Automation Engineering 3rd year Student Capability

1. Have knowledge of logic control in industry. Can implement programmable logic controllers (PLC)
2. Have knowledge about measurement in industrial process. Understand the functionality of measurement instrument such as temperature, pressure, level, etc. Know how to calibrate smart transmitters and can select appropriate measurement devices that suit the environment.
3. Have knowledge about process control such as feedback, feedforward, cascade., Can tune PID according to standard procedure.
4. Understand IT technology with industry such as ERP system.
5. Know how to use signal measurement devices such as digital multimeter, oscilloscope, function generator etc.
6. Can use software related to engineering
7. Know how to read, create and edit P&I drawing and electrical drawing using standard software
8. Can design digital and analog circuits, and basic microcontroller programming
9. Can develop program/software with C language or other languages.
10. Can design and develop embedded systems for IoT applications using C/C++, Python, and other relevant languages
11. Understand industrial communication protocols such as MODBUS and Ethernet/TCP/IP, and IoT protocols such as MQTT, HTTP/REST, CoAP, etc.
12. Can setup a network server and understand fundamental computer network security.
13. Understand Database systems
14. Eager to learn new things. Have self-discipline, teamwork and good time management. Friendly to all people.