

## S.T.E.M. ACADEMY REQUIREMENTS:

Application—9th Grade Year

### ELA (4 credits)

- ELA 9/honors
- ELA 10/honors
- ELA 11/JCC
- Technical Writing/JCC

### Social Studies (4 Credits)

- Global 9/honors
- Global 10/honors
- US History /AP
- Gov/Eco or Iroquois Studies

### Math (3 credits)

- Integrated Algebra
- Geometry
- Algebra II/Trigonometry

### Science (3 credits—minimum 3 course from list)

- Living Environment
- Biology II—Pre-AP
- Earth Science
- Chemistry

### REQUIRED ELECTIVES

- Minimum of 4 course in chosen STEM field
- History of Invention
- Data Acquisition and Analysis
- Senior Project and Internship

## *Hot S.T.E.M. Fields*

These are some of the highest paying career fields right out of college and their mid-career salary (salaries are \$80,000 or higher)

1. **Biomedical Engineering**
2. **Biochemistry**
3. **Computer Science**
4. **Software Engineering**
5. **Environmental Engineering**
6. **Civil Engineering**
7. **Petroleum Engineering**
8. **Applied Mathematics**
9. **Mathematics**
10. **Physics**

## Gowanda High School

### S.T.E.M. Advisory Committee

Dr. Robert B. Anderson, Principal  
Ms. Beth Westereheide, Director of Guidance  
Ms. Lois Piscitelli, Science Chair  
Mr. James Reeves, Math Chair  
Mr. Tom Partridge, Technology

## Gowanda High School

# S.T.E.M. ACADEMY

*Learning without thought is labor lost;  
thought without learning is perilous.  
Confucius*



**10674 Prospect Street  
Gowanda, New York 14070**

**Tel: 716 532 3325**

## *S.T.E.M. Academy*

S.T.E.M. (Science, Technology, Engineering, and Mathematics) is a National educational focus. In the 21st Century global economy, careers in the S.T.E.M. fields are essential for the United States to remain economically competitive. However, our Nation, at the current time, is not producing enough qualified candidates in these fields to meet the increasing employment demand.

With this National emphasis and an exciting new science facility, Gowanda High School has an unique opportunity to provide curriculum in the S.T.E.M. fields and associated practical experiences to prepare our students for the demands of the 21st century college and career readiness.

### **WHY AT GHS?**

TO APPEAL TO THE INTERESTS OF TODAY'S STUDENTS AND TEACH THEM THE NECESSARY SKILLS TO MEET THE DEMANDS OF THE 21ST CENTURY ECONOMY.

### **PROGRAM ELEMENTS:**

- SENIOR PROJECT/ INTERNSHIP ALLIGNED WITH S.T.E.M FIELD OF INTEREST
- JOB SHADOWING
- UNIQUE S.T.E.M. ELECTIVES
- FUTURE ADVANCED PLACEMENT COURSE OPPORTUNITIES
- ADVANCED REGENTS DIPLOMA WITH STEM ENDORSMENT

### **Benefits of S.T.E.M. Participation**

- Advanced Preparation for College and Career—STEM endorsement
- Internship in S.T.E.M. field of study through an Internship
- Opportunity to Earn College Credits (Jamestown Community College and/or Advanced Placement)

- Hands-On Experience with a Personal Faculty Advisor for Senior Project
- Specialized S.T.E.M. Electives

### **When and How to Apply?**

- Applications available February 1, 2013
- Applications due February 28, 2013
- HS/STEM showcase March 26, 2013: 6:00-7:30 pm
- Committee Interview, March 2013
- Recommendation to program, April 2013 and guidance offices.