



Regional STEM Pathway Initiative

February 1, 2010

Background of the STEM Pathway initiative

2007 – 2009

- Micron becomes flagship advanced manufacturing site in state.
- NOVA provides training program for Micron employees.
- NOVA is awarded \$1M through the Governor's Opportunity Fund to support Micron.
- NOVA and Micron support STEM (Science, Technology, Engineering and Math) activities in 3 regional school districts.
- Need established for enhanced STEM focused curriculum in region.
- NOVA commits to work with regional school districts to improve college readiness of graduates.
- NOVA's Pathway to the Baccalaureate Program is introduced to 3 regional school districts.
- Dr. Templin proposes a NOVA partnership with 3 school districts, industry and GMU to implement and sustain a STEM Pathway initiative.

Outcomes of the STEM Pathway Initiative

- To meet the demand for a trained workforce in advanced technologies;
- To increase and enhance secondary and post-secondary opportunities in STEM disciplines;
- To improve the college-readiness of the region's high school graduates;
- To implement the Pathway to the Baccalaureate program in the region;
- To establish an effective partnership between the school districts, industry, NOVA and GMU to sustain the initiative.

Pathway to the Baccalaureate Program

- In 2011-2012 it is projected:
480 high school students will be actively engaged through the STEM Pathway program annually

- In 2013-2014 it is projected:
over 1,100 students will be in the STEM pipeline
480 in the high schools
660 at NOVA and
18 will have graduated from NOVA

- In 2015-2016 it is projected:
nearly 1,600 students will be in the pipeline
480 in the high schools
1,607 at NOVA
485 graduates from NOVA
545 students will be enrolled at GMU and
200 GMU students will graduate annually

Activities of the STEM Pathway Initiative

- Professional development opportunities for teachers of STEM curriculums;
- Dual enrollment courses with a STEM focus in all three school districts;
- Expanded regional employment opportunities in the STEM fields;
- Part-time employment and internship opportunities for students in STEM programs;
- STEM-focused activities/camps that stimulate student interest and awareness in advanced technologies;
- Pathway to the Baccalaureate Program activities and student support services;
- Aligned secondary to post-secondary STEM curriculum and program offerings.

Proposed Staffing Plan for the STEM Pathway Initiative

- Regional Pathway Director
- CTE Coordinator
- Pathway to the Baccalaureate Counselors

Who are the Partners?



Questions?