



**ASSOCIATE OF APPLIED SCIENCE ADVANCED MANUFACTURING/MECHATRONICS TECHNOLOGY**

ISD:	Garland ISD	College:	Eastfield College	<b>DCCCD Catalog Year: 2021-2022</b>  <b>Plan updated: 3/6/23</b>
ECHS:	South Garland P-TECH	Endorsement:	Business & Industry or STEM	
Cluster:	STEM	AA/AS/AAS Degree	<a href="#">AAS.ADV.MANUF.MECH</a>	
Program of Study:	RENEWABLE ENERGY	Certificates:	<a href="#">Advanced Manufacturing/Mechatronics Technology (C1.ADV.MANUF.MECH.13)</a>	

**HIGH SCHOOL COURSES (\*Honors or AP Level)**

MS	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>
Algebra I	English I*	English II*	English III 1301, 1302	English IV (on-level or AP)
World Lang	Algebra I* (or Alg II*)	Algebra II*	Math 1332 (1 sem/1 HS credit)	4th Science (on-level or AP)
Health	Biology*	Chemistry*	Econ / Govt (on-level or AP)	AVID 4 (Recommended)
PE	AP Human	US History*	Physics (on-level or H/AP)	
	AVID 1 <b>A9846A/B</b>	World Lang I	World Language II	
	PE	AVID 2 (Recommended)	Health/Accelerated Geometry 21411S (1 sem, 1 HS Credit)	
			AVID 3 (Recommended)	
			Fine Arts MUSI 1306 (1 sem/1 HS credit)	

**COLLEGE COURSES**

F	CETT 1403 – DC Circuits (AAS) <b>80255A AC/DC Electronics 13036800</b> Double block CTE LEVEL 2	F	CETT 1425 Digital Fundamentals (AAS) <b>80375A Digital Electronics 13037600</b> Double block CTE LEVEL 3	F	ENGL 1301 – Composition I (AAS) <b>10505A Language &amp; Composition</b>	F	ELPT 2419 – Programmable Logic Controllers I (C1/AAS) double block <b>8M315S Programmable Logic Controllers N1303689</b>
S	CETT 1405 – AC Circuits (AAS) <b>80255B AC/DC Electronics 13036800</b> Double block CTE LEVEL 2	S	CETT 1429 – Solid State Devices (AAS) <b>80405B Solid State Electronics 13036900</b> CTE LEVEL 3	F	MATH 1332 – Contemporary Mathematics (Semester I math elective) (AAS) <b>21503S AQR (1 sem/1 HS credit)</b>	F	ELMT 1405 Basic Fluid Power (C1/AAS) – <b>80345A Scientific Research &amp; Design 13037200</b> CTE LEVEL 3
				F	SPCH 1311 – Introduction to Speech Communication (AAS) <b>10311S Communication Applications</b>	F	MFGT 1406 – Mechanical Principles in Automated Manufacturing (C1/ AAS) – <b>80345B Scientific Research &amp; Design 13037200</b> CTE LEVEL 3
				F	CETT 1441 – Solid State Circuits (AAS) <b>80415S Project Based Research 12701500</b> CTE LEVEL 4 Double Block	S	MFGT 1404 – Automated Manufacturing (C1/AAS) <b>80425A Practicum in STEM 13037400</b> CTE LEVEL 4
				S	<b>ENGL 1302 – Composition II (elective) 10505B Language &amp; Composition</b>	S	CETT 1407 – Fundamentals of Electronics (AAS) <b>80429A Practicum in STEM 13037400</b> CTE LEVEL 4
				S	PSYC 2301 – General Psychology (AAS) <b>42323S</b>	S	ELPT 2455 - Programmable Logic Controllers II (AAS Tech

Certificate and degree course information is based on the [2019-2020 DCCCD](#) catalog. Programs may be revised during the academic year. Please access our [official catalog for the official and most current degree and certificate information.](#)



						Elective) <b>80425B Practicum in STEM 13037400</b> CTE LEVEL 4	
				S	MUSI 1306 – Music Appreciation (AAS) <b>66269S Music Appreciation 03155600 (1 sem/1 HS credit)</b>	S EECT 1191 – Special Topics (AAS) <b>80429B Practicum in STEM 13037400</b> CTE LEVEL 4	
Y1	8 credit hrs	Y2	8 credit hrs	Y3	22 credit hrs	Y4	25 credit hrs

AA/AS = 60 CREDIT HOURS

TOTAL CREDIT HOURS:

63 HOURS

\* See counselor/advisor for placement. *Courses in red are NOT part of the Certificate nor Associate's degree.*

F = fall, S = spring, U = summer

(\* ) Dual Credit Humanities/Fine Arts Appreciation options:

See counselor/advisor for placement

ARTS 1301 – Art Appreciation

DANC 2303 – Dance Appreciation I

DRAM 1310 – Introduction to Theatre

DRAM 2361 -- History of Theater

MUSI 1306 -- Music Appreciation I

(\*\* ) Dual Credit Core Science options:

See counselor/advisor for placement

Courses include:

BIOL 1406, 1407 (Biology for science majors I & II)

BIOL 1408, 1409 (Biology for non-science majors I&II)

PHYS 1401, 1402 (Algebra-based Physics I&II)

PHYS 1405, 1407 (Elementary Physics I&II)

(\*\*\*) Dual Credit Language, Philosophy, and Culture options:

See counselor/advisor for placement

PHIL 1301 – Intro to Philosophy

ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2342, 2342



(\*) Dual Credit MATH options:

See counselor/advisor for placement

#2723 Advanced Quantitative Reasoning  
MATH 1332- Contemporary Math I

#2918 Independent Study  
MATH 1324- Math for Business & Social Science

#2619 Statistics  
Math 1342/1442 – Elementary Statistical Methods

#2850 Pre-Calculus (Sem 1)  
MATH 1314 - College Algebra

#2850 Pre-Calculus (Sem 2)  
MATH 1316 - Plane Trigonometry