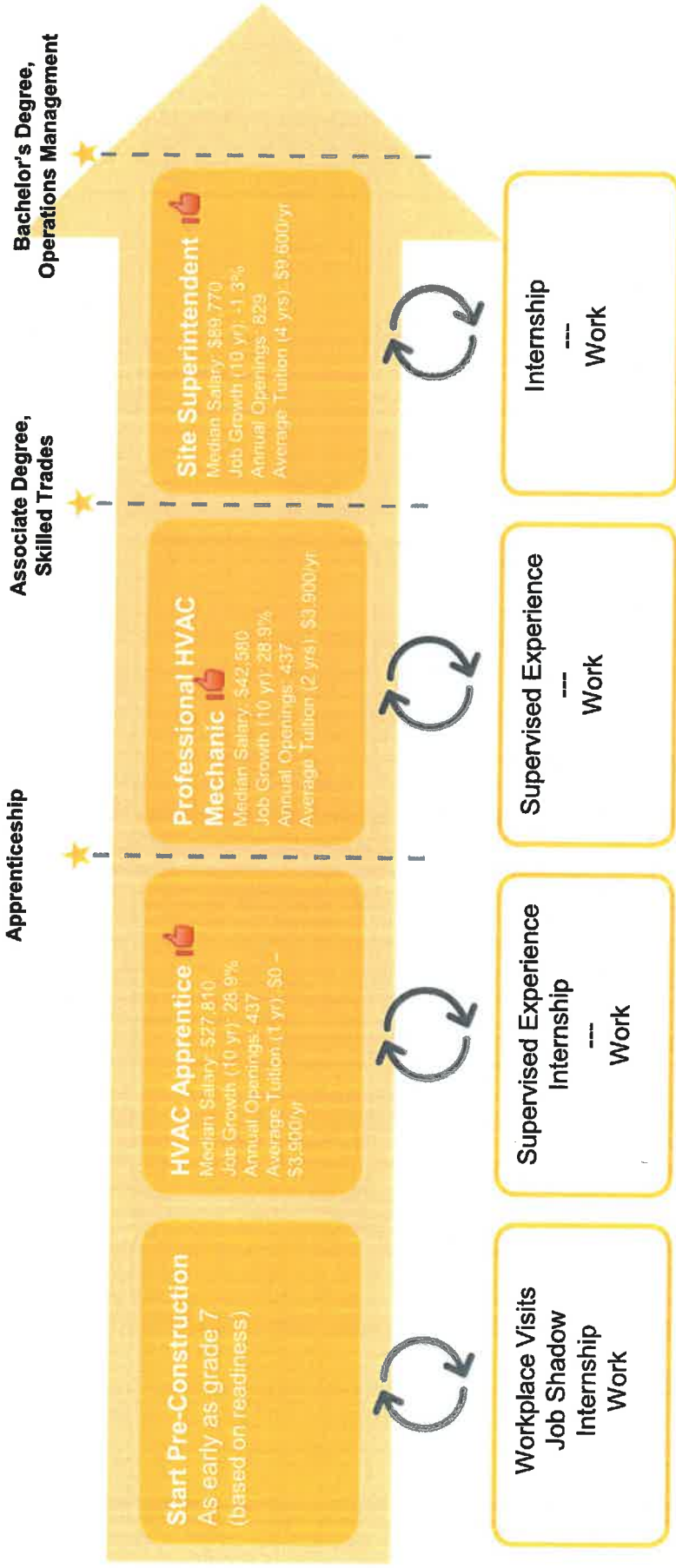


Construction Technologies Career Pathway



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.



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



Board of Regents
University System of Ohio

Construction Technologies Career Pathway

Secondary Pathway: Mechanical, Electrical and Plumbing

Postsecondary Program: HVAC

An Example of Courses with Secondary and Postsecondary Credits

Grade	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Core & Sustainable Construction
7						
8						
9	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Heating & Cooling Systems
10						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
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

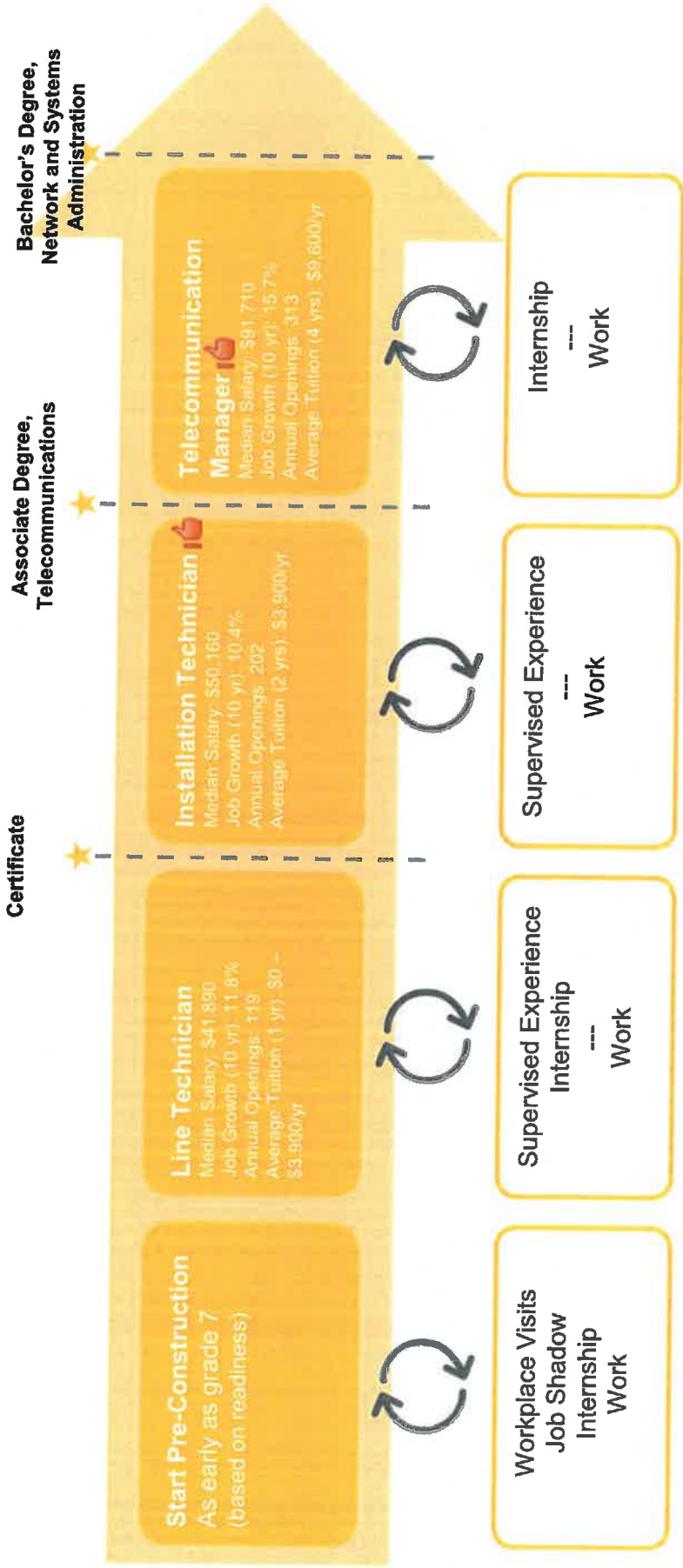
Required Courses

Recommended Electives

Visit education.ohio.gov/CareerConnections for reference information.
Course titles and sequences will vary between schools.

10/2014

Construction Technologies Career Pathway

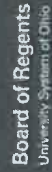


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Construction Technologies Career Pathway

Secondary Pathway: Mechanical, Electrical and Plumbing

Postsecondary Program: Telecommunications

An Example of Courses with Secondary and Postsecondary Credits

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

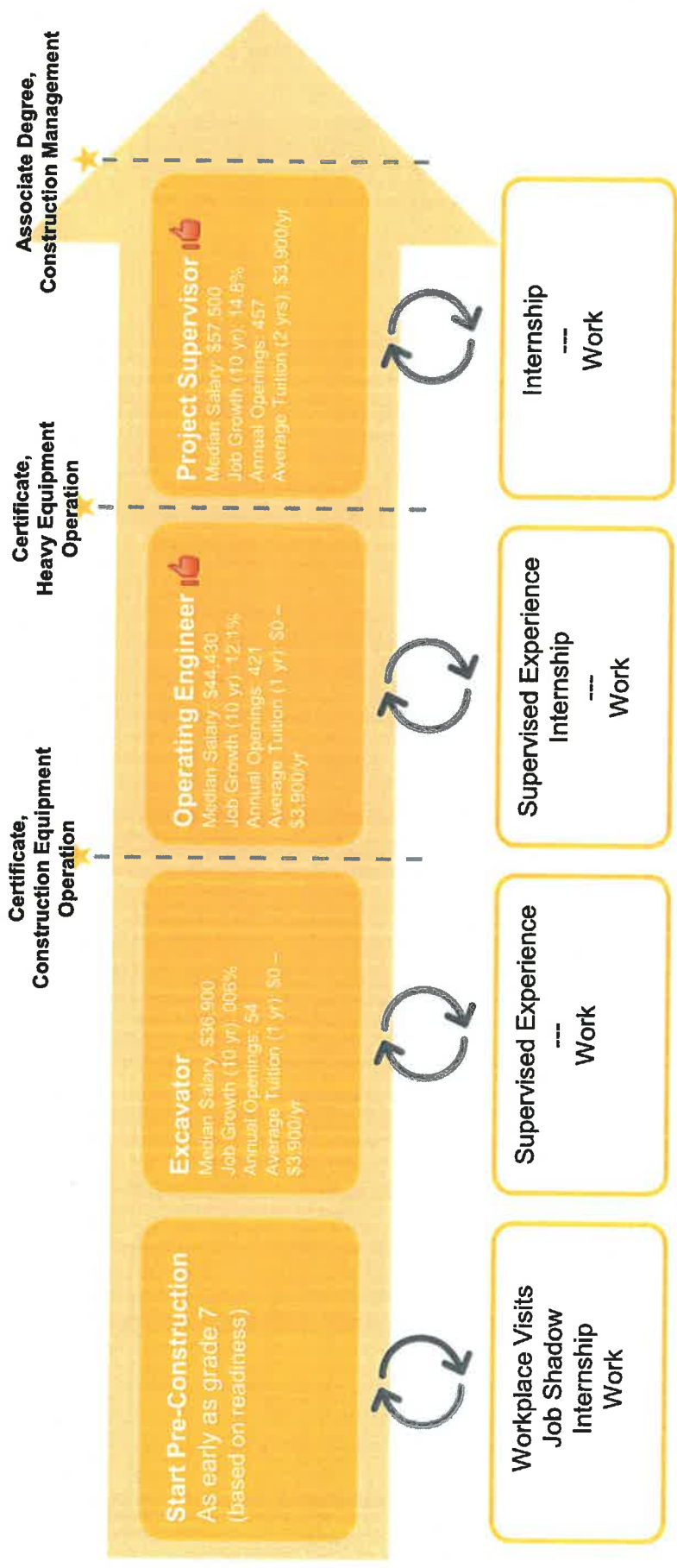
Required Courses

Recommended Electives

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6/2015

Construction Technologies Career Pathway



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Construction Technologies Career Pathway

Secondary Pathway: Structural Systems

Postsecondary Program: Construction Management

An Example of Courses with Secondary and Postsecondary Credits

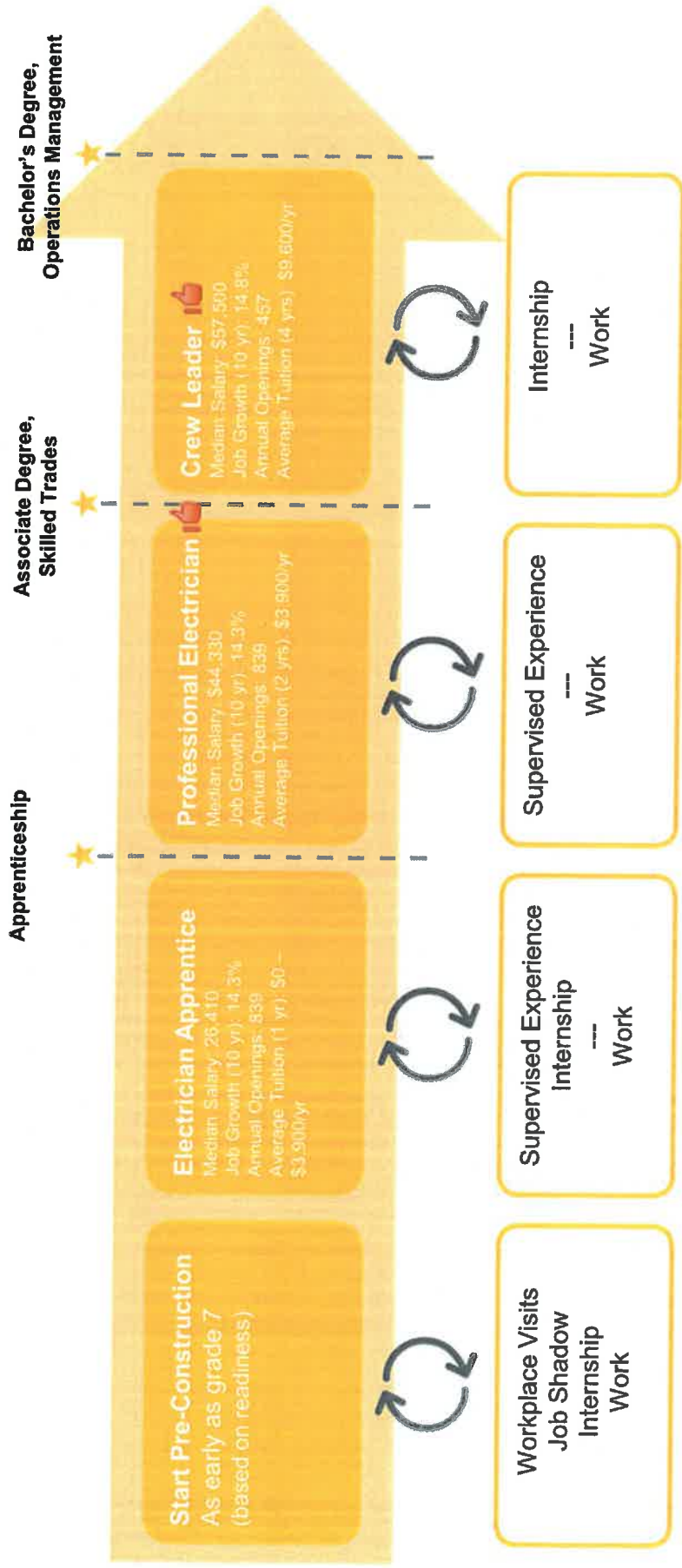
Grade	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Core & Sustainable Construction
7						
8						
9	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Plan Reading
10						World Languages
11	English III	Algebra II	Chemistry	U.S. History	Construction Safety & Leadership	Construction Management
12	English IV	Trigonometry/ Calculus	Environmental Science	U.S. Government	Heavy Equipment Operations	Construction Site Preparation
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
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	
						Environmental 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

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6/2015

Construction Technologies Career Pathway

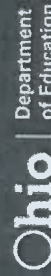


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Construction Technologies Career Pathway

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

Postsecondary Program: **Electrical Trades**

An Example of Courses with Secondary and Postsecondary Credits

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

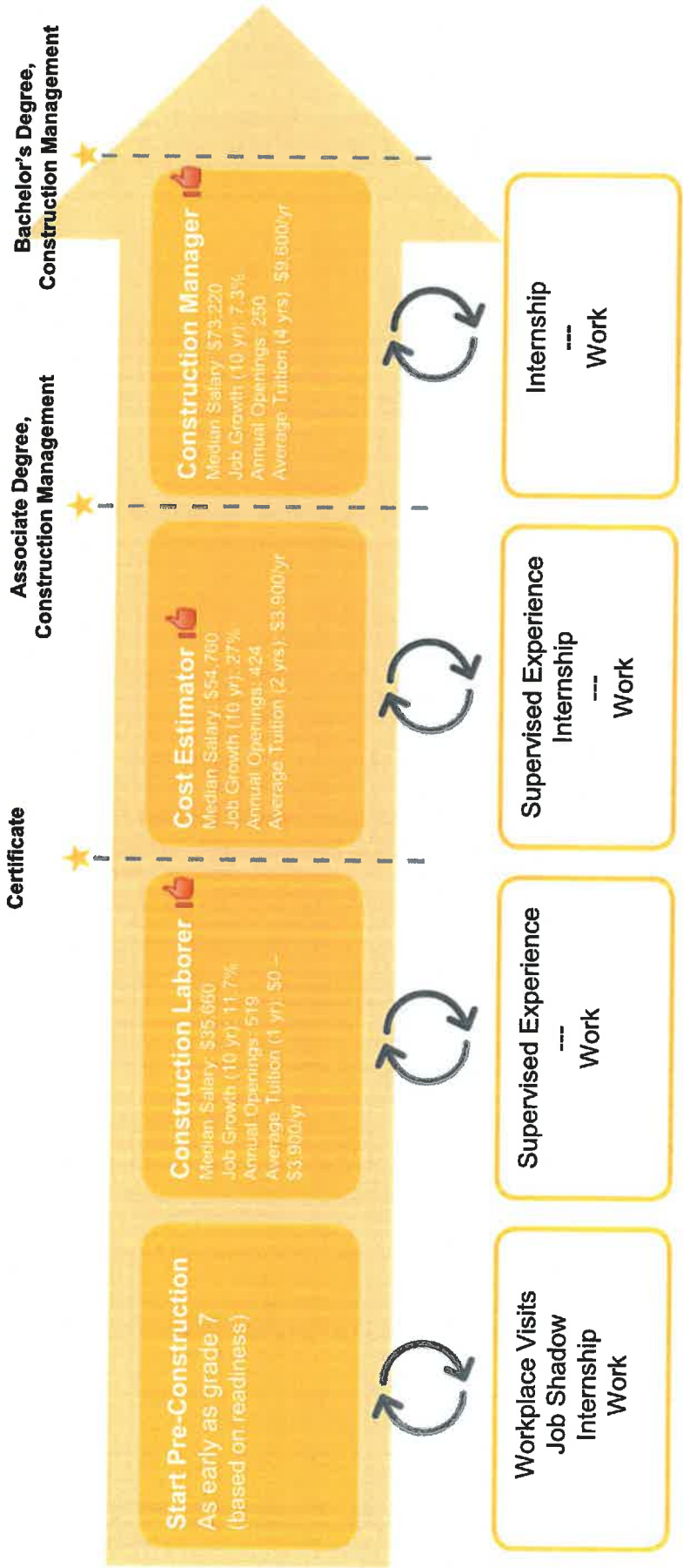
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11/2014



Board of Regents
University System of Ohio

Construction Technologies Career Pathway

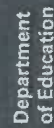


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Secondary Pathway: Construction Design and Management

Postsecondary Program: Construction Management

An Example of Courses with Secondary and Postsecondary Credits

Grade	English I	Algebra I	Physical Science	Social Studies	Fine Arts	Core & Sustainable Construction
7						
8						
9	English II	Geometry	Biology	World History	Health (.5) PE (.5)	Plan Reading
10						World Languages
11	English III	Algebra II	Chemistry	U.S. History	Architecture Design I	Construction Management
12	English IV	Trigonometry/ Calculus	Environmental Science	U.S. Government	Architecture Design II	Construction Safety & Leadership
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
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	
						Environmental 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

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Course titles and sequences will vary between schools.

11/2014