

Proposed Title Change:

Computer Education License to Computer Science License Program

At the Indiana Department of Education, they have recently changed their license title from Computer Education to Computer Science (CS). The license has changed from a broader license that focused with basic technology integration and computers and teacher professional development, to one focused more heavily on computer science. This means focusing on specific computer science concepts and courses. While the W435 leadership course is still useful in general, it is not useful for this particular license. In addition, the computer education license was previously earned by passing the Pearson 013 test (which integrated many aspects of technology integration, such as network installation and best literacy approaches with technology). The new test being used is the Praxis 5672. This test is focused completely on CS concepts and practices. Therefore, if candidates wish to teach CS at the secondary level, we are providing an optional one-credit hour course focused on test preparation. We also have updated the course titles and descriptions to reflect this new focus.

In addition, this change in the format also allows candidates to start this program later in their program. Before, this sequence sometimes required them to complete the courses over 7 semesters (if they took W200 in the fall and had to wait to take W210 until the following fall). This proposed revised program can be implemented in a 4-semester sequence instead. We also have changed the courses to be available both face-to-face, and online, to increase our enrollment and allow candidates to register for our courses from other places.

Program of Study

CURRENT Program of Study (15 credit hours + 6 student teaching hours)	PROPOSED Program of Study (12 credit hours (optional with 13) + 6 student teaching hours)
W200 (3 credit hours)	W200 (3 credit hours)
W210 Survey of Computer-Based Education (3 credit hours)	W210 Introduction to K-12 Computing, Computer Science, and Technology Integration (3 credit hours)
W220 Technical Issues in Education (3 credit hours)	W220 Computer Science and Programming in K-12 Classrooms (3 credit hours)
W310 Integrating Technology K-12 (3 credit hours)	W310 K-12 Computing and Computer Science Teaching Methods (3 credit hours)
W435 Technology Leadership in K-12 (3 credit hours)	W401 (optional) Preparation for the Computer Science Praxis Test (1 credit hour)
W410 Student Teaching (6 credit hours)	W410 Student Teaching (6 credit hours)

Descriptions of Changes in Courses

	Current Description	Proposed Changed Description
W210	First course in the computer endorsement program. Explore issues of infusing technology into the K-12 curriculum. Increase range and depth of computer applications and peripherals. Participate in professional development activities. Learning assessed through computer-based assignments and teaching portfolio creation.	First course in the computer science license program. Explore issues of infusing computing, computer science, and technology into the K-12 curriculum. Learning assessed through computer-based assignments, hands-on activities, and teaching portfolio creation.
W220	An examination of computer hardware and peripheral devices in classroom settings (e.g. networking, communications and hyper- media). Understanding of educational applications of a programming or authoring language.	An examination of visual and text-based computer programming languages used in K-12 environments. Course will also cover computational thinking and teaching methods around learning programming for K-12 students.
W310	Explores various pedagogical approaches, design and implement technology-based lessons or K-12 classrooms, participate in professional development activities, and reflect on the integration of technology in the classroom. Learning will be documented and assessed through written assignments, and a teaching portfolio.	Explores various pedagogical approaches, design and implementations of computing/computer science/technology-based lessons or K-12 classrooms. Field experiences will include computing/computer science/technology-based lessons implemented in K-12 classrooms. Learning will be documented and assessed through written assignments, field experiences, and a teaching portfolio.