

## Before You Begin

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Please read the following topics before you begin the course.

### **This Course is for Hands-On Students!**

This course was designed for 6<sup>th</sup>-8<sup>th</sup> grade students who want to write their own computer programs. Lessons begin with basic concepts, including sample code, and move quickly to hands-on implementation. Students will enjoy writing their own programs as they progress through the course.

The last section in each chapter walks students through an activity that demonstrates the concepts they have learned. Beginning in Chapter 2, students will write and run their very own Visual Basic programs. These activities will start simply and will move up in complexity as the course progresses. In the final chapter, students will create a final project which will allow them to apply all they have learned in the course.

### **What Do Students Need to Start?**

Students will need to meet the following requirements in order to successfully complete the course:

- Students should have the pre-requisite computer skills listed in the Student Textbook
- Students should have a Windows-based computer that meets the minimum hardware and software requirements listed in the Student Textbook
- Students will need an Internet connection to complete the download and installation of Visual Basic 2010 Express during the first activity. An Internet connection is optional for the rest of the course.

### **Why Did We Choose the “Visual Basic” Programming Language?**

This course is taught using the Visual Basic programming language. We feel that this is one of the easiest and quickest modern programming languages to learn. Students can create a real Windows program within seconds. In addition, concepts and techniques learned in this course can be applied to other, more advanced programming languages.

### **What Do Teachers Need to Do?**

The course is largely a self-study curriculum where students can simply read the textbook, complete the activities, and refer to this Solution Guide to clear up any questions about the activities. Teachers may choose to have greater involvement if they wish to administer the course for a more formal grade or school credit. Some students, especially younger students, may need additional assistance.

Grading a student's progress is done in two ways. First, each chapter has a hands-on activity which should be completed by the student. These activities are the focal point of the course and we recommend assigning at least 50% of the course grade to the activities. Guidance on grading activities is given below. In addition, we provide 10-question tests for every chapter.

Please see the chapter on "Evaluating Student Progress" for more details!

### **How Do I Get Help?**

All courses come with this Solution Guide and fully coded solutions for all activities. Simply install the "Solution Files" from your course setup program and you will be able to refer to the solutions as needed from the "Solution Menu". If you are confused about any activity, this will allow you to see how we solved the problem.

We also offer free technical support for students and teachers. Simply fill out the help request form in the Support area of our website with a detailed question and we will assist you.