



**TECH PREP**

*of the Rio Grande Valley, Inc.*

THE RIO GRANDE VALLEY TECH PREP SYSTEM

# Tech Prep of the Rio Grande Valley, Inc.

- Tech Prep of the Rio Grande Valley, Inc., is a Texas nonprofit and federal 501c3 corporation.
- Tech Prep's corporate mission is to form working regional and state partnerships that leverage regional resources to facilitate college-and-career-focused learning opportunities for students stressing practical problem-solving and critical thinking to achieve a higher level of competence in the workforce.
- College Tech Prep programs of study are important components of the work done by Tech Prep's Board and staff.

# College Tech Prep Programs Prepare Students for Good Jobs



**Health Fields**



**Engineering, Science, and  
Mathematics Fields**

**Computer  
Technology**



See 2011 Labor Market Report at  
<http://www.techpreprgv.com/lmi.html>

# College Tech Prep Programs

## Prepare Students for Good Jobs (cont.)

- Table 3.4, Section 3, *Targeting the Future: Tech Prep 2011 Labor Market Report: Tech Prep's Targeted Occupations by Career Cluster, Education/Training and Hourly Wage*

Targeted Occupations by Career Cluster	Education/ Training Required	Average Hourly Wage	
		Cameron	Hidalgo
HEALTH SCIENCES			
Biomedical Engineering Technician	2 years	\$17.00	\$17.00
Physician Assistant	Bachelor's	\$59.00	\$43.00
Radiologic Technologists/ Technicians	3 years	\$21.00	\$27.00

NOTE: Wages shown in Table 3.4 are average wages, not entry-level. Notes included with the table provide additional information.

For additional information, see 2011 Labor Market Report at <http://www.techpreprgv.com/lmi.html>.

# College Tech Prep Programs Prepare Students for Good Jobs (cont.)

- Table 3.5, Section 3, *Targeting the Future: Tech Prep 2011 Labor Market Report:*

## *Education and Training Opportunities for Tech Prep's Targeted Occupations*

Occupation	Education & Training Programs Available	Tech Prep Option Available?
HEALTH SCIENCES		
Biomedical Engineering Technician	TSTC	Yes
Physician Assistant	UTPA	N/A
Radiologic Technologists / Technicians	STC	No
	UTB/TSC	Yes

For additional information, see 2011 Labor Market Report at <http://www.techpreprgv.com/lmi.html>.

# College Tech Prep Programs Operate Under Program of Study Agreements

- Agreements developed through a Tech Prep Subcommittee—worked on language for almost a year, finalized in 2010.
- One agreement for each of these higher education partners:
  - **South Texas College** (serving districts in Hidalgo and Starr Counties plus others with high schools in those counties).
  - **Texas State Technical College** (serving districts in all four counties).
  - **The University of Texas at Brownsville and Texas Southmost College** (serving districts in Cameron and Willacy Counties plus others with high schools in those counties--with split, will need to be redone).
- One agreement for 32 separate independent school districts (all districts in Cameron, Hidalgo, Starr, and Willacy Counties).
- Agreements are between individual education institutions and Tech Prep of the Rio Grande Valley, Inc.
- Term of all agreements is “perpetual” ... agreements went into effect once signed, and all remain in effect at this time.

# College Tech Prep Program Agreements (cont')

- Agreements articulate programs (degree or graduation plans), not courses.
  - About College Tech Prep programs of study:
    - High school students have the opportunity to maximize the various college-level courses offered by their high schools by blending various types of college-level courses ... both academic and career and technical education ... into College Tech Prep graduation plans.
  - Copies of agreements are available from the Tech Prep office.

# College Tech Prep Program Agreements (cont')

- Types of college-level courses that can be blended in College Tech Prep programs of study:
  - Dual Credit Academic and Career and Technical Education (CTE) Courses
  - Statewide Articulated (Advanced Technical Credit [ATC] CTE Articulated Courses
  - Locally Articulated CTE Courses (subject to agreement by the college and the school district)
  - Other types of courses including, but not limited to:
    - Advanced Placement (AP) courses
    - Correspondence courses
    - Distance learning courses
    - Contract instruction courses (school districts contracting with other districts or with colleges)

# College Tech Prep Program Agreements (cont')

- College Tech Prep POS graduation plans/degree plans:
  - Begin in high school (Recommended High School Program or Distinguished Achievement Program).
  - End in college (Associate of Applied Science or Associate of Science degrees).
  - May provide certificate exit points on the way to the associate degree.
- Most Tech Prep POS plans provide one or more opportunities for continuation into baccalaureate programs.
- Agreements call for annual review of program-of-study (POS) graduation/degree plans, with online access to current plans coordinated through Tech Prep's website.

# More About Articulated and Dual Credit Courses

- **Dual Credit:** student begins creating a college transcript at point of enrollment in the dual-credit course:
  - Student receives a grade (and credit) for both high school and college course.
  - Student receives a grade on a college transcript at the time the course is taken.
- **Articulated Credit:** student does not begin creating a college transcript at point of enrollment in the articulated-credit course.
  - Student receives a grade for the high school course.
  - College credit is “banked” until the student enrolls:
    - Student must have earned a grade of “B” for the course.
    - High school course must have been taken within 15 months of enrollment at the college.
    - Articulated course must be part of the course sequence for the student’s college degree plan.
- Discussion Stage: Issuing a certificate(s) of completion at high school graduation for certificate(s) containing “blended” courses completed in high school.

# College Tech Prep POS Plans Are Accessible Online

Tech Prep of the Rio Grande Valley, Inc. - Windows Internet Explorer

C:\Documents and Settings\lperez\Desktop\Tech Prep of the Rio Grande Valley, Inc.htm

File Edit View Favorites Tools Help

Tech Prep of the Rio Grande ... Tech Prep of the Rio Gra...

**BUSINESS** **GOVERNMENT**  
**TECH T PREP**  
**EDUCATION**

**Parents**

**P16**  
Lower Rio Grande P-16 Council

**CATEMA**

### Starting point for Educators

- [Programs of Study](#)
- [Benefits of Tech Prep](#)
- [Calendar of Events](#)
- [Careers in Action](#) (with lesson plans)
- [Counselor's Network](#)
- [Curriculum](#)
- [Featured Educator](#)
- [Helpful Resources](#)
- [CATEMA](#) (with Tech Prep Declaration of Intent)
- [Scholarship Information](#)
- [Shared Advisors](#)
- [S-TEAMs](#)
- [Work-Based Learning](#)

Internet 100%

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# College Tech Prep POS Plans Are Accessible Online (cont.)

Continuing & Professional Education | Distance Education | Library | Jobs | JAGNET

**STC** South Texas College High School Programs and Services

Learn More

Future Students | Current Students | Parents | Visitors | Faculty / Staff

South Texas College > Academic Affairs > High School Programs > Tech Prep > Programs

I'm Looking For...

**Our Department**

- » Staff

**Overview**

- » What is Dual Enrollment?
- » Tuition & Student Fees
- » Application Process
- » Dual Enrollment Manual

**Dual Enrollment Academy Programs**

- » Medical Science Academy - DEISA
- » Engineering Academy - DEEA
- » Computer Science Academy - DECSA
- » Photo Gallery

**Tech Prep**

- » Overview
- » Achieve Texas 6 Year Plans
- » Requirements

**Other Programs**

- » McCCTI

**Achieve Texas 6 Year Plans**

- Donna I.S.D.
- Edcouch I.S.D.
- Edinburg C.I.S.D
- Hidalgo I.S.D.
- La Joya I.S.D.
- La Villa I.S.D.
- McAllen I.S.D.
- Mercedes I.S.D.
- Mission C.I.S.D.
- Progreso I.S.D.
- PSJA I.S.D.
- Rio Grande City C.I.S.D.
- Roma I.S.D.
- San Joaquin I.S.D.

**TSTC** Texas State Technical College

En Español | Index A-Z | Request Info

HOME

Welcome | Programs | Academics | Admissions | Financial Aid | MyTSTC | Apply Online | Jobs | Calendar

**Office Of Student Success**

- » Welcome Letter
- » Student Success Programs
- » Achieve Texas
- » HATSS Program
- » Mentoring Information
- » SI Tutoring Program
- » Academic Achievement Center

**School Districts**

Brownsville BISD plans are located on the [Achieve Texas BISD Plans](#) page.

Edinburg ECISD plans are located on the [Achieve Texas Edinburg ECISD Plans](#) page.

Harlingen CISD plans are located on the [Achieve Texas Harlingen CISD Plans](#) page.

La Feria ISD plans are located on the [Achieve Texas La Feria ISD Plans](#) page.

Los Fresnos ISD plans are located on the [Achieve Texas Los Fresnos ISD Plans](#) page.

Lyford ISD plans are located on the [Achieve Texas Lyford ISD Plans](#) page.

Point Isabel ISD plans are located on the [Achieve Texas Point Isabel ISD Plans](#) page.

Rio Hondo ISD plans are located on the [Achieve Texas Rio Hondo ISD Plans](#) page.

Santa Maria ISD plans are located on the [Achieve Texas Santa Maria ISD Plans](#) page.

Santa Rosa ISD plans are located on the [Achieve Texas Santa Rosa ISD Plans](#) page.



Weslaco ISD plans are located on the [Achieve Texas Weslaco ISD Plans](#) page.

# Example: Tech Prep POS Plan for South Texas College and PSJA ISD

AchieveTexas		South Texas College TECH PREP SIX-YEAR PLAN (Recommended Graduation Plan)				Manufacturing					
College: South Texas College Program/CIP: Precision Manufacturing / 48.0507 Plan: Precision Manufacturing Technology AAS Degree						ISD/CISD: Pharr-San Juan-Alamo ISD Career Cluster: Manufacturing Career Pathway:					
High School / Secondary					College / Post Secondary						
Subject	9	10	11	12	Sem. 1	Sem. 2	Summer I	Sem. 3	Sem. 4	Summer II	
	Full Yr	Full Yr	Full Yr	Full Yr							
English (4 credits)	English I	English II	English III	English IV	ENGL 1301 Composition						
Math (4 credits)	Algebra I	Geometry	Algebra II	Advanced Math	Math/Natural Sciences Elective						
Science (3 credits)	Biology	Chemistry	Physics	Advanced Science	Social/Behavioral Sciences Elective						
Social Studies (4 credits)	World Geography	World History	US History	Government and Economics	Humanities/Free Arts Elective						
Language (2 credits)	Foreign Language I	Foreign Language II									
Physical Education (3 credits)	Physical Education										
Fine Arts (3 Credits) Speech (1.5 Credit)	Fine Arts/Theatre	Speech			MCHN 1301 Intro. To Speech Communications						
Tech Prep and CTE Courses (1.5 Credit)		***Precision Metal Manufacturing-PEMS # 1300200 (PRECMAN) for MCHN 1426	Advanced Precision Metal Manufacturing	Precision in Metal Manufacturing	MCHN 1401 Beginning Machine Shop						
					****MCHN 1408 Basic Machine Shop I						
		***Agri/Mechanics and Metal Technology-PEMS #1300200 (AGMECHMT) for DEMR 1301			**DFTG 1313 Drafting for Specific Occupations						
					MCHN 2403 Fundamentals of Computer Numerical Controlled Machine Controls						
					**PLTC 1445 Plastic Processes I						
					MCHN 1340 Machine Shop Mathematics						
					***DEMR 1301 Shop Safety and Procedures						
					MCHN 2341 Advanced Machining I						
					MCHN 1320 Precision Tools and Measurements						
					MCHN 2345 Advanced Machining II or MCHN 1290 Cost Estimating or PLTC 2349 Plastic Processes II or DFTG 2402 Machine Drafting or OTC 1309 Quality Control						
					MCHN 2362 CAPSTONE Cooperative Education I						
					Certificate in Precision Manufacturing Technology						
					AAS Degree-Precision Manufacturing Technology						
<b>IMPORTANT POINTS:</b> * This course is an academic course available through STC dual enrollment. ** This course is a technical course available through STC dual enrollment. *** This course is eligible for ATC credit with STC if taught by a certified High School Instructor. **** This course is a technical course available through ATC credit or Dual Enrollment with STC. NOTE: This degree transfers in total to the Bachelor of Applied Technology in Technology Management at South Texas College.					<b>ATC Crosswalk with STC Courses</b>						
					High School Course			STC Credit Granted			
					Precision Metal Manufacturing-PEMS # 1300200 (PRECMAN)			MCHN 1426 - Basic Machine Shop I			
					Agricultural Mechanics and Metal Technology-PEMS #1300200 (AGMECHMT)			DEMR 1301 Shop Safety and Procedures			
Total Possible college credits completed in high school = 17											

# Example: Tech Prep POS Plan for TSTC and Harlingen CISD

Name: \_\_\_\_\_ Date of Birth \_\_\_\_\_ Student ID# \_\_\_\_\_ TSTC ID #: \_\_\_\_\_

 **AchieveTexas** 

**Texas State Technical College**  
 Associate of Applied Science Degree in Computer Drafting & Design Technology  
 College Plan  
 High School \_\_\_\_\_

College: Texas State Technical College  
 Program/CIP: 15.1300.00  
 Plan: Computer Drafting & Design Technology

ISD/CISD: Harlingen  
 Career Cluster: SCITECH Engineering & Mathematics  
 Career Pathway: Computer Drafting & Design Tech

High School 4 Year Program					College Five-Semester Program				
Subject	9th Grade	10th Grade	11th Grade	12th Grade	1st Sem	2nd Sem	3rd Sem	4th Sem	5th Sem
English	English 1	English 2	English 3	English 4	ENGL 1301 COMP I				
Math	Algebra 1 or Geometry/ MMA	Geometry & MMA or Algebra 2	Algebra 2 or Pre-Cal. or AP Stats	Pre-Calculus or AP Stats or AP Cal.		MATH 1314 College Algebra	MATH 1316 Plane Trigonometry		
Science	Biology	Chemistry	Physics	4th Science (See your counselor for available courses)					
Humanities	World Geography	World History	US History	US Government and Economics	HRPO 1311 Human Relations	PSYC 2301 General Psychology			Humanities/Fine Arts Elective
Foreign Language/ Fine Arts	Spanish 1 or Spanish 2 or French 1	Spanish 2 or Spanish 3 or French 2	Spanish 3 or French 3	Fine Arts					
Communications/ Speech		Communication Applications						Speech Elective 1311	
PE/Health	PE	Health	PE						
Electives	Principles of Architecture	Psychology		Advanced Architectural Design					
Technical Applications	BIM 1 or BIM 1-TA	BIM 2			DFTG 1305 Technical Drafting	DFTG 2312 Technical Illustration & Presentation	DFTG 1317 Architectural Drafting- Residential	DFTG 2328 Architectural Drafting- Commercial	DFTG 2331 Advanced Technologies in Architectural
Dual Enrollment			Architectural Design 13004700 for DFTG 1305 & DFTG 1309		DFTG 1309 Basic Computer-Aided Drafting	DFTG 1333 Mechanical Drafting	DFTG 2340 Solid Modeling/ Design SRVY 2348 Plane Surveying	DFTG 2332 Advanced Computer-Aided Drafting	DFTG 2306 Machine Design DFTG 2321 Topographical Drafting
ATC			INTRO to Engineering Design N1303742 for DFTG 1309		DFTG 2330 Civil Drafting	DFTG 2350 Geometric Dimensioning & Tolerancing	GISC 1311 Introduction to Geographic Info. Systems	GISC 2320 Intermediate Geographic Info. Systems	GISC 1301 Cartography and Geography in GIS &GPS
Related Activities					Computer Drafting and Design Technology Club, Job Shadowing, Volunteer Work, Part-Time Employment				

Courses that are highlighted indicate articulation credits with Texas State Technical College.  
 TSTC has upward-articulation agreements with universities that give students who complete programs at TSTC the option to continue into a baccalaureate program.  
 \*Please see your high school counselor for high school graduation requirements which are the first four years.  
 †Degree plans are contingent upon availability of the program at the time of college admissions.  
 ‡Achieve Texas plans reflect the current career pathway selected by the student. Student may change career pathways upon annual review with an advisor or counselor.  
 ††The Achieve Texas College Plan serves as a guide for students; it is not an official college degree plan


Total Possible college credits completed in high school = 15 Expected Graduation Date= \_\_\_\_\_

Approvals:  
 Student Signature \_\_\_\_\_ Date \_\_\_\_\_  
 Advisor \_\_\_\_\_ Date \_\_\_\_\_

# How Tech Prep POS Plans Fit With Early College High School Design

Does the MOU articulate the mission of the school?
Does the MOU delineate roles and responsibilities regarding the program of study, including design and delivery of the instructional program, assessment, and crediting of courses?
Does the MOU define financial arrangements regarding responsibility for expenses including tuition and fees, textbooks, transportation?
Does the MOU define financial arrangements regarding income?
Does the MOU define agreements regarding site selection?
Does the MOU define joint decision making processes?

**Countdown to Opening ECHS:  
Memoranda of Understanding and Agreements**  
(This slide courtesy of Dr. Norma L. Salaiz)



**Does the MOU delineate roles and responsibilities regarding the **program of study**, including design and delivery of the instructional program, assessment, and crediting of courses?**

# How Tech Prep POS Plans Fit With Early College High School Design

What courses are necessary for students to meet high school graduation requirements?
What high school courses will be offered?
How many and which courses will offer college credit? Will they be dual enrollment, Advanced Placement, and/or International Baccalaureate courses?
Is the basic four-year course sequence defined in order to provide enough credits to earn a high school diploma and a minimum of 60 college credit hours?
What college courses will be available to ECHS students? Will ECHS students be integrated into college courses with college students?
Does the distribution of courses provide a post-secondary pathway? Does it meet requirements for general or technical majors?
What are the prerequisites for upper-level courses of study?
How will technology be incorporated into the school?
How will the schedule be designed in order to meet the needs of the program of study?
What is the planned sequence of college-level courses? How will students achieve 60 credits?
Will any of the college courses be specially designed or adapted for the ECHS program? If yes, explain. (What is the approval process at the sponsoring post-secondary institution?)
What is the rationale for the sequence of college courses selected and the level and type of substitution of college-level classes for HS classes?

**Does the distribution of courses provide a post-secondary pathway? Does it meet requirements for general or technical majors?**

**Does the four-year course sequence include **60 college credit hours**?**

Countdown to Opening ECHS:  
Planning the Program of Study  
(This slide courtesy of Dr. Norma L. Salaiz)

# How Tech Prep POS Plans Fit With Early College High School Design

Will all students take the same college-level program of study, or will the sequence be differentiated based on student's level of academic readiness?
What is the rationale for these choices?
What do students' schedules look like?
What pre-existing college courses were chosen, changed, or adapted as part of the curriculum? What new courses were created?
How does the selected course of study ensure that students are able to meet required state performance standards (e.g. high school graduation test requirements, state university entrance requirements)?
Does the selected course of study give ECHS students an advantage over students enrolled in college preparatory high school program in gaining admission to a public university upon graduation?
What credit do students receive for their college courses? (High school, college, or dual?) If college credit, what type? Are these credits transferable to other colleges?
How does the class size of student's college courses compare to the class size of their non-college classes?
Does the college have or will it consider policies that support early college (e.g. streamlining course approval process, awarding adjunct faculty status)?

**Will all students take the same college-level program of study, or will the sequence be differentiated ....?**

**Countdown to Opening ECHS:  
Planning the Program of Study**  
(This slide courtesy of Dr. Norma L. Salaiz)

# In Conclusion

- **Questions?**
- **For Additional Information:**  
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