



IT Cluster Programming & Software Development



Elementary		Middle School	6 th Grade	7 th Grade	8 th Grade
Integrated Lessons (KITS)*				Exploring Technology*	Invention & Innovation*
High School	9 th Grade	10 th Grade	11 th Grade	12 th Grade	
	English I	English II	English III	English IV	
	Geometry	Algebra II	Pre-Calculus, or Trigonometry	Trigonometry or Calculus	
	AP Biology	AP Chemistry I	AP Physics	Engineering Science	
	Geography/State History	World History	American History	Economics/Government	
	Required Courses/Electives PE, Health, Art, Foreign Language, or Computer Technology	Required Courses/Electives PE, Health, Art, Foreign Language, or Computer Technology	Advanced Technology/Engineering Electives Advanced Technological Applications*	Technology Capstone Engineering Design*	
	Career Electives Foundations of Technology * (Transition Course)	Career Electives Advanced Design Applications*			
Post-Secondary	Technology Center		Community College		College/University
	<input type="checkbox"/> Business and Computer Technology <input type="checkbox"/> E Commerce and Web Services <input type="checkbox"/> Information Services <input type="checkbox"/> Network Services <input type="checkbox"/> Cyber Security		<input type="checkbox"/> Computer Program and Computer Science <input type="checkbox"/> Graphic Design and Visual Communications <input type="checkbox"/> E-Commerce <input type="checkbox"/> Computer Information Systems <input type="checkbox"/> Information Technologies		<input type="checkbox"/> Management Information Systems <input type="checkbox"/> Management Science & Computer Systems <input type="checkbox"/> E Commerce <input type="checkbox"/> Computer Science <input type="checkbox"/> Information Science
Career Enhancement Options	Work-based Learning Options		Short-Term Training Options		
	Job-Shadowing: Internship/Mentorship: On-The-Job Training:		<input type="checkbox"/> Advanced Networking <input type="checkbox"/> Desktop Certifications <input type="checkbox"/> Linux I <input type="checkbox"/> Linux II <input type="checkbox"/>		

*These courses are part of the Engineering byDesign™ Program curriculum. More information is available at www.teachstem.org