

STEMatics Grant - Goals, Objectives and Activities

- **Goal 1:** Strengthen the Learning Engagement of 2,500+ STEM students (cohorts and beneficiaries) annually; 20% or 2,000 first-time full-time degree seeking STEM students, particularly among at-risk low-income and/or Hispanic students (30% or 600) during the 5-year period.
 - **Strategy 1:** To Engage Students through Active Advising, Learning & Culturally Sensitive Teaching
 - **Activity 1:** Testing Supplemental Instruction in Gatekeeper Courses (Randomized Controlled Trial)
 - **Activity 2:** Implement Intensive Academic, Transfer & Career Advising
 - **Activity 3:** Professional Development for Culturally Sensitive Teaching/Enhancements of the STEM curriculum to target the needs of a culturally diverse student population
 - **Activity 4:** SI will be expanded to include the online platform, allowing access to students with limited on-campus interaction.
- **Goal 2:** Broaden the role of 20 four-year and industry partners, as well as government agencies, to become joint stewards of student success.
 - **Strategy 2:** To Expand the Campus' Reach Into the Hispanic, Corporate, and Higher Education Communities
 - **Activity 5:** Development of a STEM Student Scholars Program in partnership with 4-year colleges and industry through the Statewide Hispanic Chamber of Commerce of New Jersey
 - **Activity 6:** Introduction of Engineering Design courses to streamline Engineering student transfer
 - **Activity 7:** Utilize the STEM C2 Research Summit as a platform to showcase Hispanic STEM student talent and Industry Representatives
- **Goal 3:** Equip STEM students with the financial empowerment necessary to persist through degree completion.
 - **Strategy 3:** To Mitigate Financial Burdens
 - **Activity 8:** Development of Dual Admissions Agreements with four- year colleges and universities.
 - **Activity 9:** Utilization of Open Education Resources (OER) to adopt free vetted on-line textbooks.
 - **Activity 10:** Introduction of financial aid and literacy counseling.
 - **Activity 11:** Free Accuplacer preparation (EdReady) and Gateway course boot-camps.