In response to new federal guidelines regarding routine commercial use of small, unmanned aircraft systems (sUAS or drones), the School of Engineering and Computer Science — in collaboration with Professional and Continuing Education (PACE) — partnered with DCT Aviation of Waterford, Michigan, to develop a two-course sUAS Remote Pilot Certificate program.

The two-course program provides basic airman knowledge and lessons in hands-on flying skills in order for participants to apply for and pass the Federal Aviation Administration’s sUAS Remote Pilot Certificate Test. Although some of the program’s components overlap with commercial flying, participants are asked to please keep their feet on the ground.

“This training is strictly aimed at achieving the remote pilot license for sUAS commercial usage,” explains Lori Crose, director of PACE. “Once participants take the FAA
authorized sUAS Remote Pilot License test and pass, they will receive their sUAS Remote Pilot License directly from the FAA and may fly sUAS for compensation or commercial usage.”

Electrical engineering professor Ka C. Cheok, Ph.D., and Steve Durecki, owner of Great Lakes Aerial Video Services, recognized a need for the certification program five years ago. Together, after developing an initial curriculum, they approached Crose about implementation. However, due to a rapidly changing and burgeoning industry, the target market and FAA requirements dramatically changed.

“At that point, OU adjunct faculty and flying enthusiast Nick Zorka joined the team. Together they redefined a curriculum to meet the industry need,” Crose explains. “Then the team reached out to partner with DCT Aviation to tailor an educational examination preparation format that is leading to success.”

Program participants have a 100 percent pass rate on the FAA authorized sUAS Remote Pilot License Examination. Crose recommends a Bachelor of Science in electrical engineering or computer engineering for those interested in learning more about the mechanics behind drones.

“OU also offers a master’s in mechatronics or master’s in electrical and computer engineering (ECE) that would provide curriculum to design or develop sUAS,” she explains. “A few current examples where sUAS are used today include, movies, video, police search and rescue, thermal imaging for agricultural, inspection and fire control, real estate photography, surveying land and in the military.”

As the popularity of drones reaches new heights, technical courses such as sUAS maintenance, servicing and businesses management could be on the horizon, says Crose.

“We speculate that hobbyists may also be required to become remote pilot licensed in the future,” she says. “So, we see possible growth in that area.”

For more information about sUAS Remote Pilot Certificate program, please visit the OU PACE webpage at oakland.edu/secs.