| | | C# Language | | | | | |
|---|---|---|---|---|---|---|---|
| **Day** | **Module Name** | **Video Name** | **Video Duration** | **Trainer** | **Online Exam** | **Practice and Assignm** | **Total Hours** |
| 1 | VS.Net and Entry Point Method | Visual Studio Introduction and Installation | 19 | 60 | 30 | 120 | |
| | | First MS.Net Application | 26 | | | | |
| | | Handling Command Line Arguments | 19 | | | | |
| | | Dealing with Return Value of Main | 10 | | | | |
| | | Resolve Ambiguity of Main Method | 6 | | | | |
| | | Using Command Line Compiler-CSC.EXE | 10 | | | | |
| | | | | | | | |
| | VS.Net and Entry Point Method Assignment | **Assignment Name** | | | | | |
| | | Hello World Sample Application | | | | | |
| | | VS.Net and Entry Point Method Main Assignment | | | | | |
| | | Revision of VS.Net Descriptive and Multiple Choice Questions | | | | | |
| | | | | | | | |
| | C# Language Syntax | Why Programming Language | 72 | | | | |
| | | C# & DataTypes Introduction | 56 | | | | |
| | | Variable Intialization and Types of Memory | 17 | | | | |
| | | Value Types vs Reference Types | 11 | | | | |
| | | | | | | | |
| | C# Langugae Syntax Assignment | **Assignment Name** | | | | | |
| | | Execute All the Programs Demonstrated in Videos | | | | | |
| | | Simple Programs Demonstrating Different Types of Data Types and Their Ranges | | | | | |
| | | Programs Demonstrating Value Types and Reference Types | | | | | |
| | **Total Hours** | | 4.1 | 1 | 0.5 | 2 | 7.6 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2 | C# Language Syntax | Typecasting Implicit and Explicit | 21 | 60 | 30 | 180 | |
| | | Boxing & Unboxing | 32 | | | | |
| | | Understanding Keyword var | 10 | | | | |
| | | Datatype Dynamic | 11 | | | | |
| | | Conversion of strings to other types | 18 | | | | |
| | | Using Strings in Code | 16 | | | | |
| | | String Concatenation and Interpolation | 11 | | | | |
| | | Strings as Immutable | 17 | | | | |
| | | String Builder | 16 | | | | |
| | | Constants and Enumerated DataTypes | 24 | | | | |
| | | Operators | 24 | | | | |
| | | Technique to Learn Programming 1 | 15 | | | | |
| | | | | | | | |
| | C# Language Syntax Assignments | **Assignment Name** | | | | | |
| | | Complete all the examples demonstrated in Videos | | | | | |
| | | Type first 10 programs from C# Examples handout | | | | | |
| | | Trace these Programs using F11 | | | | | |
| | | Write comments of each line of these 10 Programs | | | | | |
| **Total Hours** | | | **3.58** | **1** | **0.5** | **3** | **8.08** |
| 3 | C# Language Syntax | Control Statements | 44 | 120 | 30 | 180 | |
| | | Understanding Arrays | 31 | | | | |
| | | Programming Arrays | 11 | | | | |
| | | Multidimensional Arrays | 9 | | | | |
| | | Understanding Methods | 18 | | | | |
| | | Method Overloading | 14 | | | | |
| | | Optional Parameters Named Arguments and params | 26 | | | | |
| | | | | | | | |
| | C# Language Syntax Assignment | **Assignment Name** | | | | | |
| | | Type next 10 Programs from C# Examples handout | | | | | |
| | | Trace these programs using F11 (Step Into) | | | | | |
| | | Write comments of each line of these 10 Programs | | | | | |
| | | Read Complete handout | | | | | |
| | | Go through all Interview Questions | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | **Total Hours** | **2.55** | **2** | **0.5** | **3** | **8.05** |
| **4** | **Revision,Group Discussion,Exam,Review** | | **0** | **8** | | | **8** |
| 5 | OOPs Concept | Object Oriented Concepts Part 1 | 46 | 60 | 30 | 120 | |
| | | Object Oriented Concepts Part 2 | 25 | | | | |
| | Programming Encapsulation | Writing Class And Initializing Objects | 47 | | | | |
| | | Destroying Objects and Role Of Garbage Collection | 37 | | | | |
| | | | | | | | |
| | OOPs Concept Assignment | **Assignment Name** | | | | | |
| | | Revision of Descriptive and Multiple Choice Question from OOPs Concept | | | | | |
| | | Practice Examples shown in videos | | | | | |
| | | **Total Hours** | **2.58** | **1** | **0.5** | **2** | **6.08** |
| 6 | Programming Encapsulation | Writing Methods in Classes | 25 | 60 | 60 | 240 | |
| | | Working with Properties in Class | 25 | | | | |
| | | Constructor and Destructor | 31 | | | | |
| | | Static Members | 55 | | | | |
| | Programming Encapsulation Assignments | **Assignment Name** | | | | | |
| | | Assignment on Properties | | | | | |
| | | Programming Encapsulation Sample Code | | | | | |
| | | Math Sample Code | | | | | |
| | | Encapsulation Assignment | | | | | |
| | | Get & Set Properties Sample Code | | | | | |
| | | Vehicle Assignment Solution | | | | | |
| | | Revision of Descriptive and Multiple Choice Question from OOPs Programming Encapsulation | | | | | |
| | | **Total Hours** | **2.27** | **1** | **1** | **4** | **8.27** |
| 7 | Inheritance | Protected Keyword And Constructors In Inheritance | 26 | 60 | 60 | 240 | |
| | | Casting Between Reference Types | 32 | | | | |
| | | Static And Dynamic Binding | 37 | | | | |
| | | Abstract Class And Methods | 23 | | | | |
| | | Object Class As Parent | 20 | | | | |
| | | **Assignment Name** | | | | | |
| | | Object Sample Code | | | | | |
| | | Inheritance Sample Code | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Inheritance Assignment | Abstract Sample Code | | | | | |
| | | Assignment in Inheritance | | | | | |
| | | Inheritance Override Assignment | | | | | |
| | | Vehicle Assignment using Inheritance | | | | | |
| | | Calculator Assignment | | | | | |
| | | Read Complete handout | | | | | |
| | **Total Hours** | | **2.3** | **1** | **1** | **4** | **8.3** |
| 8 | Interface and Polymorphism | Polymorphism And Syntax Of Interface | 25 | 60 | 120 | 240 | |
| | | Explicit Implementation And Casting | 21 | | | | |
| | | Types Of Interface | 14 | | | | |
| | | | | | | | |
| | Interface and Polymorphism | **Assignment Name** | | | | | |
| | | Interface for Explicit Implementation Sample Code | | | | | |
| | | Assignment on Interface | | | | | |
| | | Interface Figure Sample Code | | | | | |
| | | OOPs Interface and Polymorphism Assignment | | | | | |
| | **Total Hours** | | **1** | **1** | **2** | **4** | **8** |
| 9 | **Revision,Group Discussion,Exam,Review** | | **0** | | **8** | | **8** |
| 10 & 11 | Collections and Generics | Introduction To Collection Of Classes | 45 | 60 | 60 | 800 | |
| | | Writing Generic Classes And Methods | 46 | | | | |
| | | Generic Collection Classes | 32 | | | | |
| | | | | | | | |
| | Collections and Generics Assignment | **Assignment Name** | | | | | |
| | | Collections Sample Code | | | | | |
| | | Generics Sample Code | | | | | |
| | | Collections and Generics Sample Code | | | | | |
| | | Collections and Generics Assignment | | | | | |
| | | Assignment on Collections | | | | | |
| | | Assignment on Generic List | | | | | |
| | | Stack and Queue Assignment | | | | | |
| | | | | | | | |
| | **Total Hours** | | **2.05** | **1** | **1** | **13.33** | **17.38** |
| 12 | Assemblies and GAC | Assemblies Introduction And Working With Class Library | 57 | 60 | 60 | 280 | |
| | | Shared Assemblies and GAC | 39 | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 12 | Assemblies and GAC Examples | **Assignment Name** | | | 60 | 60 | 280 | |
| | | Assembly Sample Code | | | | | |
| | | Assemblies and GAC Assignments | | | | | |
| | | | | | | | |
| | **Total Hours** | | **1.6** | **1** | **1** | **4.67** | **8.27** |
| 13 | Exception Handling | What Exception And Behavior Of Try And Catch Blocks | 47 | | | | |
| | | Throw And Finally Keywords | 25 | | | | |
| | | Writing Custom Exception | 18 | | | | |
| | | | | 60 | 60 | 280 | |
| | | **Assignment Name** | | | | | |
| | Exception Assignment | Exception Handling Sample Code | | | | | |
| | | Exception Handling Assignment | | | | | |
| | | User Defined Exception Assignment | | | | | |
| | | | | | | | |
| | **Total Hours** | | **1.5** | **1** | **1** | **4.67** | **8.17** |
| 14 | **Revision,Group Discussion,Exam,Review** | | **0** | | **8** | | **8** |
| 15 | Database Programming Using ADO.Net | ADO.NET Evolution And Role Of Managed Providers | 36 | | | | |
| | | Installing SQL Server And Management Studio | 8 | | | | |
| | | Establishing Conncetion With | 42 | | | | |
| | | Executing Insert, Update And Delete Commands | 32 | | | | |
| | | Fetching Data Using Select Command | 26 | | | | |
| | | How to Implement Login in Application | 17 | 60 | 60 | 240 | |
| | | | | | | | |
| | Database Programming Using ADO.Net | **Assignment Name** | | | | | |
| | | ADO.Net Sample Code | | | | | |
| | | Vehicle Assignment | | | | | |
| | | Assignment to Save Image in Database | | | | | |
| | | Employee Management System Assignment | | | | | |
| | | | | | | | |
| | **Total Hours** | | **2.68** | **1** | **1** | **4** | **8.68** |
| | Database Programming Using ADO.Net & Managing Data Using DataSet | Executing Stored Procedures | 32 | | | | |
| | | Managing Database Transaction And DTC | 39 | | | | |
| | | Summary And API Used | 13 | | | | |
| | | Introduction to DataSet | 24 | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Data Using DataSet | Filling DataSet And DataTable Using DataAdapter | 53 | | | | |
| 16 & 17 | | | | 60 | 60 | 600 | |
| | Database Programming Using ADO.Net & Managing Data Using DataSet Assignment | **Assignment Name** | | | | | |
| | | DataSet Sample Code | | | | | |
| | | Employee Management Assignment using DataSet | | | | | |
| | | Vehicle Assignment Using DataSet | | | | | |
| | | | | | | | |
| | | **Total Hours** | **2.68** | **1** | **1** | **10** | **14.68** |
| 18 & 19 | N-Tier Layered Architecture | What is Tier and Layer | 26 | | | | |
| | | N-Tier Architecture And Role Of Each Layer | 54 | | | | |
| | | Developing N-Tier Architecture Application | 70 | | | | |
| | | Developing GUI For Application | 45 | 60 | 60 | 600 | |
| | | | | | | | |
| | N-Tier Layered Architecture Assignment | **Assignment Name** | | | | | |
| | | N-Tier Sample Code | | | | | |
| | | N-Tier Layered Architecture Application Assignment | | | | | |
| | | | | | | | |
| | | **Total Hours** | **3.25** | **1** | **1** | **10** | **15.25** |
| 20 | **Revision,Group Discussion,Exam,Review** | | **0** | **8** | | | **8** |
| 21 & 22 | Vehicle and Account Project | | 0 | 16 | | | 16 |
| 23,24,25 | Contacts Manager Project | | 0 | 32 | | | 32 |
| | | | | | | | **206.81** |
| | | | | | | | |
| | **SQL Server** | | | | | | |
| 26 | Introduction to SQL Server | Introduction to SQL Part 1 | 40 | | | | |
| | | Introduction to SQL Part 2 | 24 | | | | |
| | DDL and DML | DDL and DML Statements | 55 | | | | |
| | DQL | DQL Statements | 70 | | | | |
| | | | | 60 | 30 | 240 | |
| | DDL , DML, DQL Assignment | **Assignment Name** | | | | | |
| | | Emp Dept Assignment | | | | | |
| | | Adventure Works DW | | | | | |
| | | 10 Queries each from DDL,DML,DQL | | | | | |
| | | | | | | | |

| # | Category | Item | Value | | | | |
|---|---|---|---|---|---|---|---|
| | **Total Hours** | | | 3.15 | 1 | 0.5 | 4 | 8.65 |
| 27 | Aggregate Functions | Aggregate | 74 | | | | |
| | Joins | Joins Part 1 | 41 | | | | |
| | | Joins Part 2 | 41 | | | | |
| | | Joins Part 3 | 50 | | | | |
| | | | | 60 | 30 | 200 | |
| | | **Assignment Name** | | | | | |
| | Aggregate Functions and Joins Assignment | Aggregate Functions Assignments | | | | | |
| | | Joins Sample Code | | | | | |
| | | Joins Assignments | | | | | |
| | | Sample Table | | | | | |
| | **Total Hours** | | | 3.43 | 1 | 0.5 | 3.33 | 8.26 |
| 28 | Constraints | Constraints | 65 | | | | |
| | Views | Views Part 1 | 51 | | | | |
| | | Views Part 2 | 13 | | | | |
| | Programming using T-SQL | TSQL Part 1 | 69 | | | | |
| | | TSQL Part 2 | 12 | | | | |
| | | TSQL Part 3 | 28 | 60 | 30 | 160 | |
| | Constraints,Views,Programming using T-SQL Assignment | **Assignment Name** | | | | | |
| | | Constraints Assignment | | | | | |
| | | Views Assignment | | | | | |
| | | T-SQL Assignments | | | | | |
| 29 | **Revision,Group Discussion,Exam,Review** | | | 0 | | 8 | | 8 |
| | **Total Hours** | | | 3.97 | 1 | 0.5 | 2.67 | 8.14 |
| 30 | Stored Procedures | Execution Plan | 24 | | | | |
| | | Stored Procedure Part 1 | 43 | | | | |
| | | Stored Procedure Part 2 | 16 | | | | |
| | | Stored Procedure Part 3 | 29 | | | | |
| | | | | 60 | 30 | 320 | |
| | Stored Procedures Assignment | **Assignment Name** | | | | | |
| | | Practice Examples shown in video | | | | | |
| | | Assignment in Stored Procedures | | | | | |
| | **Total Hours** | | | 1.87 | 1 | 0.5 | 5.33 | 8.7 |
| 31 | **Revision,Group Discussion,Exam,Review** | | | 0 | | 8 | | 8 |
| 32 | Triggers | Triggers Part 1 | 47 | | | | |
| | | Triggers Part 2 | 20 | | | | |
| | | Triggers Part 3 | 10 | | | | |
| | | Triggers Part 4 | 31 | | | | |
| | | | | 60 | 30 | 300 | |

| # | Topic | Subtopic | | | | | |
|---|---|---|---|---|---|---|---|
| | Assignment in Triggers | **Assignment Name** | | | | | |
| | | Practice Examples Shown in video | | | | | |
| | | Assignment in Triggers | | | | | |
| | | | | | | | |
| | **Total Hours** | | **1.8** | **1** | **0.5** | **5** | **8.3** |
| 33 | Cursor | Cursor | 70 | | | | |
| | Index | Index Part 1 | 15 | | | | |
| | | Index Part 2 | 24 | | | | |
| | | Index Part 3 | 19 | | | | |
| | | Index Part 4 | 14 | | | | |
| | Transactions | Transaction Part 1 | 26 | 60 | 30 | 200 | |
| | | Transaction Part 2 | 42 | | | | |
| | | | | | | | |
| | Cursor,Index,Transactions Assignments | **Assignment Name** | | | | | |
| | | Practice examples shown in video | | | | | |
| | | Assignment in Cursor | | | | | |
| | | Assignment in Index | | | | | |
| | | Assignment in Trigger | | | | | |
| | | | | | | | |
| 34 | **Revision,Group Discussion,Exam,Review** | | **0** | | **8** | | **8** |
| | **Total Hours** | | **3.5** | **1** | **0.5** | **3.33** | **8.33** |
| | | | | | | | |
| | **LINQ & Entity Framework** | | | | | | |
| 35 | LINQ Centric C# Language Extensions | Anonymous Types | 30 | | | | |
| | | Partial Classes | 20 | | | | |
| | | Extension Methods | 20 | | | | |
| | LINQ Architecture | LINQ Architecture | 18 | | | | |
| | LINQ Queries | LINQ Queries Syntax | 48 | | | | |
| | | Lamda Expressions | 58 | 60 | 30 | 120 | |
| | | LINQ Queries over Custom Collections | 37 | | | | |
| | | | | | | | |
| | LINQ Queries Assignments | **Assignment Name** | | | | | |
| | | Practice Examples shown in video | | | | | |
| | | LINQ Queries Examples | | | | | |
| | | | | | | | |
| | **Total Hours** | | **3.85** | **1** | **0.5** | **2** | **7.35** |
| | Entity Framework Introduction | Enity Framework Introduction and First Example | 55 | | | | |
| | CRUD Operations | CRUD Operations | 50 | | | | |
| | | CRUD Operations with BO Class | 16 | | | | |
| | | Stored Procedure Execution | 28 | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 36 | Querying Database | Entity SQL | 35 | 60 | 30 | 180 | |
| | | Eager and Lazy Loading Queries | 20 | | | | |
| | Aditional Features | Inheritance of Entities | 27 | | | | |
| | | Modeling Techniques | 19 | | | | |
| | | | | | | | |
| | Entity Framework Assignments | **Assignment Name** | | | | | |
| | | Practice Examples shown in video | | | | | |
| | | CRUD Operations Assignment | | | | | |
| | | | | | | | |
| **Total Hours** | | | **4.17** | **1** | **0.5** | **3** | **8.67** |
| 37 | **Revision,Group Discussion,Exam,Review** | | **0** | **8** | | **8** | |
| | | | | | | | |

| **Developing Windows Based Project** |||||||
|---|---|---|---|---|---|---|
| 38 | Employee and Department using Layered Architecure and LINQ ,Entity Framwork | | 0 | 60 | 0 | 420 | |
| 39 & 40 | Contacts Manager using LINQ and Entity Framework | | 0 | 60 | 0 | 900 | |
| | | | | | | | |
| **Total Hours** | | | **0** | **2** | **0** | **22** | **24** |
| | | | | | | | |

| HTML and CSS and Javascript |||||||
|---|---|---|---|---|---|---|
| | Web Programming Introduction | Web Introduction and Terminology | 45 | | | | |
| | HTML Introduction | Introduction | 30 | | | | |
| | HTML- Basic Formatting Tags | Basic Formatting Tags | 22 | | | | |
| | HTML Grouping Using DIV Span | Grouping Using Div Span | 7 | | | | |
| | HTML Lists | Lists | 8 | | | | |
| | HTML Images | Images | 19 | | | | |
| | HTML HyperLink | Hyperlink | 19 | | | | |
| | HTML Table | Table | 13 | | | | |
| | HTML Iframe | Iframe | 9 | | | | |
| | HTML Form | Form | 24 | | | | |
| | HTML Headers | Headers | 8 | | | | |
| 41 | HTML Miscellaneous | Misellaneous | 8 | 60 | 30 | 180 | |
| | | | | | | | |

| | | Assignment Name | | | | | |
|---|---|---|---|---|---|---|---|
| | HTML Assignment | Practice all the examples shown in video | | | | | |
| | | Assignment in HTML using DIV and Span | | | | | |
| | | Assignment in HTML using Lists | | | | | |
| | | Assignment in HTML using Images and Hyperlink | | | | | |
| | | Assignment in HTML using Table | | | | | |
| | | Assignment in HTML using Forms | | | | | |
| | | | | | | | |
| | | **Total Hours** | **3.53** | **1** | **0.5** | **3** | **8.03** |
| 42 | CSS2-Introduction | CSS2-Introduction | 14 | | | | |
| | CSS2-Syntax | CSS2-Syntax | 14 | | | | |
| | CSS2-Selectors | CSS2-Selectors | 27 | | | | |
| | CSS2-Color Background Cursor | CSS2-Color Background Cursor | 16 | | | | |
| | CSS2-Text Fonts | CSS2-Text Fonts | 12 | | | | |
| | CSS2-Lists Tables | CSS2-Lists Tables | 17 | | | | |
| | CSS2-Box Modal | CSS2-Box Modal | 20 | | | | |
| | CSS2-Display Positioning | CSS2-Display Positioning | 32 | | | | |
| | | | | 60 | 30 | 220 | |
| | | Assignment Name | | | | | |
| | | CSS2-Introduction | | | | | |
| | | CSS2-Syntax | | | | | |
| | | CSS2-Selectors | | | | | |
| | CSS2 Assignment | CSS2-Color Background Cursor | | | | | |
| | | CSS2-Text Fonts | | | | | |
| | | CSS2-Lists Tables | | | | | |
| | | CSS2-Box Modal | | | | | |
| | | CSS2-Display Positioning | | | | | |
| | | | | | | | |
| | | **Total Hours** | **2.53** | **1** | **0.5** | **3.67** | **7.7** |
| | Javascript Introduction and First Program | Javascript Introduction and First Program | 28 | 60 | 30 | 180 | |
| | Javascript Language Basics | Variables and Data Types | 21 | | | | |
| | | Operators and Control Statements | 20 | | | | |
| | | Arrays | 13 | | | | |
| | | Understanding Functions | 13 | | | | |
| | | Predefined Functions | 14 | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 43 | JavaScript Built In Functions | Date and Time Functions | 8 | | | | |
| | | String and Regular Expressions | 22 | | | | |
| | | Math Object | 5 | | | | |
| | JavaScript Forms | Form Elements 1 | 27 | | | | |
| | | Form Elements 2 | 18 | | | | |
| | | Form Validation | 22 | | | | |
| | | | | | | | |
| | Javascript Assignments | **Assignment Name** | | | | | |
| | | JS Examples | | | | | |
| | | Language Syntax Demo | | | | | |
| | | Built in Functions Demo | | | | | |
| | | Forms Demo | | | | | |
| | | | | | | | |
| **Total Hours** | | | **3.52** | **1** | **0.5** | **3** | **8.02** |
| 44 | Javascript-HTML Document Object Model | Windows Object | 48 | 60 | 30 | 200 | |
| | | Document Object | 21 | | | | |
| | | Other DOM Objects | 11 | | | | |
| | Javascript-Cookies | Working with Cookies | 39 | | | | |
| | Javascript-Working with Classes and Objects | Working with Classes and Objects | 21 | | | | |
| | | Call Method | 11 | | | | |
| | | Implementing Inheritance | 9 | | | | |
| | | | | | | | |
| | Javascript Assignments | **Assignment Name** | | | | | |
| | | HTML DOM Assignment | | | | | |
| | | Cookies Assignment | | | | | |
| | | Classes and Object Assignment | | | | | |
| | | Inheritance Assignment | | | | | |
| | | | | | | | |
| **Total Hours** | | | **2.67** | **1** | **0.5** | **3.33** | **7.5** |
| 45 | **Revision,Group Discussion,Exam,Review** | | **0** | | **8** | | **8** |
| | | | | | | | |
| ASP.NET MVC | | | | | | | |
| | Overview of .NET Implementation | What is .Net | 15 | | | | |
| | | .Net Implementation and Types of .Net Applications | 27 | | | | |
| | | About MS.Net Framework | 12 | | | | |
| | | About Mono Xamarin UWP | 13 | | | | |
| | | Introduction to .Net Core | 37 | | | | |
| | Getting Started with ASP.Net Core | About ASP.Net Core | 17 | | | | |
| | | Layout of ASP.Net Core Application | 26 | | | | |
| | | Understanding Razor Pages | 21 | | | | |
| | | What is MVC Pattern | 15 | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 46 | Controllers and Action Method | MVC in ASP.Net Core | 8 | 60 | 30 | 160 | |
| | | Understanding Controllers and Action Methods | 19 | | | | |
| | | Understanding Views | 20 | | | | |
| | | Understanding Model between View and Controller | 16 | | | | |
| | | Types of Action Results | 24 | | | | |
| | | About Action Selectors | | | | | |
| | | | | | | | |
| | Controllers and Action Method Assignment | **Assignment Name** | | | | | |
| | | Practice the Examples shown in video | | | | | |
| | | Assignment in Razor Pages | | | | | |
| | | Assignment in Controllers and Action methods using Actions Results and Selectors | | | | | |
| | | | | | | | |
| **Total Hours** | | | **4.5** | **1** | **0.5** | **2.67** | **8.67** |
| 47 | Application Start-up and Registering Services using Dependency Injection. | Understanding Entry Point Method | 19 | 60 | 30 | 120 | |
| | | Startup class Configure Service and Configure Method | 18 | | | | |
| | | Registering Services and Dependency Injection | 26 | | | | |
| | Working with Middleware | Understanding Middleware and use Run and Map Methods | 22 | | | | |
| | | Programming Custom Middleware | 19 | | | | |
| | | Built In Middleware | 26 | | | | |
| | | Migrating Modules and Handlers to Middlewares | 11 | | | | |
| | Exploring Razor Views | Razor Syntax | 34 | | | | |
| | | Razor Directives | 11 | | | | |
| | | Partial Views | 18 | | | | |
| | | Layout Pages | 27 | | | | |
| | | View Component | 24 | | | | |
| | | | | | | | |
| | Razor Views Assignment | **Assignment Name** | | | | | |
| | | Practice the Examples shown in video | | | | | |
| | | Assignment in how to use Dependency Injection | | | | | |
| | | Assignment in Razor Views | | | | | |
| | | | | | | | |
| **Total Hours** | | | **4.25** | **1** | **0.5** | **2** | **7.75** |

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|---|---|---|---|---|---|---|---|
| | Digging into HTML Helpers | Introducing HTML Helper Methods | 39 | | | | |
| | | Binding HTML Helpers to View Data | 9 | | | | |
| | | Binding HTML Helper to Model | 35 | | | | |
| | | Display and Editor Helper Methods | 10 | | | | |
| | | Custom Templates for Display and Editor Helper Methods | 13 | | | | |
| | | Reusing Helper Methods | 15 | | | | |
| 48 | Using Tag Helper | Tag Helpers Introduction | 19 | 60 | 30 | 180 | |
| | | Anchor and Image Tag Helpers | 16 | | | | |
| | | Form Environment and Script Tag Helpers | 35 | | | | |
| | | Custom Tag Helpers | 11 | | | | |
| | Understanding Model Binders | HTML Form Submit Behaviour | 9 | | | | |
| | | Behaviour of Default Model Binder | 16 | | | | |
| | | Customizing Model Binder | 20 | | | | |
| | | | | | | | |
| | HTML Helpers,Tag Helper,Model Binders Assignment | <mark>Assignment Name</mark> | | | | | |
| | | Practice the Examples shown in video | | | | | |
| | | Assignment in Helper Methods | | | | | |
| | | Assignment in Tag Helper | | | | | |
| | | Assignment in Model Binders | | | | | |
| | | | | | | | |
| 49 | **Revision,Group Discussion,Exam,Review** | | **0** | | **8** | | **8** |
| | **Total Hours** | | **4.12** | **1** | **0.5** | **3** | **8.62** |
| | Validations and Data Annotations | Validating Model Object | 32 | | | | |
| | | Remote and Custom Validation Attributes | 25 | | | | |
| | | Custom Client Side Validation | 24 | | | | |
| | Configuration Web Applications | Configuring ASP.Net Core Applications | 29 | | | | |
| | | Working with Environmental Variable | 19 | | | | |
| 50 | State Management Techniques | What is a Cookie | 24 | 60 | 30 | 180 | |
| | | Programming Cookie in ASP.Net Core | 23 | | | | |
| | | Authentication using Cookies | 19 | | | | |
| | | Progamming Sessions in .Net Core | 23 | | | | |

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|---|---|---|---|---|---|---|---|
| | | ViewData vs ViewBag vs TempData | 16 | | | | |
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| | Validations and Data Annotations & State Management Techniques Assignment | **Assignment Name** | | | | | |
| | | Practice Examples shown in video | | | | | |
| | | Assignment in Data Annotations | | | | | |
| | | Assignment in State Management Techniques | | | | | |
| | | | | | | | |
| | **Total Hours** | | **3.9** | **1** | **0.5** | **3** | **8.4** |
| 51 | **Revision,Group Discussion,Exam,Review** | | **0** | | **8** | | **8** |
| 52 | Data Access Using Entity Framework Core | CRUD Operations using EF Core | 27 | 60 | 30 | 180 | |
| | | Working with Migration in EF Core | 10 | | | | |
| | | Writing and Using Bussiness Objects | 18 | | | | |
| | | Writing and Using Generic Repository | 23 | | | | |
| | | Caching in Repository | 9 | | | | |
| | Authentication and Authorization | ASP.Net Core Identity Provider Introduction | 20 | | | | |
| | | Scafolfing Identity in Exsiting Application | 18 | | | | |
| | | Adding Custom Fields to User Entity | 21 | | | | |
| | | Role Based Authorization | 28 | | | | |
| | | External Authentication Providers | 11 | | | | |
| | | Using JWT Token to Authenticate and Authorize | 46 | | | | |
| | | | | | | | |
| | EF Core and Authentication and Authorization Example | **Assignment Name** | | | | | |
| | | Practice the Example shown in video | | | | | |
| | | Assignment in Employee Department using EF Core and JWT | | | | | |
| | | Assignment in Vehicle Example using EF Core | | | | | |
| | | | | | | | |
| | **Total Hours** | | **3.85** | **1** | **0.5** | **3** | **8.35** |
| 53 | **Revision,Group Discussion,Exam,Review** | | **0** | | **8** | | **8** |
| | Web Caching | Web Caching | 41 | 60 | 30 | 180 | |

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|---|---|---|---|---|---|---|---|
| | URL Routing | URL Routing | 30 | | | | |
| | | Routing Features | 15 | | | | |
| 54 | WEB API | Working with WEB API | 36 | | | | |
| | | Swagger and Swashbuckle | 19 | | | | |
| | | Understanding JWT Token | 16 | | | | |
| | | Web API Security using JWT Token | 43 | | | | |
| | | | | | | | |
| | WEB API Assignment | **Assignment Name** | | | | | |
| | | Practice Examples shown in video | | | | | |
| | | Assignment In Web API | | | | | |
| | | | | | | | |
| Total Hours | | | **3.33** | **1** | **0.5** | **3** | **7.83** |
| 55 | Revision,Group Discussion,Exam,Review | | **0** | | **8** | | **8** |
| | | | | | | | |
| Projects | | | | | | | |
| 56 & 57 | Mini-Project Vehicle Assignment covers all modules with ASP.NET MVC | | 0 | 120 | 14 | | |
| 58 , 59 & 60 | Contacts Manager application with ASP.NET MVC | | 0 | 120 | 30 | | |