

## **(330) C# Programming (S | PS)**

### **Description**

Evaluate knowledge of working with C# syntax, programming logic, program development, system design concepts, database, designers and objects. This contest will be graded on the Windows operating system; therefore Unix/Linux should *not* be used. *This event includes a separate certification component which will be offered in conjunction with the BPA event at NLC; all members passing this component will receive an industry certification regardless of their overall event placement.* The certification offered will be IT Specialist – Software Development and upon passing the exam, members will be awarded 100 points to their final score. All persons planning to take a certification test **MUST** register with Certiport ([www.certiport.com](http://www.certiport.com)) before attending NLC to create their Certiport profile. Members must include their BPA member ID in their Certiport profile when they register online. For more information on the exam, visit: <http://www.certiport.com>

### **Eligibility**

Any Secondary or Post-secondary division student member may enter this event.

### **Member must supply**

Computer or laptop/notebook; a full-size keyboard may be used (no printer is needed)

Visual Studio 2015 or higher

Carry-in and set-up of equipment must be done solely by the member

Member must bring all supporting devices and software appropriate for the event (e.g., extension cords, power supply, IDE, paper, etc.)

Published and/or unpublished non-electronic written reference materials

Only pre-written code that is hard copied is allowed.

**Business Professionals of America assumes no responsibility for hardware/software provided by the member. No equipment, supplies, or materials other than those specified for an event will be allowed in the testing area. No previous Business Professionals of America tests and/or sample tests or facsimiles thereof (handwritten, photocopied, or keyed) may be taken into the testing area. Violation of this rule will result in disqualification.**

### **Competencies**

- Demonstrate knowledge of object-oriented concepts and techniques
- Demonstrate understanding of general computer concepts and computer language
- Use structured design techniques, algorithms, and object-oriented concepts
- Understand and implement UML diagrams
- Create a program/GUI using variables, looping, controls, logical operations, calculations, classes, totals, file access, data structures, sorting, selection statements, and I/O operations

### **Method of evaluation**

Application

Certification test taken per conference schedule at NLC

### **Length of event**

No more than ten (10) minutes orientation, ninety (90) minutes testing time, ten (10) minutes wrap-up

No more than one hundred twenty (120) minutes for certification test.

### **Entries**

Each state is allowed five (5) entries