



**CFISD STEM ACADEMY FOR AUTOMATION, ROBOTICS  
& COMPUTER SCIENCE (ARC)**  
(housed at Cypress Springs High School)  
**Endorsement: Science, Technology, Engineering & Mathematics (STEM)**



Apply to attend the **CFISD STEM Academy for Automation, Robotics, and Computer Science (ARC)** if you desire a focused experience on advanced engineering and robotics.

- Academy Entry Requirements:**
- Successful completion of Algebra I (80+ end-of-year average) in middle school
  - Score Meets or Masters on 8th Reading STARR and Algebra I EOC
  - Recommended to have completed Principles of Applied Engineering and/or Principles of Manufacturing
  - If LOTE requirement for graduation is not met in middle school, one credit of LOTE, PE, or Art may need to be taken in summer school
  - Enroll at Cypress Springs High School
  - Application required - see your counselor

**Course Sequence (*Program of Study*) that satisfy the CTE course requirement for STEM Endorsement**  
Earn at least 4 credits by taking at least two courses in the same cluster, with at least one containing advanced topics in that field (\*)--see page in this document on Endorsements or your counselor for more information on graduation requirements.

<b>STEM4 - Automation, Robotics &amp; Computer Science</b>			
<b>9th Grade</b>	Computer Science I K (1-LOTE) Manufacturing Engineering Tech I K (1)	English I K (1) Biology K (1) Geometry K (1)	Health (0.5) PACE (0.5) LOTE/PE/Fine Arts/Elective (1)
<b>10th Grade</b>	Computer Science II K (1-LOTE) Digital Electronics K (1-math)	English II K (1) Chemistry K (1) Algebra II K (1)	Wld Geog K or Human Geog AP or Wld Hist AP (1) LOTE/PE/Fine Arts/Elective (1)
<b>11th Grade</b>	*Computer Science III (1) *Engineering Math K (1-math)	English III K (1-dual) Pre-Calculus K (1-dual) US History AP (1-dual)	***Physics K (1) LOTE/PE/Fine Arts/Elective (1)
<b>12th Grade</b>	*Project-based Computer Science: Robotics Programming K (1) *Scientific Research & Design I K (1-science)	English IV K (1-dual) Physics C AP (2-dual)	Calculus AB/BC AP (1-dual)) Government AP (0.5) Economics AP (0.5)
<b>Certifications</b> (** Satisfies Performance Acknowledgement)	IT Specialist Python IT Specialist Java (replacing MTA Intro to Java Programming) **Oracle Java SE Programming **Certified SolidWorks Associate		
<b>Careers</b>	Mechanical or Electrical Engineer (\$95K) Hardware Engineer (\$99K) CAD Drafter (\$46K) Software Engineer (\$100K) Computer Programmer (\$75K)		

\*\*\*Students who already have credit for Physics should consider taking Engineering Design and Problem Solving K as their science course.