Course Code	Course Title	Credits	Lectures /Week
USCSP404	**IoT Technologies – Practical**	**1**	**3**
1	Preparing Raspberry Pi: Hardware preparation and Installation		
2	Demonstrate Arduino Uno and its pins interfacing with IDE.		
3	GPIO: Light the LED with Python with/without a button using either Uno/Raspberry Pi.		
4	SPI: Camera Connection and capturing Images/Videos using SPI		
5	GPIO: LED Grid Module: Program the 8X8 Grid with Different Formulas		
6	Stepper Motor Control: PWM to manage stepper motor speed using Uno/Raspberry Pi.		
7	Node RED: Connect LED to Internet of Things		
8	Use different types of sensors (LDR, Temperature) with Raspberry Pi/Uno.		
9	Trigger a set of led GPIO on any IoT platform via any related web server		
10	Interface with any sensor and send its value over the internet to the server using any suitable protocol		