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Same Courses, New Questions

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At ETS, September 2014 will mark the 15th anniversary of using ─ campus wide ─ Texas Instruments CAS technology. Nspire CAS technology is used at ETS since September 2011 and has two great advantages over preceding products (TI-92 Plus, Voyage 200). First, it comes in two platforms, handheld and software; students have to buy the "combo" for their 4 years of undergraduate studies. Second, Nspire is more than a computer algebra system: geometry, list and spreadsheet, data and statistics, Vernier Dataquest are included and used by some science/finance professors.

Students are allowed to use their *handheld* to solve almost all *applications* problems during *exams*. During a lecture, some students will prefer to use the software version of Nspire CAS on their laptop: no need to go to the PC lab to do things such as finding and plotting a Fourier partial sum, applying Euler's method, computing inverse Laplace transforms, using matrices to produce and visualize described composite 2D transformations, plotting parametric surfaces and so on. Even though the curriculum is still similar as in the past, some exam questions or problems in homeworks have changed and request the use of technology. In this talk, we will give specific examples of this type in some areas of engineering mathematics.

Keywords
Engineering mathematics, use of CAS.