skills	Social Welfare and Policy		
	Year 2 1st Semester	Fundamentals of Communication	College Algebra	Family Systems	Introduction to Ethics	Human Services Practicum I			
	Year 2 2nd Semester	Abnormal Psychology	Anatomy & Physiology	Chemical Dependency II	Human Services Practicum II	Human Services Capstone			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

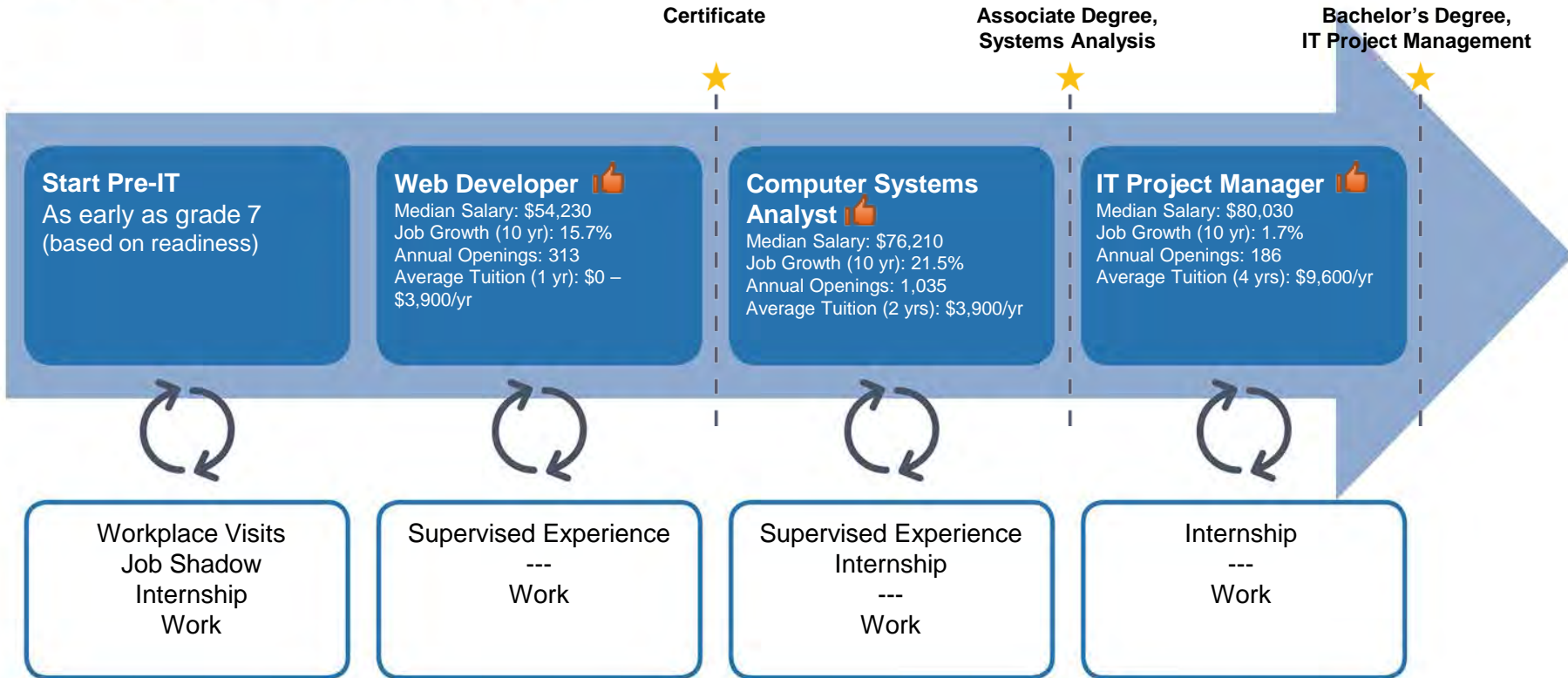
Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

4/2015

Information Technology Career Pathway



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Information Technology Career Pathway

Secondary Pathway: **Interactive Media**

Postsecondary Program: **Interactive Media**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Information Technology	Web Design	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Design Techniques	Interactive Application Development	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	3D Techniques	World Languages		
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Video & Sound	IT Capstone		
Postsecondary	Year 1 1st Semester	English	College Seminar	Biology	Principles of Interactive Design	Video and Sound Basics	Intro to Computer Design	HTML	
	Year 1 2nd Semester	Visual Communication	Storyboarding	Audio Production I	Branding	CSS	Media Graphics & Optimization	Intro to Humanities	
	Year 2 1st Semester	Flash I and II	Intro to Sociology	Audio Production II	JavaScript Fundamentals	Content Management & Integration	Statistics		
	Year 2 2nd Semester	Advanced Flash III	Interactive Portfolio	Web Design Creation	Interactive Media Practicum	Creation-Encore			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

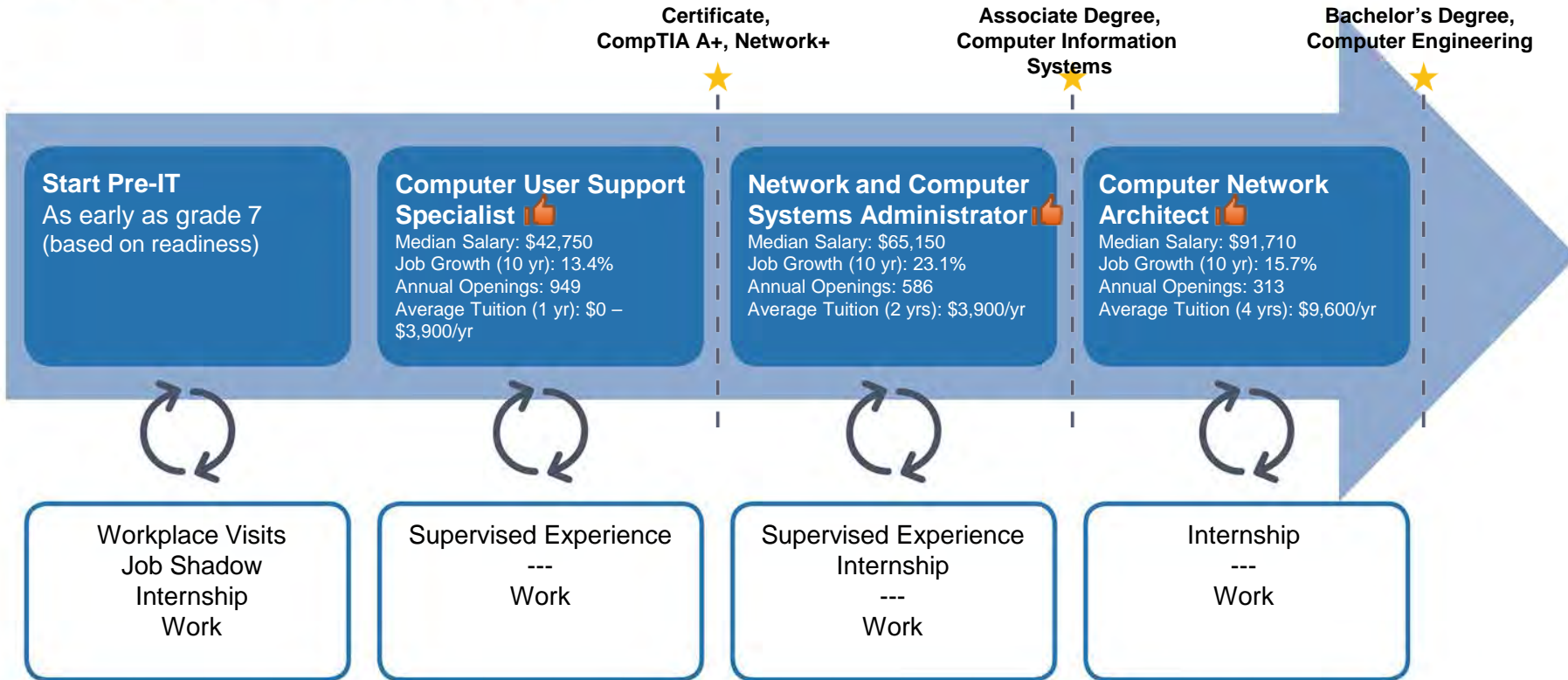
Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014

Information Technology Career Pathway



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
 gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Information Technology Career Pathway

Secondary Pathway: **Network Systems**

Postsecondary Program: **Computer Networking**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Information Technology	Networking	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Network Operating Systems	Network Management	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Network Security	World Languages		
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Routing & Switching			
Postsecondary	Year 1 1st Semester	Operating Systems & Software	Computer Hardware Support	Cisco I: Networking Technologies	Networking Fundamentals				
	Year 1 2nd Semester	English	TCP/IP	Cisco II: Basic Router Technologies	Network Administration				
	Year 2 1st Semester	Intro to Business	Technical Writing	Cisco III: LAN Switching & Wireless	Math	Natural Science Elective			
	Year 2 2nd Semester	Professional Success Strategy	Networking Capstone	Cisco IV: WAN Technologies	Arts & Humanities Elective	Social Science Elective			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

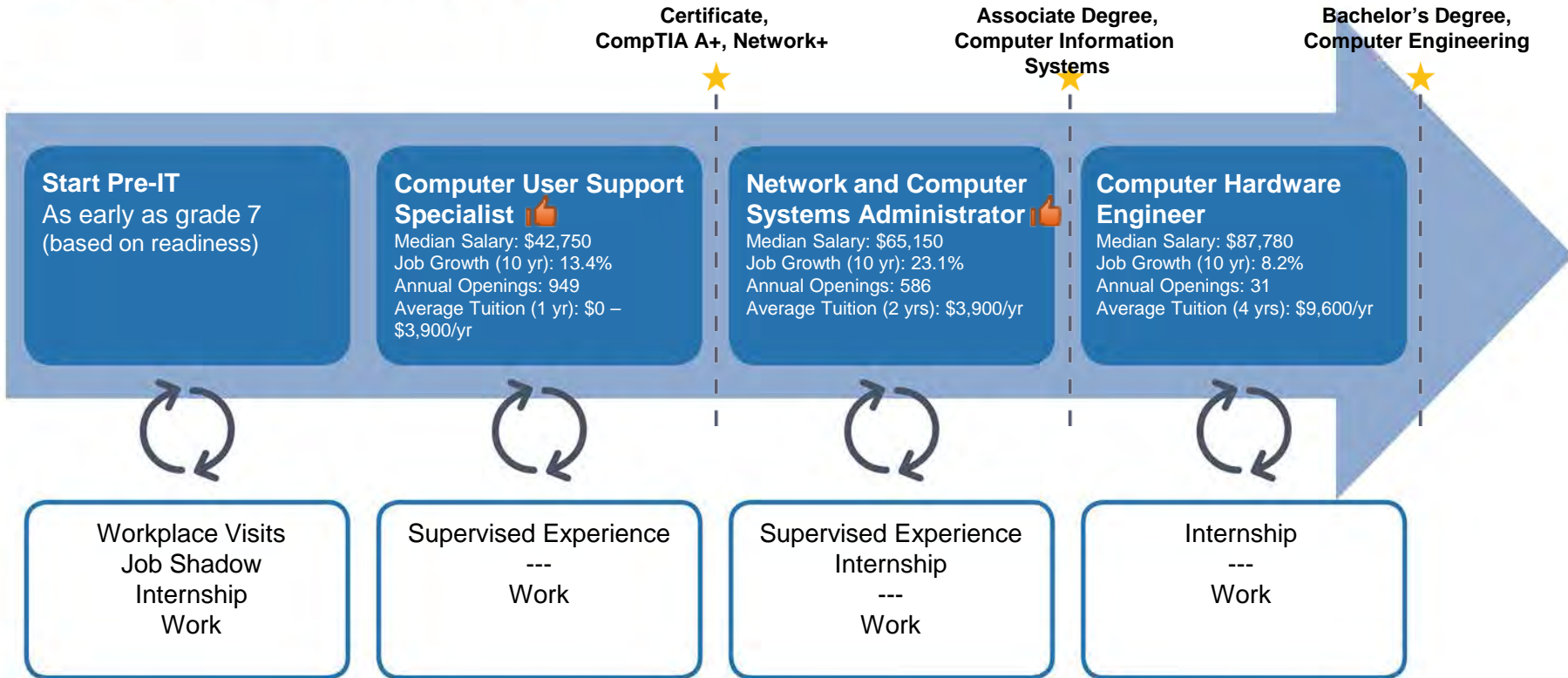
Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014

Information Technology Career Pathway



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

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 gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Information Technology Career Pathway

Secondary Pathway: **Network Systems**

Postsecondary Program: **Computer Networking**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Information Technology	Networking	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Network Operating Systems	Network Management	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Network Security	World Languages		
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Routing & Switching			
Postsecondary	Year 1 1st Semester	Operating Systems & Software	Computer Hardware Support	Cisco I: Networking Technologies	Networking Fundamentals				
	Year 1 2nd Semester	English	TCP/IP	Cisco II: Basic Router Technologies	Network Administration				
	Year 2 1st Semester	Intro to Business	Technical Writing	Cisco III: LAN Switching & Wireless	Math	Natural Science Elective			
	Year 2 2nd Semester	Professional Success Strategy	Networking Capstone	Cisco IV: WAN Technologies	Arts & Humanities Elective	Social Science Elective			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

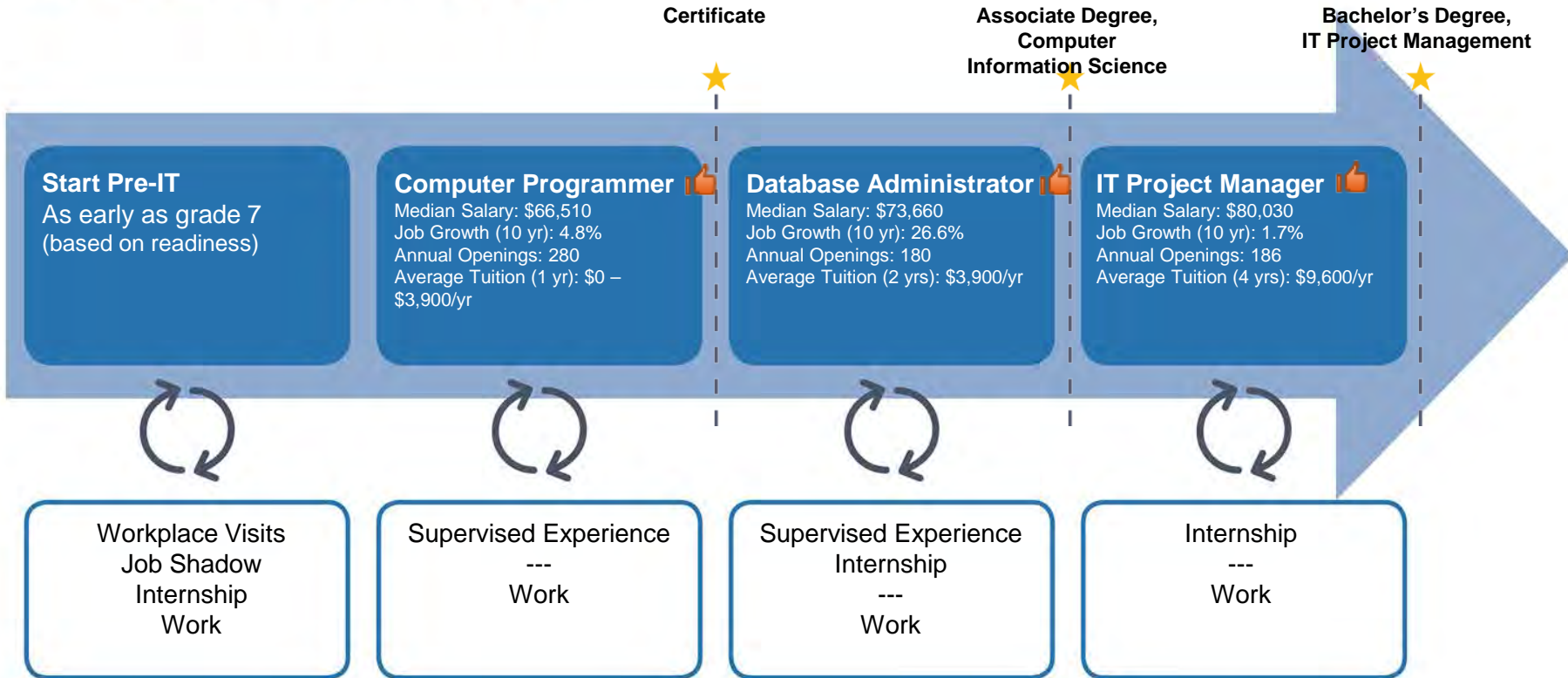
Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014

Information Technology Career Pathway



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Information Technology Career Pathway

Secondary Pathway: Programming and Software Development

Postsecondary Program: Programming and Software Development

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Information Technology	Programming	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Object Oriented Programming	Visual Programming	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Systems Analysis & Design	World Languages		
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Database Applications Development			
Postsecondary	Year 1 1st Semester	English	College Seminar	Intro to Business	Computer Applications	Computer Programming	Operating Systems & Security		
	Year 1 2nd Semester	Technical Writing	Math for Information Technology	Internet Programming I	Database	Advanced C++			
	Year 2 1st Semester	College Algebra	Visual Basic I	Internet Programming II	Systems Analysis & Design	Natural Science Elective			
	Year 2 2nd Semester	Communication	Visual Basic II	Java Programming	Arts & Humanities Elective	Social Science Elective	IT Capstone		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

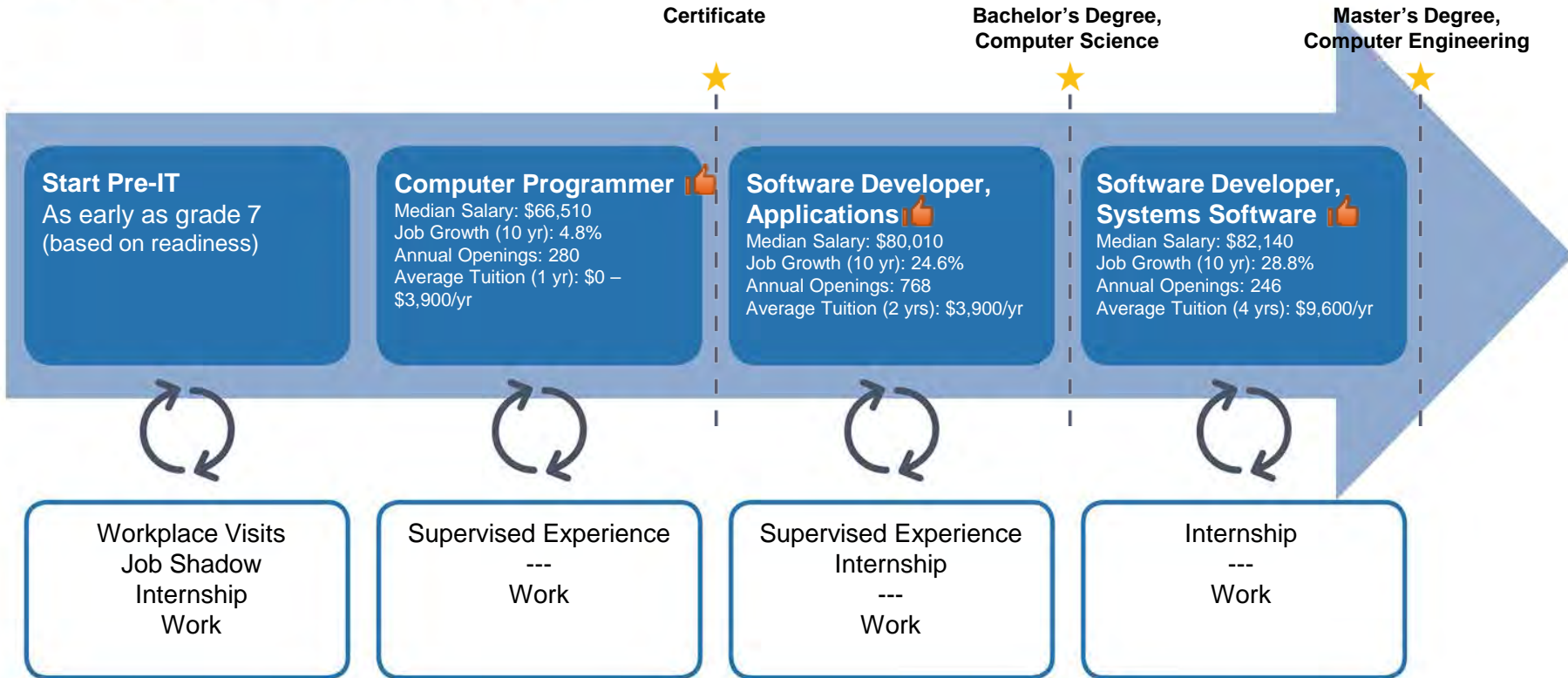
Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014

Information Technology Career Pathway



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Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

 Ohio In-demand Occupations

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Information Technology Career Pathway

Secondary Pathway: **Programming and Software Development**

Postsecondary Program: **Programming and Software Development**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Information Technology	Programming	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Object Oriented Programming	Visual Programming	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Systems Analysis & Design	World Languages		
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Database Applications Development			
Postsecondary	Year 1 1st Semester	English	College Seminar	Intro to Business	Computer Applications	Computer Programming	Operating Systems & Security		
	Year 1 2nd Semester	Technical Writing	Math for Information Technology	Internet Programming I	Database	Advanced C++			
	Year 2 1st Semester	College Algebra	Visual Basic I	Internet Programming II	Systems Analysis & Design	Natural Science Elective			
	Year 2 2nd Semester	Communication	Visual Basic II	Java Programming	Arts & Humanities Elective	Social Science Elective	IT Capstone		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

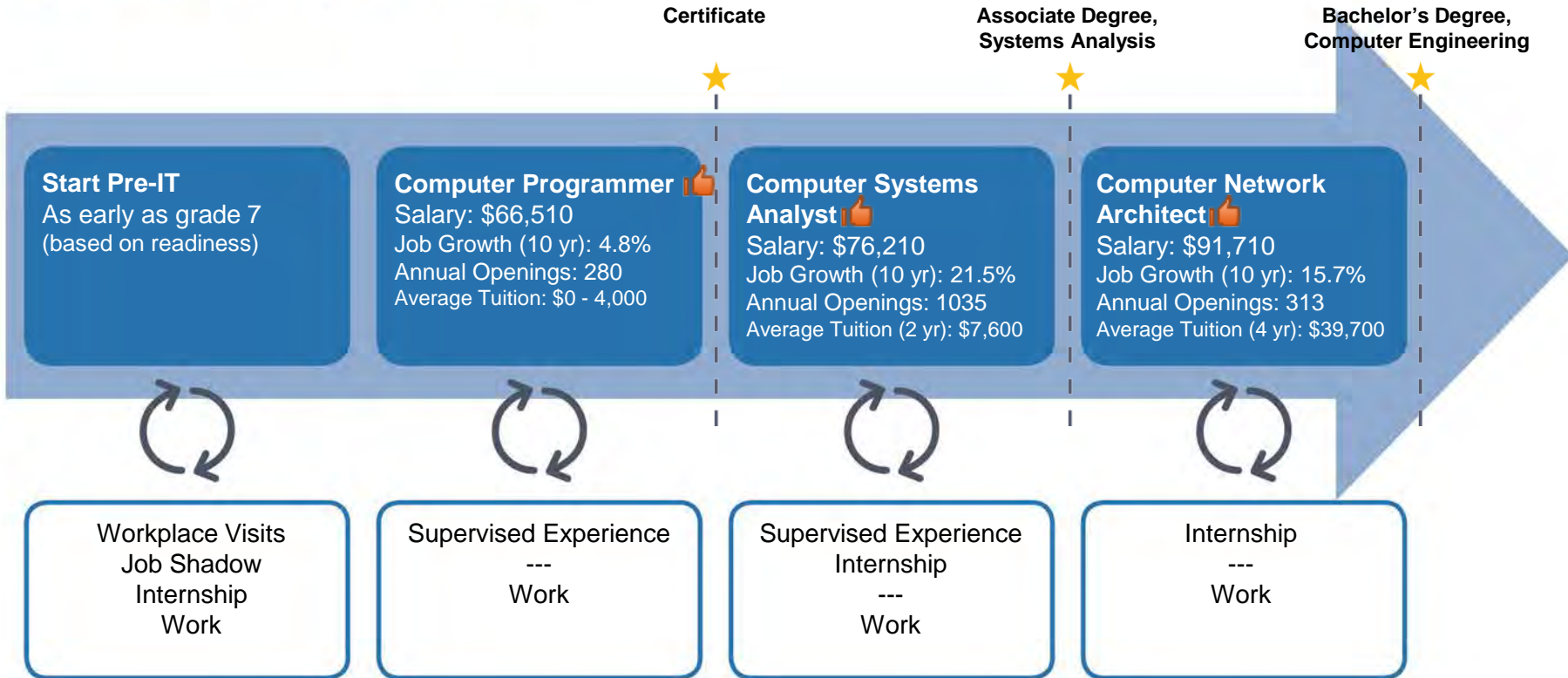
Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014

Information Technology Pathway Model



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
 gainful employment and/or postsecondary study.



Information Technology Pathway Model

Secondary Pathway: Programming and Software Development

Postsecondary Program: Programming and Software Development

Courses with Secondary and Post-Secondary Credits

Secondary	7 8	English	Algebra I	Science	Social Studies	Fine Arts	Information Technology	Programming	
	9 10	English	Geometry	Biology	US History	Health (.5) PE (.5)	Object Oriented Programming	Visual Programming	
	11	English	Algebra II	Physics	US Government & Economics	Foreign Language	Systems Analysis and Design		
	12	English	Trigonometry	Chemistry	Psychology	Foreign Language	Database Applications Development		
Post-Secondary	Year 1 1st Semester	English	College Seminar	Intro to Business	Computer Applications	Computer Programming	Operating Systems & Security		
	Year 1 2nd Semester	Technical Writing	Math for Information Technology	Internet Programming I	Database	Advanced C++			
	Year 2 1st Semester	College Algebra	Visual Basic I	Internet Programming II	Systems Analysis & Design	Natural Science Elective			
	Year 2 2nd Semester	Communication	Visual Basic II	Java Programming	Arts & Humanities Elective	Social Science Elective	IT Capstone		

High School CTE Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

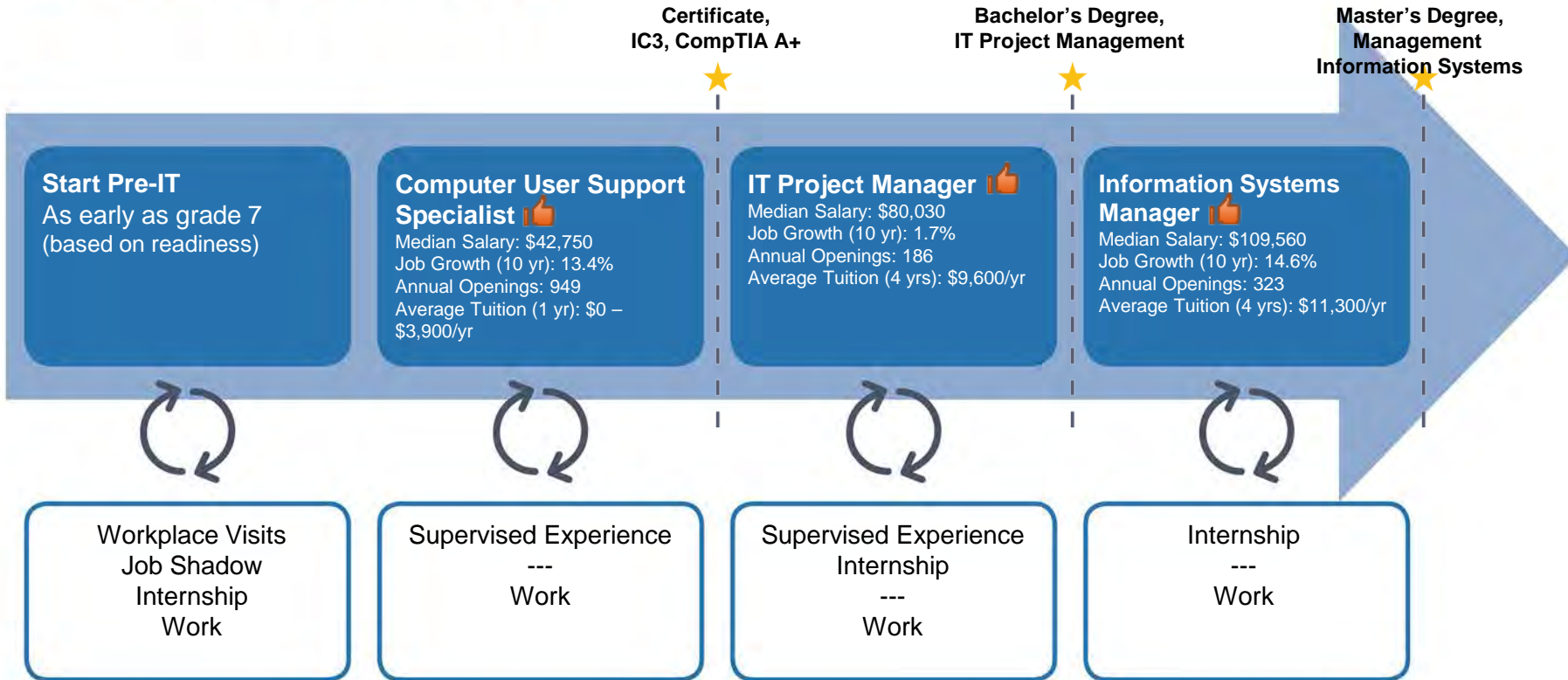
Required Courses

Recommend Electives

Visit education.ohio.gov/CareerConnections for reference information

5.2014

Information Technology Career Pathway



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Information Technology Career Pathway

Secondary Pathway: **Information Services and Support**

Postsecondary Program: **Computer Science**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Information Technology	Networking	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Network Operating Systems	Network Management	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Network Security	World Languages		
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Routing & Switching			
Postsecondary	Year 1 1st Semester	English	College Algebra	College Seminar	Computer Applications	Programming Logic	Humanities Elective		
	Year 1 2nd Semester	Business Communication	Operating Systems	Networking Concepts	Object Oriented Analysis	Visual Basic I	HTML	Systems Analysis	
	Year 2 1st Semester	Financial Accounting	Micro-economics	Project Management	Technical Elective	Natural Science Elective			
	Year 2 2nd Semester	Marketing Principles	Database Systems Programming	IT in Logistics	Computer Science Seminar	Computer Science Practicum	Technical Elective		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

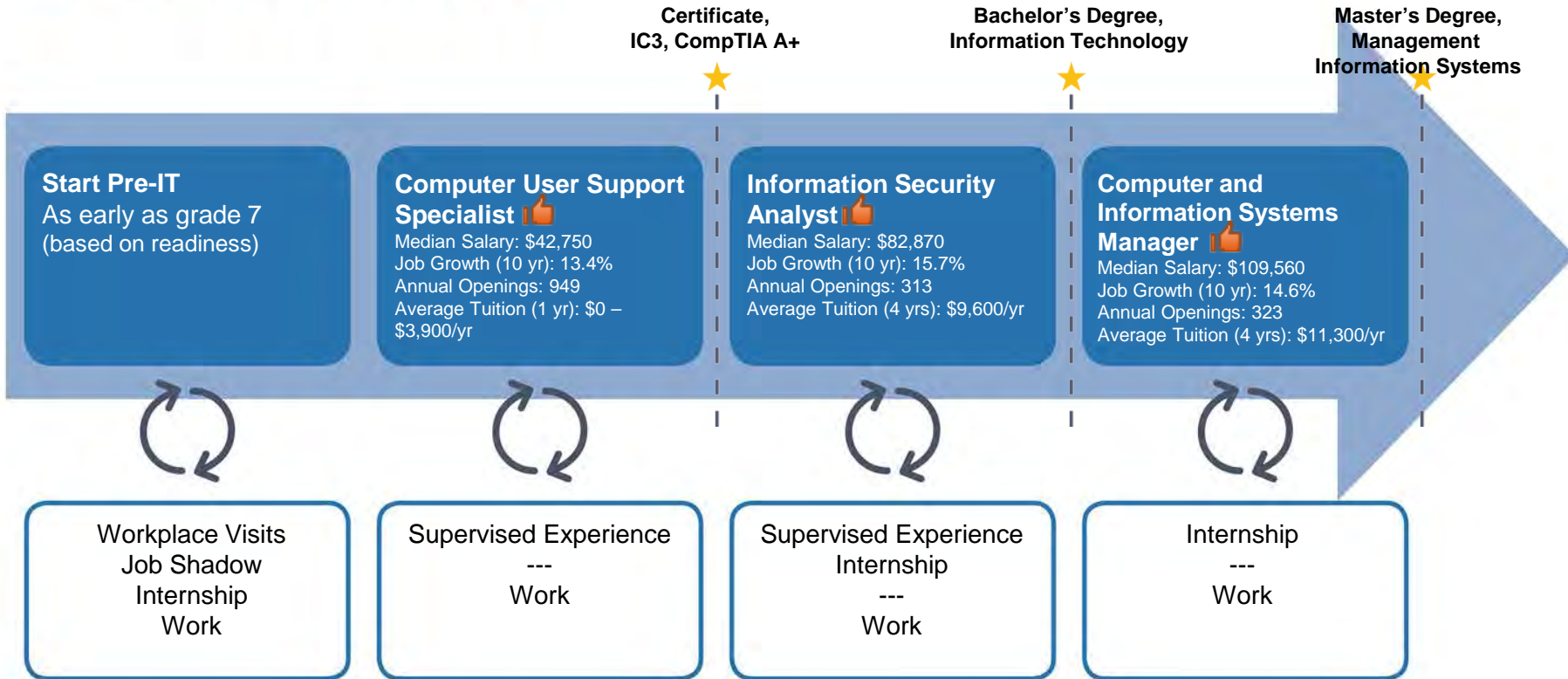
Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014

Information Technology Career Pathway



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
 gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Information Technology Career Pathway

Secondary Pathway: **Information Services and Support**

Postsecondary Program: **Computer Science**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Information Technology	Networking	
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Network Operating Systems	Network Management	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Network Security	World Languages		
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Routing & Switching			
Postsecondary	Year 1 1st Semester	English	College Algebra	College Seminar	Computer Applications	Programming Logic	Humanities Elective		
	Year 1 2nd Semester	Business Communication	Operating Systems	Networking Concepts	Object Oriented Analysis	Visual Basic I	HTML	Systems Analysis	
	Year 2 1st Semester	Financial Accounting	Micro-economics	Project Management	Technical Elective	Natural Science Elective			
	Year 2 2nd Semester	Marketing Principles	Database Systems Programming	IT in Logistics	Computer Science Seminar	Computer Science Practicum	Technical Elective		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014

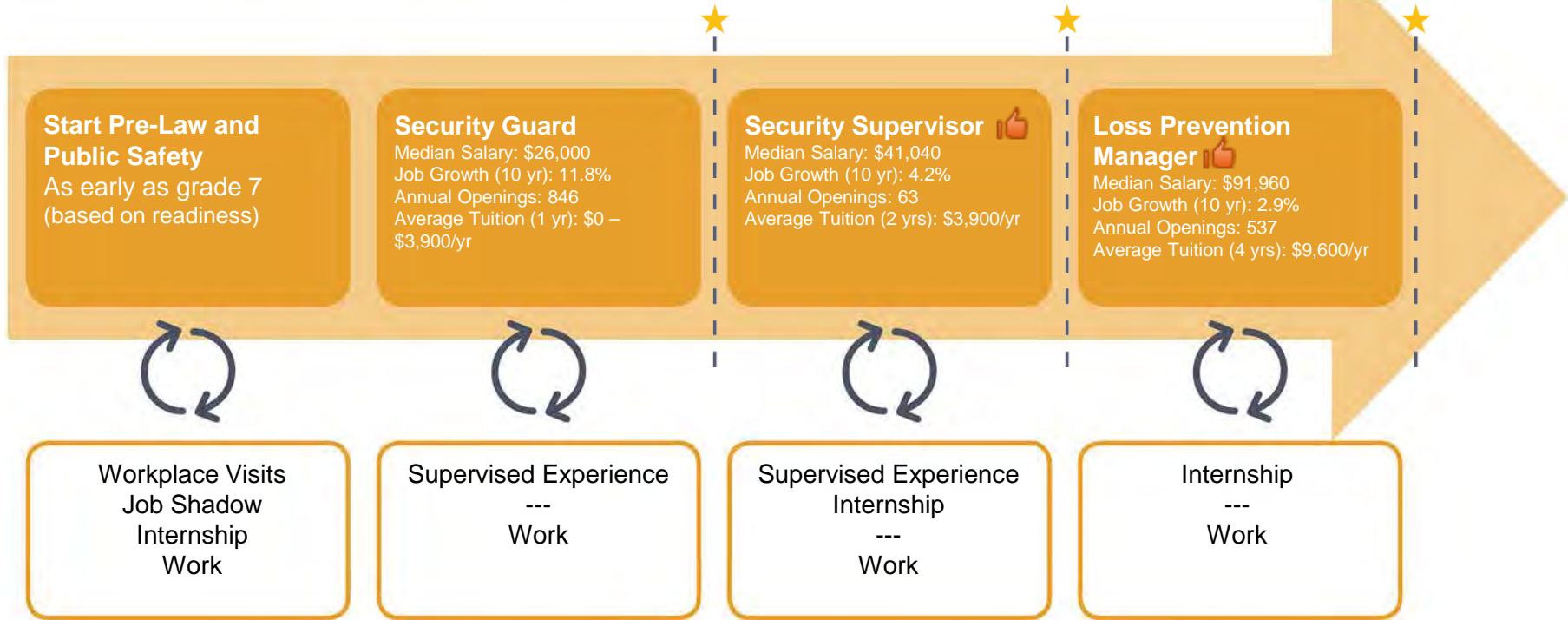


Law and Public Safety Career Pathway

Certificate

Associate Degree,
Criminal Justice

Bachelor's Degree,
Criminology



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Law and Public Safety Career Pathway

Secondary Pathway: **Criminal Justice**

Postsecondary Program: **Criminal Justice**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	American Criminal Justice System		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Security & Protective Services	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Police Work & Practice in Public Safety	Investigations & Forensics	World Languages	
	12	English IV	Trigonometry/ Calculus	Psychology	U.S. Government	Correctional System & Services	Homeland Security	Law & Public Safety Capstone	
Postsecondary	Year 1 1st Semester	English Composition I	College Algebra	Psychology	Criminal Justice	Ethics in Criminal Justice	Basic Investigations		
	Year 1 2nd Semester	English Composition II	Basic Chemistry	Abnormal Psychology	Public Administration	Constitutional Law & Courts	Criminal Law & Procedure		
	Year 2 1st Semester	Communication	Intro to Sociology	Human Diversity	Criminology	Correctional System	Victimology		
	Year 2 2nd Semester	Homeland Security	Correctional Management	Juvenile Process	Probation & Parole	Current Issues in Criminal Justice	Criminal Justice Practicum		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

6/2015



Law and Public Safety Career Pathway

150 hour Training,
National Registry

250 hour Training,
National Registry

1100 hour Training,
National Registry

Start Pre-Law and Public Safety

As early as grade 7
(based on readiness)

Emergency Medical Technician (EMT) 👍

Median Salary: \$19,300
Job Growth (10 yr): 30.6%
Annual Openings: 450
Average Tuition (1 yr): \$0 – \$3,900/yr

Advance EMT 👍

Median Salary: \$27,600
Job Growth (10 yr): 30.6%
Annual Openings: 450
Average Tuition (2 yrs): \$3,900/yr

Paramedic 👍

Median Salary: \$44,600
Job Growth (10 yr): 30.6%
Annual Openings: 450
Average Tuition (4 yrs): \$9,600/yr



Workplace Visits
Job Shadow
Internship
Work

Supervised Experience

Work

Supervised Experience
Internship

Work

Internship

Work

Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:

gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Law and Public Safety Career Pathway

Secondary Pathway: **Firefighting and Emergency Medical Services**

Postsecondary Program: **Emergency Medical Services**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Foundations of Firefighting & EMT		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Medical Terminology	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Principles of Allied Health	Patient Centered Care	World Languages	
	12	English IV	Trigonometry/ Calculus	Anatomy & Physiology	U.S. Government	Patho-physiology	Pharmacology	EMT	
Postsecondary	Year 1 1st Semester	College Seminar	Human Anatomy & Physiology	Paramedic I					
	Year 1 2nd Semester	Algebra	Legal Issues for Emergency Services	Paramedic II	English	Technical Elective			
	Year 2 1st Semester	Interpersonal Skills	Spanish for Law Enforcement	Paramedic III	Computer Applications				
	Year 2 2nd Semester	Psychology	Chemistry	EMS Management	Disaster Planning				

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014

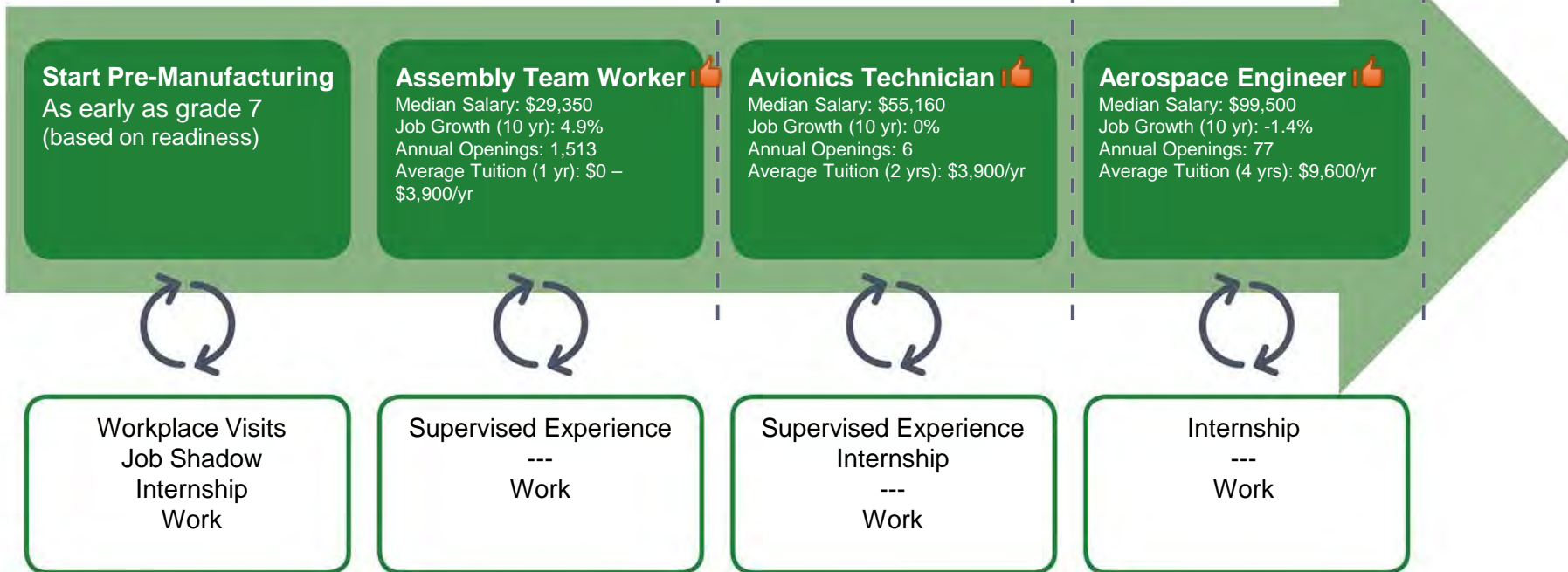


Manufacturing Technologies Career Pathway

Certificate

Associate Degree,
Avionics Technology

Bachelor's Degree,
Aerospace Engineering



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Manufacturing Technologies Career Pathway

Secondary Pathway: **Manufacturing Operations**

Postsecondary Program: **Avionics Technology**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Pre-Engineering Technologies		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Manufacturing Operations	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	CNC Technology	Machine Tools	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Computer Integrated Manufacturing	Robotics		
Postsecondary	Year 1 1st Semester	English Composition	Intro to Aviation	Aircraft Weight & Balance	Aircraft Materials	AMT Regulation & Inspection	Ground Operation & Servicing	Manufacturing Operations	
	Year 1 2nd Semester	College Algebra	AMT Electricity	Aircraft Metallic Structures	Aircraft Electrical Systems	Aircraft Fuel Systems	Aircraft Non-Metallic Structures	Communication & Navigation Systems	
	Year 2 1st Semester	Physics	Turbine Engine Maintenance	Reciprocating Engine Maintenance I	Machine Tools	Aircraft Environmental Controls	Landing Gear & Fluid Power		
	Year 2 2nd Semester	Ethics	Powerplant Inspection	Reciprocating Engine Maintenance II	Propellers	Hazardous Materials Maintenance	Aircraft Inspection		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

6/2015

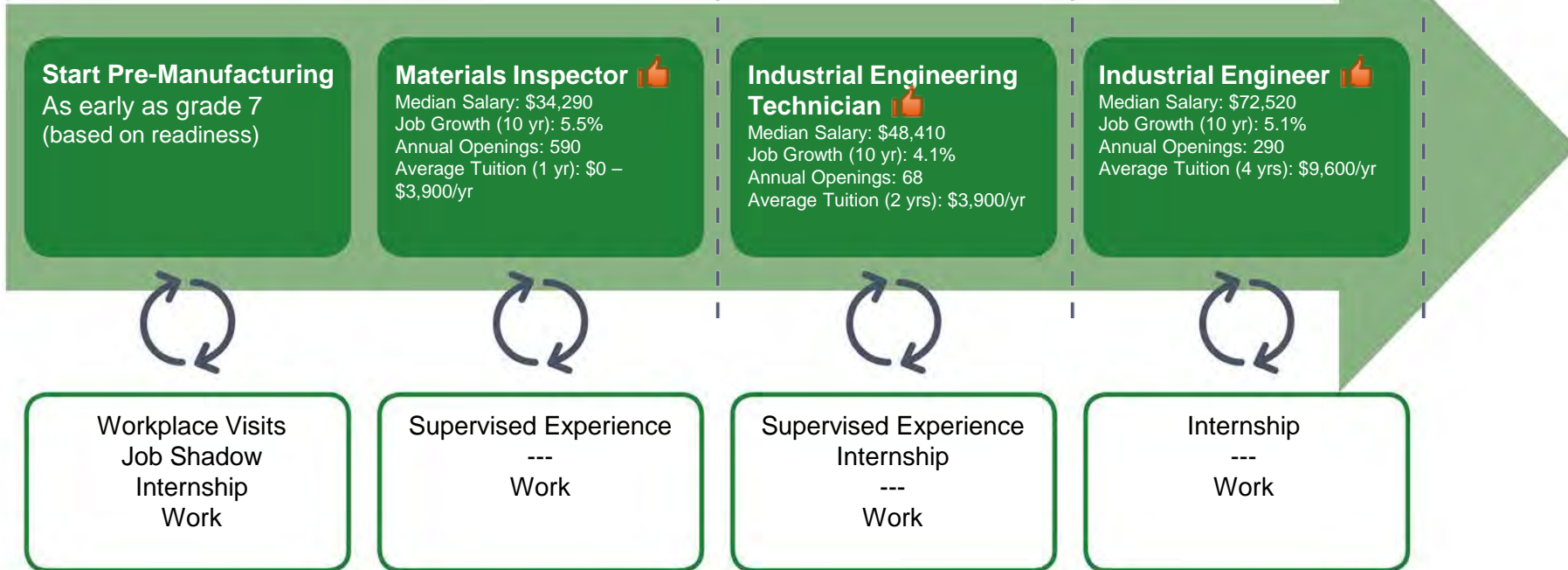


Manufacturing Technologies Career Pathway

Certificate

Associate Degree,
Industrial Technology

Bachelor's Degree,
Industrial Engineering



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Manufacturing Technologies Career Pathway

Secondary Pathway: **Manufacturing Operations**

Postsecondary Program: **Industrial Technology**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Pre-Engineering Technologies		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Manufacturing Operations	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Engineering Principles	Machine Tools	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Computer Integrated Manufacturing	Mechanisms & Drives		
Postsecondary	Year 1 1st Semester	Computer-Aided Design	Industrial Safety	Electrical Systems	Mechanical Maintenance	Introduction to Engineering Technology	Technical Math		
	Year 1 2nd Semester	Employability Skills	Hydraulics & Pneumatics	Programmable Logic Control	Dimensional Metrology	Software Applications	Motor and Motor Controls		
	Year 2 1st Semester	English	Hydraulic Troubleshooting	Electrical Troubleshooting	Electrical Distribution	Automated Systems			
	Year 2 2nd Semester	Business Communication	Small Group Communication	Micro-economics	Industrial Machine Maintenance	Industrial Technology Projects	Humanities Elective		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

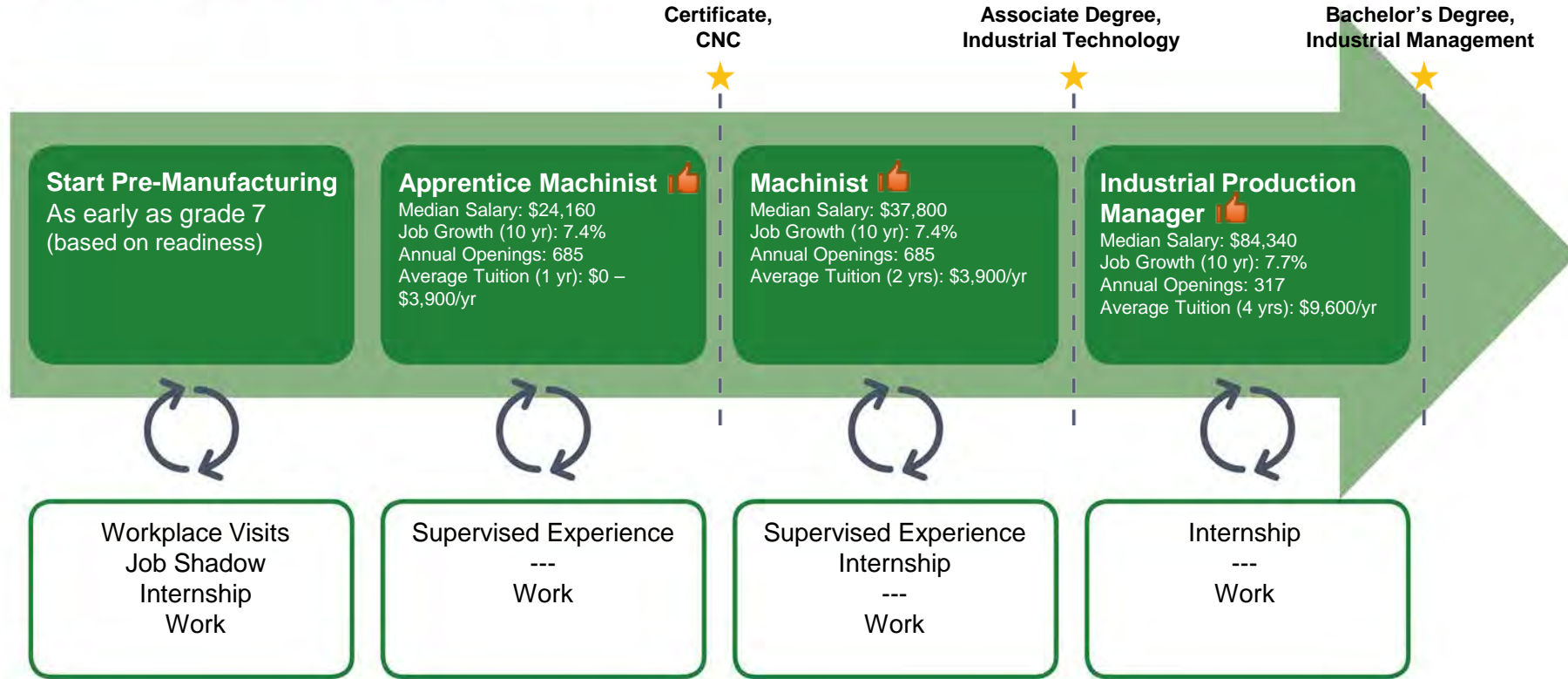
Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014



Manufacturing Technologies Career Pathway



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Manufacturing Technologies Career Pathway

Secondary Pathway: **Manufacturing Operations**

Postsecondary Program: **Industrial Technology**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Pre-Engineering Technologies		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Manufacturing Operations	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Machine Tools	Mechanisms and Drives	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Computer Integrated Manufacturing	Machining with Industrial Lathes (CNC)		
Postsecondary	Year 1 1st Semester	English	Technical Math	PLC I	AC/DC Electrical				
	Year 1 2nd Semester	OSHA Safety & Health	Industrial Maintenance	PLC II	Digital Electronics	Mechatronics			
	Year 2 1st Semester	Communication	Quality Processes	PLC III	Fluid Power	Leadership			
	Year 2 2nd Semester	Financial Management	Management	Applied Electricity	Automation (Robotics)	Physics			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014



Manufacturing Technologies Career Pathway

Certificate

Associate Degree,
Manufacturing
Technology Operations

Bachelor's Degree,
Materials Engineering

Start Pre-Manufacturing

As early as grade 7
(based on readiness)

Welder

Median Salary: \$35,300
Job Growth (10 yr): 5.1%
Annual Openings: 425
Average Tuition (1 yr): \$0 – \$3,900/yr

Tool & Die Maker

Median Salary: \$45,270
Job Growth (10 yr): -3.1%
Annual Openings: 35
Average Tuition (2 yrs): \$3,900/yr

Materials Engineer

Median Salary: \$89,300
Job Growth (10 yr): 1%
Annual Openings: 27
Average Tuition (4 yrs): \$9,600/yr



Workplace Visits
Job Shadow
Internship
Work

Supervised Experience

Work

Supervised Experience
Internship

Work

Internship

Work

Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Manufacturing Technologies Career Pathway

Secondary Pathway: **Manufacturing Operations**

Postsecondary Program: **Manufacturing Technology Operations Management**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Pre-Engineering Technologies		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Manufacturing Operations	Welding Technologies	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Gas Metal Arc Welding	Shielded Cored Arc Welding	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Flux Cored Arc Welding	Gas Tungsten Arc Welding		
Postsecondary	Year 1 1st Semester	English Composition	College Algebra	Engineering Design	Manufacturing Operations	Welding	Engineering Technologies		
	Year 1 2nd Semester	Economics	Financial Accounting	Jig & Fixture Design	Advanced Manufacturing	Computer Aided Manufacturing I			
	Year 2 1st Semester	Business Entrepreneurship	Physics	Quality	Logistics	Engineering Materials			
	Year 2 2nd Semester	Technical Writing	Business Management	Hydraulics & Pneumatics	Stamping Operations & Die Design				

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

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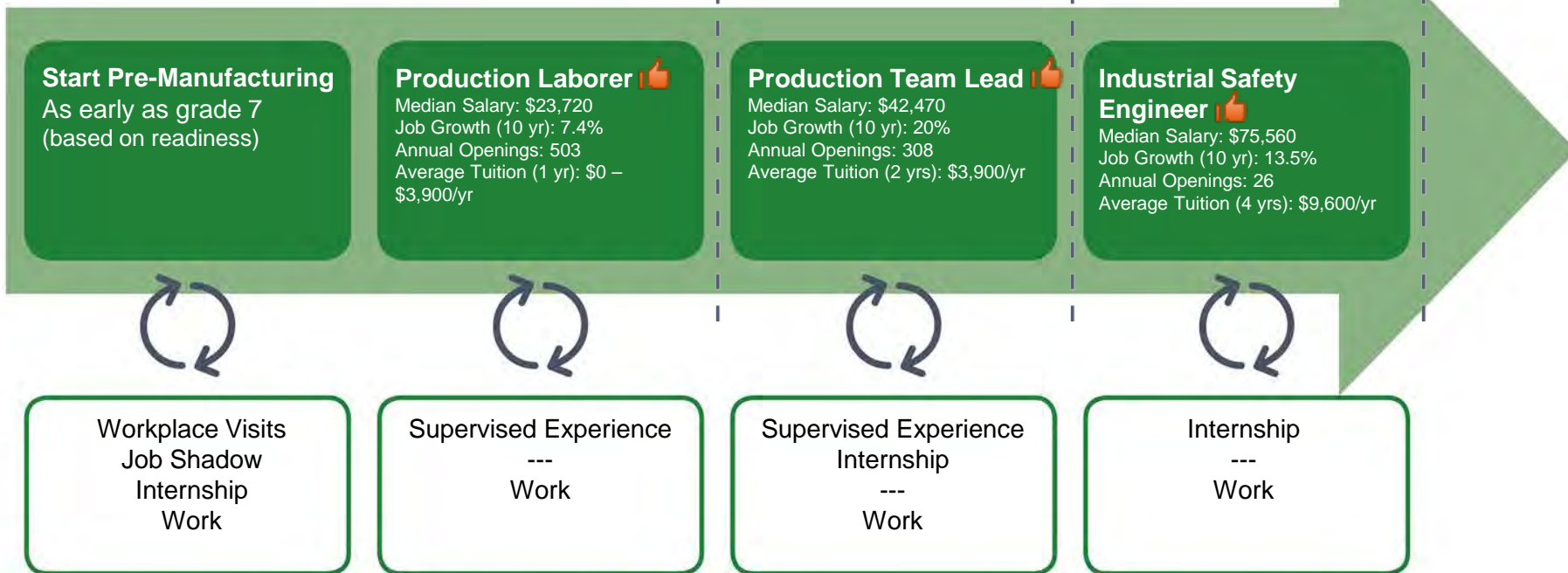


Manufacturing Technologies Career Pathway

Certificate

Associate Degree,
Systems Technology

Bachelor's Degree,
Environmental Engineering



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Manufacturing Technologies Career Pathway

Secondary Pathway: **Manufacturing Operations**

Postsecondary Program: **Systems Technology**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Pre-Engineering Technologies		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Manufacturing Operations	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	CNC Technology	Machine Tools	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Computer Integrated Manufacturing	Robotics		
Postsecondary	Year 1 1st Semester	English Composition	College Algebra	Computer Applications	Environmental Health & Safety	Operations Management I	Print Reading & Sketching		
	Year 1 2nd Semester	Technical Writing	Statistics	Quality Management Systems	Manufacturing Processes	Operations Management II	Human Relations in the Workplace		
	Year 2 1st Semester	Communication	Labor Relations	Effective Management	CNC Programming	Lean Systems			
	Year 2 2nd Semester	Psychology	Manufacturing Automation	Machine Reliability	Problem Solving & Decisions				

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

6/2015



Manufacturing Technologies Career Pathway

Certificate

Associate Degree,
Systems Technology

Bachelor's Degree,
Systems Engineering



Start Pre-Manufacturing

As early as grade 7
(based on readiness)

Mold Operator

Median Salary: \$28,420
Job Growth (10 yr): 1.5%
Annual Openings: 166
Average Tuition (1 yr): \$0 – \$3,900/yr

Production Technician

Median Salary: \$57,150
Job Growth (10 yr): 1.5%
Annual Openings: 70
Average Tuition (2 yrs): \$3,900/yr

Manufacturing Engineer

Median Salary: \$70,940
Job Growth (10 yr): 2.7%
Annual Openings: 146
Average Tuition (4 yrs): \$9,600/yr



Workplace Visits
Job Shadow
Internship
Work

Supervised Experience

Work

Supervised Experience
Internship

Work

Internship

Work

Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:

gainful employment and/or postsecondary study.

 Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Manufacturing Technologies Career Pathway

Secondary Pathway: **Manufacturing Operations**

Postsecondary Program: **Systems Technology**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Pre-Engineering Technologies		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Manufacturing Operations	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	CNC Technology	Machine Tools	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Computer Integrated Manufacturing	Robotics		
Postsecondary	Year 1 1st Semester	English Composition	College Algebra	Computer Applications	Environmental Health & Safety	Operations Management I	Print Reading & Sketching		
	Year 1 2nd Semester	Technical Writing	Statistics	Quality Management Systems	Manufacturing Processes	Operations Management II	Human Relations in the Workplace		
	Year 2 1st Semester	Communication	Labor Relations	Effective Management	CNC Programming	Lean Systems			
	Year 2 2nd Semester	Psychology	Manufacturing Automation	Machine Reliability	Problem Solving & Decisions				

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

6/2015



Marketing Career Pathway

Certified Professional Salesperson

Bachelor's Degree, Marketing

Master's Degree, Marketing

Start Pre-Marketing

As early as grade 7
(based on readiness)

Sales Representative

Median Salary: \$48,430
Job Growth (10 yr): 13.2%
Annual Openings: 908
Average Tuition (1 yr): \$0 – \$3,900/yr

Sales Supervisor (Non-Retail)

Median Salary: \$64,960
Job Growth (10 yr): -0.5%
Annual Openings: 359
Average Tuition (4 yrs): \$9,600/yr

Marketing Manager

Median Salary: \$113,080
Job Growth (10 yr): 8.8%
Annual Openings: 186
Average Tuition (2 yrs): \$11,300/yr



Workplace Visits
Job Shadow
Internship
Work

Supervised Experience

Work

Supervised Experience
Internship

Work

Internship

Work

Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:

gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Marketing Career Pathway

Secondary Pathway: **Marketing Management**

Postsecondary Program: **Marketing**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Fundamentals of Business & Admin.		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Business Foundations	Marketing Principles	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Marketing Applications	Professional & Technical Sales	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Marketing Research	Marketing Capstone		
Postsecondary	Year 1 1st Semester	English	Statistics	Retailing	Micro-economics	Digital Media Preparation	College Seminar		
	Year 1 2nd Semester	Marketing Principles	Financial Accounting	Supply Chain Mgmt Principles	Branding	Customer Service & Sales	Physics	American History	
	Year 2 1st Semester	Web & Electronic Marketing	Advertising & Promotion	Business-to-Business Marketing	Marketing Info & Consumer Analysis	Managerial Accounting			
	Year 2 2nd Semester	Global Marketing	Project Management Principles	Direct & Database Marketing	Marketing Seminar	Marketing Practicum	Fundamentals of Interactive Media		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014



Marketing Career Pathway

Associate Degree,
Marketing

Bachelor's Degree,
Marketing

Master's Degree,
Marketing

Start Pre-Marketing

As early as grade 7
(based on readiness)

Marketing Specialist

Median Salary: \$55,450
Job Growth (10 yr): 37.4%
Annual Openings: 855
Average Tuition (2 yrs): \$3,900/yr

Product Manager

Median Salary: \$81,590
Job Growth (10 yr): 8.6%
Annual Openings: 114
Average Tuition (4 yrs): \$9,600/yr

Marketing Manager

Median Salary: \$113,080
Job Growth (10 yr): 8.8%
Annual Openings: 186
Average Tuition (2 yrs): \$11,300/yr



Workplace Visits
Job Shadow
Internship
Work

Supervised Experience

Work

Supervised Experience
Internship

Work

Internship

Work

Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:

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Ohio In-demand Occupations

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Marketing Career Pathway

Secondary Pathway: **Marketing Management**

Postsecondary Program: **Marketing**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Fundamentals of Business & Admin.		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Business Foundations	Marketing Principles	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Marketing Applications	Professional & Technical Sales	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Marketing Research	Marketing Capstone		
Postsecondary	Year 1 1st Semester	English	Statistics	Retailing	Micro-economics	Digital Media Preparation	College Seminar		
	Year 1 2nd Semester	Marketing Principles	Financial Accounting	Supply Chain Mgmt Principles	Branding	Customer Service & Sales	Physics	American History	
	Year 2 1st Semester	Web & Electronic Marketing	Advertising & Promotion	Business-to-Business Marketing	Marketing Info & Consumer Analysis	Managerial Accounting			
	Year 2 2nd Semester	Global Marketing	Project Management Principles	Direct & Database Marketing	Marketing Seminar	Marketing Practicum	Fundamentals of Interactive Media		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

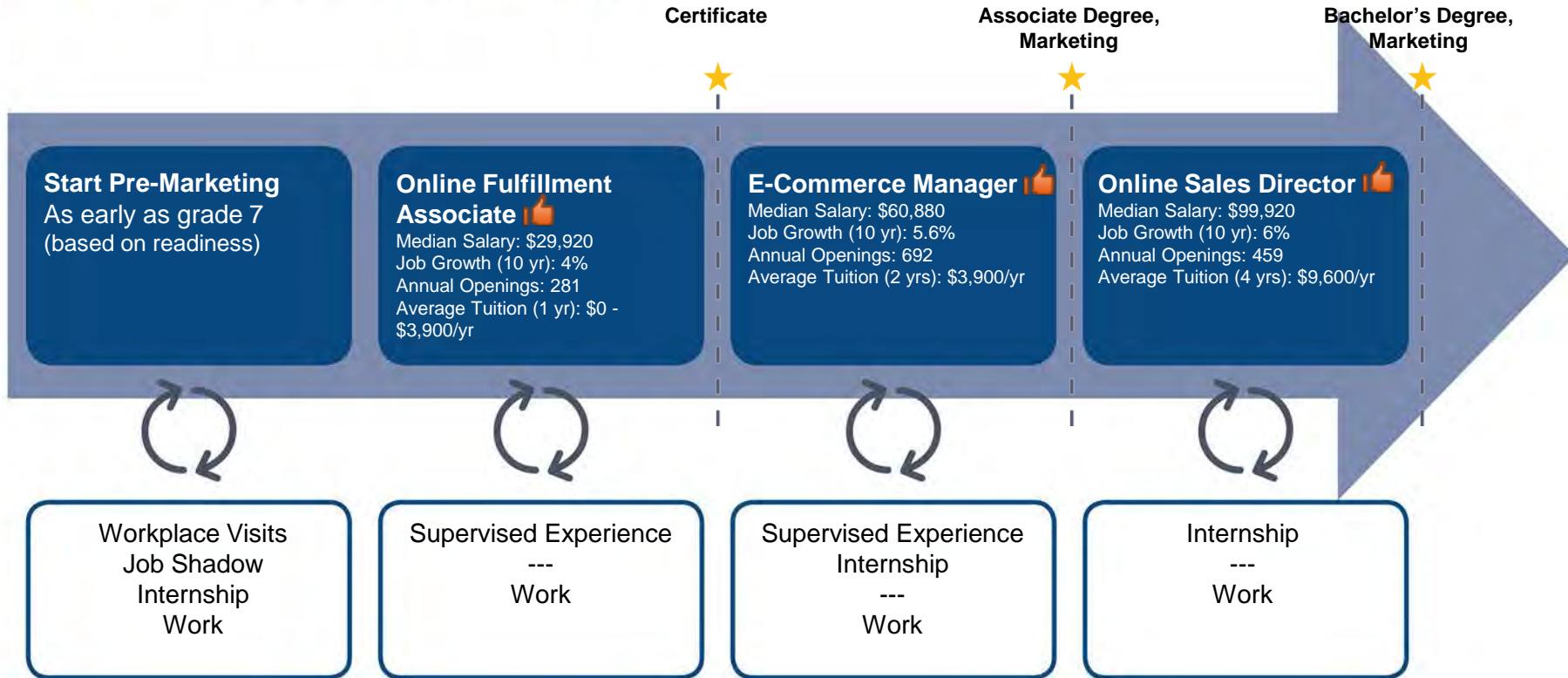
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11/2014



Marketing Career Pathway



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 Ohio In-demand Occupations

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Marketing Career Pathway

Secondary Pathway: **Marketing Management**

Postsecondary Program: **Marketing**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Fundamentals of Business & Admin.		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Marketing Principles	Digital Marketing & Management	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Marketing Applications	Professional & Technical Sales	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Merchandising & Buying	Strategic Entrepreneurship		
Postsecondary	Year 1 1st Semester	English	Statistics	Retailing	Micro-economics	Digital Media Preparation	College Seminar		
	Year 1 2nd Semester	Marketing Principles	Financial Accounting	Supply Chain Mgmt Principles	Branding	Customer Service & Sales	Physics	American History	
	Year 2 1st Semester	Web & Electronic Marketing	Advertising & Promotion	Business-to-Business Marketing	Marketing Info & Consumer Analysis	Managerial Accounting			
	Year 2 2nd Semester	Global Marketing	Project Management Principles	Direct & Database Marketing	Marketing Seminar	Marketing Practicum	Fundamentals of Interactive Media		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

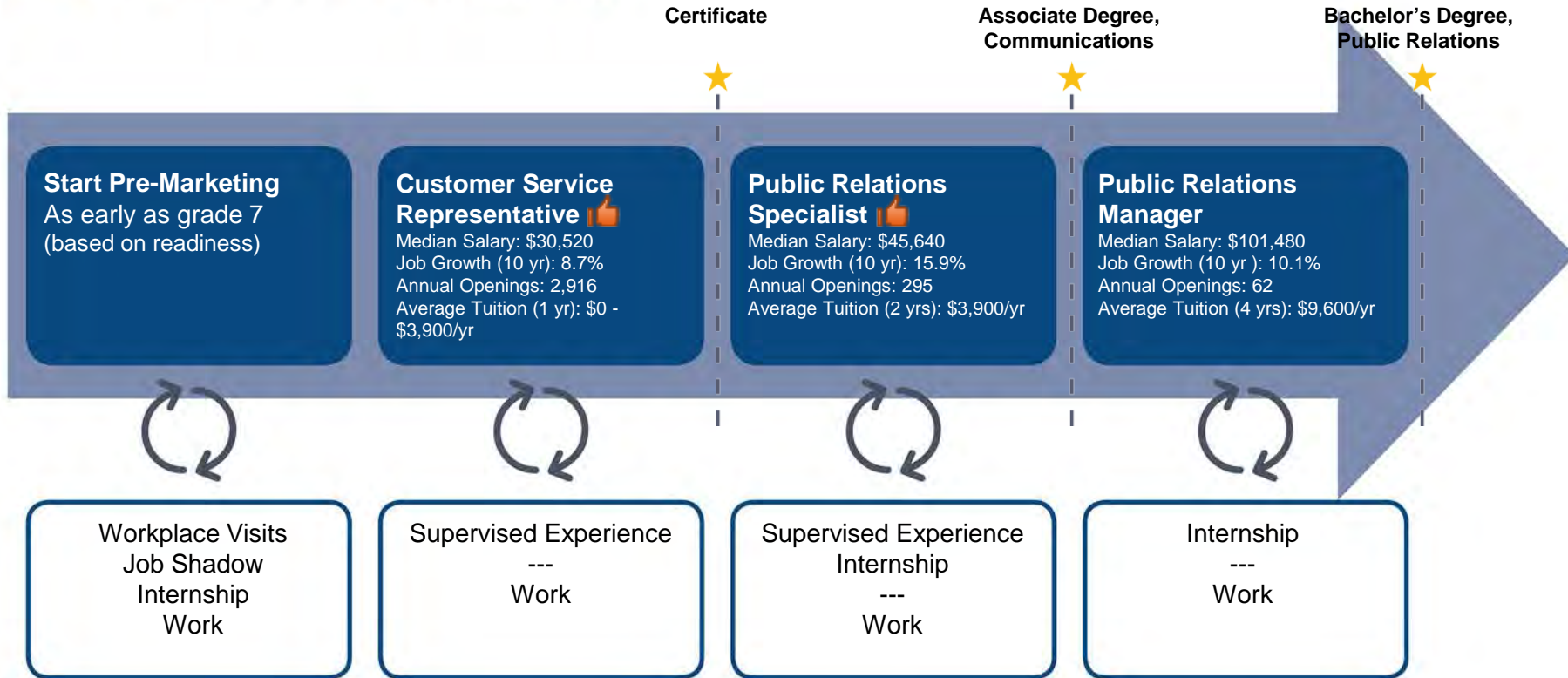
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Course titles and sequences will vary between schools.

6/2015



Marketing Career Pathway



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 gainful employment and/or postsecondary study.

 Ohio In-demand Occupations

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Marketing Career Pathway

Secondary Pathway: **Marketing Management**

Postsecondary Program: **Marketing**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Fundamentals of Business & Admin.		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Business Foundations	Marketing Principles	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Marketing Applications	Professional & Technical Sales	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Marketing Research	Marketing Capstone		
Postsecondary	Year 1 1st Semester	English	Statistics	Retailing	Micro-economics	Digital Media Preparation	College Seminar		
	Year 1 2nd Semester	Marketing Principles	Financial Accounting	Supply Chain Mgmt Principles	Branding	Customer Service & Sales	Physics	American History	
	Year 2 1st Semester	Web & Electronic Marketing	Advertising & Promotion	Business-to-Business Marketing	Marketing Info & Consumer Analysis	Managerial Accounting			
	Year 2 2nd Semester	Global Marketing	Project Management Principles	Direct & Database Marketing	Marketing Seminar	Marketing Practicum	Fundamentals of Interactive Media		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

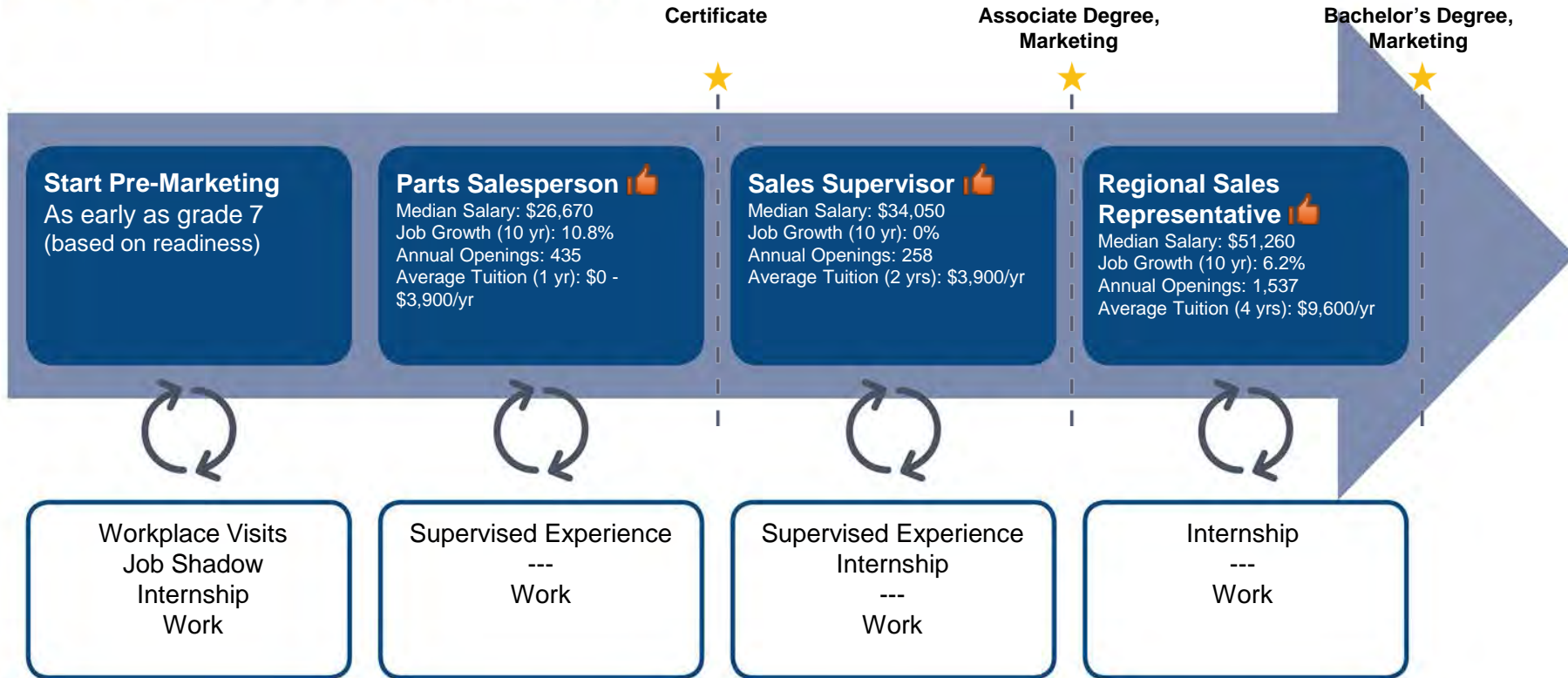
Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

5/2015



Marketing Career Pathway



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Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

 Ohio In-demand Occupations

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Marketing Career Pathway

Secondary Pathway: **Marketing Management**

Postsecondary Program: **Marketing**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Business Foundations		
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Marketing Principles	Digital Marketing & Management	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Marketing Applications	Professional & Technical Sales	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Merchandising & Buying	Strategic Entrepreneurship		
Postsecondary	Year 1 1st Semester	English Composition	Statistics	Retailing	Micro-economics	Digital Media Preparation	College Seminar		
	Year 1 2nd Semester	Marketing Principles	Financial Accounting	Supply Chain Mgmt Principles	Branding	Customer Service & Sales	Physics	American History	
	Year 2 1st Semester	Web & Electronic Marketing	Advertising & Promotion	Business-to-Business Marketing	Marketing Info & Consumer Analysis	Managerial Accounting			
	Year 2 2nd Semester	Global Marketing	Project Management Principles	Direct & Database Marketing	Marketing Seminar	Marketing Practicum	Fundamentals of Interactive Media		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

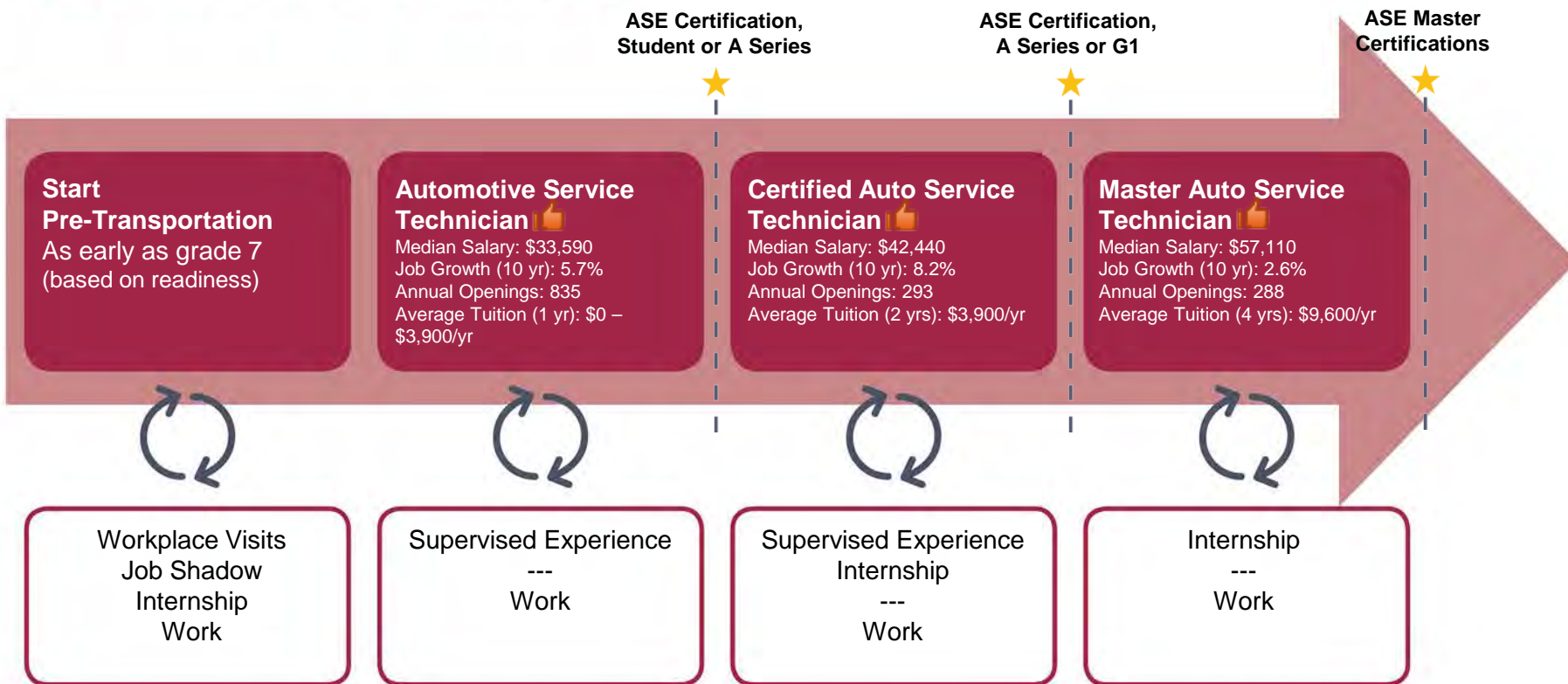
Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

6/2015



Transportation Systems Career Pathway



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Transportation Systems Career Pathway

Secondary Pathway: **Automotive Technology** Postsecondary Program: **Automotive Technology**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts			
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Ground Transportation Maintenance	Breaking, Suspension, & Steering	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Engine & Power Train	HVAC	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Electrical/ Electronic	Engine Performance	Transportation Capstone	
Postsecondary	Year 1 1st Semester	English	Computer Applications	Shop Safety & Procedures	Numerical Applications	Intro to Automotive Service	Transmission & Drivetrain	Automotive Electrical Fundamentals	
	Year 1 2nd Semester	Math	Humanities Elective	Automotive Engines	Alignment, Steering & Suspension	Braking Systems	Auto Field Experience		
	Year 2 1st Semester	Communication	Intro to Business	Economics	Automotive HVAC	Engine Performance	Auto Electrical Systems	Automotive Field Experience	
	Year 2 2nd Semester	Automatic Transmissions	Auto Electronic Engine Controls	Auto Electrical Diagnosis	Auto Service Operations	Automotive Field Experience	Social & Behavioral Science		

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014

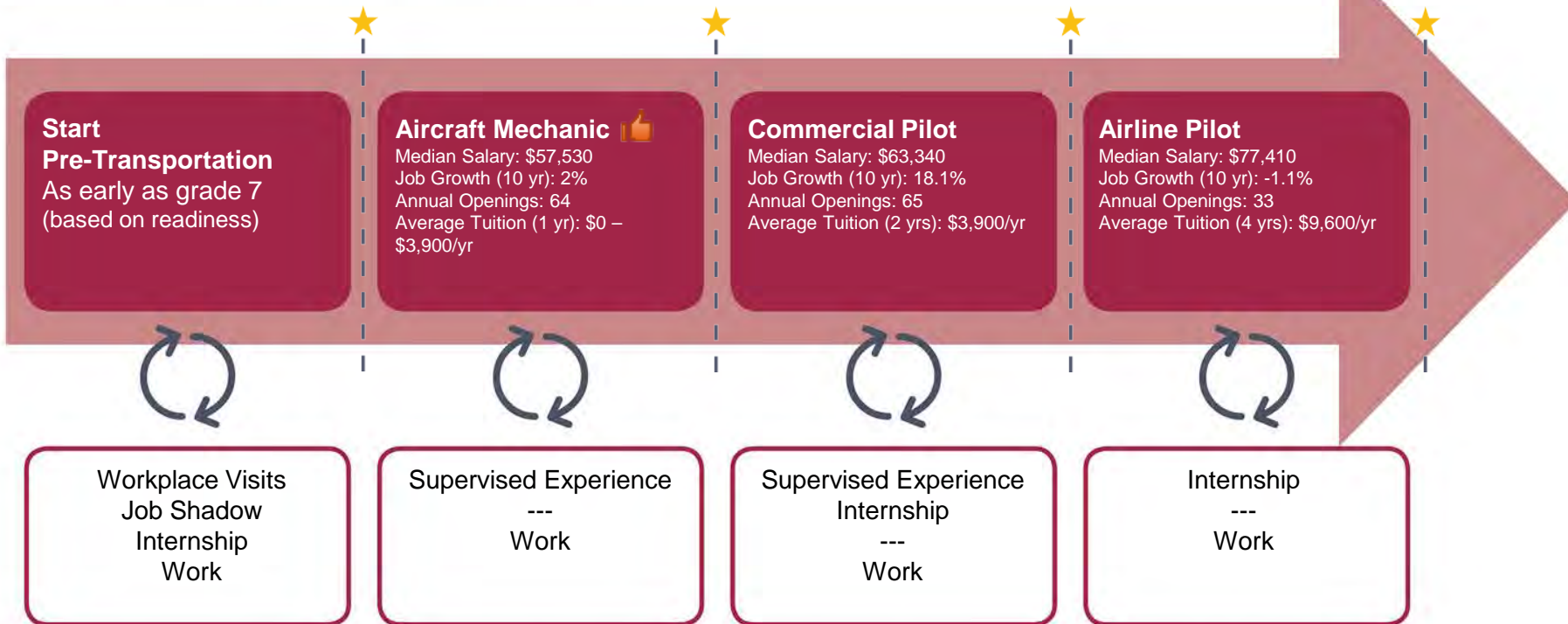


Transportation Systems Career Pathway

Certificate

Associate Degree,
Aviation Technology

Bachelor's Degree,
Aviation



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Transportation Systems Career Pathway

Secondary Pathway: **Air Transportation**

Postsecondary Program: **Aviation Technology**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts			
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Aviation	World Languages	
	11	English III	Algebra II	Chemistry	U.S. History	Aviation Maintenance	Airframe Systems	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Aviation Meteorology	Airport Management	Air Traffic Control	
Postsecondary	Year 1 1st Semester	English Composition	College Algebra	Orientation to Aviation	Introduction to Airline Operations	Aviation Meteorology	Computer Applications		
	Year 1 2nd Semester	Public Speaking	Flight Simulator Instruction	Pilot Ground School	Instrument Ground School	Instrument Flight Lab	Private Pilot Flight Lab		
	Year 2 1st Semester	Trigonometry	Flight Instructor Flight Lab	Aerodynamics & Flight Mechanics	Commercial Pilot Ground	Aircraft Accident Investigation	Blind Flying Hazards	Flight Instructor Ground	
	Year 2 2nd Semester	Physics	Multi Engine Flight Lab	Human Factors in Aviation	Advanced Navigation Science	Principles of Aviation Leadership	Aviation Internship	Arts & Humanities Elective	

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

11/2014

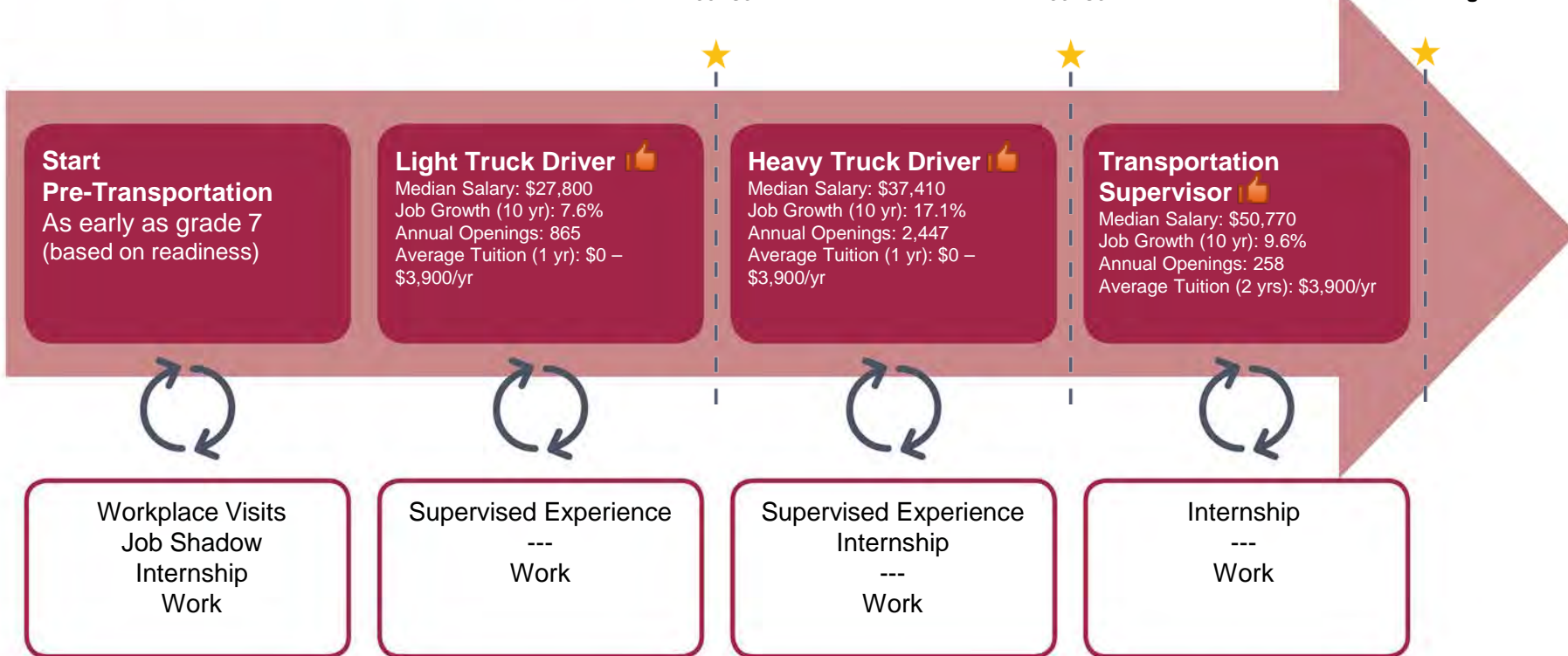


Transportation Systems Career Pathway

License

License

Associate Degree



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Transportation Systems Career Pathway

Secondary Pathway: **Ground Transportation** Postsecondary Program: **Diesel Technology**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts			
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Ground Transportation Maintenance	Braking, Suspension & Steering	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Engine & Power Train	Truck Brake, Suspension & Steering Sys.	World Languages	
	12	English IV	Trigonometry/Calculus	Physics	U.S. Government	Truck Diesel Engines	Engine Performance	Ground Transportation HVAC	
Postsecondary	Year 1 1st Semester	Personal Finance	Basic Electrical	Preventive Maintenance	Heavy Truck Drive Trains	Industrial & Engineering Technology			
	Year 1 2nd Semester	Employability Skills	Industrial Calculations	Hydraulic Theory & Operation	Fundamentals of Engines	Truck Steering & Suspension	Welding Processes	Truck Brake Systems	
	Year 2 1st Semester	English Composition	Computer Concepts & Applications	Advanced Electrical & Electronics	Heavy Truck HVAC	Social Science Elective			
	Year 2 2nd Semester	Interpersonal Communication	Business Communication	Customer Relations	Engine Performance	Heavy Truck Automatic Transmissions			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

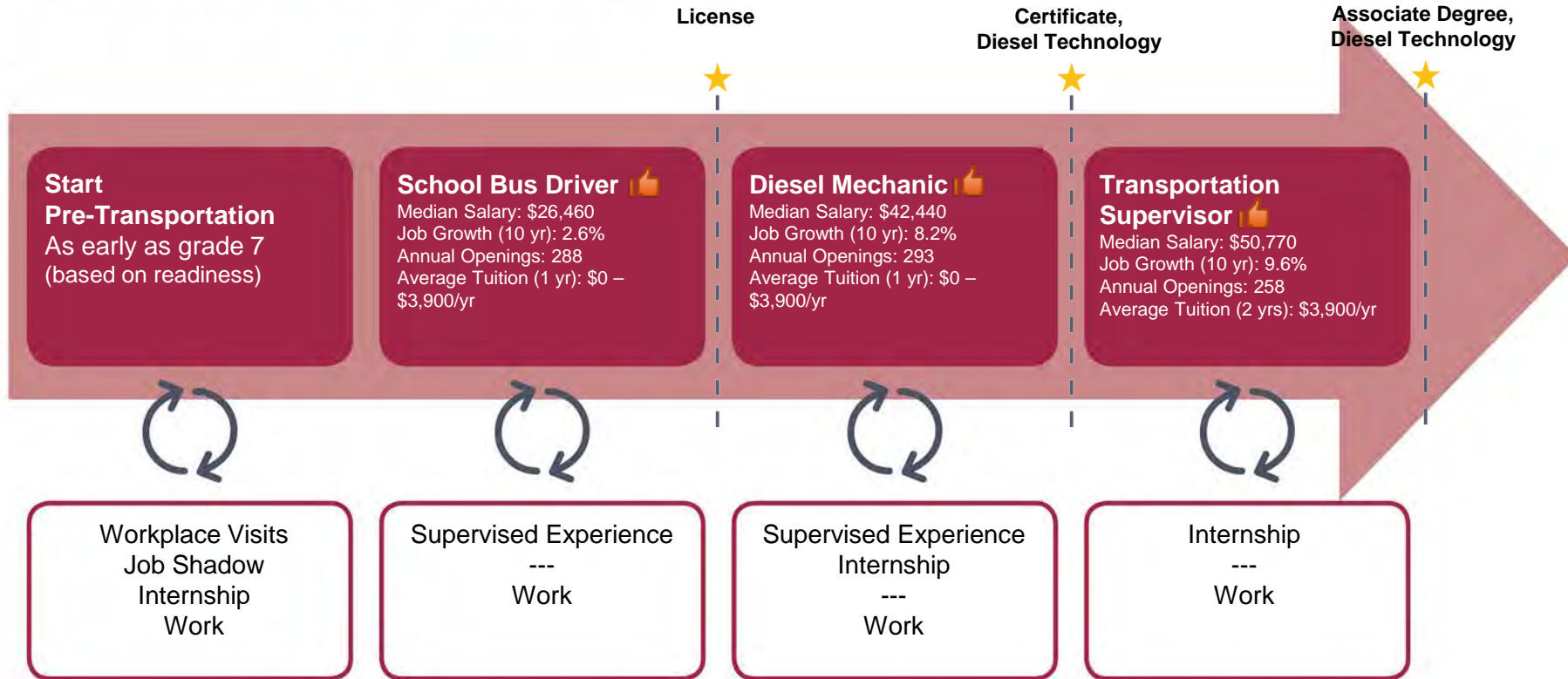
Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

6/2015



Transportation Systems Career Pathway



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

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Transportation Systems Career Pathway

Secondary Pathway: **Ground Transportation** Postsecondary Program: **Diesel Technology**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts			
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Ground Transportation Maintenance	Braking, Suspension & Steering	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Engine & Power Train	Truck Brake, Suspension & Steering Sys.	World Languages	
	12	English IV	Trigonometry/Calculus	Physics	U.S. Government	Truck Diesel Engines	Engine Performance	Ground Transportation HVAC	
Postsecondary	Year 1 1st Semester	Personal Finance	Basic Electrical	Preventive Maintenance	Heavy Truck Drive Trains	Industrial & Engineering Technology			
	Year 1 2nd Semester	Employability Skills	Industrial Calculations	Hydraulic Theory & Operation	Fundamentals of Engines	Truck Steering & Suspension	Welding Processes	Truck Brake Systems	
	Year 2 1st Semester	English Composition	Computer Concepts & Applications	Advanced Electrical & Electronics	Heavy Truck HVAC	Social Science Elective			
	Year 2 2nd Semester	Interpersonal Communication	Business Communication	Customer Relations	Engine Performance	Heavy Truck Automatic Transmissions			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

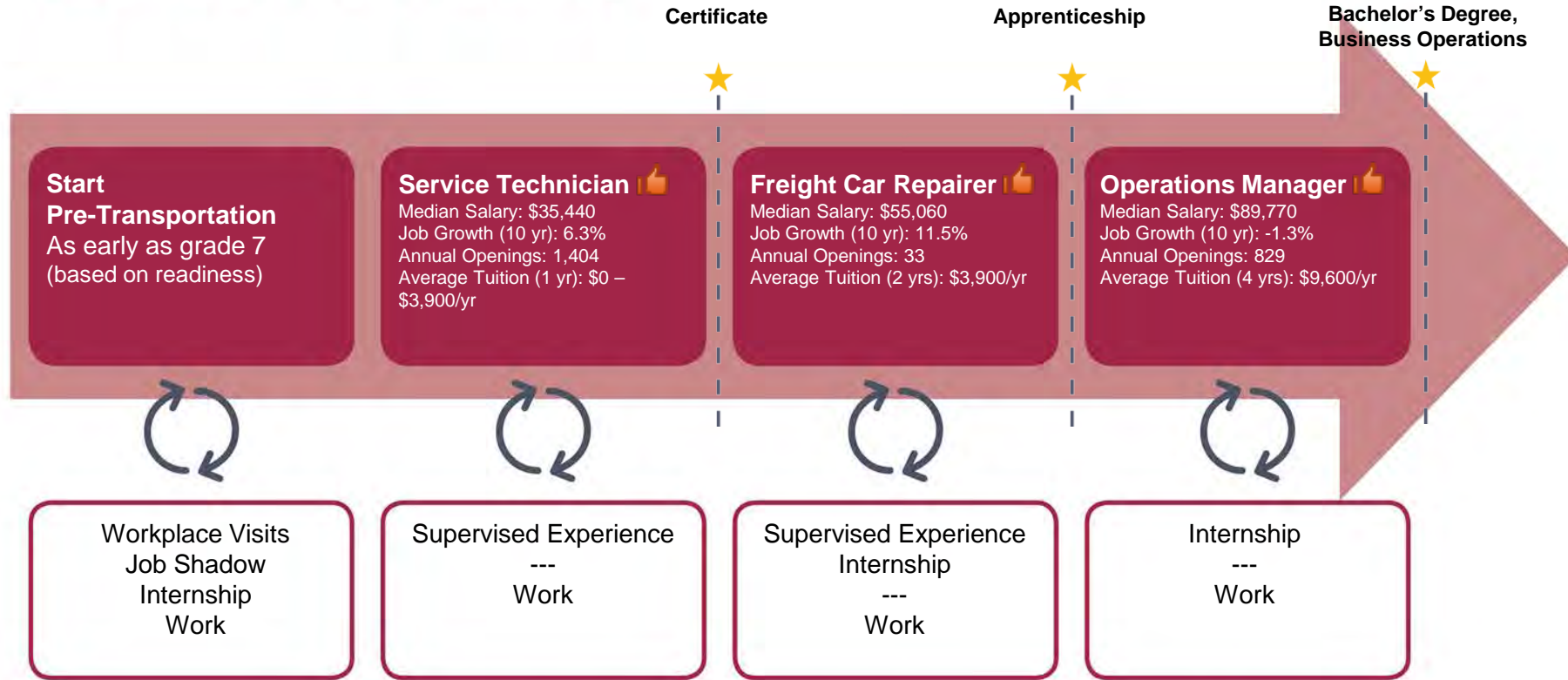
Visit education.ohio.gov/CareerConnections for reference information.

Course titles and sequences will vary between schools.

6/2015



Transportation Systems Career Pathway



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

Preparing students for multiple options after high school:
gainful employment and/or postsecondary study.

Ohio In-demand Occupations

Data reflects 2014 Ohio labor statistics and public institutions of higher education for 2013-2014. For specific tuition costs, visit ohiohighered.org.



Transportation Systems Career Pathway

Secondary Pathway: **Automotive Technology** Postsecondary Program: **Heavy Equipment Technology**

An Example of Courses with Secondary and Postsecondary Credits

Secondary	7 8	English I	Algebra I	Physical Science	Social Studies	Fine Arts			
	9 10	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Ground Transportation Maintenance	Breaking, Suspension & Steering	World Languages
	11	English III	Algebra II	Chemistry	U.S. History	Engine & Power Train	HVAC	World Languages	
	12	English IV	Trigonometry/ Calculus	Physics	U.S. Government	Electrical/ Electronic Systems	Engine Performance	Transportation Capstone	
Postsecondary	Year 1 1st Semester	English Composition	College Algebra	Trouble Shooting Strategies	HEQT Maintenance Fundamentals	HEQT Electronics			
	Year 1 2nd Semester	Industrial Writing	Fluid Power Fundamentals	Physics	Planned Maintenance Systems	HEQT Electrical Systems			
	Year 2 1st Semester	Humanities Elective	Diesel Fuel Systems	HEQT Brakes-Suspension Systems	HEQT Engine Technology	Transport Refrigeration Systems			
	Year 2 2nd Semester	Social Science Elective	Intro to Welding	HEQT Auto Transmissions	Power Transfer Technology	Internship			

High School Career-Technical Education Program Courses

High School Courses for Postsecondary Credit (Including Apprenticeship Hours) and the Corresponding Postsecondary Courses

Required Courses

Recommended Electives

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Course titles and sequences will vary between schools.

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