

Course description:

Requirements (prerequisites)

- Knowledge of ANSI C.

Description (description)

Fundamentals of construction and testing of embedded systems based on the Arduino platform.

Program (Program)

Basics of electronics: the tension device diagram drawing of wires and connections, resistor, bar code resistors, connection method resistors (serial and parallel), potentiometer, the basic unit, resistance / voltage / current / capacity / power capacitors constantly, electrolytic capacitors, rectifying diodes / stabilization / LED, transistors, switches and buttons, connectors and sockets, the plates and printed circuits.

Fundamentals and types of optimization programs.

Create systems based on Arduino - writing and debugging programs, and folding devices.

Literature:

AVR programming systems for practitioners, Elliot Williams

Arduino Cookbook - 2nd Edition by Michael Margolis

Making Embedded Systems, Elecia White

Designing Embedded Hardware John catsoulis