Costing of Robotics Lab

Introduction

This document provides a comprehensive breakdown of the costs associated with setting up and maintaining a robotics lab in Sonargaon University. The costs are divided into initial setup costs, equipment costs, computing and software costs, and operational costs.

Initial Setup Costs

Facility Preparation

Space Renovation: 8000-8100 (for 30 students)

Electrical Work: 173,000 BDT

Furniture and Fixtures

Workbenches: 33,000 BDT (6 table)

Chairs: 76,950 BDT (30 chairs)

Storage Cabinets: 45,000 BDT

Equipment Costs

Robotics Kits and Components

Basic Robotics Kits: 220,000 BDT

Sensors and Actuators: 100,000 BDT

Tools and Instruments

Soldering Stations: 5,100 BDT

Multimeters: 9,220 BDT

Oscilloscopes: 32,800 BDT

Computing and Software

Computers and Laptops

Desktop Computers: 250,000 BDT

Software Licenses

CAD Software: 230,000 BDT/year(optional)

Networking Equipment

Routers: 28,000 BDT

Miscellaneous Costs

Maintenance and Upkeep

Regular Maintenance: 50,000 BDT/year

Repairs and Replacements: 20,000 BDT/year

Operational Costs

Staffing

Salaries: 15,000 BDT/month

Utilities

Electricity: 1,5000 BDT/month

Internet: 1,500 BDT/month

Total Estimated Costs

Initial Setup Costs: 327,000 BDT

Equipment Costs: 277,120 BDT

Computing and Software: 482,800 BDT

Miscellaneous Costs: 70,000 BDT/year

Operational Costs: 18,000 BDT/month

Resource :

1. https://www.startech.com.bd/tenda-ac10-ac1200-smart-dual-band-router
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4. https://www.ubuy.com.bd/en/product/4DA7EUY0G-24-quot-mission-bar-stool-ndash-backless-scooped-seat-ndash-solid-quartersawn-oak-wood-pub-stool-with-footrest-ndash-kitchen
5. https://hatimfurniturebd.com/stool-hftst-201--yz015-details
6. https://www.bdstall.com/details/top-melamine-board-office-table-108303/
7. https://www.bennykuriakose.com/post/getting-into-the-basics-of-designing-a-classroom
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