Participants will learn:

• To make intelligent purchase decisions.
• To use digital and 3D radiography and associated implant and treatment planning.
• To use digital cone beam technology for making implant treatment plans.
• To use Conebeam, digital impression systems and CAD/CAM systems.

With more than 600 undergraduates, the faculty is currently one of the largest dental learning institutions in the South-East Asian country. Prof. Passari Nisalak, dean of the faculty, said that the new technology, developed and marketed by US manufacturer Image Navigation, is going to enhance the learning experience for students through the simulation of a full clinical environment.

By using DentSim simulators, students will be able to develop their cognitive and motor skills in dental surgery, as well as other fields, such as implantology, prosthodontics and endodontics, he said.

The school is estimated to have invested several million US dollars in the technology. The DentSim system is based on GPS technology and uses a camera to track a set of LEDs that send infra-red signals, giving students live feedback in a virtual simulation of a treatment area that includes a manikin with an adjustable head and lifelike mouth.

The system has been used in dental education since 1998, when the University of Pennsylvania installed the first units in its School of Dental Medicine. It is backed by 56 studies and over 100,000 hours of student learning, the manufacturer said. According to DentSim figures, over 400 DentSim units are currently in use worldwide, primarily in dental schools in the US, Japan and Taiwan.

“By integrating state-of-the-art technology, advanced expert performance teaching methodologies and an innovative curriculum, Mahidol is setting a new standard for dental education,” Image Navigation CEO Lawrence Ostfeld commented in view of the latest acquisition.

Virtual methods have increasingly found their way into dental education. Along with SimDent, a few other systems are available on the market, including the Simodont trainer by Dutch technology provider Moog, which is based on high-fidelity flight simulation technology and used by a number of dental schools in Australia.

Thai university backs virtual reality simulation technology