Instructor Helps Shape Statewide Curriculum

Lee College instructor contributes expertise to statewide curriculum review

Collaboration is critical for strong workforce education, and Lee College faculty members are contributing their expertise to help shape what that looks like across Texas.

Andrew Masterson, a Lee College cybersecurity instructor who recently completed his second year at the college, joined cybersecurity and information technology instructors from colleges across the state as a subject matter expert at the Workforce Education Course Manual (WECM) course maintenance workshop.

Together, the educators reviewed course descriptions and student learning outcomes for cybersecurity and digital forensics courses, helping ensure workforce education keeps pace with evolving technologies and industry needs.

WECM provides the framework community colleges use to develop and maintain workforce education courses. During the workshop, subject matter experts reviewed existing course information to identify outdated descriptions, clarify learning outcomes and ensure courses continue to reflect industry expectations. Recommendations from these workshops have the potential to affect more than 50 community colleges across Texas.

For Masterson, the experience was an opportunity to collaborate with fellow cybersecurity educators, compare programs and gain a broader perspective on emerging workforce needs.

"One of the biggest takeaways was getting to connect with other cybersecurity instructors and see what their programs look like," Masterson said. "It helped me see where our program stands and recognize opportunities for collaboration."

Those conversations also reinforced the growing need for cybersecurity education in areas such as artificial intelligence and industrial control systems security. The latter is particularly relevant to our local industries, including oil and gas, where cybersecurity extends beyond traditional office networks to the systems that help operate entire industrial plants.

"When people think about cybersecurity, they often think about networking and office buildings," Masterson said. "But industrial control systems extend cybersecurity into places like oil and gas facilities, where protecting those systems is critical."

Lee College is already working to expand its offerings in emerging areas, including an artificial intelligence-focused cybersecurity course. Masterson hopes to build on what he learned through the statewide workshop as the college continues developing programs that respond to evolving industry needs.

His commitment to hands-on learning also extends beyond the classroom. After developing and teaching a cybersecurity camp through Lee College's Kids at College program, he hopes to expand those opportunities with additional workshops for middle and high school students.

Drawing inspiration from a recent Wi-Fi hacking workshop at Lamar University, Masterson is exploring ways to bring similar hands-on learning experiences to Lee

College. His goal is to have a new workshop ready for Cybersecurity Awareness Month in October 2027.

In the classroom, Masterson emphasizes that technical knowledge is only one part of succeeding in the IT field. He encourages students to remain curious, develop strong problem-solving skills and remember the importance of working well with others.

"There's always going to be someone who knows more than you do," he tells his students. "Always do the best you can, pay attention to detail, and develop good problem-solving and critical-thinking skills. Those are going to be some of the best tools in your toolbox."