



ORBIT FET COLLEGE
BRITS, RUSTENBURG AND MANKWE CAMPUS

ECDE LEVEL 2 TO 4

| | MATERIAL | DESCRIPTION | VALUE | TOTAL QUANTITY | UNIT PRICE |
|-----|----------|---------------|-------|----------------|------------|
| 1. | Resistor | 1W, Fixed | 33Ω | 1 | |
| 2. | Resistor | ½ watt; Fixed | 100Ω | 1 | |
| 3. | Resistor | ½ watt; Fixed | 150Ω | 1 | |
| 4. | Resistor | ½ watt; Fixed | 120Ω | 1 | |
| 5. | Resistor | ½ watt; Fixed | 200Ω | 1 | |
| 6. | Resistor | ½ watt; Fixed | 220Ω | 1 | |
| 7. | Resistor | ½ watt; Fixed | 270Ω | 1 | |
| 8. | Resistor | ½ watt; Fixed | 300Ω | 1 | |
| 9. | Resistor | ½ watt; Fixed | 330Ω | 1 | |
| 10. | Resistor | ½ watt; Fixed | 390Ω | 1 | |
| 11. | Resistor | ½ watt; Fixed | 470Ω | 1 | |
| 12. | Resistor | ½ watt; Fixed | 480Ω | 1 | |
| 13. | Resistor | ¼ watt; Fixed | 510 Ω | 1 | |
| 14. | Resistor | ½ watt; Fixed | 680Ω | 1 | |
| 15. | Resistor | ½ watt; Fixed | 600Ω | 1 | |
| 16. | Resistor | ½ watt; Fixed | 1KΩ | 1 | |
| 17. | Resistor | ½ watt; Fixed | 1.2KΩ | 1 | |
| 18. | Resistor | ½ watt; Fixed | 1.5KΩ | 1 | |
| 19. | Resistor | ½ watt; Fixed | 1.8KΩ | 1 | |
| 20. | Resistor | ½ watt; Fixed | 2KΩ | 1 | |
| 21. | Resistor | ½ watt; Fixed | 2.2KΩ | 1 | |
| 22. | Resistor | ½ watt; Fixed | 3KΩ | 1 | |
| 23. | Resistor | ½ watt; Fixed | 3.3KΩ | 1 | |
| 24. | Resistor | ½ watt; Fixed | 3.6KΩ | 1 | |
| 25. | Resistor | ½ watt; Fixed | 4.7KΩ | 1 | |
| 26. | Resistor | ½ watt; Fixed | 6.8KΩ | 1 | |
| 27. | Resistor | ¼ watt; Fixed | 10KΩ | 1 | |
| 28. | Resistor | ½ watt; Fixed | 10KΩ | 1 | |
| 29. | Resistor | ¼ watt; Fixed | 15KΩ | 1 | |

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| 30. | Resistor | ½ watt; Fixed | 15KΩ | 1 | |
| 31. | Resistor | ½ watt; Fixed | 20K Ω | 1 | |
| 32. | Resistor | ½ watt; Fixed | 22K Ω | 1 | |
| 33. | Resistor | ¼ watt; Fixed | 22K Ω | 1 | |
| 34. | Resistor | ¼ watt; Fixed | 30K Ω | 1 | |
| 35. | Resistor | ¼ watt; Fixed | 33K Ω | 1 | |
| 36. | Resistor | ¼ watt; Fixed | 47KΩ | 1 | |
| 37. | Resistor | ½ watt; Fixed | 47KΩ | 1 | |
| 38. | Resistor | ¼ watt; Fixed | 100KΩ | 1 | |
| 39. | Resistor | ¼ watt; Fixed | 200KΩ | 1 | |
| 40. | Resistor | ¼ watt; Fixed | 300KΩ | 1 | |
| 41. | Resistor | ¼ watt; Fixed | 470KΩ | 1 | |
| 42. | Resistor | ¼ watt; Fixed | 680KΩ | 1 | |
| 43. | Resistor | ¼ watt; Fixed | 1MΩ | 1 | |
| 44. | Resistor | ¼ watt; Fixed | 1.5MΩ | 1 | |
| 45. | Resistor | ¼ watt; Fixed | 2MΩ | 1 | |
| 46. | Resistor | ¼ watt; Fixed | 3MΩ | 1 | |
| 47. | Resistor | ¼ watt; Fixed | 5.1MΩ | 1 | |
| 48. | Resistor | ¼ watt; Fixed | 9.1MΩ | 1 | |
| 49. | Potentiometer | | 1KΩ | 1 | |
| 50. | Potentiometer | | 10KΩ | 1 | |
| 51. | Potentiometer | | 100KΩ | 1 | |
| 52. | Potentiometer | | 1MΩ | 1 | |
| 53. | Light dependant resistor | LDR | | 1 | |
| 54. | Diode | Standard diode | 1N4001 | 1 | |
| 55. | Diode | Standard diode | 1N4004 | 1 | |
| 56. | Diode | Standard diode | 1N4005 | 1 | |
| 57. | Diode | Standard diode | 1N4006 | 1 | |

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| 58. | Diode | Standard diode | 1N4007 | 1 | |
| 59. | Diodes | | IN 4148 | 1 | |
| 60. | Zener diode | Zener diode | 1N4728A | 1 | |
| 61. | Zener diode | Zener diode | 1N4739A | 1 | |
| 62. | Zener diode | Zener diode | 1N4742A | 1 | |
| 63. | Zener diode | Zener diode | 1N4744A | 1 | |
| 64. | LED | Green | 5mm | 1 | |
| 65. | LED | Red | 5mm | 1 | |
| 66. | LED | Orange | 5mm | 1 | |
| 67. | LED | White | 5mm | 1 | |
| 68. | RGB Led Common | RGB Led Common cathode, 5mm, 4 | 5mm | 1 | |
| 69. | LED holders | | 5mm | 1 | |
| 70. | Photo diode | | | 1 | |
| 71. | Capacitor | Electrolytic | 0.1 μ F/ 25V | 1 | |
| 72. | Capacitor | Electrolytic | 0.1 μ F/ 50V | 1 | |
| 73. | Capacitor | Electrolytic | 1 μ F/ 25V | 1 | |
| 74. | Capacitor | Electrolytic | 10 μ F/ 25V | 1 | |
| 75. | Capacitor | Electrolytic | 47 μ F/ 25V | 1 | |
| 76. | Capacitor | Electrolytic | 47 μ F/ 35V | 1 | |
| 77. | Capacitor | Electrolytic | 50 μ F/ 25V | 1 | |
| 78. | Capacitor | Electrolytic | 100 μ F/ 25V | 1 | |
| 79. | Capacitor | Electrolytic | 220 μ F/ 25V | 1 | |
| 80. | Capacitor | Electrolytic | 250 μ F/ 25V | 1 | |
| 81. | Capacitor | Electrolytic | 1000 μ F/ 25V | 1 | |
| 82. | Capacitor | Electrolytic | 470 μ F/ 25V | 1 | |
| 83. | Capacitor | Electrolytic | 2200 μ F/ 25V | 1 | |
| 84. | Capacitor | Electrolytic | 4700 μ F/ 25V | 1 | |
| 85. | Capacitor | ceramic | 1Pf | 1 | |
| 86. | Capacitor | ceramic | 10Pf | 1 | |
| 87. | Capacitor | ceramic | 100Pf | 1 | |
| 88. | Capacitor | 22n (223) ceramic | 22Nf | 1 | |
| 89. | Capacitor | 100n monoblock | 100Nf | 1 | |
| 90. | Capacitor | 10n monoblock | 10Nf | 1 | |
| 91. | Capacitor | 1n (102) ceramic | 1Nf | 1 | |
| 92. | Capacitor | 5.6p ceramic | 5.6p ceramic | 1 | |

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| 93. | Capacitor | 27p ceramic | 27p ceramic | 1 | |
| 94. | Capacitor | Trim Cap 6-45 Pf | Trim Cap 6-45 Pf | 1 | |
| 95. | Voltage regulator | LM7805 | LM7805 | 1 | |
| 96. | Voltage regulator | LM7809 | LM7809 | 1 | |
| 97. | Voltage regulator | LM7812 | LM7812 | 1 | |
| 98. | Voltage regulator | LM7905 | LM7905 | 1 | |
| 99. | Voltage regulator | LM7909 | LM7909 | 1 | |
| 100. | Voltage regulator | LM7912 | LM7912 | 1 | |
| 101. | Voltage regulator | LM7815 | LM7815 | 1 | |
| 102. | Transistor | BC107 | BC107 | 1 | |
| 103. | Transistor | BC108 | BC108 | 1 | |
| 104. | Transistor | BC109 | BC109 | 1 | |
| 105. | Transistor | BC182 | BC182 | 1 | |
| 106. | Transistor | BC547 | BC547 | 1 | |
| 107. | Transistor | BC548 | BC548 | 1 | |
| 108. | Transistor | 2N2222A | 2N2222A | 1 | |
| 109. | Transistor | 2N2219A | 2N2219A | 1 | |
| 110. | OP AMP 555 | 555 timer | | 1 | |
| 111. | IC | Quad 2-input OR | SN7432 | 1 | |
| 112. | IC | 7555 LOW | 7555 LOW | 1 | |
| 113. | IC | 7805 Voltage | 7805 Voltage | 1 | |
| 114. | IC Decade | CD4017 | CD4017 | 1 | |
| 115. | IC HOLDER | | 8 PIN | 1 | |
| 116. | Switch | SPST toggle switch | MS 550 | 1 | |
| 117. | Switch | SPDT toggle switch | MS 550 | 1 | |
| 118. | 2-pole, single | Miniature switch | Low voltage | 1 | |
| 119. | Beeper/Buzzer | | 9 – 12 V | 1 | |
| 120. | Battery | NiMh Rechargeable | 9 VDC, 1A | 1 | |
| 121. | Battery connector | PM3 battery connector | PM3 | 1 | |
| 122. | 4,5V Battery box for AA | | Battery box | 1 | |

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| 123. | Banana plugs | stackable | Red and black | 1 | |
| 124. | Banana sockets | | Red and black | 1 | |
| 125. | 2xBanana plugs to | 1,2 MT flexible wire | Red and black | 1 | |
| | Soldering wire | 0.5mm ² | 100m | 1 | |
| | Soldering wire | 1mm ² | 100m | 1 | |
| | Soldering wire | 0.25mm ² | 100m | 1 | |
| 126. | Double sided tape | | | 1 | |
| 127. | Solder wicks | Copper brail | | 100 rolls | |
| 128. | Solder cleaning sponge | 200mm x 200mm average size | | 1 | |
| 129. | Enclosure Box | No. ABS 10 Black | 113 mm x 62 mm x 26 mm | 1 | |
| 130. | Enclosure Box | No. ABS 10 Black | 130 mm x 70 mm x 40 mm | 1 | |
| 131. | Enclosure Box | No. ABS 10 Black | 195 mm x 110 mm x 60 mm | 1 | |
| 132. | Fuse holder (Chassis | | 250mA | 1 | |
| 133. | Beeper/Buzzer | | 9 – 12 V | 1 | |
| 134. | Miniature lamp | Screw type (ES) | 6 Volt-60mA | 1 | |
| 135. | Miniature lamp holder | Screw type (ES) | | 1 | |
| 136. | Relay, PCB type | SRD-09VDC-SL-C | 9V Dc relay | 1 | |
| 137. | Relay, PCB type | SPDT, one set of contacts | 12 VDC | 1 | |
| 138. | Relay, PCB type | SPDT, one set of contacts | 24 VDC | 1 | |

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| 139. | Veroboard Strips | 100mm x 300mm strips | 600 strips | 600 strips | |
| 140. | Bridge rectifier | Round in shape with four pins | 1,5A WOM | 1 | |
| 141. | Transformer | | 9V 1A | 1 | |
| 142. | SINGLE PHASE TRANSFORMER | STEP DOWN | 230V-12V | 1 | |
| 143. | Delivery cost to | Brits Campus | | | R |
| 144. | Delivery cost to | Rustenburg Campus | | | R |
| 145. | Delivery cost to | Mankwe Campus | | | R |
| (A) | TOTAL EXCLUDING VAT | | | | R |
| (B) | VAT @ 15% | | | | R |
| (C) | TOTAL BID PRICE INCLUSIVE OF VAT | | | | R |

NB: Provision will be made for any other ECDE Consumables that may be ordered in future.

- Quotations will be requested from the panel of three (3) suppliers and order will be placed against the lowest bidder.