PASCAL OCHIENG OROT

+254 740 964 689 | pascalochieng838@gmail.com

Career Objective

Aspiring Telecommunication Engineer with a strong foundation in networking, IoT, and electrical systems. Seeking an internship position to apply my technical knowledge, problem-solving abilities, and leadership skills in a dynamic environment while gaining hands-on experience in the telecom industry.

Education

1. Dedan Kimathi University of Technology
   Bachelor of Science in Telecommunication and Information Engineering (2020 – Present)
   (Waiting for Graduation in April 2025 having completed my studies in January 2025)
2. Siger Mixed Secondary School
   Kenya Certificate of Secondary Education (2016 – 2019)

Technical Skills

- IoT & Sensor Integration (ESP32, MPU6050, DS18B20)
- Computer Networking (LAN/WAN setup, Internet installation, CCTV installation, Wi-Fi networks)
- Programming (Python, MATLAB, Arduino)
- Electrical Installation & Maintenance (Wiring, Power Distribution, Generator Installation Solar installation)
- Machine Learning (RandomForestClassifier, micromlgen)
- Data Processing & Real-Time Anomaly Detection
- Cybersecurity (Threat Analysis, System Vulnerability Monitoring, Data Protection)
- Troubleshooting & ICT Maintenance (Hardware, Software, Network Systems)

Professional Experience

Internship | Calmape Engineering Ltd, Nakuru

- Actively involved in business development, including tender documentation and bid preparation.
- Managed front office operations, including welcoming visitors, handling inquiries, managing correspondence, and organizing office records.
- Provided ICT support by troubleshooting hardware and software issues, performing basic maintenance in the ICT department, and managing wireless Safaricom fiber Wi-Fi. Coordinated with Safaricom's technical team to resolve network issues.

- Led cybersecurity initiatives by implementing security measures, monitoring system vulnerabilities, and ensuring data protection protocols were adhered to in Calmape Engineering Ltd.
- Joined the technical team for engineering projects, including electrical installation, CCTV installation, and generator maintenance.
- Participated in site visits, tender submission, and tender opening on behalf of Calmape Engineering Ltd.

External Attachment | Savotech Venture, Bondo

- Actively participated in the installation, repair, and maintenance of:
    o CCTV systems
    o Electrical systems
    o Wi-Fi networks
    o Solar systems
    o Generators
    o Alarm security systems
- Gained hands-on experience in troubleshooting and maintaining these systems to ensure efficiency and security.
- Time management and working extra hours in technical projects

Internal Attachment | Dadan Kimathi University of Technology, Nyeri
- Computer networking & troubleshooting
- Practical application of electrical machines (motors & transformers)
- Hands-on experience with engineering software (MATLAB, ArchiCAD)
- Arduino microcontroller applications
- PCB layout and design fundamentals

Projects

IoT-Based Cattle Health Monitoring System
- Designed and deployed ESP32-based nodes with acceleration and temperature sensors
- Implemented machine learning for real-time anomaly detection
- Developed a gateway for sensor data collection and analysis

Comprehensive Security & Power Solutions Deployment at Savotech Venture

- Led the installation, maintenance, and troubleshooting of integrated security and power solutions, including CCTV, alarm systems, and solar power setups.
- Conducted generator installation and maintenance to guarantee an uninterrupted power supply.

Leadership & Extracurricular Activities

Class Representative (Assistant)
- Representing Telecommunication & Information Engineering students.
- Organized the department's first networking event for students

- **Catholic Chaplaincy**
- Executive Treasurer
  - Managed financial operations and budgeting
  - Member of the constitution review committee
  - Served as St. Joseph Small Christian Community Coordinator (DeKUT School of Engineering Catholic Students)
  - Chairperson of the 2024/2025 Electoral Commission, DeKUT Catholic Students

Work Study Program (Sports Department Leader)
- Led work-study students under the sports department (2021 – 2022)
- Assisted in organizing the 11th KUSF National Women Championship at DeKUT

Peer Counseling & Mentorship
- Led a team of peer counselors under Pastor Christopher Githae
- Participated in the university's National Values and Principles of Governance training
- Certified Peer Counselor (DeKUT)
- Certified Peer-to-Peer Counselor (Kenya Students Christian Fellowship)

Climb to Educate Program
- Served as the Secretary (December 2020 – September 2021) and Registrar (September 2021 – August 2022)
- Successfully organized and participated in multiple fundraising and awareness events
- Participated in 5-day Session 7 Trip 2 Climbing of Mt. Kenya, summiting Batian Peak
- Learned key soft skills such as teamwork, resilience, adaptability, problem-solving, leadership, and endurance

Certifications & Trainings

- Certificate of Appreciation – Blessed Irene Stefany DeKUT Community Chaplaincy (St. Joseph Association Coordinator)
- Certificate of Appreciation – Chairperson, 2024/2025 Electoral Commission, DeKUT Catholic Students
- Certificate of Participation – Session 7 Trip 2 5-day Climbing of Mount Kenya and summiting Batian Peak by Dedan Kimathi University Climb to Educate Program
- Certificate of Training – Peer Counselor (DeKUT)
- Certificate of Training – Peer-to-Peer Counselor (Kenya Students Christian Fellowship)

- Training on National Values and Principles of Governance – Dedan Kimathi University
- Cisco Networking Training (CCNA Fundamentals)
- Cisco Python Training (Python Essentials)

Languages

English
Kiswahili
Luo

Hobbies & Interests

- Hiking & Mountain Climbing
- Researching Emerging Technologies
- Traveling & Networking with Professionals
- Cycling

Referees

Dr. Joseph Muguro (PhD)
Lecturer, Electrical Department, Dedan Kimathi University of Technology
Phone: +254 724 429600

Rev. Fr. Dr. Vincent Wambugu (PhD)
Chaplain, Dedan Kimathi University of Technology
Phone: 0723822788

Mr Benard Asewe
Director Savotech Venture Bondo
Phone: 0717413024

DEDAN KIMATHI UNIVERSITY OF TECHNOLOGY

PROVISIONAL UNDERGRADUATE ACADEMIC TRANSCRIPT

Name: Pascal Ochieng OROT

Registration No: E020-01-0926/2020

School: SCHOOL OF ENGINEERING

Degree: BACHELOR OF SCIENCE IN TELECOMMUNICATION AND INFORMATION ENGINEERING

Academic Year: 2020/2021

Year of Study: FIRST

Unit Code	Unit Title	Unit(s)	Grade
ETI 1101	Introduction to Engineering and Computing	1	A
SMA 1117	Calculus I	1	B
HNS 1100	Gender, HIV AIDS and Substance abuse	1	A
IGS 1104	Introduction to Philosophy and Critical Thinking	1	A
SMA 1108	Algebra	1	B
SPH 1120	Physics I	1	A
SPH 1222	Physics II	1	B
SMA 1109	Geometry and Linear Algebra	1	B
SMA 1218	Calculus II	1	B
EME 1101	Workshop Practice I	1	A
EME 1202	Fundamentals of Mechanical Engineering	1	B
EME 2102	Engineering Drawing and Design	1	C
ETI 1202	Circuit and Network Theory I	1	C
ETI 2102	Electrical Measurements and Instrumentation	1	C
IGS 1201	Communication skills: An introduction to General Studies and African Civilization	1	A

Mean Grade: B

RECOMMENDATION: PASS

<u>KEY TO THE GRADING SYSTEM</u>

A = 70 – 100%	Excellent
B = 60 – 69%	Good
C = 50 – 59%	Satisfactory
D = 40 – 49%	Pass
E = 0 – 39%	Fail
INC	Incomplete

NB:
1 unit consists of 35 lecture hours or equivalent (3 Practical hours of two tutorial hours are equivalent to 1 lecture hour)

Signed:
CoD, Electrical & Electronic Engineering
Date: 24/9/21

CHAIRMAN
De.K.U.T.
DEPARTMENT OF ELECTRICAL

DEDAN KIMATHI UNIVERSITY OF TECHNOLOGY

PROVISIONAL UNDERGRADUATE ACADEMIC TRANSCRIPT

Name: Pascal Ochieng OROT

Registration No: E020-01-0926/2020

School: SCHOOL OF ENGINEERING

Degree: BACHELOR OF SCIENCE IN TELECOMMUNICATION AND INFORMATION ENGINEERING

Academic Year: 2021/2022

Year of Study: SECOND

Unit Code	Unit Title	Unit(s)	Grade
ETI 2101	Physical Electronics	1	C
ETI 1204	Material Science	1	C
ETI 2103	Introduction to Networks	1	B
CCS 2101	Computer Programming	1	C
SMA 2119	Calculus III	1	C
ETI 1203	Workshop Practice II	1	B
IGS 2101	Communication Skills: Understanding Africa's Mathematics and Film	1	A
CCS 2202	Data Structures and Algorithms	1	B
ETI 2204	Circuit and Network Theory II	1	D
ETI 2205	Electromagnetics I	1	A
ETI 2206	Network Design and Management	1	A
SMA 2220	Calculus IV	1	B
SMA 2232	Ordinary Differential Equations	1	B
BCM 2240	Principles of Entrepreneurship and Marketing	1	B
IGS 2102	Communication Skills: African Technology and Literature	1	A

Mean Score: 62.93
Mean Grade: B

RECOMMENDATION: PASS

KEY TO THE GRADING SYSTEM
A = 70 – 100%   Excellent
B = 60 – 69%   Good
C = 50 – 59%   Satisfactory
D = 40 – 49%   Pass
E = 0 – 39%   Fail
INC   Incomplete

NB:
A unit is defined as the equivalent of 39 lecture hours spread over one semester. For this purpose, two hours of tutorial or three hours of practicals are equivalent to one hour of lecture.

Signed: _____
CoD, Electrical & Electronic Engineering
Date: **29/6/22**

DEDAN KIMATHI UNIVERSITY OF TECHNOLOGY

PROVISIONAL UNDERGRADUATE ACADEMIC TRANSCRIPT

Name: Pascal Ochieng OROT   **Registration No:** E020-01-0926/2020

School: SCHOOL OF ENGINEERING

Degree: BACHELOR OF SCIENCE IN TELECOMMUNICATION AND INFORMATION ENGINEERING

Academic Year: 2022/2023   **Year of Study:** THIRD

Unit Code	Unit Title	Unit(s)	Grade
ETI 3101	Analogue Electronics I	1	B
ETI 3102	Distributed Computing and Applications	1	B
ETI 3103	Electromagnetics II	1	C
ETI 3104	Digital Electronics I	1	D
ETI 3105	Electrical Machines I	1	B
CCS 2101	Database Systems	1	A
ETI 3206	Digital Electronics II	1	B
ETI 3207	Internet of Things and Data Science applications	1	B
ETI 3208	Electromagnetics III	1	C
ETI 3209	Analogue Electronics II	1	B
ETI 3210	Introduction to Software Engineering	1	A
SMA 2272	Statistics	1	C
IGS 3101	Communication Skills	1	A
IGS 3102	Communication skills: The arts of Africa	1	B

Mean Grade: B

RECOMMENDATION:PASS

KEY TO THE GRADING SYSTEM

A = 70 – 100%	Excellent
B = 60 – 69%	Good
C = 50 – 59%	Satisfactory
D = 40 – 49%	Pass
E = 0 – 39%	Fail
INC	Incomplete

NB:

A unit is defined as the equivalent of 39 lecture hours spread over one semester. For this purpose, two hours of tutorial or three hours of practicals are equivalent to one hour of lecture.

Signed: _____
CoD, Electrical & Electronic Engineering
Date: 12/07/23

DEDAN KIMATHI UNIVERSITY OF TECHNOLOGY

PROVISIONAL UNDERGRADUATE ACADEMIC TRANSCRIPT

Name: Pascal Ochieng OROT

Registration No: E020-01-0926/2020

School: SCHOOL OF ENGINEERING

Degree: BACHELOR OF SCIENCE IN TELECOMMUNICATION AND INFORMATION ENGINEERING

Academic Year: 2023/2024

Year of Study: Fourth

Unit Code	Unit Title	Unit(s)	Grade
ETI 4101	Control Engineering I	1	C
ETI 4102	Power Systems I	1	C
ETI 4103	Mobile and Internet Applications Development	1	B
ETI 4104	Transmission Lines and Waveguide Theory	1	B
ETI 4105	Power Electronics	1	B
ETI 4106	Signals and Communication I	1	A
ETI 4207	Radio Frequency Circuits	1	B
ETI 4208	Digital Communication	1	A
ETI 4209	Research Methodology	1	C
ETI 4210	Machine Learning	1	C
ETI 4211	Microprocessors and Embedded Systems	1	C
ETI 4212	Signals and Communication II	1	B

Mean Grade: B

RECOMMENDATION: PASS

NB:
A unit is defined as the equivalent of 39 lecture hours spread over one semester. For this purpose, two hours of tutorial or three hours of practicals are equivalent to one hour of lecture.

KEY TO THE GRADING SYSTEM

A = 70 – 100%		Excellent
B = 60 – 69%		Good
C = 50 – 59%		Satisfactory
D = 40 – 49%		Pass
E = 0 – 39%		Fail
INC		Incomplete

Signed:

CoD, Electrical & Electronic Engineering

Date: 1/7/2024

CHAIRMAN
De.K.U.T
DEPARTMENT OF ELECTRICAL
& ELECTRONIC ENGINEERING
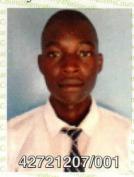
The Kenya National Examinations Council

KENYA CERTIFICATE OF SECONDARY EDUCATION

This is to certify that the candidate named below sat for the Kenya Certificate of Secondary Education examination in the subjects shown and attained the grades indicated.

42721207/001

NAME: PASCAL OCHIENG   *M1*   42721207/001
       SIGER SECONDARY SCHOOL

	SUBJECT	GRADE
101	ENGLISH	C+ (PLUS)
102	KISWAHILI	C (PLAIN)
121	MATHEMATICS	B+ (PLUS)
231	BIOLOGY	B (PLAIN)
232	PHYSICS	A- (MINUS)
233	CHEMISTRY	B+ (PLUS)
313	CHRISTIAN RELIGIOUS EDUCATION	A- (MINUS)
565	BUSINESS STUDIES	B- (MINUS)

SUBJECTS NAMED EIGHT   MEAN GRADE B (PLAIN)
EXAMINATIONS OF YEAR 2019
PRINTED: 200601:133652

Chief Executive Officer
Kenya National Examinations Council

Chairman
Kenya National Examinations Council

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DEDAN KIMATHI UNIVERSITY OF TECHNOLOGY

Certificate No. 0009/2021

Certificate of Training

This is to certify that

Pascal Ochieng

Participated as a trainee in a five days Peer Counsellors Training in:

- Introduction to Peer Counselling in the University
- Basic Counselling skills
- Basic Theories in Counselling
- Self Awareness, Personal Growth and Behaviour Change
- Financial Literacy

- Professional Ethics in Counselling
- Contemporary Issues: Youth Criminology, Sexual Reproductive Health, Gender, Disability & Addictions
- Behaviour Change Communication Groups
- Stress & Stress Management
- Mental Health

Prof. Esther Magiri

_____
DVC Adminstration & Finance

DEDAN KIMATHI UNIVERSITY
OF TECHNOLOGY
HEAD OF CHAPLAINCY
P.O. Box PRIVATE BAG 10143,
DEDAN KIMATHI NYERI

Better Life Through Technology

Fr. Dr. Vincent Wambugu

_____
Head of Chaplaincy Services

Acts 2:32

KSCF

KSCF

KSCF

KENYA STUDENT CHRISTIAN FELLOWSHIP

CERTIFICATE OF TRAINING

THIS IS TO CERTIFY THAT

PASCAL OCHIENG

OF

SIGER SECONDARY SCHOOL

Attended and successfully completed peer to peer counselors training of Christian Union leaders held on 28th January 2018 at

Ramba boys high school

CHAIRMAN

SIAYA COUNTY

KSCF

SECRETARY

SIAYA COUNTY

KSCF

KSCF