

Kentucky State University STEM Initiatives

1. STEM Degree Programs:

- **Master of Science in Aquaculture/Aquatic Science**
- **Master of Science in Computer Science Technology**
- **Bachelor of Arts in Mathematics with four options**
 - **Pure Mathematics**
 - **3/2 Applied Mathematics/Pre-Engineering**
 - **Mathematics Education with Secondary Teaching Certification**
 - **Actuarial Science**
- **Bachelor of Science in Biology with four options**
 - **General Biology**
 - **Biology Education with Secondary Teaching Certification**
 - **Pre-Health Professions**
 - **Biotechnology**
- **Bachelor of Science in Chemistry**
- **Bachelor of Science in Computer Science with four Options**
 - **Computer Science Mathematics Option**
 - **Computer Science Business Option**
 - **Information Technology Web Development Option**
 - **Network Engineering Option**
- **Master of Science in Biomedical Sciences**
 - **This new degree program is being developed with the University of Louisville.**
- **Master of Science in Environmental Studies**
 - **This new degree program is being developed by KSU.**

2. Research and Grant Projects

- **NSF TEAMS (Teams Enhancing Access for Minorities in Sciences)**
 - **Create a pathway to identify and recruit high potential high school minority students to STEM area at KSU through two summer bridge programs**
 - **Create a solid academic learning community**
 - **Generate undergraduate research opportunities**
 - **Foster student awareness of STEM graduate programs through the graduate Bridge program.**
- **TEAMS II (Proposal Submitted – December, 2006)**
- **AMSP (Appalachian Mathematics and Science partnership)**
 - **As one of the higher education partners KSU has actively participated in this program.**

- **KY Center for Environmental Education**
 - **This center, under the operation of the KSU Land Grant program, includes student based activities as well as professional development opportunities for middle school science teachers.**

- **Research Opportunities**
 - **KSU's Land Grant Program offers STEM majors numerous opportunities to participate in research activities through the 23 active research projects supported by USDA funds and Capacity Building Grants.**

3. STEM Scholarship Opportunities

- **Hach Scholarship for chemistry majors**
- **NOYCE Loan/Scholarship for Science/Mathematic Teachers**
- **LSAMP: Kentucky-West Virginia Alliance for Minority Participation through University of Kentucky**
- **Transportation Cabinet - Civil Engineering Scholarships**
- **MASC scholarships for students majoring in mathematics, pre-engineering, biology and chemistry.**

4. STEM Articulation Agreements with BCTC

- **The University has a total of 13 articulation agreements with BCTC offering a variety of programs in computer science, information technology, mathematics, biology, and chemistry.**