Obtaining a Computer Science Teaching Endorsement

1. How to earn a teaching endorsement (282 IAC 13.29(a)).

Two options:

1. Complete a program of study for required courses through an approved teacher preparation college or university. The program will recommend you directly to the BoEE for the endorsement.
2. Take required courses and submit your transcripts directly to the BoEE for their review and approval.

2. Required coursework (282 IAC 13.28(35))

Methods: One course

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<tr>
<th>Requirement</th>
<th>Course</th>
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<td>A grade level specific methods of teaching computer science course.</td>
<td>Must be taken from a college/university with an approved teacher preparation program.</td>
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Content: A minimum of 12 semester hours of computer science to include coursework in the following:

<table>
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<tr>
<th>Requirement</th>
<th>Courses*</th>
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| Data representation and abstraction to include primitive data types, static and dynamic data structures, and data types and stores. | Intro to Programming Logic  
  Programming Logic and Design  
  Computer Programming  
  Intro to Game Design  
  Computer Science  
  Data Structures  
  Computational Structures |
| Designing, developing, testing and refining algorithms to include proficiency in two or more programming paradigms. | C++  
  C#  
  C# for Game Developers  
  Java  
  iOS Programming  
  Introduction to Database  
  SQL |
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|             | Game Development  
|             | Intro to Procedural Languages  
|             | COBOL  
|             | Visual Basic  
|             | Mobile User Interface Design  
|             | Mobile Device Security  
|             | Android App Development  
|             | Apple App Development  
|             | Objective-C for Apple Apps  
|             | Mobile Web App Fundamentals  
|             | Mobile Data Storage Management  
|             | Mobile Game Development  |
| Systems and networks to include operating systems, networks, mobile devices, and machine-level data representation. | Intro to Large Computer Systems  
| | Information Security  
| | Computer Organization  
| | PC Clinic  
| | Survey of Mobile Development Technologies  
| | Troubleshooting  
| | Hardware / Software Installation and Troubleshooting  
| | IT Essentials  
| | Computer Hardware Basics  
| | Networking Technology / Administration / Security  
| | Operating Systems  
| | Networking Technologies  
| | Introduction to Networking  
| | Computer Forensics / Hacking / Cybersecurity  
| | Wireless & Mobile Implementation  |

*Courses can be taken from a college or university or a community college. The list of possible courses are from community colleges and have been approved by the Board of Educational Examiners to meet endorsement requirements. Check with the college or university for their course offerings.

Citations:

Iowa Administrative Code 281-79, Standards for Practitioner and Administrator Preparation Programs

Iowa Administrative Code 282-13, Issuance of Teacher Licenses and Endorsements