CCI Capstone Alignment for the UNC Charlotte Cybersecurity Clinic

The Cybersecurity Clinic (4010 / 4415 / 6415 / 8415) fulfills the College of Computing and Informatics (CCI) capstone requirements by serving as an integrative, client-facing experience where students synthesize their cumulative academic knowledge to address real-world security and AI governance challenges for under-resourced community organizations.

Core Alignment with CCI Capstone Objectives

- **Culminating Applied Knowledge:** Rather than working in simulated environments, student consultants apply coursework in technical network defense, vulnerability scanning, threat modeling (e.g. STRIDE, MITRE ATT&CK), and AI risk frameworks (e.g. NIST AI RMF 1.0) to assessments of live organizational infrastructure.

- **End-to-End Client Consulting Lifecycle:** Student teams take full professional ownership of a real-world engagement from kickoff to hand-off, producing professional consulting deliverables: a Client Engagement Letter, internal Mid-Point Progress Report, Final Risk Assessment Report, and Final Client Presentation.

- **Socio-Technical Problem Solving & Translation:** Students bridge technical vulnerability assessment with qualitative field discovery (e.g. staff interviews, shadow AI auditing, and process mapping), translating complex technical risks into plain-language, budget-conscious mitigation playbooks for non-technical leadership.

- **Team Leadership & Project Management:** Operating within a structured consulting hierarchy, graduate students serve as Senior Consultants – managing team workflows, leading client discovery sessions, conducting quality assurance over findings, and enforcing operational security (OpSec) protocols.

Capstone Verification & Individual Culminating Report

To satisfy Capstone credit requirements, students must complete a formal **Individual Culminating Synthesis Report** at the end of the term. This individual deliverable requires students to:

1. **Integrate Degree Coursework:** Articulate how specific concepts, frameworks, and technical skills from their broader CCI degree program were directly applied during their client engagement.

2. **Evaluate Professional Agency & Growth:** Reflect on their development in qualitative discovery, technical reframing, client boundary-setting, and risk communication.

3. **Document Personal Impact:** Provide a self-assessment of their individual contributions to the client's final cybersecurity and AI posture, demonstrating their readiness to enter the workforce as technical leads and public-interest technology consultants.