

# T-STEM DESIGNATION OVERVIEW

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# Agenda

- Logistics
- Designation Purpose
- What is T-STEM
  - Grant vs. designation
- T-STEM Designation Application
- Timeline
- Questions

# PLEASE.....

- While you are muted for the webinar that doesn't mean we want you to be silent...
  - ▣ Type questions in the question window.
- A copy of this presentation will be sent to the email address used to register for this presentation



# Designation Purpose

# Purpose of Designation

- To maintain the integrity of the T-STEM Model and to ensure that T-STEM Academies:
  - ▣ Increase student achievement by engaging and exposing underrepresented students to innovative STEM instruction.
  - ▣ Provide a rigorous, well-rounded education; establish a personalized culture with the expectation that all students will achieve postsecondary success; and provide teacher and leadership development.



# What is T-STEM?

# What is STEM?

- STEM Education refers to the teaching and learning of STEM disciplines, in an integrated, intensive and applied fashion, to a level of rigor at least sufficient for college readiness without remediation.

# What is T-STEM?

- Targets traditionally underserved students and combines STEM instruction and postsecondary readiness.
- Focuses on student engagement and exposure to innovation and design and learning that models real-world contexts.
- Focuses on increasing the number of students who study and enter science, technology, engineering, and mathematics careers.



# Components of a T-STEM Academy

- ❑ Rigorous STEM curriculum
- ❑ Integration of technology throughout
- ❑ Interdisciplinary instruction
- ❑ Pathways for college and career readiness
- ❑ Extracurricular activities integrating science and math
- ❑ Community partnerships with institutions of higher education, T-STEM Centers and local businesses

<http://www.tstemblueprint.org/>

# Rigorous Curriculum

- Support for successful completion of a curriculum with rigorous math and science courses
- Project- and work-based, contextual learning with a global perspective
- Classrooms prepared to support spontaneous questioning and planned investigation

# Innovative Teaching Methods

- Use of technology across all disciplines
- Coaching-based professional development to better prepare math and science teachers
- Project based learning instruction
- Weekly common planning time for teachers
- External networking opportunities for teachers

# College and Career Readiness

- Potential to earn college credit through dual-credit, AP, or IB courses
- College readiness standards incorporated into core curriculum
- Individualized college and career planning through advisory periods and counseling
- Internships and capstone projects to promote career exploration



# T-STEM Academies

2006-current

Pathway to Becoming a T-STEM Academy

# 2006-2010 T-STEM Academies

- Campuses were selected to become T-STEM Academies through:
  - ▣ Competitive grant from TEA
  - ▣ Private grant from Communities Foundation of Texas (CFT)
- T-STEM Academies have been provided technical assistance and support by the Educate Texas (formerly the Texas High School Project) and the T-STEM Centers.



# T-STEM Designation 2011 - present

Pathway to Becoming a T-STEM Academy



# Grant vs. Designation

What's the difference?



# Grant vs. Designation

## Grant Process

- ❑ Competitive with other applicants- based ranking of score
- ❑ Limited by funding
- ❑ Funding directly to district for the campus
- ❑ T-STEM Blueprint (full)

## Designation Process

- ❑ Not competitive-based on an application score
- ❑ Not bound by funding
- ❑ No funding directly to district for the campus
- ❑ T-STEM Blueprint (abbreviated)



# Benefits of Designation

# Benefits of Designation

- Recognition as an approved T-STEM Academy
- Access to exclusive T-STEM Convenings
- Membership in the T-STEM Network
- Access to technical assistance
- Access to professional development exclusively for T-STEM designees
- Recognition for fidelity to T-STEM model

# Designation Timeline

- March 21<sup>st</sup>, 2014-Application released
- April 8<sup>th</sup>, 2014-Technical Assistance Webinar
- May 2<sup>nd</sup>, 2014-T-STEM Designation Application due to TEA
- June 2014-Notification of Designation status



Resources available

# New Applicants

- T-STEM Centers ([www.edtexas.org](http://www.edtexas.org))
  - ▣ Transformation 2013-Austin/San Antonio
  - ▣ South Texas T-STEM Center-Region 1
  - ▣ Texas Tech T-STEM Center-Lubbock
  - ▣ Aggie T-STEM Center-Texas A/M-College Station
  - ▣ Ingenuity Center-University of Texas, Tyler
  - ▣ University of Texas, Dallas T-STEM Center-Dallas
  - ▣ Southeast Regional T-STEM Center, University of Texas Medical Branch, Galveston

# Previously Designated T-STEM Academies

- Contact assigned leadership coach
- T-STEM Centers



# Review and Scoring



# Review and Scoring

Element	New	Currently designated
Application	❖	❖
Interview	As needed	As needed
Fidelity to Model	❖	❖
Performance during previous year	n/a	❖

# Reviewers are looking for....

- Evidence of fidelity to the T-STEM Blueprint model
- Evidence of activities to move along the continuum
- Required attachments

# Possible outcomes

- Fully designated
- Provisionally designated
- Denied



# Application



# Designation application

- Based on T-STEM Design Blueprint
  - ▣ Focuses on all 7 benchmarks
    - Mission Driven Leadership
    - T-STEM Culture
    - Student outreach and retention
    - Teacher Selection, Development, and Retention
    - Curriculum, Instruction, and Assessment
    - Strategic Alliances
    - Academy Advancement and Sustainability

# Designation application

- Focuses on specific program requirements and indicators detailed in the blueprint.
- Specific attachments
  - ▣ MOU with an IHE
  - ▣ Professional Development Plan
  - ▣ Signed agreements with local STEM businesses
  - ▣ Master Schedule

# 2 different applications

- T-STEM Designation Application
  - ▣ New campuses
  - ▣ Campuses that were “Provisionally Designated” in the 2013-2014 school year
- Renewal Designation Application
  - ▣ Campuses that were “Fully Designated” in the 2013-2014 school year

# Part 1 -Academy contact information

- ❑ Basic information about the campus
- ❑ Detailed partner information
- ❑ Signed by authorized school official



# Part 2-Background information

- Details regarding Academy
- Identification of Academy model
- Target population of students to be served
  - ▣ Place n/a in grades 6-8 if you are only serving students in grades 9-12



## Part 3 T-STEM Blueprint

# T-STEM Blueprint

- Benchmark 1-Mission-Driven Leadership
- Benchmark 2-T-STEM Academy Culture and Design
- Benchmark 3-Student Outreach, Recruitment, and Retention
- Benchmark 4-Teacher Selection, Development and Retention
- Benchmark 5-Curriculum, Instruction and Assessment
- Benchmark 6-Strategic Alliances
- Benchmark 7-Advancement and Sustainability

# Online application

[http://www.thetrc.org/TSTEM\\_2014](http://www.thetrc.org/TSTEM_2014)



# Helpful Hints

# Additional Resources

- Contact information for STEM Centers and the full T-STEM Academy Design Blueprint are available on the “Home” page of the application.

# Additional Resources

## Texas Education Agency

Application for New/Provisional T-STEM Designation

[Home](#) | [Guidelines](#) | [Application](#) | [Logout](#)

### I. The T-STEM Designation Process

### II. What are the benefits for schools that achieve T-STEM Designation?

### III. What resources are available to help me understand T-STEM Academies?

- Visit an existing T-STEM academy. All existing T-STEM academies are demonstration sites. Contact a T-STEM Academy to arrange a site visit. A list of Academies can be found [here](#).
- T-STEM Centers provide high quality STEM professional development and support to STEM Academies and schools interested in improving STEM programs. The 7 T-STEM Centers are located at education service centers or institutions of higher education. T-STEM Centers are able to provide technical support to campuses interested in implementing the T-STEM Academy model. A list of Centers is available here:
  - Aggie STEM Center, Texas A&M University, College Station  
<http://aggie-stem.tamu.edu/>
  - Southeast Regional STEM Center, UT - Medical Branch, Galveston  
<http://www.utmb.edu/tstem/>
  - Ingenuity Center, UT – Tyler  
<http://ingenuitycenter.org/>
  - Transformation 2013 Center, Region XIII ESC, Austin / Region 20 ESC, San Antonio  
<http://www.transformation2013.org/>
  - STEM Center of South Texas, Region 1 ESC, Edinburg  
<http://www.esc1.net/Page/444>
  - Center for STEM Education and Research, UT – Dallas  
<http://www.utdcser.org/>
  - Texas Tech T-STEM Center, Texas Tech University, Lubbock  
<http://www.depts.ttu.edu/tstem/>
- BEFORE YOU APPLY: review and internalize the full T-STEM Academy Design Blueprint [here](#).

# Viewing Program Requirements

- In order to view the Benchmark Program Requirements, one must click on the link on each Benchmark page.
- The requirements will appear in separate browser window.



# Viewing Program Requirements

**Texas Education Agency**

### Application for New/Provisional T-STEM Designation

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**SAVE**

## Contacts

## Background

## Benchmark1

## Benchmark2

## Benchmark

## Bench

## Benchmark 5

## Benchmark6

## Benchmark7

## Summary

## Summary

All required fields on this page are completed.

### Benchmark 1: Mission-Driven Leadership

### Benchmark 1 Program Requirements

Program Requirement 1.3.A. requires the use of data to drive design and decision making in a T-STEM Academy. Designated campuses will be required to meet or exceed "Implementing" on the rubric given in the "Benchmark 1 Program Requirements" link above. Data will be used to design student interventions, Annual Action Plan, and to inform teaching and learning aligned to the standards of the state of the first designated year.<

Describe below how the campus will meet or exceed this expectation.  
Please limit your answers to **500 words** or less.

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thetr.org/tstem/instructions.php?b=1

## Benchmark 1: Mission-Driven Leadership

### Program Requirements

1.2.C.	Develops and demonstrates support from an advisory board (AB) consisting of representatives from the Academy, school board, district, community, higher education, and STEM businesses to support and guide facility requirements, resource acquisition, curriculum development, internship, externships, and student/community outreach to ensure a successful 6-20 STEM academic and career pipeline.
1.3.A.	Integrates and assesses the level of mission-driven and data-driven decision making evident in the daily work of the Academy.
1.4.A.	Participates and collaborates with the T-STEM Centers and T-STEM coaches to support the transformation of STEM teaching methods, teacher preparation, and instruction to support continuous development and the achievement of long-term T-STEM goals.

### Key Elements for Success

- Job descriptions and roles for design team, leadership team, and advisory board
- Mission is posted and can be articulated by teachers, staff, students, key stakeholders, etc.
- MOUs with T-STEM Centers

	Developing	Implementing	Mature	Role Model
1.2.C.	Advisory Board (AB) established.	AB positions and subcommittees are identified.	AB develops innovative and creative approaches to support Academy mission vision.	AB addresses major shifts in STEM, educational standards, industry expectations, and analyzes SWOT of Academy, resulting in measurable action items.
1.3.A.	Little or no evidence of data-driven and mission-driven decision making.	Data is used to design student interventions, Annual Action Plan (AAP), and to inform teaching and learning aligned to the mission.	Teachers work interdependently as teams to review data across content areas, develop targeted interventions, and develop common formative assessments.	The Academy's continual analysis of results for improvement is critical to the school's system of interventions and culture of celebration.

# Viewing Application as PDF

- The application can be downloaded as a PDF for reviewing purposes.
- The applicant must simply click the link at the top of any page.

# Viewing Application as PDF

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**[Benchmark1](#)**

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[Benchmark5](#)

[Benchmark6](#)

### Benchmark 1: Mission-Driven Leadership

[Benchmark 1 Program Requirements](#)

- Program Requirement 1.3.A. addresses the use of data to drive design and decision making in a T-STEM Academy.
- Designated campuses will be expected to meet or exceed "Implementing" on the rubric given in the "Benchmark 1 Program Requirements" link above (Data is used to design student interventions, Annual Action Plan, and to inform teaching and learning aligned to the mission) by the end of the first designated year.<

Describe below how the campus will meet or exceed this expectation.  
Please limit your answers to **500 words** or less.

Word count: 213

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# Uploading MOUs

- MOUs are not uploaded until **Upload Successful** appears.

# Uploading MOUs

Contacts  
Background  
Benchmark1  
Benchmark2  
Benchmark3  
Benchmark4  
Benchmark5  
Benchmark6  
**Benchmark7**  
Summary

## Benchmark 7: Supporting Documents

### Program Requirements

The following documents must be submitted for fulfilling the submission requirements of this application:

- **One (1) IHE Memorandum of Understanding (MOU):** Memorandum of Understanding signed by an Institution of Higher Education (IHE) and the campus which includes a dual credit agreement. The campus MUST submit a current MOU that covers the 2014-2015 school year to meet the requirement.
- **One (1) Professional Development Plan:** Professional Development Plan detailing the types and frequency of STEM professional development that will be provided during the 2014-2015 school year for Academy staff. The plan should also include the entity providing professional development, which may include T-STEM Centers and/or other professional development providers.
- **One (1) STEM Business Community Industry MOU:** Copies of agreements with local STEM businesses and IHEs allowing students to participate in internship programs, capstone projects, or conduct field work (minimum of 1 agreement must be submitted).
- **One (1) 2014-2015 Master Schedule:** A copy of the Academy's proposed master schedule, demonstrating a commitment to STEM education, rigorous coursework including Dual Credit, AP, or IB courses, and a vertically and horizontally aligned curriculum.
- **One (1) Official Signature:** Official signature of a district or charter official authorized by the local board to bind the applicant organization in a legally binding contractual agreement.

The applicant must indicate whether the uploaded document is FINAL (covers the 2014-2015 school year) or a DRAFT (does NOT cover the 2014-2015 school year) using the options in the designated upload space. It is strongly encouraged that applicants upload a FINAL document prior to submission. If the application is submitted with DRAFT documents attached, the FINAL version should be submitted to TEA as soon as possible.

The applicant must verify that the Master Schedule covers the 2014-2015 school year.

The applicant must download and print the page given [here](#), fill it out and have it signed by an authorized school district or charter official, and scan and upload the signed document in PDF format in the designated upload space.

Once the application is submitted, the final version will need to be submitted to TEA at [tstem@tea.state.tx.us](mailto:tstem@tea.state.tx.us) for any attachment that was submitted in draft form. Final designation determination is contingent upon receipt of all attachments in final form.

All documents must be in PDF format of sizes less than 10MB. PDF titles may not contain periods. Upload one document at a time. Please be patient as uploads could take a few minutes, depending on the size of the file, your Internet connection speed, and our server load at time of upload. For quickest upload speeds, minimize the sizes of uploads.

Upload successful!

IHE MOU uploaded!

[View uploaded document](#)

Upload Master Schedule

No file selected.

# Official Signature

- Applicants must download the Official Signature page and have it signed by an authorized school district or charter official. The signed document must be uploaded in Benchmark 7.



# Official Signature

Contacts  
Background  
Benchmark1  
Benchmark2  
Benchmark3  
Benchmark4  
Benchmark5  
Benchmark6  
Benchmark7  
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Upload successful!

# Summary Page

- The Summary Page lists sections of the application that are missing information. The application cannot be submitted until all fields are complete.



# Summary Page

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[Benchmark6](#)

[Benchmark7](#)

**Summary**

### Summary

Below is a list of pages of your application that are missing information. Return here once all fields are complete to submit the final application. You may view a PDF version of your application at any time by clicking the link in the top right corner of your browser window.

- Benchmark 1
- Benchmark 5



# Final Submission

- The application is not complete until you click on the “Final Submission” button after all fields have been completed.
- Simply completing all sections **DOES NOT** mean the application has been submitted.

# Final Submission

## Texas Education Agency

*Application for New/Provisional T-STEM Designation*

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[Benchmark4](#)

[Benchmark5](#)

[Benchmark6](#)

[Benchmark7](#)

**Summary**

### Summary

All fields of your application are complete! Review each page carefully, and if everything looks all right, you may submit the application using the button below. Note that once the application is submitted, **no further changes are allowed**. You will, however, receive a PDF version of your application in case you wish to reference it later.

**FINAL SUBMISSION**





# FAQ's

# Questions.....

- In reading the designation application part 3, I'm unclear on the definitions of a few of the terms. Where can I find more additional information?
  - ▣ Refer to the [full T-STEM Blueprint](#). A glossary of terms is included in the back of the full T-STEM Blueprint

# Questions.....

- Will every campus that applies for designation receive designation?
  - ▣ Not necessarily. Applications are reviewed and scored by multiple reviewers. The designation application must demonstrate an applicant's ability to implement the T-STEM model with fidelity

# Questions.....

- If we attend the webinar and site visit, are we obligated to submit the designation application?
  - ▣ No. Not all campuses may be ready to apply for T-STEM Designation at this time. The webinar and site visit are opportunities to learn more about the T-STEM Academies and the T-STEM Blueprint. Each campus should determine if designation is right for their campus.

# Questions.....

- If a campus is designated, does that mean they will receive grant funding if it becomes available?
  - ▣ No. The grant process and the designation process are entirely separate processes. Should grant funds become available, all grantees will be required to apply for and become designated.



# Questions.....

- What is an MOU?

- ▣ A MOU is a Memorandum of Understanding. This critical document between parties describes the agreement of all parties. It ensures that each party has a clear understanding of their roles and responsibilities. Many districts have existing MOUs with entities that can be used as an example. Additionally T-STEM Centers have used MOUs for several years with T-STEM Academies.

# Questions.....

- Is a site visit required?
  - ▣ No a site visit is not required. It is an option available for potential designees to learn about the T-STEM Blueprint in action at an established T-STEM Academy.
  - ▣ All T-STEM Academies are demonstration sites. Please work with one of the 7 T-STEM Centers to schedule a visit with a T-STEM Academy in your local area.

# Questions.....

- We want to apply for designation with the intent that if designated we will operate as a magnet school. Is this acceptable?
- ▣ No, T-STEM is not a magnet program. T-STEM Academies should serve all students with a special emphasis on underrepresented populations (economic disadvantaged, at-risk, ELL, and first generation college goers)

# Questions.....

- There isn't enough space in the application to respond. Is it acceptable to add additional pages?
  - ▣ No. Responses are limited to the space provided. There is a word count in each section of the application. Your application will be marked incomplete if you exceed the word limit.

# Questions.....

- Are there any browser requirements?
  - ▣ Yes. You must be using Google Chrome 31.0+, Safari 7.0+, Mozilla Firefox 25.0+, Internet Explorer 10.0+ to complete the application. Be sure to disable any pop-up blockers you have running.

# Additional questions

[tstem@tea.state.tx.us](mailto:tstem@tea.state.tx.us)