

Young Men's Leadership Academy
Associates of Applied Science Robotics and Automation/HS Diploma [Mechatronics Technician level 1]
STEM and Multidisciplinary Endorsement

9 th Grade			10 th Grade		11 th Grade		12 th Grade	
	Fall Semester	Spring Semester	Fall Semester	Spring Semester	Fall Semester	Spring Semester	Fall Semester	Spring Semester
High School	English I or II	English I or II	English II or *III	English II or *III	English *III or *IV	English *III or *IV	English *IV or *English Elective	English *IV or *English Elective
	Algebra I or Geometry	Algebra I or Geometry	Geometry or Algebra II	Geometry or Algebra II	*College Algebra	**Pre-Calculus	4 th Year Math	4 th Year Math
	AP Human Geography or Honors World Geography	AP Human Geography or Honors World Geography	AP World History or Honors World History	AP World History or Honors World History	US History	US History	Government	Economics
	Biology	Biology	Physics or Chemistry	Physics or Chemistry	Physics or Chemistry or AP Chemistry	Anatomy Phys.	4 th Year Science	4 th Year Science
			PE	PE				
	Spanish I	Spanish II	Health	Health				
	IED	IED	Engineering Sci.	Engineering Sci.	CIM	CIM	Practicum/ Practicum	Practicum/ Practicum
College	ARTS 1301 03500110	SPEECH 1321 13009900	RBTC 1351-3 13037000	*CETT 1409 13036800	*ENGL 1301-3 03220300	*ENGL 1302-3 03220300	GOVT 2305 -3 03330100	*ELMT 2337-3
			RBTC 1401-4 13036900	*CETT 1441-3 13036900	*CETT 1445-4	*ELPT 2455 N1303690	*HYDR 1345-3 N1303683	RBTC 2445- 4 13037050
					*Math 1314 or 1342 3 03101100	*Math 2412 4 or 1342 3 03101100		ECON 2301 3 03310300
							*ENGL 1301 or 2322 or 2327 3 03220400	*ENGL 1301 or 2323 or 2327 3 03220400
					*CETT 1449- 4 13037600	*CETT 2435-4	* RBTC 1447-4	

	Up to 6 hours	Up to 6 hours	Up to 12 hours	Up to 11 hours	Up to 14 hours	Up to 14 hours	Up to 13 hours	Up to 13 hours
			ASS Robotics and Automation Associates Degree: 60+ hours Certifications: Mechatronics Technician Level 1 Certification: 30 hours				3 hours of dual credit Mathematics 3 hours of dual credit Creative Arts/Language, Philosophy & Culture	
*TSI compliance or TSI waiver will determine if the course is taken as a Dual Credit course for TSI placement courses. Juniors and seniors that are not TSI met will take AP courses in-lieu of dual credit course.								

ELECTRONICS TECHNOLOGY: ROBOTICS AND AUTOMATION, AAS

ELEC.D006.UG

Associate of Applied Science

STEM Pathway

Offered at South Campus

Program Requirements

First Year

Fall Term

[CETT 1409 - DC-AC Circuits](#)

[CETT 1449 - Digital Systems](#)

[RBTC 1401 - Programmable Logic Controllers](#)

Mathematics Elective Semester Hours: 3 *

Spring Term

[CETT 1441 - Solid State Circuits](#)

[CETT 1445 - Microprocessor](#)

Choose one from the following:

[GOVT 2306 - Texas Government \(Texas Constitution & Topics\) +](#) **or**

[GOVT 2305 - Federal Government \(Federal Constitution & Topics\) +](#)

[RBTC 1351 - Robotic Mechanisms](#)

Second Year

Fall Term

[CETT 2435 - Advanced Microprocessors](#)

[ENGL 1301 - Composition I +](#)

[RBTC 1447 - Electro-Mechanical Devices](#)

[HYDR 1345 - Hydraulics and Pneumatics](#)

Creative Arts/Language, Philosophy and Culture Semester Hours: 3 *

Spring Term

[ELMT 2337 - Electronic Troubleshooting, Service and Repair](#)

[ELPT 2455 - Programmable Logic Controllers II](#)

[RBTC 2445 - Robot Application, Set-Up and Testing](#) (Capstone)

Choose one from the following:

[SPCH 1321 - Business and Professional Communication +](#) or
[SPCH 1311 - Introduction to Speech Communication +](#) or
[SPCH 1315 - Public Speaking +](#)

Total Degree Hours: 60

** Mathematics, Creative Arts/Language, Philosophy and Culture electives must be chosen from the corresponding section of the [Core Curriculum](#).*

MECHATRONICS TECHNICIAN

ELEC.T003.UG

Level 1 Certificate

STEM Pathway

Offered at South Campus

Program Requirements

Fall Term

Mathematics Elective Semester Hours: 3 *

[CETT 1409 - DC-AC Circuits](#)

[CETT 1449 - Digital Systems](#)

[RBTC 1401 - Programmable Logic Controllers](#)

Spring Term

[RBTC 1351 - Robotic Mechanisms](#)

[CETT 1441 - Solid State Circuits](#)

[CETT 1445 - Microprocessor](#)

[RBTC 2445 - Robot Application, Set-Up and Testing](#) (Capstone)

Total Certificate Hours: 30

** Mathematics elective must be chosen from the corresponding section of the [Core Curriculum](#).*