

# 2017 TexPREP I

## Information Brochure

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### THE TEXAS PREFRESHMAN ENGINEERING PROGRAM CONDUCTED by THE UNIVERSITY OF TEXAS RIO GRANDE VALLEY

In Collaboration with the  
College of Science and Engineering  
and the  
Office of Student Educational Outreach

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June 5, 2017 - July 21, 2017

***APPLICATION DEADLINE: February 28, 2017***

The University of Texas Rio Grande Valley, in cooperation with the College of Science and Engineering, is one of several institutions in Texas offering the Texas Prefreshman Engineering Program, which provides educational enrichment opportunities for high ability 6th grade through 11th grade students interested in pursuing mathematics, science, or engineering careers.

Target students for TexPREP include female and other students who have been traditionally underrepresented in the sciences, mathematics, and engineering professions. All qualified and interested students are urged to apply. In selecting individuals for participation and otherwise in the administration of this project, The University of Texas Rio Grande Valley will not discriminate on the grounds of race, creed, color, age, handicap, or national origin of any applicant.

Approximately 220 first year students from grades 6<sup>th</sup> through 8<sup>th</sup> grade will be chosen to participate in the seven-week summer program and continue with six follow-up meeting during the school year.

Sponsors of the program will provide all courses instructional materials. The sponsors for the 2016 TexPREP included: The University of Texas Rio Grande Valley, The University of Texas-San Antonio, Dept. of Defense, and local school districts.

### **ACADEMIC PROGRAMS**

1. **Logic-** Statements, compound statements, truth tables, and rules of inference, quantifiers, paradoxes, and elementary set theory, Boolean algebra.
2. **Topics in Problem Solving-** Problems assigned in the above courses; mathematical formulation of word problems; selected problems in subject areas of number pre-algebra, geometry, trigonometry, physics, and engineering; practice SAT examinations.
3. **Introduction to Engineering-** Historical perspective, service to society, professional responsibilities, development of good study habits, spoken and written communication, technical calculations, use of electronic hand calculators, statistics and graphical analysis, the metric system, basic laws governing the behavior of physical systems and their applications to mechanical and electrical systems.
4. **Computer Science-** An overall view of capabilities and applications of computers; explanation of basic hardware and software concepts including definition of system components for small home computers and large mainframe installations; development of algorithms through the use of flowcharting; writing programs; BASIC language.
5. **Career Opportunities Awareness-** Invited speakers from local and state high technology industries will discuss current and future professional engineering scientific opportunities, their own work, and a biography of the professional development. Career counseling and such topics as resume preparation, college preparatory expectations, college financial aid.

## **SCHEDULE AND ACADEMIC STANDARDS**

All program participants will be expected to spend the hours between 1:00 p.m. and 5:50 p.m., Monday through Friday, engaged in class work, seminars, or research work from June 5, 2017 to July 21, 2017, and six monthly follow-up meeting during the school year on Saturday.

Homework assignments and examinations will be given in all classes. All participants are expected to do the work required to maintain a C (75) average in the TexPREP Programs. Students who fail to maintain a 75 or better average in Logic or Algebraic Structures will be subject to dismissal from the program. There are special activities to support students not meeting these standards.

Absences from the program or other acts of misconduct will result in **immediate dismissal from the program**. Students with **more than two absences** will be asked to resign from the program. **Absences can be, but not limited to: cheerleading, football, or band practice, or vacations.**

## **ACADEMIC CREDIT**

The Texas Education Agency has approved up to one innovative Career and Technical Educational (CTE) state elective credit to participating students who successfully complete the summer program. The TexPREP courses are not substitutes for any courses in the junior high school or senior high school program. For additional information concerning credit, a program applicant should consult his/her counselor.

## **PROGRAM COST**

All participants in UTRGV TexPREP during Summer 2017 must be funded through a combination of funds UTRGV receives from the State of Texas and funding either provided by students' respective school districts or by the students themselves. For Summer 2017, the cost that must be covered either by the school district or by the student is \$390 per student. Interagency contracts will be sent after March 1st to the offices of Superintendents from whose school districts TexPREP student applications have been received. These contracts must be signed in order for UTRGV to be able to invoice school districts that agree to cover the \$390 cost per student. Note that applicants from school districts that do not enter into an Interagency Contract with UTRGV for TexPREP services will be invoiced directly for the \$390 and will not be able to attend the program if payment is not arranged. For any further questions concerning costs, please contact your school counselor, or call, UTPA TexPREP Program at 665-3794.

## **STAFF**

1. Dr. Stephen Crown; TexPREP Director
2. Cynthia Valdez; Executive Director for Student Educational Outreach
3. Anna Ramos; TexPREP Program Specialist
4. Nalleli Salinas, Program Coordinator
4. Teachers from various Valley high schools
5. Professors from the University of Texas Rio Grande Valley
6. Undergraduate college students with majors in engineering, science, or math

## **FACILITIES**

All program activities and classroom sessions will be held in classrooms on the UTRGV campus. Program Staff will be available for supervised research and individual consultations.

## **TRANSPORTATION**

Each student is expected to provide transportation between his/her home and UTRGV. The following are the school districts that provided a bus at their own cost in the summer of 2016: Edinburg, Edcouch-Elsa, La Joya, McAllen, Mission, Monte Alto, PSJA, Valley View, and Weslaco. Students are encouraged to contact their district transportation department to verify on transportation. The TexPREP program is not responsible if the district does not provide transportation

## **REQUIREMENTS FOR ELIGIBILITY**

1. All program applicants must be current full-time sixth, seventh or eighth grade students.
2. The two nomination forms one must be from his/her mathematics teacher and other form from either science teachers or counselors.
3. All applicants must have a B or better from their first semester final average in their mathematics courses during their current school year.
4. All applicants must have a cumulative B or better from their first semester final academic course averages during their current school year.
5. Students must score a 70 or better on the Math Placement Exam provided by TexPREP in order to be considered an eligible applicant.
6. Each applicant must submit *a copy of grade reports for the current academic year.*
7. Each applicant must submit a short essay between 100 and 200 words, which presents the reasons for wanting to participate in the TexPREP program.
8. Mandatory parent/student orientation on April 1, 2017.

## **MANDATORY MATH PLACEMENT EXAM**

Every applicant must take the Math placement exam. Students will have two hours to complete the exam. Student should arrive 30 minutes before the exam to sign-in and bring a pencil. Only students who have submitted a completed application will be allowed to take the Math Placement Test. **FAILURE TO ATTEND THE PLACEMENT EXAM** will be ground for rejection of the application. If you cannot attend any of the dates indicated, please contact the office and make arrangements to test. Students can take the test as soon as a completed application has been submitted to the TexPREP office. **THERE WILL BE NO TESTING AFTER March 11, 2017.**

## **STUDENTS / PARENTS:**

**It is your responsibility to be aware of the important deadlines in which you must submit your paperwork and attend the Math Placement Test date.**

**Please submit the entire application as one packet. An incomplete application will not be considered for selection to the program.**

## **SUBMIT APPLICATION TO:**

TexPREP Office  
The University of Rio Grande Valley  
LEAC 164  
1201 W. University Drive  
Edinburg, TX 78539-2999  
Telephone:(956) 665-3794

# TEXAS PREFRESHMAN ENGINEERING PROGRAM (TexPREP)

June 5, 2017 – July 21, 2017

## **TexPREP I APPLICATION**

DEADLINE: MUST BE SUBMITTED ON OR BEFORE: **FEBRUARY 28, 2017.**

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**GRADERS 6<sup>TH</sup> TO 8<sup>TH</sup> MAY COMPLETE THE APPLICATION – ALL QUESTIONS MUST BE ANSWERED. PLEASE PRINT IN BLACK OR BLUE INK. NO PENCIL**

NAME: \_\_\_\_\_  
LAST FIRST M.I.

SCHOOL ID# \_\_\_\_\_ GENDER: \_\_\_\_\_ FEMALE \_\_\_\_\_ MALE

ADDRESS: \_\_\_\_\_  
Where you receive your mail APT. #

CITY: \_\_\_\_\_ ZIP CODE: \_\_\_\_\_

PHONE: \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ DATE OF BIRTH: \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

ETHNICITY: \_\_\_\_\_ AMERICAN INDIAN \_\_\_\_\_ ANGLO \_\_\_\_\_ AFRICAN AMERICAN \_\_\_\_\_ HISPANIC \_\_\_\_\_ ASIAN \_\_\_\_\_ OTHER

CURRENT GRADE LEVEL: \_\_\_\_\_ 6<sup>th</sup> \_\_\_\_\_ 7<sup>th</sup> \_\_\_\_\_ 8<sup>th</sup>

SCHOOL ATTENDING YEAR 2017-2018: \_\_\_\_\_

SCHOOL DISTRICT(check one) \_\_\_\_\_ Donna \_\_\_\_\_ Edcouch-Elsa \_\_\_\_\_ Edinburg \_\_\_\_\_ IDEA \_\_\_\_\_ La Joya \_\_\_\_\_ McAllen \_\_\_\_\_ Mission  
\_\_\_\_\_ Monte Alto \_\_\_\_\_ PSJA \_\_\_\_\_ Sharyland \_\_\_\_\_ South Texas \_\_\_\_\_ Valley View \_\_\_\_\_ Weslaco \_\_\_\_\_ Other

### **TO BE COMPLETED BY PARENT OR GUARDIAN**

FATHER'S NAME: \_\_\_\_\_ CELL PHONE: \_\_\_\_\_

MOTHER'S NAME: \_\_\_\_\_ CELL PHONE: \_\_\_\_\_

IN CASE OF EMERGENCY AND WE CAN NOT REACH THE PARENT(S)

NAME: \_\_\_\_\_ RELATIONSHIP \_\_\_\_\_ PHONE: \_\_\_\_\_

### **TO BE COMPLETED BY PARENT OR GUARDIAN**

FOR THE MANDATORY PARENT/STUDENT ORIENTATION WOULD YOU PREFER TO ATTENDING TO A (check one)

\_\_\_\_\_ SPANISH SPEAKING ONE \_\_\_\_\_ ENGLISH SPEAKING ONE

### **PARENT/GUARDIAN CONSENT**

THE TUITION OF \$390 WILL BE PAID BY? (CHECK ONE) \_\_\_\_\_ SCHOOL \_\_\_\_\_ PARENT

AS THE PARENT/GUARDIAN OF THE ABOVE MENTIONED STUDENT, I CERTIFY THAT MY CHILD HAS MY PERMISSION TO PARTICIPATE IN THE PREP PROGRAM. HE/SHE IS COMMITTING TO ATTEND PREP MONDAY THROUGH FRIDAY FOR EIGHT WEEKS. IT IS MY UNDERSTANDING THAT HE/SHE WILL BE SUBJECT TO THE REGULATIONS OF THE PREP SITE WHICH HE/SHE WILL ATTEND.

PARENT'S SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

APPLICANT'S SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_



B. PLEASE CHECK BELOW THE CONCEPTS/SUBJECTS YOU HAVE STUDIED THUS FAR (ask your math teacher, if needed):

\_\_\_ 6<sup>TH</sup> GRADE MATH      \_\_\_ 7<sup>TH</sup> GRADE MATH      \_\_\_ 8<sup>TH</sup> GRADE MATH      \_\_\_ PRE-ALGEBRA

\_\_\_ OTHER: \_\_\_\_\_

C. ATTACH A COPY OF YOUR FIRST SEMESTER FOR THE 2016-2017 GRADE REPORT.

D. HOW DID YOU FIRST HEAR ABOUT TexPREP? (PLEASE CHOOSE ONLY ONE RESPONSE).

( )TEACHER      ( )PRINCIPAL      ( )COUNSELOR      ( )POSTER/FLYER

( )FORMER PARTICIPANT      ( )SCHOOL PRESENTATION      ( )OTHER: \_\_\_\_\_

## **PART 5: CHECK ONE: MATH PLACEMENT TEST DATE YOU WILL ATTEND**

A \_\_\_ MARCH 4, 2017(SATURDAY, 9:00AM TO 11:00AM IN THE SCIENCE BUILDING ROOM 2.102) UTRGV MAP #31; PARKING E16

B \_\_\_ MARCH 4, 2017(SATURDAY, 2:00PM TO 4:00PM IN THE SCIENCE BUILDING ROOM 2.102) UTRGV MAP #31; PARKING E16

C \_\_\_ MARCH 11, 2017(SATURDAY, 9:00AM TO 11:00AM IN THE MATH BUILDING ROOM 1.302) UTRGV MAP #40 PARKING E12

C \_\_\_ MARCH 11, 2017(SATURDAY, 2:00PM TO 4:00PM IN THE MATH BUILDING ROOM 1.302) UTRGV MAP #40 PARKING E12

## **STUDENTS MUST BRING 2 SHARPENED PENCILS**

**THERE WILL BE NO TESTING AFTER MARCH 11, 2017. IT IS THE RESPONSIBILITY OF THE STUDENT AND PARENT TO BE AWARE OF THE TEST DATE SELECTED. OUR OFFICE WILL NOT BE NOTIFYING YOU OF THE TEST DAY YOU SELECTED. IT IS YOUR RESPONSIBILITY TO COME ON THE DAY YOU SELECTED.**

## **PART 6: TO BE COMPLETED BY COUNSELOR**

A. NAME OF TEXPREP COUNSELOR: \_\_\_\_\_

B. COUNSELOR'S TELEPHONE NUMBER: \_\_\_\_\_

C. NAME OF SCHOOL: \_\_\_\_\_

D. MAILING ADDRESS OF SCHOOL: \_\_\_\_\_

E. E-MAIL ADDRESS: \_\_\_\_\_

MAIL THE ENTIRE APPLICATION PACKET TO:

**TexPREP Office  
The University of Rio Grande Valley  
LEAC  
1201 W. University Drive  
Edinburg, TX 78539  
956-665-3794**

# TEXAS PREFRESHMAN ENGINEERING PROGRAM (TexPREP)

June 5, 2017 to July 21, 2017

## **MATHEMATICS TEACHER NOMINATION FORM**

**DEADLINE: MUST BE SUBMITTED ON OR BEFORE FEBRUARY 28, 2017.**

**DIRECTIONS: TO BE COMPLETED BY MATHEMATICS TEACHER.** All parts of the Applications must be completed or the application will be considered. Incomplete or late applications will not be processed. Please type or print clearly.

APPLICANT'S NAME: \_\_\_\_\_

SCHOOL NAME: \_\_\_\_\_ CURRENT GRADE LEVEL: \_\_\_\_\_

YOUR EVALUATION OF THE STUDENT'S DESIRE TO WORK HARD AND TO LEARN DURING THIS SEVEN-WEEK PROGRAM IS ESPECIALLY IMPORTANT. WITHOUT THIS NOMINATION FORM, A STUDENT'S APPLICATION WILL BE CONSIDERED INCOMPLETE. PLEASE COMPLETE THE EVALUATION BELOW AS HONESTLY AS POSSIBLE. YOUR ASSISTANCE IS GREATLY APPRECIATED.

A. PLACE AN "X" IN THE APPROPRIATE COLUMN FOR EACH CHARACTERISTIC LISTED.

CHARACTERISTIC	EXCELLENT	GOOD	FAIR	POOR
ACADEMIC PERFORMANCE				
CONDUCT IN CLASS				
WILLINGLY PARTICIPATES IN CLASS				
RESPECTS OTHERS AND THEIR PROPERTY				
ABILITY TO FOLLOW INSTRUCTIONS				
COMPLETES ASSIGNED WORK ON TIME				
ANALYTICAL THINKING SKILLS				
MATURITY				
PUNCTUALITY				
EAGER TO LEARN NEW THINGS				
STUDENT IS SUFFICIENTLY MOTIVATED TO COMPLETE A 7-WEEK SUMMER PROGRAM				

B. INDICATE CURRENT MATH COURSE (S) YOU ARE TEACHING THE APPLICANT: \_\_\_\_\_

C. PLEASE PROVIDE COMMENTS ON MOTIVATION, AMBITION, BEHAVIOR, PERSONALITY, ETC., WHICH YOU FEEL ARE PERTINENT TO THE STUDENT'S PERFORMANCE IN PREP. IF THE STUDENT FAILS TO SATISFY SOME ACADEMIC REQUIREMENT, PLEASE EXPLAIN IN DETAIL. ADDITIONAL COMMENTS MAY BE WRITTEN ON THE BACK.

\_\_\_\_\_  
PRINTED NAME/TITLE

\_\_\_\_\_  
TELEPHONE NUMBER

\_\_\_\_\_  
TEACHER'S SIGNATURE

\_\_\_\_\_  
DATE

TEXAS PREFRESHMAN ENGINEERING PROGRAM (TexPREP)  
 June 5, 2017 to July 21, 2017  
**OTHER SCHOOL OFFICIAL NOMINATION FORM**  
**DEADLINE: SUBMITTED ON OR BEFORE FEBRUARY 28, 2017.**

**DIRECTIONS: TO BE COMPLETED BY SCIENCE TEACHER OR COUNSELOR.** All parts of the applications must be completed or the application will be considered incomplete. Incomplete and late applications will not be processed. Please type or print clearly.

APPLICANT NAME: \_\_\_\_\_

SCHOOL NAME: \_\_\_\_\_ CURRENT GRADE LEVEL: \_\_\_\_\_

YOUR EVALUATION OF THE STUDENT'S DESIRE TO WORK HARD AND TO LEARN DURING THIS SEVEN-WEEK PROGRAM IS ESPECIALLY IMPORTANT. WITHOUT THIS NOMINATION FORM, A STUDENT'S APPLICATION WILL BE CONSIDERED INCOMPLETE. PLEASE COMPLETE THE EVALUATION BELOW AS HONESTLY AS POSSIBLE. YOUR ASSISTANCE IS GREATLY APPRECIATED.

A. PLACE AN "X" IN THE APPROPRIATE COLUMN FOR EACH CHARACTERISTIC LISTED.

CHARACTERISTIC	EXCELLENT	GOOD	FAIR	POOR
ACADEMIC PERFORMANCE				
CONDUCT IN CLASS				
WILLINGLY PARTICIPATES IN CLASS				
RESPECTS OTHERS AND THEIR PROPERTY				
ABILITY TO FOLLOW INSTRUCTIONS				
COMPLETES ASSIGNED WORK ON TIME				
ANALYTICAL THINKING SKILLS				
MATURITY				
PUNCTUALITY				
EAGER TO LEARN NEW THINGS				
STUDENT IS SUFFICIENTLY MOTIVATED TO COMPLETE AN 7-WEEK SUMMER PROGRAM				

B. INDICATE CURRENT COURSE (S) YOU ARE TEACHING THE APPLICANT: \_\_\_\_\_

C. PLEASE PROVIDE COMMENTS ON MOTIVATION, AMBITION, BEHAVIOR, PERSONALITY, ETC., WHICH YOU FEEL ARE PERTINENT TO THE STUDENT'S PERFORMANCE IN PREP. IF THE STUDENT FAILS TO SATISFY SOME ACADEMIC REQUIREMENT, PLEASE EXPLAIN IN DETAIL. ADDITIONAL COMMENTS MAY BE WRITTEN ON THE BACK.

\_\_\_\_\_  
 PRINTED NAME/TITLE

\_\_\_\_\_  
 TELEPHONE NUMBER

\_\_\_\_\_  
 TEACHER'S SIGNATURE

\_\_\_\_\_  
 DATE