

New Computer Science Teaching (Computer Education) Supplemental Licensure Program

What is the Computer Science Teaching Program?

The Computer Science Teaching (Computer Education) Supplemental Licensure Program prepares Purdue education majors to teach computer science in secondary schools. The program is designed to meet the International Society for Technology in Education (ISTE) Secondary Computer Science Education program standards and Computer Education supplemental licensure standards for the State of Indiana. The program consists of 19-21 credit hours of course work in Computer Science and Education. Content course work in Computer Science consists of contemporary issues in computing, programming in at least two languages (e.g., Java and C, Java and Python), discrete mathematics, and data structures and algorithms. Pedagogical course work in Education consists of methods of teaching computer science in secondary schools and a student teaching experience involving computer science (to be completed concurrently with student teaching in the student's primary licensure area). For specific program requirements, see the reverse side of this sheet.

Who should consider this program?

The Computer Science Teaching (Computer Education) Supplemental Licensure Program is open to all teacher education students who are pursuing a primary license in a secondary teaching discipline. The program should be of special interest to mathematics education majors, science education majors, and engineering/technology education majors. Students may take course work leading toward the Computer Science Teaching (Computer Education) Supplemental Licensure Program while pursuing licensure in the student's primary area. The Computer Education program is available to undergraduate students who are classified as semester 5 or above and graduate students. A candidate must hold an Indiana license under Bulletin 400, Rules 46-47, Rules 2002, or REPA in order to be recommended for the addition of Computer Education.

What are the benefits of this program?

A national effort is underway to increase the teaching of Computer Science in high schools. A goal has been set to have 10,000 high school teachers capable of teaching the new Advanced Placement exam in Computer Science by 2015. The Computer Science Teaching (Computer Education) Supplemental Licensure Program will prepare students to be effective Computer Science teachers. This extra certification will make students more marketable and provide greater flexibility in their teaching assignments.

For detailed requirements, see the reverse side of this sheet.

COMPUTER EDUCATION*
(COMPUTER SCIENCE TEACHING)

Early Childhood, Middle Childhood, Early Adolescence and Adolescence/Young Adulthood
 Rules 2002/REPA

			<u>Semester Hours</u>
CS	18000	Problem Solving and Object-Oriented Programming in Java	4
CS	19000	Contemporary Issues in Computing	1
<i>One of the following:</i>			2-4
CS	15800	C Programming (3)	
CS	15900	Programming Applications for Engineers (3)	
CS	17700	Programming with Multimedia Objects (4)	
CS	24000	Programming in C (3)	
ECE	26400	Advanced C Programming (2)	
<i>One of the following:</i>			3
CS	18200	Foundations of Computer Science (3)	
ECE	36900	Discrete Mathematics for Computer Engineering (3)	
MA	37500	Discrete Mathematics (3)	
<i>One of the following:</i>			3
CS	25100	Data Structures and Algorithms (3)	
ECE	36800	Data Structures and Algorithms (3)	
EDPS	49100 / CS 49100	Methods of Teaching Computer Science in Secondary Schools	3
EDCI	49800	Supervised Teaching	3
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Total			19-21

This content area may be added to an existing Bulletin 400, Rules 46-47, Rules 2002, or REPA license. This area may be added to a Professionalized license or Accomplished Practitioner license when the candidate has completed three (3) credit hours of graduate coursework in Computer Education, in addition to the 19-21 credit hours required for the Standard, Initial Practitioner (IP), or Proficient Practitioner (PP) license, and has met the professionalization/accomplished practitioner requirement for the basic preparation level of the license.

Professionalization/Accomplished Practitioner additional requirement: 3

Course options as advised by faculty.

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***Approved by the TEC 9/29/2010**