Engineering + Innovation Camps at CU Denver
Robotics Design + Challenge

Sample Itinerary

Monday

9 – 9:30 a.m.	Welcome and Registration
9:30 – 10:30 a.m.	LED series circuit
10:30 – 11 a.m.	Arduino C++ Programming – Blink LED
11 a.m. – 12 p.m.	Project 1: Traffic Lights
12 – 1 p.m.	Lunch on your own
1 – 2 p.m.	Programming: Data types, displaying information
2 – 3 p.m.	Programming Decision Making
3 – 4 p.m.	Project 2: Music & Lights

Tuesday

9 – 10 a.m.	Analog, Pulse Width Modulation circuits
10 a.m. – 12 p.m.	Introduction to visual python
12 – 1 p.m.	Lunch on your own
1 – 2 p.m.	Robot Car Assembly
2 – 4 p.m.	Robot Driving Fundamentals

Wednesday

9 – 10:30 a.m.	Remote Driving Control
10:30 a.m. – 12 p.m.	Line-tracking sensors
12 – 1 p.m.	Lunch on your own
1 – 4 p.m.	Line-following/Maze Solving

Thursday

9 – 10:30 p.m.	Distance Detection with Ultrasonic Sensors
10:30 a.m. – 12 p.m.	Data Visualization with python
12 – 1 p.m.	Lunch on your own
1 – 2:30 p.m.	Programming Arrays, Sorting
2:30 – 4 p.m.	Filtering Noisy Data

Friday

9 – 10 p.m.	Servo Motors
10 a.m. – 12 p.m.	Ultrasonic Radar Object Detection
12 – 1 p.m.	Lunch on your own
1 – 4 p.m.	Autonomous Obstacle Avoidance