



UNIVERSITY OF NAIROBI

SCIENCE AND TECHNOLOGY PARK

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INTRODUCTION

The University of Nairobi (UoN) Science and Technology Park (STP) : inter disciplinary training, research and product development in Science and Technology

How : Centers of excellence in Biotechnology, ICT and Informatics, Materials, Environmental, Space Sciences.

VISION

- To become a world class center offering quality economic development through technological development.

OBJECTIVES

- Technology transfer
- Support economic development
- Develop technology based industries and maintain a competitive advantage
- Access to knowledge in science and technology

At present we operate from a rapid-prototyping laboratory in the Mechanical & Manufacturing Engineering Building.

This rapid-prototyping facility, is called Fab Lab (fabrication or “fabulous” laboratory), is part of the international MIT Fab Lab network, which now boasts about 200 labs worldwide. The Fab Lab is ideal for innovative activity in a wide range of technical fields.

There are at least 17 companies being incubated at the STP at present. These can be divided into three groups:

- Ready for funding
- Pilot stage
- R&D stage

ACTIVITIES

- School Outreach program
- Fab academy
- Short courses

OUTREACH

Fab Lab Outreach is a program in which our Students go to schools and with the help of the , Picocricket, and GogoBoard Kits, encourage practical learning by tapping into the creativity of children and help them gain a deeper understanding of the process of design and invention.

FAB ACADEMY

The UoN Science and Technology Park and Fab Lab offers every year a six months on-line video conference course (Fab Academy). The course focuses on a hands on approach to digital fabrication where the student is exposed to tools in the lab to enable them to complete each module. Each module focuses on a particular skill that may aid in the development of the final project that tests the mastery of the skills acquired over the weeks.

SHORT COURSES

1. MICRO-CONTROLLER
2. COMPUTER AIDED DESIGN
3. PCB FABRICATION

FUTURISTIC COURSES

1. Scada Programmable Logic Control
2. Embedded Linux
3. Gemstone Cutting.
4. Ceramics for pottery and whitewares.

PROJECTS

- Mkulima hodari
- Egg incubators
- Ubuni studio
- Maker hub

MKULIMA HODARI

STP has conceived a device dubbed “Mkulima Hodari” to take care of all challenges that make greenhouse farming difficult by making it more productive and a less involving process.

The device, Mkulima Hodari, is made up of programmed chip, humidity and temperature sensors, a real time clock, internet connectivity, electrical valves, a buzzer and display. This device is powered by a solar panel and is able to implement commands that are either preset or communicated to it via SMS

EGG INCUBATOR

A project on incubating eggs using solar energy. A project that attracted a great deal of interest to small, medium and large scale poultry Farmers.

MAKER PROJECT

The UoN - FAB LAB in the STP is currently collaborating with Kenyatta National Hospital on the Maker project sponsored by Concern Worldwide US Inc. The project is being funded at (\$424,000 for a 22 month period) by Concern Worldwide US Inc.

The Maker project is aimed at addressing gaps in health service coverage via the creation of low-cost, high-quality, locally designed and produced alternatives to essential parts and equipment for Maternal and Newborn Child Health (MNCH) service delivery.

UBUNI STUDIO (FABLAB UseFuL)

The UoN-STP & FabLab in collaboration with the Institute of Economic affairs (IEA) are setting up a Fablab in Kivuli community center located at Kabiria, Satelite. The lab has been funded by the Rockefeller foundation and will be instrumental in stimulating innovation and entrepreneurship by availing shared high-tech resources to the community of technicians, artisans, artists and students within this locality.

TRANSFORM KENYA AWARD

After an overwhelming public response from the more than 24,000 entries made by Kenyans who nominated individuals and institutions they consider us to be transforming the country and touching the lives of citizens in their work. The Fab Lab which is part of the UoN Science and Technology Park, won the top spot for transforming the country in the manufacturing category on 19th July, 2014.

CHALLENGES

- Inspiring our students to innovate
- Staff shortage

WAY FORWARD

- WORKSHOPS AND TRAININGS
- INCUBATION SPACE



THANK YOU