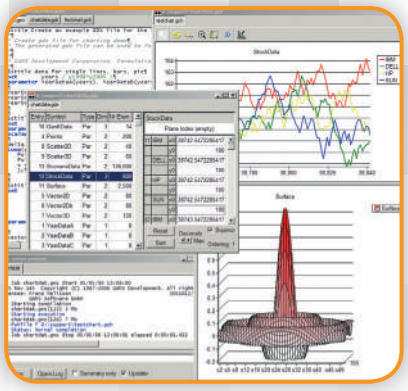
GAMS

➤ OPTIMIZATION ➤

GENERAL ALGEBRAIC MODELING SYSTEM

High-Level Modeling

The General Algebraic Modeling System (GAMS) is a high-level modeling system for mathematical programming problems. GAMS is tailored for complex, large-scale modeling applications, and allows you to build large maintainable models that can be adapted quickly to new situations. Models are fully portable from one computer platform to another.



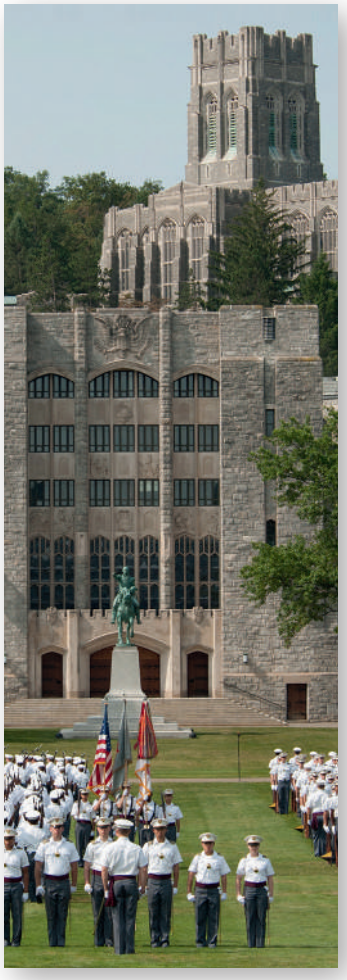
GAMS Integrated Developer Environment for editing, debugging, solving models, and viewing data.

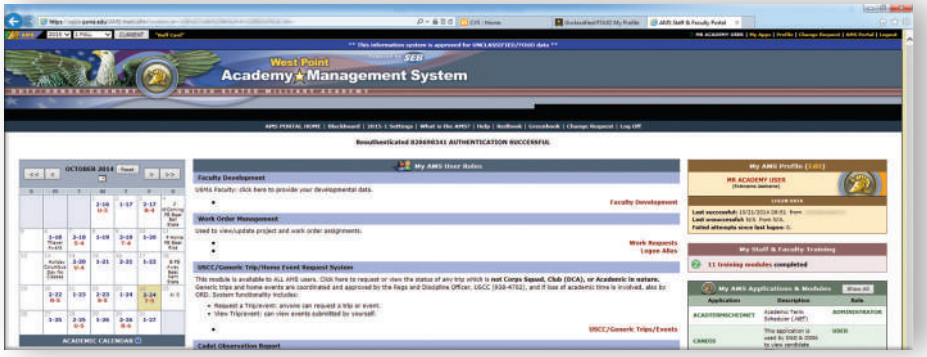
State-of-the-Art Solvers

GAMS incorporates all major commercial and academic state-of-the-art solution technologies for a broad range of problem types.

West Point Academy Scheduler

Since 1802 the United States Military Academy (USMA) at West Point has trained cadets to become Army officers. Every year USMA schedules more than 250 courses and examinations for 4,000+ cadets. Each cadet is given a careful balance of academic, military, and physical education. Student-centric planning, unique requirements, and a vast catalog of business rules makes course and examination scheduling a very unusual and challenging problem. Since 2001 USMA has used GAMS web-based models to support their complex scheduling process. Originally developed on-site by GAMS experts, a GAMS application is now part of West Point's academy management system. This application assigns courses to students based on a variety of constraints, identifies conflicts, and suggests schedules for each student's term-end examinations. Combined with human intervention, the GAMS application has reduced a previous scheduling process which required several weeks to the work of a few hours.





For further information please contact David Monroe - David.Monroe@usma.edu