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Donald G Hartig* (dhartig@calpoly.edu), Prof. D. Hartig, Dept of Mathematics, Cal Poly State Univ, San Luis Obispo, CA 93407, and Russell M Cummings (rcumming@calpoly.edu), Prof. R. Cummings, Dept of Aerospace Engineering, Cal Poly State Univ, San Luis Obispo, CA 93407. An Integrated Course in Advanced Engineering Mathematics: A Multimedia Approach.

A selected group of Cal Poly engineering students are required to take an integrated course in advanced engineering mathematics that is team taught by faculty in the Mathematics Department and the School of Engineering. Lectures are given in a multimedia classroom with ready access to the internet, PowerPoint, pdf files, and Maple worksheets. These sessions are also televised to Vandenberg Air Force Base to a group of officers and engineers enrolled in Cal Poly's Aerospace Engineering program. Professor Hartig will describe this course from a mathematician's perspective and Professor Cummings will present the engineer's point of view. We will visit the course web site, demonstrate some of the more interesting Maple worksheets that were developed for the course, and discuss solutions to some of the problems that are associated with the delivery of course material via television and the internet. (Received September 29, 2000)