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Randy Boucher* (randy.boucher@usma.edu), Dept of Math Sciences, U.S. Military Academy, 646 Swift Road, West Point, NY 10996, and Janet Braunstein and Donald Outing. The Advanced Mathematics Program at the United States Military Academy: Exposing Students to Technology through a Rigorous Mathematics Curriculum. Preliminary report.

The USMA Advanced Mathematics Program is a one-year program designed for a subset of freshmen with prior calculus experience. It consists of a rich treatment of multi-variable calculus, including infinite series and vector calculus, followed by an introductory ordinary differential equations course. Historically, two-thirds of these students choose a Science, Technology, Engineering, or Mathematics major. Over the past fifteen years, the integration of technology into the classroom has changed in many ways in our program. In this presentation, we will provide a brief history of our efforts to integrate technology into our curriculum. We will discuss lessons learned and the road ahead. We will focus on how we currently teach with technology and require students to learn with technology. Finally, we will share a few successful strategies for assessing the technological part of the curriculum. (Received September 16, 2008)