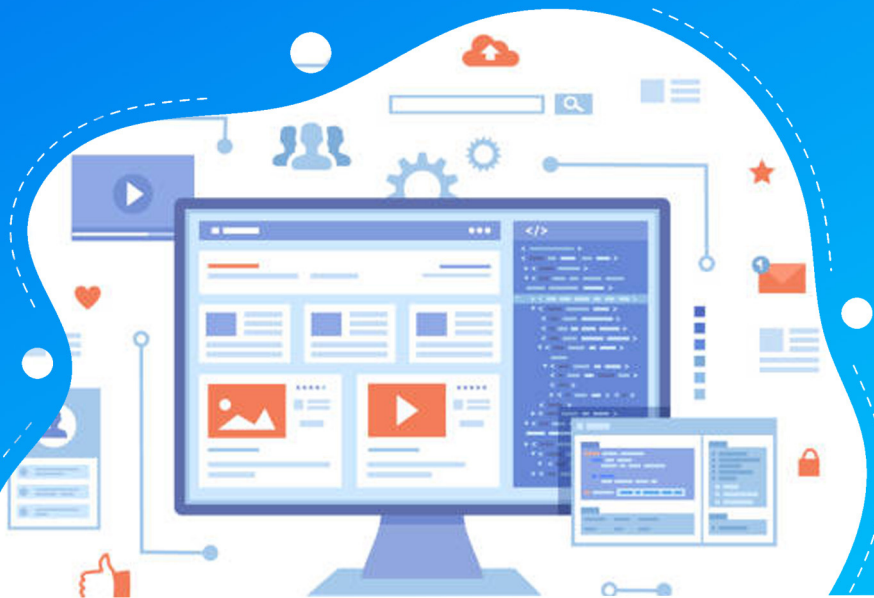


# RoboSmart Labs

REDEFINING ROBOTICS EDUCATION

## 51 Hour Course - Option 3

Course code: RSL0L51R01

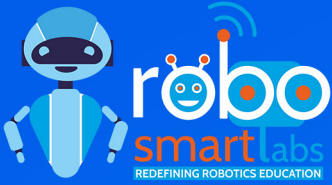


**ADVANCED CODING (PYTHON – JAVA – ANDROID STUDIO – BLOCKLY – C SHARP – HTML CSS) / ETHICAL HACKING – CYBER SECURITY / APP DEVELOPMENT / AI / ML / AR-VR /ADVANCED WEB DEVELOPMENT**

(ROBUST - GOOD FOR GRADE 9-12)



**INTERACTIVE LIVE  
COURSE SERIES**



# RoboSmart Labs

REDEFINING ROBOTICS EDUCATION

**ADVANCED CODING (PYTHON – JAVA – ANDROID STUDIO – BLOCKLY – C SHARP – HTML CSS) / ETHICAL HACKING – CYBER SECURITY / APP DEVELOPMENT / AI / ML / AR-VR /ADVANCED WEB DEVELOPMENT**  
(ROBUST - GOOD FOR GRADE 9-12)

Course code: RSL0L51R01

ADVANCE - PYTHON PROGRAMMING (GAME DEV)

## Learning Outcome

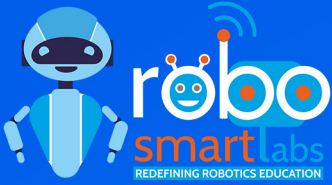
What is Python?, Gaming in Python, Installing Python, Installing Pygame Zero, Using IDLE, Learning the Basics, Creating variables, Making decisions, Playing with loops, Functions, Fixing bugs

## Projects

Your first program, Shoot the Froot, How to build Shoot the Fruit, Coin Collector, How to build Coin Collector, Follow the Numbers, How to build Follow the Numbers, Red Alert, How to build Red Alert, Happy Garden, How to build Happy Garden, Sleeping Dragons, How to build Sleeping Dragons, Big Quiz, How to build Big Quiz, Ballon Fight, How to build Balloon Flight, Dance Challenge, How to build Dance Challenge

[CLICK HERE FOR COURSE REGISTRATION](#)

[www.robosmartlabs.com](http://www.robosmartlabs.com)



# RoboSmart Labs

REDEFINING ROBOTICS EDUCATION

**ADVANCED CODING (PYTHON – JAVA – ANDROID STUDIO – BLOCKLY – C SHARP – HTML CSS) / ETHICAL HACKING – CYBER SECURITY / APP DEVELOPMENT / AI / ML / AR-VR /ADVANCED WEB DEVELOPMENT**  
(ROBUST - GOOD FOR GRADE 9-12)

Course code: RSL0L51R01

## BASIC - ETHICAL HACKING AND CYBER SECURITY

### Learning Outcome

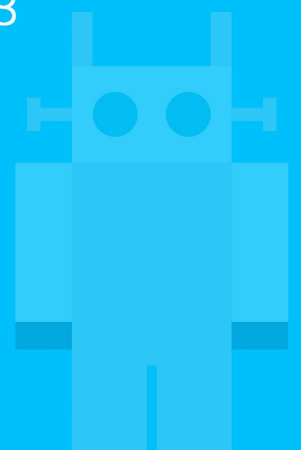
Hacking with Kali Linux, Basics of hacking, What is ethical Hacking?, Cyber security, Linux architecture, Basics of Linux operating system, Basic linux commands, Characteristics of Kali Linux & it's important in the hacking world, Installation of Kali Linux, Applications and use of Kali Linux, Different tools of Kali Linux, How can Kali Linux be used for Hacking?, Techniques of using Kali Linux, Penetration testing, VPN, Firewall, Cryptography

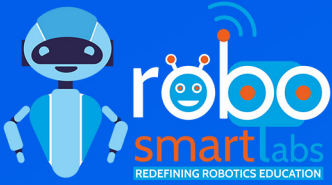
### Projects

Virus creation for Wi-Fi circle, Virus creation for global Attack, Window payload generation, Backdoor generation, Android pay load generation, VPN creation, Firewall Cracking, Browser exploitation, Port scanning

[CLICK HERE FOR COURSE REGISTRATION](#)

[www.robosmartlabs.com](http://www.robosmartlabs.com)





# RoboSmart Labs

REDEFINING ROBOTICS EDUCATION

**ADVANCED CODING (PYTHON – JAVA – ANDROID STUDIO – BLOCKLY – C SHARP – HTML CSS) / ETHICAL HACKING – CYBER SECURITY / APP DEVELOPMENT / AI / ML / AR-VR /ADVANCED WEB DEVELOPMENT**

(ROBUST - GOOD FOR GRADE 9-12)

Course code: RSL0L51R01

VIRTUAL REALITY AND AUGMENTED REALITY (BASIC)

## Learning Outcome

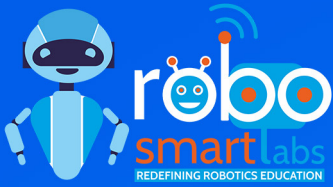
Getting familiar with VR and VR software, Develop 3D Creation skills, Working with variables, Using lists, Using Functions, Screen templates, Camera movements, The Snapping tool, Scene filters, The hierarchy, Building blocks, Sphere textures, Floor image, Lock feature, Duplicate, Attach feature, Uploading videos, Publish VR App, Desktop shortcuts, Editor, Navigation, Building, Co locks

## Projects

Play mode, Gyro mode, VR (Virtual Reality) mode, AR (Augmented Reality) mode, Register, Create, Explore 360° tours, Virtual exhibitions, Storytelling lesson, Creation Planning, Create virtual scenes, Build new constructions, Add external files

[CLICK HERE FOR COURSE REGISTRATION](#)

[www.robosmartlabs.com](http://www.robosmartlabs.com)



# RoboSmart Labs

REDEFINING ROBOTICS EDUCATION

**ADVANCED CODING (PYTHON – JAVA – ANDROID STUDIO – BLOCKLY – C SHARP – HTML CSS) / ETHICAL HACKING – CYBER SECURITY / APP DEVELOPMENT / AI / ML / AR-VR /ADVANCED WEB DEVELOPMENT**  
(ROBUST - GOOD FOR GRADE 9-12)

Course code: RSL0L51R01

## AI AND ML PROGRAMMING (ADVANCE)

### Learning Outcome

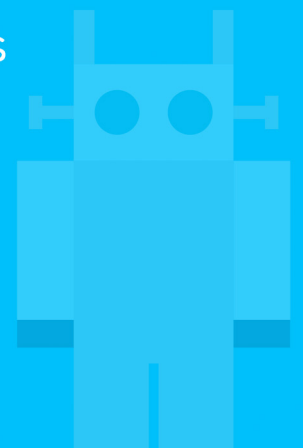
What is machine learning?, Why machine learning?, When should you use machine learning?, Types of Systems of Machine Learning, Supervised and unsupervised learning, Reinforcement Learning, Instance based learning, Model-based learning, Measures of Performance, Confusion Matrix, Recall Trade-off ROC, Multi-class Classification, Training a Random Forest Classifier, TRAINING A MODEL, Linear Regression, Computational Complexity, Types of Descent, Polynomial Regression, Learning Curves, Regularized Linear Models, Ridge & Lasso Regression

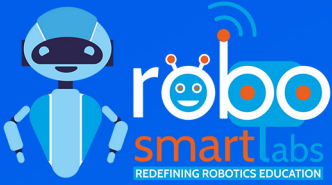
### Projects

- 3 Basic using the above features
- 4 Advance ML & AL using the above features

[CLICK HERE FOR COURSE REGISTRATION](#)

[www.robosmartlabs.com](http://www.robosmartlabs.com)





# RoboSmart Labs

REDEFINING ROBOTICS EDUCATION

**ADVANCED CODING (PYTHON – JAVA – ANDROID STUDIO – BLOCKLY – C SHARP – HTML CSS) / ETHICAL HACKING – CYBER SECURITY / APP DEVELOPMENT / AI / ML / AR-VR /ADVANCED WEB DEVELOPMENT**  
(ROBUST - GOOD FOR GRADE 9-12)

Course code: RSL0L51R01

ADVANCE - WEB DEVELOPMENT (HTML , CSS )

## Learning Outcome

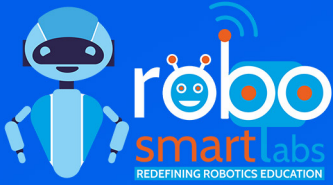
Basics of CSS, Applying CSS Code, Syntax of a CSS rule, Selecting an Element, Selecting Classes and IDs, More Selectors, Case Insensitivity, Order of Precedence, Display Inconsistency, Comments, CSS Box Model, Width and Height Properties, Overflow Property, Padding and Margin Properties, Border Properties, Border Shorthand, Positioning and Floating, Floating, Display and Visibility, Background, Background Color Image repeat attachment position, Text and Font Properties, Lists, Links and Navigation Bars, CSS Lists, Links, Navigation Bars, Tables. Border, Padding and Margin

## Projects

5 Basic Websites using the above features  
8 Advance websites using the above features

[CLICK HERE FOR COURSE REGISTRATION](#)

[www.robosmartlabs.com](http://www.robosmartlabs.com)



# RoboSmart Labs

REDEFINING ROBOTICS EDUCATION

**ADVANCED CODING (PYTHON – JAVA – ANDROID STUDIO – BLOCKLY – C SHARP – HTML CSS) / ETHICAL HACKING – CYBER SECURITY / APP DEVELOPMENT / AI / ML / AR-VR /ADVANCED WEB DEVELOPMENT**  
(ROBUST - GOOD FOR GRADE 9-12)

Course code: RSL0L51R01

## APP DEVELOPMENT (BASIC) JAVA - ANDROID STUDIO

### Learning Outcome

The Android platform dissected, Development Environment, Install Android Studio, Build a basic app, Activities and layouts, Android Studio folder structure, Useful files in your project, Editing code with Android Studio editors, Run the app with Android emulator, Creating an Android Virtual Device, Console progress, Your Android Toolbox, Create a chooser, Pass from First to a second activity, Build the custom Java class, Test drive your app

### Projects

Let's build a Juice Adviser app  
(full version with learning more than 10 concepts)  
Transfer message app  
(full version with learning more than 12 concepts)

[CLICK HERE FOR COURSE REGISTRATION](#)

[www.robosmartlabs.com](http://www.robosmartlabs.com)

