Fall Quarter Part List

Sections listed in order of necessity.

Server Components

- Raspberry Pi 4 8gb \$75
- 32GB SanDisk Ultra Micro SD Card \$12.86
- Waterproof Enclosure \$22.99
- USB-C Power Supply \$7.99

Subtotal: \$118.84

User Interface Components

- 2 Industrial Bluetooth Scanners \$64.59 each
- Rugged Tablet \$175.99
- Tablet Wall Mount \$19.99
- Waterproof Membrane Keyboard \$36.99
- 2 RS232 Adapters \$9.59

Subtotal: \$381.33

Wireless Components

- Bluetooth 5.1 Antenna \$9.99
- WiFi AC600 Antenna \$27.99
- Antenna Extenders: \$8.54
- Wireless Bridge \$69.99

Subtotal: \$116.51

Solar Components

- 100W 12v Solar Panel \$39.99
- Solar Panel Extension Cable \$16.99
- 12v Solar Charge Controller \$18.99
- 12v 8ah LiFePO4 Battery \$24.57
- 12v to 5v DC Buck Converter \$8.99
- 12v DC Power Supply \$14.99
- 12v Waterproof Relay \$7.99

Subtotal: \$132.51

Sensor Components

- 8 ESP32 Modules \$39.99
- 5 Soil Moisture Sensors \$9.99
- 5 Temperature Sensors \$9.99
- 4 Light Sensors \$6.99
- 4~3000mAh Batteries \$19.75
- 6 Channel Battery Charger \$9.99

Subtotal: \$96.70