Last Name:

First Name:

Middle Name:

Address:

City:

State & zip code:

Home phone:

Work phone:

Email:

**I am applying for the Regents Alternative Pathway to Iowa Licensure Program and would like to teach CTE Information Technology. (Check one)**

* I have attached official transcripts of all college credits showing coursework required for this endorsement.
* I have sent my official transcripts directly from my college.

## 279 CTE Information Technology

**Please indicate in the form the course work you have completed for this endorsement**.

279 5-12 CTE Information Technology

1. ​*Program requirements.* Applicants must hold a valid Iowa teaching license with at least one additional teaching endorsement.
2. ​*Content.* A minimum of 12 semester hours of computer science to include coursework in the following:

1. Data representation and abstraction to include primitive data types, static and dynamic data structures, and data types and stores.

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| Course # | Course Title | Institution | Semester Hr. | Year Completed |
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1. Designing, developing, testing and refining algorithms to include proficiency in two or more programming paradigms.

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| Course # | Course Title | Institution | Semester Hr. | Year Completed |
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1. Systems and networks to include operating systems, networks, mobile devices, and machine-level data representation.

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1. ​*Methods course.* A content area methods course is required pursuant to 13.29(1). The course should include the following effective teaching and learning strategies for information technology:

(1) Curriculum development including recognizing and defining real-world computational problems; computing concepts and constructs; developing and using abstractions; creating, testing, and refining computational artifacts; and problem-solving strategies in computer science.

* + 1. Project-based methodologies that support active and authentic learning, fostering an inclusive computing culture, collaborative groupings, and opportunities for creative and innovative thinking.
    2. Communication about computing including multiple forms of media.
    3. Digital citizenship including the social, legal, ethical, safe and effective use of computer hardware, software, peripherals, and networks.

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1. CTE methods.

(1) A minimum of six semester hours of career and technical curriculum and methods to include:

1. Foundations of career and technical education.
2. Methods of career and technical education.
3. Evaluation and assessment of career and technical programs.

(2) The CTE methods coursework is not required if the educator holds another career and technical endorsement.

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**Graded field experience (if needed)**

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