## **Syllabus**

There are various teaching subjects that can be taught and exercised using this kit. They are appropriate for various courses, like Control, Processes Control, Real-Time Systems, Mechatronics and much more.

Lists of selected subjects that can be combined into the courses are as follows:

- Familiarity of C/C++ programming under Windows.
- Access to ports, Direction of ports (Input, Output).
- Writing code and running it in real-time mode, Considerations and Techniques.
- Synchronous and Asynchronous parallel communication through an 8-bit channel and Controls.
- 12 bit analog to digital conversions (ADC), Resolution, Dynamic Range.
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- Sampling and Sensing.
- Advanced Processes Control PID (Heat, Light, Velocity, Angle, Level, Servo and much more).
- PWM Control.
- Writing Interrupts, Enabling and Disabling Interrupts.
- Working with Timers and using them to call Interrupts.