Имате свободен избор за използвания контролер при следните условия:

- *можете да ползвате 8, 16 или 32 битов микроконтролер*

- *микроконтролера може да е: MSP430xx (като този от лабораторните), PICxxFxxx (Microchip) или контролери на Atmel (Microchip), STM32xxx (STMicroelectronics), LPC21/20/17/13xxx (NXP), ESP32 (Espressif) или вариантите му, RASPBERRY PI PICO (Raspberry Pi Foundation) или RASPBERRY PI PICO W*

- *може да се използва Arduino и Arduino IDE при условие, че кода е написан на ниво регистър или чрез използване на базови периферни библиотеки (SPI, I2C, UART, ADC и т.н.) за получаване на крайния резултат*

!!! НЕ Е НЕОБХОДИМО ДА ПРЕДСТАВИТЕ ФИЗИЧЕСКИ РЕАЛИЗИРАН ПРОТОТИП НА ПРОЕКТА ВИ !!!

За Лабораторните упражнение по МСхТ:
https://github.com/LubomirBogdanov/MSHT/tree/main/03_lab_exercises
https://github.com/LubomirBogdanov/MSHT/blob/main/03_lab_exercises/01_documents/00_RUKOVODSTVO.pdf
https://github.com/LubomirBogdanov/MSHT/blob/main/03_lab_exercises/00_MSHT_Blanka_Protokol/MSHT_Blank.doc

Помощна информация:

За Microchip:
https://www.microchip.com/en-us/tools-resources/develop/mplab-x-ide
https://www.microchip.com/en-us/tools-resources/develop/mplab-xc-compilers

За STMicroelectronics:
https://www.st.com/en/development-tools/stm32cubeide.html

За NXP:
https://www.nxp.com/design/design-center/software/development-software/mcuxpresso-software-and-tools-/mcuxpresso-integrated-development-environment-ide:MCUXpresso-IDE

За Espressif:
https://code.visualstudio.com/download
https://github.com/espressif/vscode-esp-idf-extension/blob/master/docs/tutorial/install.md
https://www.youtube.com/watch?v=XDDcS7HQNlI

За Raspberry Pi Foundation:
https://code.visualstudio.com/download

Нов вариант:
https://datasheets.raspberrypi.com/pico/getting-started-with-pico.pdf

Стар вариант:
https://shawnhymel.com/2096/how-to-set-up-raspberry-pi-pico-c-c-toolchain-on-windows-with-vs-code/

https://www.youtube.com/watch?v=B5rQSoOmR5w&list=PLEBQazB0HUyQO6rJxKr2umPCgmfAU-cqR&index=2

За Arduino IDE:
https://www.arduino.cc/en/software

За изчертаване на схеми:
https://easyeda.com/

Магазини от където бихте могли да закупите микроконтролер и сензори/модули/периферия:
https://elimex.bg/
https://elimex.bg/category/hobby-electronics-atmel
https://store.comet.bg/Catalogue/
https://www.olimex.com/Products/
https://radev96.com/
https://erelement.com/
https://www.robotev.com/index.php

Помощна литература:
https://store.comet.bg/Catalogue/Product/6798/
https://store.comet.bg/Catalogue/Product/25310/
https://store.comet.bg/Catalogue/Product/16008/
https://store.comet.bg/download-file.php?id=1596
https://storage.composity.com/files/b47a2a73
https://www.jameco.com/Jameco/workshop/Howitworks/how-servo-motors-work.html
https://howtomechatronics.com/how-it-works/how-servo-motors-work-how-to-control-servos-using-arduino/
https://howtomechatronics.com/tutorials/arduino/arduino-and-hc-05-bluetooth-module-tutorial/
https://lastminuteengineers.com/433mhz-rf-wireless-arduino-tutorial/
https://www.youtube.com/watch?v=cUNb_XtwIZU

https://www.youtube.com/@greatscottlab/videos
https://www.youtube.com/@HowToMechatronics/videos
https://www.youtube.com/@ELECTRONOOBS/videos
https://www.youtube.com/@SineLab/videos