BLUETOOTH DEVELOPMENT

1) Bluetooth Introduction
2) Bluetooth Technology
3) Bluetooth LE, Bluetooth low energy
4) Bluetooth core specification
5) Bluetooth profiles
6) Bluetooth Networking architecture
7) Bluetooth operations
8) Bluetooth implementations
9) Bluetooth protocol
10) Bluetooth architecture
11) Bluetooth physical layer
12) Physical channel
13) Physical links
14) Spectrum
15) Interference
16) Class of Radio
17) Power and Range
18) Bluetooth packets
19) Link manager protocol (IMP)
20) Host controller Interface (HCI)
21) Logical link control and Adaption Protocol (L2CAP)
22) Bluetooth security
23) Bluetooth smart
24) Bluetooth IOT
25) Bluetooth Standards
26) Bluetooth Conformance and Compatibility testing
27) Bluetooth 5
28) Bluetooth 5 and connectionless IOT
29) Bluetooth 5 advancing beacon and location based capabilities.

ADVANCED C & UNIX PROGRAMMING

This course provides a thorough practical exposure to the C programming language, the workhorse of the UNIX operating system. The first two weeks will cover basic syntax and grammar which covers Basic C, Loops, Function, Array, Pointer, and Structure and expose students to practical programming techniques. The remaining lectures will focus on more advanced concepts, such as dynamic memory allocation, memory management Data Structure, concurrency and synchronization, UNIX signals and process control, library development and usage. Daily programming assignments and weekly laboratory

exercises are required. Knowledge of C is highly marketable for full-time positions in software and embedded systems development.