

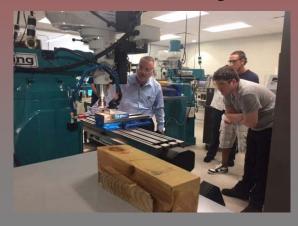




# Future Industries Academy







### Potential Phase One Programs

#### **Precision Machining**







Welding







#### HVAC







### Electromechanical Technology







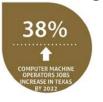
All identified by Interlink as targeted high skill/high demand occupations for North Central Texas

### Potential Phase Two Programs

### Computer Aided Manufacturing







Solar Technology







### Logistics Technology







### Robotics Technology







All identified by Interlink as targeted high skill/high demand or emerging and evolving occupations for North Central Texas

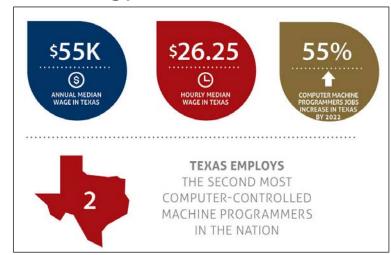
### A closer look at Precision Machining Technology

#### Job fields include

- aircraft industry
- medical and telecommunications equipment
- automotive tool manufacturing
- oil tool manufacturing

#### Skills taught within the program

- precision measurement
- blueprint reading
- heat treatment of metals
- machine tool operation
- CNC computer programming



1,920 projected annual job openings in Texas through 2022

**Potential Offerings** 

Certification program

Associate of Applied Science

Name ID NO					Grade			Date			
9th		Credits	10th		Credits	11th		Credits	12th		Credits
<sub>1.</sub> English I	1.0 1. English II			1.0	1. English III – Dual Credit		1.0	1.English IV		1.0	
2. Algebra I	Algebra I 1.0 2. Geometry		2. Geometry	1.0		2. Algebraic Reasoning		1.0	2College Algebra/ Plane Trig-DO		1.0
3. Biology		1.0	3. Chemistry		1.0	3. Principles of Engineering		1.0	3.Environmental Systems		1.0
4. World Geography		1.0	4. World History		1.0	0 4. US History		1.0	4.Gov't / Econ		1.0
5. Choir		1.0	<sub>5.</sub> Choir		1.0	5. Flexible Manufacturing		1.0	5 Adv. Precision Metal Manufacturing		1.0
<sub>6</sub> Spanish I		1.0	6. Spanish II		1.0	6. Principles	of Manufacturing	1.0	6.Adv. Precision Metal Manufacturing		1.0
, Health/Professional Comm.		1.0	7. PE		1.0	7. Precision Metal Manufacturing		1.0	7 Adv. Precision Metal Manufacturing		1.0
Summer School			Summer School			Summer School			Summer School		
	Credits	7.0		redits	7.0		Credits	7.0		Credits	7.0
Required Subject Areas		Foundation/Endorsement Plan idents are eligible to apply for general admission to state colleges and universities			year Eng	iguage Arts lish:	Math 3 <sup>rd</sup> and 4 <sup>th</sup> year Math:		ar Science:	Science 3 <sup>rd</sup> and 4 <sup>th</sup> year Sc	cience
English	4 credits English 1, 2, 3, 4 <sup>th</sup> year choice (ECOs: English 1 and English 2) 4 credits Algebra 1, Geometry, 3 <sup>rd</sup> year choice, 4 <sup>th</sup> year choice (EOC: Algebra 1)				English 4     Oral Interpretation 3     Debate 3     AP English Literature and Composition     IB Language Studies A1 HL		Math Models     Statistics     Algebra 2	IPC and     Che			
Math				l.			Algebra 2 is a prerequisite for the following courses:  Precalculus  Advanced Quantitative			Environmental Systems     AP or IB Biology     AP or IB Chemistry     AP Physics 1-2	
Science	4 credits:	2 <sup>nd</sup> year choice 3 <sup>rd</sup> year choice, 4 <sup>th</sup> year			Professiona	ition – if taken	Advanced Quantitative Reasoning     AP Statistics     AP Calculus AB     AP Calculus BC			AP Physics 1-2     AP Physics C     IB Physics     AP Environmental Science	
Social Studies	4 credits World Geography, World History, US History, US Government/Economics (EOC: US History)			another ½ course		res – if taken	Math Independent Study     IB Mathematics SL     IB Mathematics HL     IB Further Mathematics			IB Environmental Systems     Anatomy and Phy     Food Science	siology
Fine Arts		Art, Music	, Theater, Dance, Principles and			Vriting – if taken • AP Computer Science A				<ul> <li>Forensic Science</li> <li>Scientific Researe Design Honors</li> </ul>	
Foreign Language	2 credits			1						<ul> <li>Engineering Desi</li> </ul>	gn and
Health Physical Education	1.0 credit	ealt of Pr	inciples of Health Science	┨						<ul> <li>Problem Solving</li> <li>Principles of Engine</li> </ul>	ineering
Communication			Oral Interpretation 1, Debate 1,	1							
Electives/Endorsement Choices	5 credits	ai CUIIIII	unication	1							
Total	26 Credits  Distinguished Level of Achievement is the Foundation/Endorsement Plan including Algebra 2. Students are eligible for top 10% automatic admission to state universities.				All prerequisites must met before taking a		All prerequisites must be met before taking a	met	rerequisites must be before taking a	All prerequisites must be met before taking a course.	
					course.	-	course.	course.			

**Public Services** 

**Arts and Humanities** 

Multidisciplinary

Business and Industry

STEM

Circle Endorsement(s)

### A closer look at Electromechanical Technology

#### Job fields include

- utilities
- wind energy
- high-speed manufacturing
- medical device production

### Skills taught within the program

- DC and AC circuitry
- robotic programming
- industrial automation
- logic controllers
- vision systems









### TEXAS EMPLOYS THE SECOND MOST ELECTROMECHANICAL TECHNICIANS

IN THE NATION

Source: U.S. Bureau of Labor Statistics and O°Net °Wages vary by location, employer and experience.

560 projected annual job openings in Texas through 2022

**Potential Offerings** 

2 levels of certification programs

Associate of Applied Science

Name ID NO					Grade				_Date		
9th	Cred	ts 10th		Credits	₫1th	<del></del>	_Credits	12th		Credi	
1. English I	English I 1.0 1. English II			1.0	h. English I	II – Dual Credit	1.0	1.English IV		1.0	
2. Algebra I 1.0		<sub>2</sub> Geometry		1.0	≥ Algebra II		1.0	2 College Algebra/ Plane Trig		OC 10	
3. Biology		3 Chemistry		1.0	h. Physics		1.0	3. Environmental Systems		1.0	
World Geography		4 World History		1.0	US History		1.0	4.Gov't / Econ		1.0	
Choir		5. Choir			k Electronics			5 Advanced Electronics		1	
Spanish I		6. Spanish II		1.0	6 Robotics and Automation		1.0	6. Advanced Electronics		1.0	
_ Health/Prof. Comm.		6. Spanish II		1.0	Pr		1.0	<del>_</del>		1.0	
7. Mediti/Prof.commi.		7. PE		1.0	Concepts of Eng. And Tech.		1.0	7. Digital Electronics		1.0	
Summer School	Credits 7.0	Summer School	Cond	fits 7.0	Summer School	l Credits	7.0	Summer School	Condi	s 7.0	
Required Subject Areas  English	Students are eligible to apply for general admission to state colleges and universities  4 credits English 1, 2, 3, 4 <sup>th</sup> year choice (EOCs: English 1 and English 2) 4 credits Algebra 1, Geometry, 3 <sup>rd</sup> year choice, 4 <sup>th</sup> year choice (EOC: Algebra 1) 4 credits: Biology, 2 <sup>nd</sup> year choice 3 <sup>rd</sup> year choice, 4 <sup>th</sup> year choice (EOC: Biology) 4 credits World Geography, World History, US History, US Government/Economics (EOC: US History) 1.0 credit Art, Music, Theater, Dance, Principles and Elements of Floral Design			4 <sup>th</sup> year Eng		Math 3 <sup>rd</sup> and 4 <sup>th</sup> year Math: • Math Models	Science 2 <sup>nd</sup> year Science: • IPC (Integrated Physics		Science 3 <sup>rd</sup> and 4 <sup>th</sup> year Science  Chemistry Physics Earth and Space Scienc Environmental Systems		
Math				Oral Interpre     Debate 3     AP English	e Statistics Algebra 2	and • Che	Chemistry)				
				Composition  B Language Studies A1  HL		for the following courses:  Precalculus  Advanced Quantitative			AP or IB Biology     AP or IB Chemistry     AP Physics 1-2		
Science				after English	ation - if taken	Reasoning  AP Statistics  AP Calculus AB  AP Calculus BC			AP Physics C     IB Physics     AP Environmental Science		
Social Studies				another 1/2 s course	nres – if taken	Math Independent Study     IB Mathematics SL     IB Mathematics HL     IB Further Mathematics			IB Environmental Systems     Anatomy and Physiolog     Food Science		
Fine Arts					riting - if taken	AP Computer Science A			Forensic Science     Scientific Research and Design Honors		
Foreign Language Health	2 credits	Principles of Health Science							Engineering De Problem Solvin	esign and	
Physical Education	.5 or 1.0 credit of Principles of Health Science 1.0 credit						1		Principles of Er		
Communication		1, Oral Interpretation 1, Debate 1	1,								
Electives/Endorsement	5 credits	IIIIuiiioduoii	-								
Choices Total	26 Credits	$\dashv$	All prerequisites must be								
	Distinguished Le Foundation/End Students are elig to state universit	All prerequi met before course.		<ul> <li>All prerequisites must be met before taking a course.</li> </ul>	All prerequisites must be met before taking a course.		All prerequisites must be met before taking a course.				

**Public Services** 

**Arts and Humanities** 

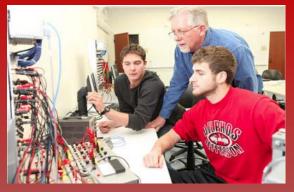
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## Your feedback.....





