

# Fablab Winam Bio



FabLab Winam is an open-access laboratory for creative fabricators, artists, scientists, Engineers, educators, students, amateurs, and professionals of all ages the goal is to distribute manufacturing, research, and education.

We are a part of a network of over 1700 labs from over 100 countries across the world. We have a customized set of tools and machines that enable users to make and easily replicate designs made by other members of the network.

Our wealth lies in people and community that is why we invest in empowering our community with knowledge. We uphold a culture of collaboration, creativity and localization. We are located in **Kisumu, Kenya** and operate within the Lake Basin Region.

## Vision

Community empowerment through innovation and local manufacturing

## Mission

To provide prototyping space for nurturing innovation and entrepreneurship

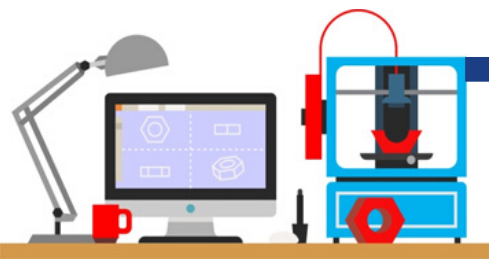
## OUR Values

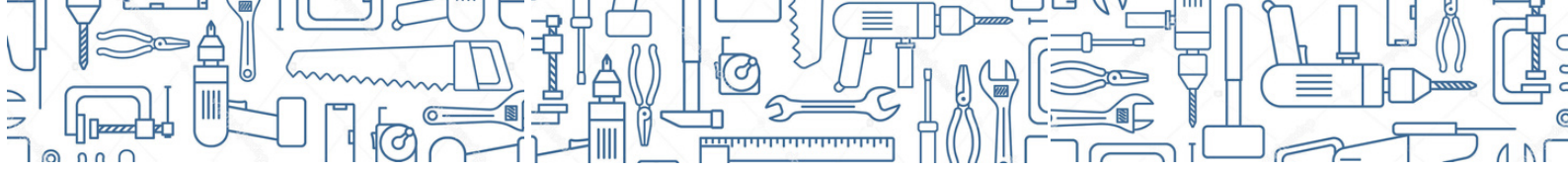
Collaboration

Innovation

Experimentation

Hands on learning





# Services

## Computer Aided Design



CAD is essential in the creative and innovative sector of engineers. We develop electrical and mechanical designs for different machines and structures. We provide simulations for the different designs develop designs. Our CAD practices enable organizations and individuals to engage in product development with ease and increased efficiency.

## Mechanical Structures Design And Fabrication

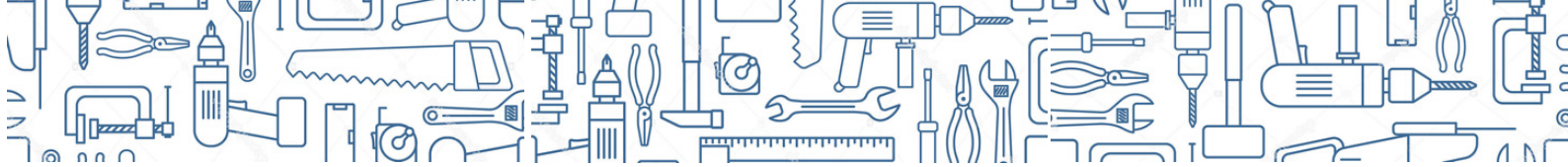
We offer mechanical structures design and simulations using different CAD softwares. We then produce the structure using different fabrication techniques and Computer aided manufacturing. We perform stress analysis and thermal conditions analysis to ensure your product is of sound quality. Our fabrication cuts across simple wood and metal structures to complex mechanical machines



## Branding

We bring in creative and innovative designs for all your branding solutions, we are experts in utilizing different materials to bring out your desired brand image, this also cuts across interior designing solutions. Our current branding services includes: Flyers, Roll up banners, business cards, logos, letter head designs, receipts, signage, light box, direction boards etc.





## Customized Furniture Production



Our Fab Furniture production line excels in creating customized furniture using digital production techniques making sure the fabrication process is highly interactive with the consumer and the fabricator. This enhances creativity and efficiency in production.

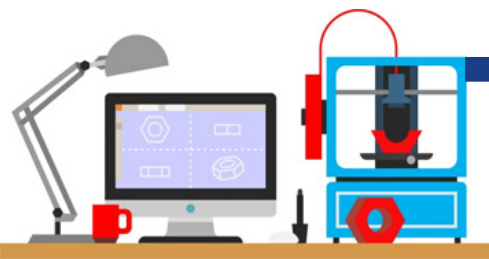
Clients typically send images of any item from online sites and we easily replicate and customize the design to the clients preference then produce the product with utmost keen regards to quality and finishing. We have produced a wide range of products such as Office Desks, Chairs, Wall Cabinets, Coffee tables, Stools, Outdoor sits etc.

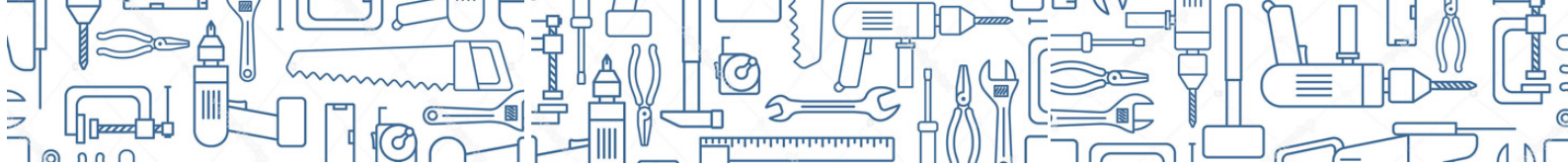
## Product/Project Development



We engage in different product development projects, this covers creating solutions for the industrial, health and agriculture sectors. We pride ourselves in providing local based solutions for local problems. Our product development involves problem research, product design and prototyping and testing.

We provide this service for individuals seeking to develop products but lack the skill and resources to develop their first prototype. For organizations we eliminate their headache in research and development for production line problems and other losses experienced due to lack of technology or poor technology.



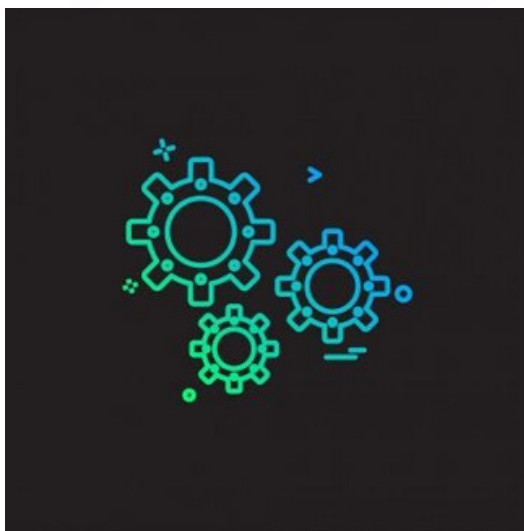


## Technical Equipment Troubleshooting and Repair

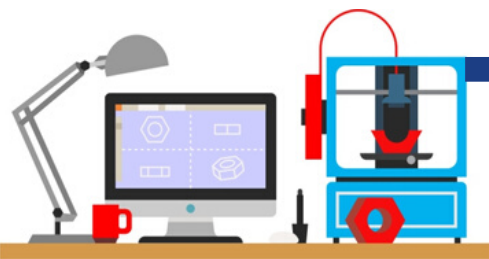


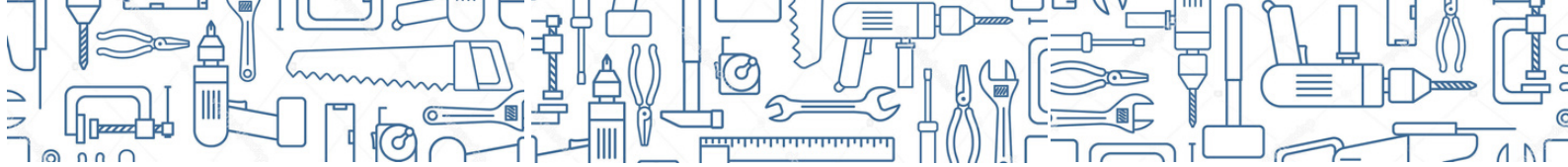
We offer repair and troubleshooting services for mechanical and electrical machines. We have qualified engineers with experience in repairing a variety of mechanical machines as well as electronics in the market. This covers computers, home and industrial appliances, CNC machines, automated machines etc.

## Machine Set Up and Configuration



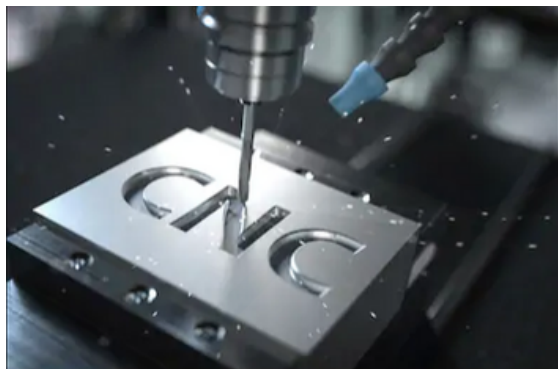
We are experienced in the installation and configuration of different digital fabrication machines such as 3D printers, CNC machines, Laser Cutters, Vinyl Cutters, PCB milling machines etc. In addition, we provide training for the operation of these machines.





# Machining Services

## CNC Fabrication



Fablab winam is equipped with a CNC Router that cuts wood into any desired shape and finish. We provide CNC fabrication services that are inclusive of design and machining. In extension we are linked to a network of CNC metal fabricators with CNC lathes and mills that can produce your desired end product of high quality. Our charges are favourable and are based on Machining time.

## Laser Cutting

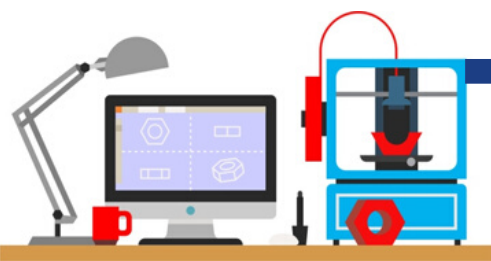
Fablab Winam is equipped with a laser cutting machine that can engrave and cut wood, plastic, leather etc. Our machine has great accuracy and precision. Our rates are flexible and based on the size of the work piece and the type of work to be done. We also have a design team onsite that can enable you generate the perfect art work needed

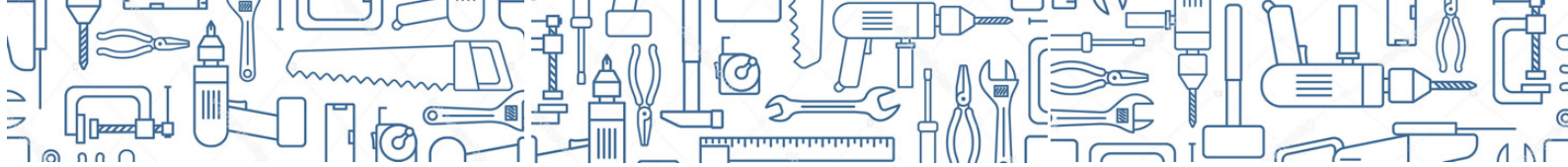


## Vinyl Cutting



The lab also has a vinyl cutting machine that is used to produce different sticker cut outs used for branding and personal use.





## 3D printing

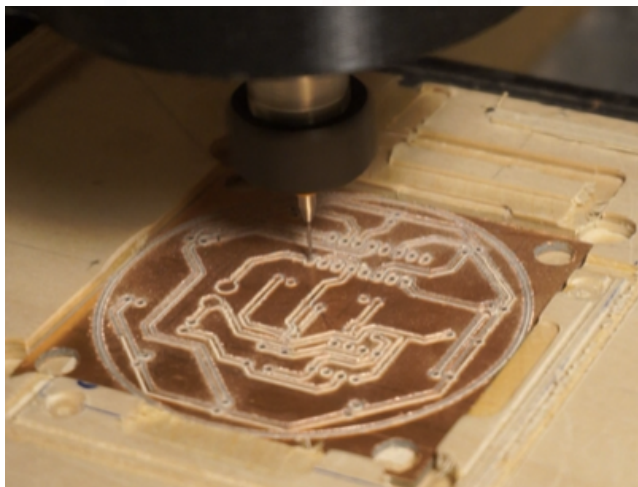


Fablab winam has several 3D printers onsite used for rapid prototyping, we use PLA plastic in printing and are engaged in current research to utilize recycled plastic.

Our machines are commercial and produce a very accurate print with excellent surface and structural characteristics.

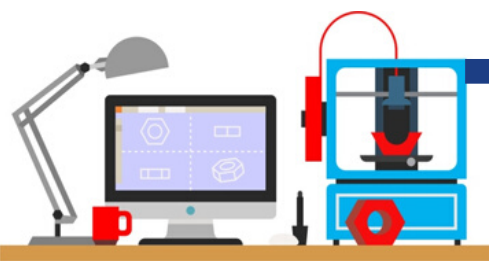
We have a wide variety of colors available.. Charges are also based on printing time

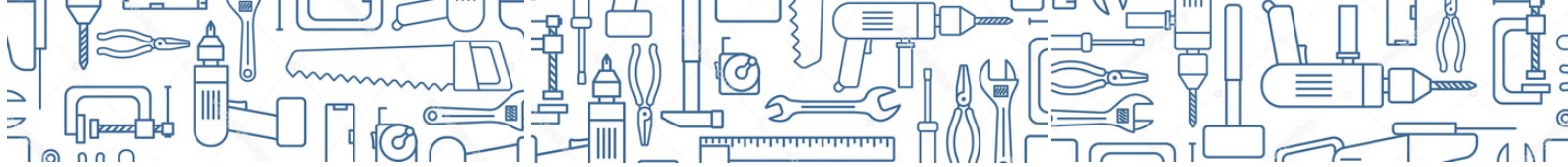
## PCB Production



Fablab Winam has a PCB milling machine utilized to produce single and double sided prints on copper boards. The machine can draw tracts of various sizes, drill holes and cut the board outline with minimal distortion.

We also provide PCB production using etching, in addition, we offer services in PCB design and assembly





# Trainings

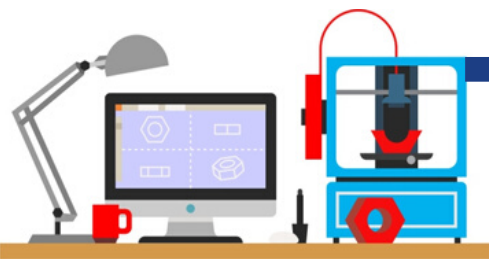


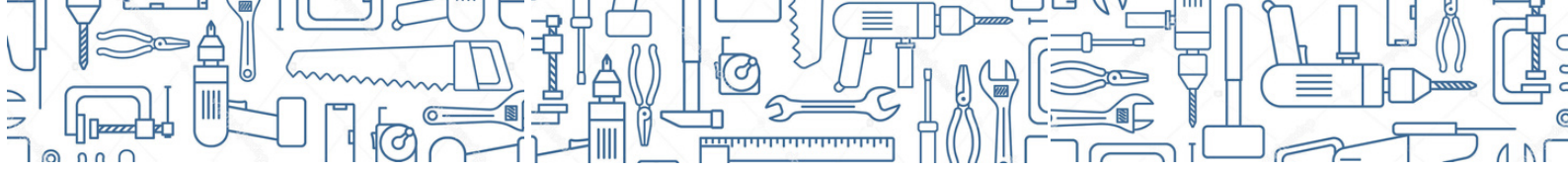
**BECOME A STUDENT,  
AND LEARN HOW TO MAKE  
ALMOST ANYTHING**

At the Fab Academy, you will learn how to envision, prototype and document your ideas through many hours of hands-on experience with digital fabrication tools. We take a variety of code formats and turn them into physical objects.

The Fab Academy Diploma consists of a 5 month part-time student commitment, from January to June. The Fab Diploma is the result of the sum of Fab Academy Certificates. Progress towards the diploma is evaluated by a student's acquired skills rather than time or credits.

Students at the Fab Academy learn, project development and management; website development tools; version control protocols; modelling with 2D and 3D software; laser cutting; design and programming circuit boards; interpret and implement programming protocols; interpret and implement networking protocols; the use of sensors and output devices; 3D printing and scanning; CNC machining in small and large scale; mold design, construction and casting; mechanical and machine design; integration of techniques into a final project.





## Digital Fabrication Training

We offer a digital fabrication course that cover the following modules

- CAD
- 3D printing
- Computer Controlled Cutting
- Computer Controlled Machining

## Embedded System Training

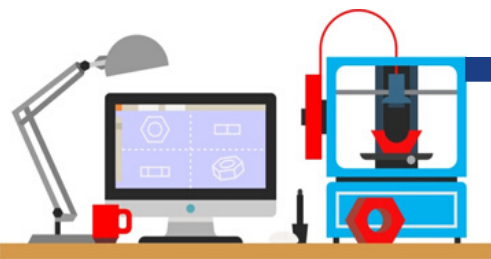
We offer an embedded systems course that cover the following modules

- Arduino 101
- Arduino 102
- In-Circuit Programming
- Interface application programming
- IoT

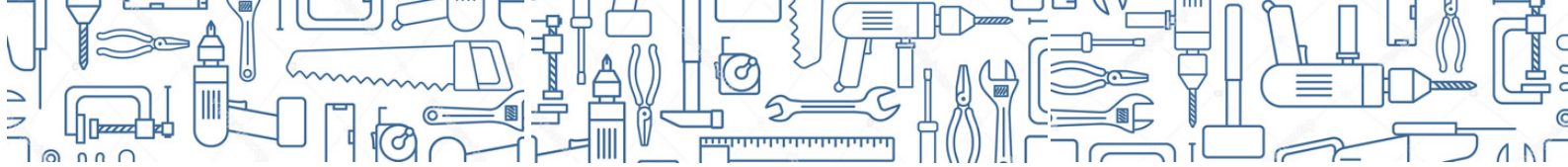
## Electronic Production Training

We offer an electronic production course that covers the following modules:

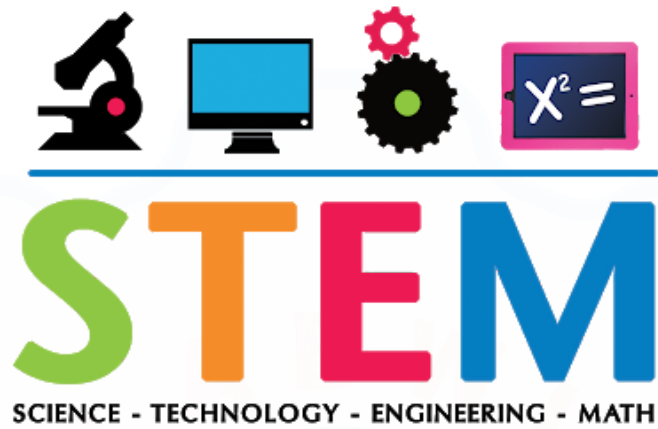
- Electronics 101
- Electronics 102
- Electronics 103
- PCB Design
- PCB Fabrication
- Machine Building and Project Management





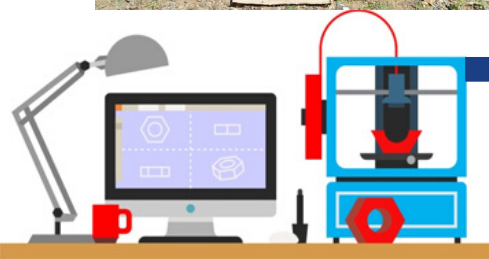


# FabKids



We offer a STEM program during the holidays and also as an after school program. The program aims at introducing STEM to kids at an early age enabling them to create interest in the different fields they can specialize at.

The program also passes on creative skills in making to kids at an early age sparking of their innovative minds to be young entrepreneurs in the society





# Our Team

## Founder and CEO



**Martin Oloo**

Martin Oloo is the Founder and CEO of Fablab Winam. He was the first Kenyan Fab Academy Course graduate in 2016. He is a trained social worker with vast experience in the Western Kenya Region. He Identified the big gap between knowledge learnt in colleges and the job market, and the lack of locally made products to cater for regional problems. This gap was his inspirations to start a makerspace for prototyping and local manufacturing.

## General Manager



**Kioko Muthui**

The General Manager is Kioko Muthui who has a background in Mechatronic Engineering, with specialization in PCB production, 3D design, simulations and fabrication. His role involves ensuring different departments are efficiently run within the FabLab, while also providing expert input in different engineering projects

## Designer and Workshop Manager



**Bramwel Olela**

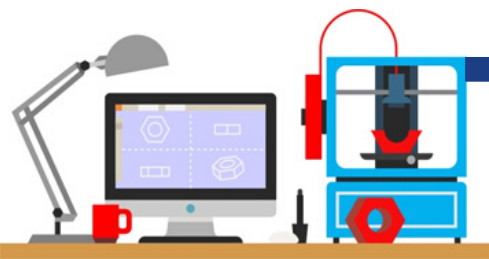
Bramwel Olela is the workshop technician who also doubles up as the graphic designer, he is instrumental in generating 2D and 3D designs of prototypes before fabrication. He is also quite conversant with operating different machines within the Fablab, in addition, he provides trainings based on his respective roles in the FabLab.

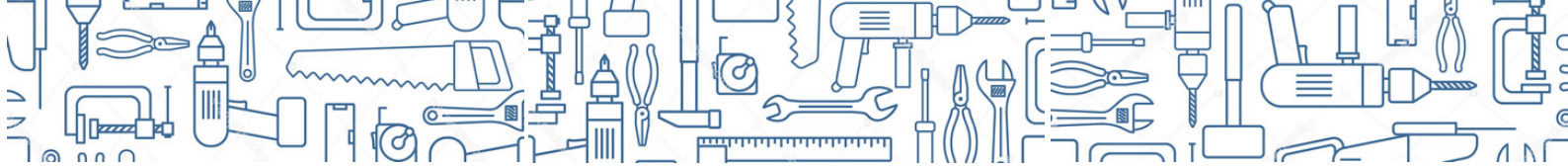
## Finance and Accounts



**Moses Owino**

Moses Owino is the company fiance and accounting head. He is in-charge of the financial affairs of the company. Despite his finance related attributes he is also keen in furniture production and active in the fab furniture production line

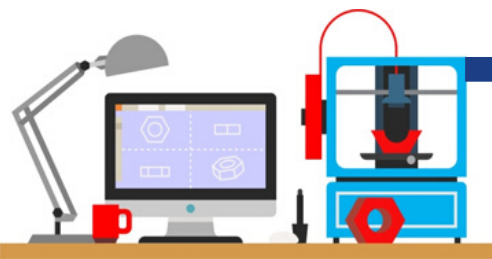




# Partners



AFRICA  
OPEN SCIENCE  
HARDWARE



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