

## OAC Straight A Personalized Learning Pathways

### Pathway: STEM

	Courses	Grade Level							Post-Secondary Level	
		Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12	Grade 13	Grade 14
Academic Requirements	<b>English</b>	Ohio's New Learning Standards	Ohio's New Learning Standards	Ohio's New Learning Standards	CP English 9 Honors Eng 9	CP English 10 Honors Eng 10	CP English 11 <b>English Comp I – 3 semester hours</b> <b>Literature of Crime – 3 semester hours</b>	CP English 12 <b>English Comp II – 3 semester hours</b> <b>British Literature – 3 semester hours</b>	<b>English Comp I – 3 semester hours</b> <b>Technical Writing – 3 semester hours</b>	<b>English Comp II – 3 semester hours</b>
	<b>Math</b>	Ohio's New Learning Standards	Pre-Algebra Ohio's New Learning Standards	Algebra I	CP Geometry	CP Algebra II	<b>College Algebra – 4 semester hours</b> <b>Pre-Calculus – 5 semester hours</b>	<b>Pre-Calculus – 5 semester hours</b> <b>Calculus – 5 semester hours</b>	<b>Algebra &amp; Trig – 4 semester hours</b>	
	<b>Science</b>	Ohio's New Learning Standards	Ohio's New Learning Standards	Ohio's New Learning Standards	Physical Science CP Biology	CP Biology CP Chemistry	CP Chemistry <b>General Biology – 3 semester hours</b>	Physics Anatomy	<b>Chemistry – 3 semester hours</b>	
	<b>Social Sciences</b>	Ohio's New Learning Standards	Ohio's New Learning Standards	Ohio's New Learning Standards	CP World Studies	CP US History <b>Microeconomics – 3 semester hours</b> <b>Macroeconomics – 3 semester hours</b>	<b>Western Civilization I – 3 semester hours</b> <b>Western Civilization II – 3 semester hours</b> <b>US History I – 3 semester hours</b> <b>US History II – 3 semester hours</b>	<b>American National Government – 3 semester hours</b> <b>Psychology – 3 semester hours</b> <b>Sociology – 3 semester hours</b>		

	<b>Language other than English</b>			Spanish I French I	Spanish II French II	Spanish III <b>French III – 8 semester hours</b>	Spanish IV Advanced French	Spanish V Advanced French		
	<b>Visual and Performing Arts</b>	Intro to Art	Intro to Art	Music Band	Art Choir/Band	Ceramics Choir/Band	Choir/Band Drawing <b>Intro to Theater—3 semester hours</b>	Choir/Band <b>Script Analysis – 3 semester hours</b>		
	<b>College Preparatory Elective</b>				Career Search		<b>College Success Strategies – 1 semester hour</b>	Speech		
	<b>Other Elective Requirements</b>				Health PE				<b>First Year Success – 1 semester hour</b>	<b>Public Speaking – 3 semester hours</b>
<b>Core Components</b>	<b>Technical Courses</b>	Computer Applications	STEM	STEM	Intro to Engineering <b>Intro to Microcomputers – 3 semester hours</b>	Principles of Engineering	Robotics Digital Electronics	Civil Engineering	<b>Engineering Graphics – 3 semester hours</b> <b>Manufacturing Processes – 3 semester hours</b>	<b>Project Management – 3 semester hours</b>
	<b>Work-Based Learning Opportunities</b>	Career Connections Resources	Ohio Means Jobs K-12 Field Trip to Local Higher Education	Career Speakers Career Center Visits Ohio Means Jobs K-12	Job Shadowing Ohio Means Jobs K-12 Career Speakers Field Trip to Local Higher Education	Job Shadowing Ohio Means Jobs K-12 Field Trip to Local Higher Education	Job Shadowing Ohio Means Jobs K-12 Field Trip to Higher Education College Fair	Job Shadowing Ohio Means Jobs K-12 Field Trip to Higher Education		
	Courses	6	7	8	9	10	11	12	13	14

What types of jobs or career clusters are in this pathway? (Refer to Ohio Department of Education Career Pathways)

Mechanical Engineering Technology – [www.zanestate.edu/programs/mechanical-engineering-technology](http://www.zanestate.edu/programs/mechanical-engineering-technology)

Civil Engineering Technology – [www.zanestate.edu/programs/civil-engineering-technology](http://www.zanestate.edu/programs/civil-engineering-technology)

Industrial Maintenance Engineering Technology – [www.zanestate.edu/programs/industrial-maintenance-technology](http://www.zanestate.edu/programs/industrial-maintenance-technology)