



This course combines topics from the following courses (any items marked with a * will be covered if time allows).

Topics taken from our **INTRODUCTION TO VISUAL C#** course

Creating forms <ul style="list-style-type: none">• Drawing controls• Formatting forms	Conditions <ul style="list-style-type: none">• Using IF and ELSE• The SWITCH statement	Debugging and trapping errors <ul style="list-style-type: none">• The TRY clause• Stepping through code• Setting breakpoints
Coding form events <ul style="list-style-type: none">• Forms and their events• The two event arguments	Modular code <ul style="list-style-type: none">• Passing arguments• Writing functions	Using lists <ul style="list-style-type: none">• Populating lists• Finding items
Laying out your code <ul style="list-style-type: none">• Commenting out code• Using regions	Arrays <ul style="list-style-type: none">• Using arrays• Splitting text	Properties in C# <ul style="list-style-type: none">• RO, WO and RW properties• Coding properties
C# variables <ul style="list-style-type: none">• Creating and using variables• The types of variable	Looping <ul style="list-style-type: none">• Looping n times• WHILE loops• Looping over collections	
Enumerations and constants (*) <ul style="list-style-type: none">• Enumerations• Constants	Files and folders <ul style="list-style-type: none">• Stream readers and writers• The USING statement• FileInfo and DirectoryInfo	



Topics taken from our **INTERMEDIATE C#** course

Designing classes <ul style="list-style-type: none">• The domestic cat object• Properties and methods• Encapsulation and exposure	LINQ theory <ul style="list-style-type: none">• Extension methods• lenumerability• Query vs. method syntax	LINQ with Entity Frameworks <ul style="list-style-type: none">• Creating a data context• Selecting data using LINQ• Using relationships (associations)• Adding, editing and deleting
Creating classes <ul style="list-style-type: none">• Using namespaces• Creating constructors• Fields, properties and methods• Static members	Writing LINQ <ul style="list-style-type: none">• Arrays, lists and data tables• Criteria and ordering• Using LET expressions	Advanced LINQ with EF (*) <ul style="list-style-type: none">• Returning anonymous types• Using stored procedures• Extending (partial classes)
The form as a class <ul style="list-style-type: none">• Partial classes• InitializeComponent method• Instantiating forms	Advanced LINQ (*) <ul style="list-style-type: none">• Projecting data• Anonymous types• Forcing query execution• Taking and skipping	Grouping using LINQ (*) <ul style="list-style-type: none">• IGrouping and IEnumerable• Grouping keys• Group into and ordering• Using multiple keys
Data structures <ul style="list-style-type: none">• Generics• Arrays• Lists, stacks and queues• Dictionaries	Types of model <ul style="list-style-type: none">• Code first• Model first• Database first	
Overloading (*) <ul style="list-style-type: none">• Overloaded methods• Overloading constructors	Entity Frameworks <ul style="list-style-type: none">• Creating entity data models• Data contexts• Updating models	

Maximum 6 people per course. Scheduled classroom courses include lunch at a local restaurant; you can see how our online training works [here](https://www.wiseowl.co.uk/). For more information, see <https://www.wiseowl.co.uk/>.