As technology advanced, virtual laboratory software has increased in number and their usage spread. Package programs that are developed may not be flexible and interactive enough for different branches of science. Therefore, in this study, virtual laboratory software was developed for the speed control of an induction motor fed by a three-level inverter. PI, PID, fuzzy logic, artificial neural network and neuro-fuzzy controllers were provided for the choice of the user for speed controller. By enabling the user to change all parameters, different working conditions for the induction motor were simulated and the outcomes were observed. The virtual laboratory has a flexible interface and it was written on Microsoft Visual Studio 2015 IDE using C# programming language on WPF infrastructure.