<table>
<thead>
<tr>
<th>Day</th>
<th>Topic</th>
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</table>
| Day 1 (Morning)     | • Introduction to Electronic Hardware System Design  
                      • Understanding an Hardware Design Document                                               |
| Day 1 (Afternoon)   | • Introduction to electronic components resistors, capacitors, inductors, transistors, PLD, FPGA  
                      • Component Identification and selection for the requirement                               |
| Day 2 (Morning)     | • Power supply conversion  
                      o Basics of AC to DC                                                                 |
| Day 2 (Afternoon)   | • Power supply conversion  
                      o Basics of DC to DC                                                                  |
| Day 3 (Morning)     | • Digital I/O  
                      o I/O standards  
                      o Buffers/Drivers/Level Translators                                                   |
| Day 3 (Afternoon)   | • Analog I/O  
                      o Basics of ADC and DAC                                                                |
| Day 4 (Morning)     | • Introduction to Processor based system                                                         
                      • Introduction to FPGA based system                                                      |
| Day 4 (Afternoon)   | • Memory Interface  
                      o SRAM  
                      o Flash/EPROM  
                      o SDRAM                                                                       |
| Day 5 (Morning)     | • Serial communication Interface  
                      o UART  
                      o SPI  
                      o I2C                                                                         |
| Day 5 (Afternoon)   | • Schematic Entry                                                                               |
| Day 6 (Morning)     | • PCB Stack up creation                                                                         |
| Day 6 (Afternoon)   | • Layout Guideline                                                                               |
| Day 6 (Afternoon)   | • PCB CAD Layout Design                                                                         |
| Day 7 (Morning)     | • Fabrication Guidelines and Gerber Release  
                      • Fabrication process  
                      • Assembly process                                                                 |
| Day 7 (Afternoon)   | • Lab Ethics (Procedure for Safety – ESD, Power sequence etc)  
                      • Testing - Test and Measurement equipments  
                      • Test Report preparation                                                               |