

# Proposal Concept Form

## TEEM UP for K-12

**Institution:**

University of Houston downtown

**Team Members (names & e-mails):**

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**Area of Focus (in-service, pre-service, student outreach, etc.):**

Curriculum development for k-12

**Project Description:**

Assist school district in development of curriculum for technology/engineering in the middle schools. Using the resources of the school district, museum and university we promote this development.

### 1. Needs Assessment (communities served)

Communities served are the middle school students, parents and teachers

### 2. Project Background / Rationale / Supporting Research

It is clear that current curricula have not taken into consideration the developments in technology over the last 100 years. They do not present technology and its integration with other subjects nor do they present the excitement of engineering and its potential for our students.

### 3. Project Organization / Management / Partnerships

**Center for computational science at the university of Houston downtown, Houston museum of natural science, Houston independent school district , spring branch independent school district, galena park independent school district**

#### **4. Specific Objectives**

Implement engineering/technology subject matter in the middle school environment.  
Provide teacher training for implementation  
Engage local engineering/technology firms in the development of curricula, training, engineering day activities and mentoring  
Provide on line accessibility to key engineering websites

#### **5. Marketing Plan**

Provide parent awareness  
Engage engineering firms  
Provide pre engineering experiences through summer and academic year precollege programs.

#### **6. Budget / Funding Strategy / Sustainability**

Seek rfps from nsf /dod/dof education...  
Need funding for curricula development, teacher training and new equipment

#### **7. Timeline**

April 2004, visit with key school administrators to encourage participation

May /june 2004 develop proposal  
October,2004...submit proposal  
September 2005 begin implementation

#### **8. Evaluation / Accountability**

**Pre/post assessment on knowledge of engineering /technology for student and faculty**  
**Long range tracking of students participating in the program**