# About CMAST

Grambling State University established the Center for Mathematical Achievement in Science and Technology (CMAST) in the fall of 2005. The Center seeks to increase the number of underrepresented minority graduates with majors in science, technology, engineering, or mathematics (STEM) through the reform of all introductory STEM courses, research in education, summer programs, scholarships, undergraduate research, and mentoring. It enhances the role and function



of science and mathematics in the curriculum and significantly raises the profile of study and career opportunities in STEM fields. The Center supports research on teaching methodologies and strategies of introductory college-level STEM courses and supports research in problem-based learning strategies, which involves student participation





Chemistry

Computer Science

Engineering Technology

Mathematics & Physics

Website:

www.gram.edu/cmast



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# Components of CMAST

# High Ability

#### High school juniors!!

Do you want to earn up to <u>6 hours of college credit?</u> Attend the High Ability Program during GSU's summer session II. Some participants will receive complimentary housing, meals, and tuition, plus each participant receives a **\$200 stipend**! Students that return to GSU as college freshmen and major in a STEM field are eligible for a <u>\$6000 scholarship</u>!



# STCM Teacher Preparation Program

Earn a <u>BS degree</u> in a STEM field while simultaneously getting <u>certified to teach K-12</u>. Gain first hand teaching experience with student teaching class and service learning projects with the Grambling Laboratory schools. <u>*Partial scholarship*</u> support will be provided!

### Faculty/Professional Development Activities

STEM *faculty* can attend workshops that focus on developing innovative teaching strategies that are more effective than the traditional lecture styles of STEM courses.



High Ability STEM Learning Community Rising Sophomore Academy STEM Teacher Preparation Program Faculty/Professional Development Activities Restructuring of Introductory STEM Courses





# STCM Learning Community

#### College freshmen & transfer students come & join!

A great way to <u>meet fellow STEM majors</u> while developing strong foundations in science through shared classes, social activities, enrichment activities, peer academic coaching, and faculty mentoring. All participants receive

<u>\$500 textbook awards</u>!



# Rising Sophomore Academy

A <u>3 week, summer research program</u> at GSU for students that have completed their **freshman year in college.** Students make connections with what they learn in class while gaining research training. Participants receive complimentary housing, meals, a <u>\$650 stipend</u> and a <u>\$500</u> <u>textbook award</u> the following fall semester. Participants also qualify for a <u>\$6,000 scholarship</u>.





## Restructuring of Introductory STCM Courses

CMAST works to develop ways to infuse <u>problem-based</u> <u>-learning strategies</u> into introductory STEM courses to keep students engaged in the classroom; therefore, increasing their *confidence*, *performance* and *success rate*. Peer mentoring programs and special research projects are also included.

