INSTITUTE OF HEAVY EQUIPMENT AND TECHNOLOGY



PROSPECTUS 2024/2025

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Principal,

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On behalf of the Institute of Heavy Equipment and Technology (IHET) community, I

am pleased to welcome you all to the 2024 edition of the Institute of Heavy Equipment

and Technology (IHET) Prospectus. The information contained in this publication will

enable our stakeholders realize their aspirations in searching for new learning

experiences.

Our stakeholders are prospective students, parents, workers (Operators, Technicians,

Engineers, etc), industries (Mining, beverage, farming, etc), benefactors, employers,

Government and alumni following up new developments at IHET.

Our 2024 edition contains details of Diploma, Certificate, Long and short-term

programmes that aim at addressing general and specific needs of different groups of

stakeholders serving in technical and vocational education and training for Tanzania

and world.

We welcome and experience with us the information contained in this document, For

further information do not hesitate to contact us at principal@ihet.ac.tz or visit our

website <u>www.ihet.ac.tz</u>

We look forward to serve you diligently.

Asia N. Ntembo

Principal

October 2024

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List of Abbreviations

AC - Alternating Current

AE - Auto Electric.

ATC - Arusha Technical College.

CAD - Computer Aided Design

CBET - Competence Based Education and Training

DC - Direct Current.

DIT - Dar es Salaam Institute of Technology.

DSM - Dar es Salaam.

FA - Field Attachment

FTC - Full Technician Certificate.

GPA - Grade Point Average.

HDEM - Heavy Duty Equipment Mechanics

ICT - Information and Communication Technology.

IT - Information Technology.

IHET - Institute of Heavy Equipment and Technology

NACTVET - National Council For Technical and Vocational Education

and Training.

NIT - National Institute of Transportation.

NTA - National Technical Award

NVA - National Vocational Award.

MD - Managing Director.

MUST - Mbeya University of Science and Technology.

OP - Operator

OSHA - Occupational Safety and Health Authority

TCU - Tanzania Commission for Universities.

TPF - Tanzania Police Force.

UDOM - University of Dodoma.

UDSM - University Of Dar Es Salaam.

WF - Welding and Metal Fabrication

VET - Vocational Education and Training

VETA - Vocational Education and Training Authority

1.0 Executive Summary

IHET is a NACTVET registered Institution with registration number REG/SAT/060 and VET registration number VET/DSM/PR/2018/C/110.

IHET is an education institution located in Dar es Salaam, Tanzania. IHET is efficiently and effectively helping Tanzania Government meet the high-tech challenges of today's global economy, in partnership with business and industry, government agencies and other educational institutions.

IHET was established and started its operations in 2016 at Tazara, Temeke then shifted to Kijitonyama, Kinondoni Dar es Salaam in 2017. In 2019 IHET opened a new branch in Ilemela Mwanza and the next year 2020, Dodoma branch was opened in Nala Dodoma.

Welcome to the Institute of Heavy Equipment and Technology (IHET), *Experience and Knowledge*. At IHET, we are dedicated to preparing students for the challenges of the modern world by offering cutting-edge courses in Information and Communication Technology (ICT) and Mechanical Studies, including specialized programs in Heavy Duty Mechanics and Heavy-Duty Equipment Operations.

Our institution is equipped with state-of-the-art facilities, experienced faculty, and a curriculum designed to foster hands-on skills, critical thinking, and innovation. Whether you're starting your career or upgrading your skills, IHET is the place to gain the knowledge and expertise needed to thrive in today's fast-evolving industries.

1.1 Institute Vision

To be a catalyst in engaging partners to bring innovative educational solutions to individuals, employers, and communities – transforming challenges into opportunities.

1.2 Institute Mission

To provide relevant technical education and training to support student goals, a skilled workforce, and the economic vitality of our communities.

1.3 Institute Core Values

We value:

- a) Integrity
- b) Collaborative Partnerships
- c) Innovation
- d) Continuous Improvement
- e) Customer Focus Diversity
- f) Sustainability

1.4 Why Choose IHET?

- i. **Modern Facilities:** Our laboratories, workshops, and classrooms are equipped with the latest technology and industry-standard equipment.
- ii. **Experienced Faculty**: Our instructors are seasoned professionals and experts in their fields, bringing both academic knowledge and industry experience into the classroom.
- iii. **Industry Connections**: IHET maintains strong partnerships with leading companies in ICT and Mechanical industries, providing students with valuable internship and employment opportunities.
- iv. **Practical Learning**: Our programs emphasize hands-on training, ensuring that students not only learn theory but also gain practical skills.
- v. **Flexible Learning**: IHET offers both full-time and part-time study options, allowing students to choose a schedule that suits their needs.

2.0 Organization Structure of IHET

The Institute of Heavy Equipment and Technology (IHET) is structured to ensure effective governance, academic excellence, research innovation, and administrative efficiency. The organizational structure is designed to facilitate decision-making, foster collaboration, and support the institution's vision and mission in providing quality education in Information Technology, Mechanical Studies, Equipment Operations and other fields.

2.1 IHET Governing Body

The following are members of IHET's governing body

SN	Name & Address	Position & Organization
1	Prof. Eng. Patrick Makungu P.O. Box 30390 Kibaha, Pwani. Email: pjmakungu@gmail.com	Chairperson MD, BOPi Garage
2	DCP (Rtd). Mohammed R. Mpinga P.O. Box 72641 Dar es Salaam, Email: momping58@gmail.com	Deputy Chairman TPF
3	Sofia Sinda Email: sophiasinda.ss@gmail.com	Member Politician
4	Edwin Godwin P.O. Box 42036 Dar es Salaam, Email: egak2002@gmail.com	Member MD, Ada & Ale Co.
5	Adv. Christina Ilumba Email: christinailumba@gmail.com	Member Advocate FCIArb
6	Havijawa Mbuma P.O. Box 35047 Dar es Salaam, Email: havymbuma@gmail.com	Member CRDB Bank

7	Mohamed Rweyemam	Member
	Email: Mohamed.rweyemam@tms.co.tz	TMS
8	Adam Nsalamba Shabani	
	P.O. Box 55079 Dar es Salaam,	Member
	Tel: +255767962475	Director, IHET
	Email: ansalamba@gmail.com	
9	Robert Reuben Murema	
	P.O. Box 55079 Dar es Salaam,	Member
	Tel: +255777063073	Instructor, IHET
	Email: robertmurema04@gmail.com	
10	Asia Nyuda Ntembo	
	P.O. Box 55079 Dar es Salaam,	Principal
	Tel: +255763589044	(Secretary)
	Email: ntemboa@yahoo.com	

2.2 IHET Management Staff

SN	Name	Title	Professional Qualification
1	Ms. Asia N. Ntembo	Principal	Masters Degree in Corporate Management (Mzumbe University).
			Bachelor Degree in Regional Planning (Mzumbe University).
2	Edwin Godwin Kasenene	Deputy Rector (Administration	Post Graduate Diploma in Finance Management (IFM)
		and Finance)	Advanced Diploma in Mechanical Engineering (DIT)
3	Robert Reuben Murema	Director of Training	FTC - Mechanical Engineering (ATC).

2.3 Teaching Staff

SN	Staff Name	Title	Professional Qualification
1	Justine Benard Kadyugenzi	Tutor & Coordinator Heavy Duty Equipment Operation	Bachelor degree of Mechanical Engineering (NIT).
2	Rukia Rajab Majid	Tutor & HOD Research and Innovation	Bachelor of Education (MN)
3	Robert Reuben Murema	Instructor & Director of Training	FTC - Mechanical Engineering (ATC).
4	Aniceth Johnson Nswillah	Tutor ICT	Bachelor Degree in Information Systems (UDOM)
5	Basilideus Rashid Luyanji	Instructor HDEM	FTC
6	Alexander Nestory Samwel	Tutor ICT	Bachelor Degree
7	Abdulwahid Ali Khamis	Tutor ICT	Bachelor Degree
8	Seif Mwarami Zombe	Tutor Mathematics	Bachelor Degree (Mathematics and Chemistry)
9	Ayoub Yahaya Lyobha	Tutor Mechanics	Bachelor degree of Mechanical Engineering (NIT).
10	Edwin Godwin Kasenene	Tutor & Deputy Rector (Administration and Finance)	Post Graduate Diploma in Finance Management (IFM) Advanced Diploma in Mechanical Engineering (DIT)

11	Adam Nsalamba Shabani	Tutor & Managing Director	Bachelor of Engineering (Mechanical Engineering), DIT. FTC - Mechanical Engineering (ATC).
12	Adam Kaleb Lyatura	Instructor HDEO	Certificate
13	Hassan Mbwana Salum	Instructor Auto Electric	FTC
14	Asia Nyuda Ntembo	Tutor General Studies	Masters Degree in Corporate Management (Mzumbe University). Bachelor Degree in Regional Planning (Mzumbe University).
15	Meshack M. Mantoga	Instructor	Diploma
16	Daniel J. Bunyaga	Instructor	Certificate
17	Modest D. Machibya	Instructor	Certificate
18	Beatus Nyakunga	Instructor Mechanics	Bachelor Degree of Mechanical Engineering
19	Ezekiel David	Instructor Machine Operation	Certificate

2.4 Non-Teaching Staff

SN	Staff Name	Title	Professional Qualification
1	Ngwitika Ossia Mwakapalila	Marketing Officer	Certificate
2	Juliana Allen Mringo	Marketing Officer	Diploma in Accounts (TIA)

3	Nsalamba Makanga Nsalamba	Patron	Diploma in Clinical Medicine
4	Ramadhani Rajabu Mdugu	Marketing Officer	Certificate
5	Yassir Mohamed Hamis	Procurement Officer	Diploma
6	Asha Hassan Sultan	Accountant	Bachelor degree
7	Mwantumu Seif Shabani	Secretary	Certificate
8	Theresia Komba	Librarian	Diploma

3.0 Programs Offered

IHET offers a variety of programs tailored to meet the needs of different learners. Below are the key programs offered for the academic year:

3.1 Information and Communication Technology (ICT) Programmes

3.1.1 Certificate in Information and Communication Technology (NTA Level 4)

a) Program Overview

The Certificate in Information and Communication Technology (ICT) is designed for individuals looking to gain foundational knowledge in ICT, enabling them to work in entry-level positions in IT support, network administration, and computer systems management. This course offers both theoretical and practical components, ensuring students acquire essential skills for the ICT sector.

b) Duration of Study

Duration of study for Certificate in Information and Communication Technology is one (1) year which involves institutional training, Industrial Practical Training practice (IPT).

c) Entry Requirements:

To join this programme an applicant must have:

- i. Holders of Certificate of Secondary Education Examination (CSEE) with At Least four (4) Passes in non-religious Subjects.
- ii. Basic computer literacy is preferred but not mandatory.

d) Scheme of Study

Year 1

i) Semester 1

Basic technician certificate in Information and Communication Technology (NTA LEVEL 4)

Semester 1

Sn	Code	Module	Credit
1	ITT04102	Basics Of Computer Networks	12
2	ITT04106	Computing Fundamentals	10
3	MTT04102	Computing Mathematics	12
4	ITT04107	Programming Principles	15
5	BAT 04103	Basics Of Communication Skills	9

ii) Semester 2

Basic technician certificate in Information and Communication Technology (NTA LEVEL 4)

Semester 2

Sn	Code	Module	Credit
1	BAT04204	Basics Of Entrepreneurship	11
2	ITT04202	Database Essentials	15
3	ITT04203	Basics Of Graphics Design	14
4	ITT04204	Web Design Essentials	12
5	ITT04205	Basics Of Computer Applications	10

e) Career Opportunities

- i. IT Support Technician
- ii. Data Entry Operator
- iii. Junior Network Administrator
- iv. Help Desk Assistant

f) Certification

Upon successful completion, students will receive a Certificate in Information and Communication Technology (ICT).

3.1.2 Diploma in Information and Communication Technology (NTA Level 5 - 6) a) Program Overview

The Diploma in Information and Communication Technology builds upon the foundational knowledge from the certificate program, delving deeper into areas such as programming, networking, and cybersecurity. This program is ideal for those aiming for mid-level careers in the ICT sector or planning to pursue further studies in computer science and engineering.

b) Duration of Study

Duration of study for Diploma in Information and Communication Technology is three (3) years for ordinary level entry and two (2) years for certificate level entry which involves institutional training, Industrial Practical Training practice (IPT).

c) Entry Requirements

To join this programme an applicant must have:

- i. Holders of Certificate of Secondary Education Examination (CSEE) with At Least four (4) Passes in non-religious Subjects. (3 years)
- ii. Holders of Basic Technician Certificate (NTA Level 4) in Information Technology OR Advanced Certificate of Secondary Education (ACSEE) with at least one Principal pass and one Subsidiary in Principal subjects. (2 years)
- iii. Minimum of Form IV (O-Level) with a pass in Mathematics and English is preferred.

d)Scheme of Study

Year 1

i) Semester 1

Т	Technician certificate in Information and Communication Technology (NTA LEVEL 5)			
		Semester 1		
Sn	Code	Module	Credit	
1	BAT05102	Principles Of Entrepreneurship and innovation	9	
2	MTT05102	Basic Discrete Mathematics	12	
3	ITT05112	Fundamentals Of Computer Architecture	9	
4	ITT05113	Computer Maintenance Practices	8	
5	ITT05107	Fundamentals Of Programming In C	12	

Communication Skills

Career Planning and Management

ii) Semester 2

BAT05103

BAT05109

6

7

Te	Technician certificate in Information and Communication Technology (NTA LEVEL 5)					
	Semester 2					
Sn	Code	Module	Credit			
1	ITT05201	Fundamentals Of Database Management System	8			

8

6

2	ITT05205	Computer Networks Fundamentals	8
3	ITT05202	Multimedia Fundamentals	8
4	ITT05203	Principles Of Object-Oriented Programming Using Java	8
5	ITT05214	Website Development	12
6	ITT05204	Field Work in IT	12

Year 2

i) Semester 1

(Ordinary Diploma in Information and Communication Technology (NTA LEVEL 6)				
		Semester 1			
Sn	Code	Module	Credit		
1	BAT06103	Business Communication	9		
2	ITT06101	Network Administration Fundamentals	12		
3	ITT06102	Mobile Applications Programming	12		
4	ITT06107	Visual Programming Fundamentals	12		
5	ITT06108	Basics Of Web Applications Development	12		
6	BAT06106	Leadership and Management	11		

ii) Semester 2

Ordinary Diploma in Information and Communication Technology (NTA LEVEL 6)

Semester 2

Sn	Code	Module	
1	ITT06201	Business Information Systems Management	10
2	ITT06202	IT Security Fundamentals	10
3	ITT06203	Professional Ethics in Computing	10
4	ITT06212	Basic Of Software Engineering	10
5	ITT06214	Capstone Project	12

e) Career Opportunities:

- i. Network Administrator
- ii. Systems Analyst
- iii. Software Developer
- iv. Database Administrator
- v. IT Consultant

f) Certification

Graduates will receive a Diploma in Information and Communication Technology (ICT).

3.2 Long-term Programmes

3.2.1 Heavy Duty Equipment Mechanics (HDEM) - NTA Level I

a) Program Overview

The Heavy-Duty Equipment Mechanics course provides students with the knowledge and skills required to repair, maintain, and troubleshoot heavy machinery such as bulldozers, cranes, and excavators. This program focuses on the mechanical, hydraulic, and electrical systems found in heavy-duty equipment.

b) Duration of Study

Duration of study for Heavy duty Equipment Mechanics Level I is one (1) year which involves institutional training, and Industrial Practical Training practice (IPT).

c) Entry Requirements

To join this programme an applicant must have:

- i. Completion of Form IV (O-Level) with pass in Mathematics, Physics and English or equivalent.
- ii. Basic mechanical aptitude is an advantage.

d) Scheme of Study

i) Semester 1

	LEVEL ONE					
Sn	Code	Module	HRS	NO OF PERIODS(1 period = 45 Minutes)		
1	HDEM 101	Maintaining safety of workshop, tools, equipment and environment.	54	72		
2	HDEM 102	Performing preventive Maintenance of tools, machines and equipment	63	84		
3	HDEM 103	Performing Bench Works	75	100		
4	HDEM 104	Applying Rigging skills	70.5	94		
5	HDEM 105	Performing sheet metal works.	15	20		
6	HDEM 106	Performing welding process	63	84		

7	HDEM 108	Building simple electric circuit.	49.5	66
SUI	PORTING SUI	BJECTS	,	
1	ENG & COMM.	01. English language basics and Grammar	40	54
2	CA.	 Introduction Creating Document Internet application 	33	44
3	LS	01. Understanding personalities and character development.	25.5	34
		02. Communication in life skills	10.5	15
4	TD	01. Drawing plain Geometry.	28.5	38
		02. Scale Drawing	3	4
		03. Construction of pictorial drawing	17.5	23

ii) Semester 2

	LEVEL ONE					
Sn	Code	Module	HRS	NO OF PERIODS (1 period = 45 Minutes)		
1	HDEM 107	Fabricating sealants process	23	32		
2	HDEM 109	Carrying out general maintenance of electrical and electronic system components	73	114		

	TIDEN 4 440			
3	HDEM 110	Carrying out general maintenance	129	172
4	HDEM 111	Maintain wheels and tyres	16	24
5	HDEM 112	Performing maintenance of suspension system	47	62
6	HDEM 113	Maintaining brake system	90	120
SUI	PORTING SUI	BJECTS		
1	ENG & COMM.	01. Communication concepts	30	39
2	TD.	01. Construction of pictorial drawing	9.5	13
		02. Construction of orthographic projection	15	20
		03. Construction of sectional view.	15	20
		04. Drawing descriptive geometry and	18	24
		auxiliary views	6	8
		05. Drawing of similar and equivalent areas		
3	ES	01. Basic concepts of engineering science.	18	24
		02. Force in equilibrium	10	13
		03. Dynamics	15	20
		04. Heat	10.5	14
4	EET	02. Entrepreneurs Concepts03. Generating feasibility business	16	22
		co. Selicialing reasionity business		

04. Starting business	22	29
05. Managing business	18	24
	36	48

iii) Summary Distribution of Time

SEMESTER 1	CORE SUBJECTS	SUPPORT SUBJECTS	TOTAL
Number of hours	390	210	600
Number of periods (1 period = 45 Minutes	520	280	800
Percentage	65%	25%	100
SEMESTER 2	CORE SUBJECTS	SUPPORT SUBJECTS	TOTAL
Number of hours	390	210	600
Number of periods (1 period = 45 Minutes	520	280	800
Percentage	65%	35%	100

e) Career Opportunities

- i. Heavy Equipment Mechanic
- ii. Maintenance Technician
- iii. Field Service Technician
- iv. Workshop Mechanic

f) Certification

Successful candidates will be awarded a Level I Certificate of Heavy-Duty Equipment Mechanics.

3.2.2 Heavy Duty Equipment Mechanics (HDEM) - NTA Level II a) Program Overview

The Heavy-Duty Equipment Mechanics Level II provides students with the knowledge and skills required to repair, maintain, and troubleshoot heavy machinery such as bulldozers, cranes, and excavators. This program focuses on the mechanical, hydraulic, and electrical systems found in heavy-duty equipment.

b) Duration of Study

Duration of study for Heavy duty Equipment Mechanics Level II is one (1) year which involves institutional training, and Industrial Practical Training practice (IPT).

c) Entry Requirements

To join this programme an applicant must have:

i. The trainee should have achieved CBET performance grade C in continuous assessment in level I.

d) Scheme of Study

i) Semester 1

	LEVEL TWO					
Sn	Code	Module	HRS	NO OF PERIODS (1 period = 45 Minutes)		
1	HDEM 201	Carrying out engine maintenance	39	52		
2	HDEM 202	Performing engine Overhauling.	135	180		
3	HDEM 203	Performing Servicing of fuel systems.	147	196		

4	HDEM 204	Maintaining steering system	49.5	66
5	HDEM 205	Repairing of suspension system.	19.5	26
6	FA		180	240
7	HDEM 206	Repairing of transmission system.	100.5	134
8	HDEM 207	Performing service of hydraulic systems	34.5	46

ii) Semester 2

	LEVEL TWO				
Sn	Code	Module	HRS	NO OF PERIODS (1 period = 45 Minutes)	
1	HDEM 208	Servicing air condition systems	36	48	
2	HDEM 209	Carry out welding processes.	15	20	
3	HDEM 210	Performing lathe machine operations.	33	44	
4	HDEM 211	Maintaining emission control system.	21	28	

iii) Summary Distribution of Time

SEMESTER 1	CORE SUBJECTS	SUPPORT SUBJECTS	TOTAL
Number of hours	390	210	

Number of periods (1 period = 45 Minutes	520	280	
Percentage	65%	35%	100%
SEMESTER 2	Industrial 1		TOTAL
	Training		
Number of hours	180	0	640
Number of periods (1 period = 45	240		
Minutes			
SEMESTER 2	CORE	SUPPORT	TOTAL
	SUBJECTS	SUBJECTS	
Number of hours	240	180	640
Number of periods (1 period = 45	320	240	853
Minutes			
Percentage	70%	30%	100%

e) Career Opportunities

- i. Heavy Equipment Mechanic
- ii. Maintenance Technician
- iii. Field Service Technician
- iv. Workshop Mechanic

f) Certification

Successful candidates will be awarded a Level II Certificate in Heavy Duty Equipment Mechanics.

3.2.3 Heavy Duty Equipment Mechanics (HDEM) - Level III a) Program Overview

The Heavy-Duty Equipment Mechanics provides students with the knowledge and skills required to repair, maintain, and troubleshoot heavy machinery such as bulldozers, cranes, and excavators. This program focuses on the mechanical, hydraulic, and electrical systems found in heavy-duty equipment.

b) Duration of Study

Duration of study for Heavy duty Equipment Mechanics Level III is one (1) year which involves institutional training, and Industrial Practical Training practice (IPT).

c) Entry Requirements

To join this programme an applicant must have:

i. A trainee should have a minimum CBET performance grade C in continuous assessment in level II or vocational certificate II.

d) Scheme of Study

i) Semester 1

	LEVEL THREE				
Sn	Code	Module	HRS	NO OF PERIODS (1 period = 45 Minutes)	
1	HDEM 301	Performing heavy duty equipment occupational skills	42	56	
2	HDEM 302	Servicing hydraulic and pneumatic systems.	180	240	
3	HDEM 303	Servicing Heavy Duty Equipment Brake systems.	27	36	

4	HDEM 304	Servicing Heavy Duty Equipment Steering systems.	31.5	42
5	HDEM 305	Servicing Heavy Duty Equipment Clutches and Transmission systems.	58.5	78
6	HDEM 306	Performing Maintenance of Drive shaft, drive axles assemblies and final drive.	18	24
7	HDEM 307	Servicing Track undercarriage system.	33	44

ii) Semester 2

	LEVEL THREE				
Sn	Code	Module	HRS	NO OF PERIODS (1 period = 45 Minutes)	
1	FA 301		180	240	
2	HDEM 308	Servicing off-road suspension system.	19.5	26	
3	HDEM 309	Servicing Earthmoving attachments and components.	39	52	
4	HDEM 310	Servicing Heavy Duty Equipment Diesel Engine Management.	81	108	
5	HDEM 311	Servicing Heating Ventilation and Air condition systems.	82	110	
6	HDEM 312	Managing Workshop Activities.	18	24	

iii) Summary Distribution of Time

SEMESTER 1	CORE	SUPPORT	TOTAL
	SUBJECTS	SUBJECTS	

Number of hours	390	210	
Number of periods (1 period = 45	520	280	
Minutes			
Percentage	65%	35%	100%
SEMESTER 2	Industrial 1		TOTAL
	Training		
Number of hours	180	0	640
Number of periods (1 period = 45	240		
Minutes			
SEMESTER 2	CORE	SUPPORT	TOTAL
	SUBJECTS	SUBJECTS	
Number of hours	240	180	640
Number of periods (1 period = 45	320	240	853
Minutes			
Percentage	70%	30%	100%

e) Career Opportunities

- i. Heavy Equipment Mechanic
- ii. Maintenance Technician
- iii. Field Service Technician
- iv. Workshop Mechanic

f) Certification

Successful candidates will be awarded a Certificate in Heavy Duty Equipment Mechanics Level III.

3.2.4 Auto Electric (AE) - Level I

a) Program Overview

The Auto Electric course provides students with the knowledge and skills required to repair, maintain, and troubleshoot vehicles electric systems. This program focuses on the electrical systems found in heavy-duty equipment, Trucks and Light vehicles.

b) Duration of Study

Duration of study for Auto Electric Level I is one (1) year which involves institutional training, and Industrial Practical Training practice (IPT).

c) Entry Requirements

To join this programme an applicant must have:

- i. Completion of Form IV (O-Level) or equivalent.
- ii. Basic mechanical or auto electric aptitude is an advantage.

d) Scheme of Study

i) Semester 1

	LEVEL ONE				
Sn	Code	Module	HRS	NO OF PERIODS (1 period = 45 Minutes)	
1	AE 101	Maintaining safety of workshop and surrounding.	36	48	
2	AE 102	Performing preventive maintenance of tools, machine and equipment	50	66	

	A E 102		<u> </u>	
3	AE 103	Performing Bench works	134.5	180
4	AE 104	Performing welding and Fabrication	79	132
5	AE 105	Building simple electric circuits.	110	146
SUI	PORTING SUI	BJECTS		
1	MATH	01. Performing arithmetic operations.	12	16
		02. Performing algebra	9	12
		03. Performing geometric expressions (Unit 5.1: 5.1.1, 5.1.2, 5.1.3 & 5.1.5)	9	12
2	Eng & Comm.	01. Grammar (1.11.2)	30	40
3	TD	01. Drawing plain geometry.	30	40
4	ES	01. Basic concepts of engineering science.02. Force in equilibrium.	18	24
		oz. rorce in equinoriam.	12	16
5	EET	01.Entrepreneurship concept.	18	24
		02. Generating feasible business idea (unit 2.1)	12	16
6	LS	01. Understanding personalities.	24	32
		02.Good interpersonal relationship and effective communication	15	20
		03. Creative problem solving and effective decision making	12	16
		04. Negotiation and conflict resolution.	9	12

ii) Semester 2

	LEVEL ONE					
Sn	Code	Module	HRS	NO OF PERIODS (1 period = 45 Minutes)		
1	AE 106	Building simple electronic circuits	87	117		
2	AE 107	Carrying out general maintenance on electrical and electronic systems	51	68		
3	AE 108	Carrying out general vehicle services	105.5	140		
4	AE 109	Carrying out repair of wheel and tyre.	63	84		
5	AE 110	Repairing hydraulic brake system.	84	112		
SUI	PORTING SUI	BJECTS				
1	MATH	01. Performing geometric expressions (Unit 5.1: 5.1.4 & Unit 5.2: 5.2.1 & 5.2.2)	12	16		
		02. Performing mensuration calculations	15	20		
		03. Performing exponents, radicals and logarithms (unit 2.1.)	3	4		
2	Eng & Comm.	01.Grammar (Unit 1.3)	24	32		
	Contini,	02.Word formation	6	8		
3	TD	01.Scale drawing	3	4		
		02. Construction of pictorial drawing.	27	36		

4	ES	01.Dynamics (Unit 3.2)	12	16
		02.Determination of pressure	18	24
5	EET	01.Generating feasible business idea (unit 2.2)	10.5	14
		02.Starting a business	19.5	26
6	LS	01. Sexual and reproductive health	27	36
		02. Gender concern.	6	8
		03. Achieving career goals and vision.	3	4
		04. Creative and critical thinking.	9	12
		05. Referrals and linkages.	3	4
		06. Customer care.	12	16

iii) Summary Distribution Time

SEMESTER 1	CORE SUBJECTS	SUPPORT SUBJECTS	TOTAL
Number of hours	390	210	600
Number of periods (1 period = 45 Minutes	520	280	800
Percentage	65%	35%	100%
SEMESTER 2	CORE SUBJECTS	SUPPORT SUBJECTS	TOTAL
Number of hours	390	210	600

Number of periods (1 period = 45 Minutes	520	280	800
Percentage	65%	35%	100%

e) Career Opportunities

- i. Mechanic
- ii. Maintenance Artisan
- iii. Field Service Artisan
- iv. Workshop Mechanic
- v. Auto Electric Artisan

g) Certification

Successful candidates will be awarded a Level I Certificate of Auto Electric.

3.2.5 Auto Electric (AE) - NTA Level II

a) Program Overview

The Auto Electric Level II provides students with the knowledge and skills required to repair, maintain, and troubleshoot electric systems. This program focuses on the mechanical, and electrical systems found in heavy-duty equipment, trucks and motor vehicles.

b) Duration of Study

Duration of study for Auto Electric Level II is one (1) year which involves institutional training, and Industrial Practical Training practice (IPT).

c) Entry Requirements

To join this programme an applicant must have:

- i. Completion of Auto Electric NTA Level I or equivalent.
- ii. Basic mechanical or auto electric aptitude is an advantage.

d) Scheme of Study

i) Semester 1

LEVEL TWO				
Sn	Code	Module	HRS	NO OF PERIODS (1 period = 45 Minutes)
1	AE 201	Maintaining suspension system	54	72
2	AE 202	Carrying out engine maintenance	48	64
3	AE 203	Maintaining starting system	72	96
4	AE 204	Maintaining charging system	72	96
5	AE 205	Maintaining lighting system	109	146
6	AE 206	Maintaining accessories circuits and components.	125	168
SUI	PORTING SUI	BJECTS	•	
1	MATH	01. Performing exponents, radicals and logarithms (unit 2.2 – 2.3))	21	28
		02. Solving equation (Unit 4.1: 4.1.1 & 4.1.2)	9	12
2	Eng & Comm.	01. Conversation	30	40
3	TD	01. Construction of orthographic projection.	15 15	20 20
		02. Construction of sectional view.	10	20

4	ES	01. Simple machines	9	12
		02. Heat	21	28
		03. Strength of materials	7.5	10
		04. Work energy and power	12	16
		05. Friction	10.5	14
5	EET	01.Managing business (Unit 4.1 -4.4)	30	40
6	CA	01. Introduction to computer	3	4
		02. Office application (Unit 2.1 – 2.2)	27	36

ii) Semester 2

LEVEL TWO				
Sn	Code	Module	HRS	NO OF PERIODS (1 period = 45 Minutes)
1	FA 201		240	
2	AE 203	Maintaining ignition system.	85	114
3	AE 204	Maintaining electric fuel system.	100	134
4	AE 205	Maintaining emission control system.	55	74
SUPORTING SUBJECTS				
1	MATH	01. Solving equations (Unit 4.2 & 4.3)	15	20
		02. Performing trigonometry.	15	20

2	Eng &	01. Communication concept	9	12 16
	Comm.	02. Applying writing and reading skills.	18	24
3	TD	01. Drawing Descriptive geometry and auxiliary views.	18	24
		02. Drawing of similar and equivalent areas.	6	6
		03. Drawing Loci (Unit 8.1)	6	6
4	ES	01. Electricity and magnetism	30	40
5	EET	01.Managing business (Unit 4.1 -4.4)	30	40
6	CA	01. Office application (2.3 – 2.4)	30	40

iii) Summary Distribution of Time

SEMESTER 1	CORE SUBJECTS	SUPPORT SUBJECTS	TOTAL
Number of hours	390	210	600
Number of periods (1 period = 45 Minutes	520	280	800
Percentage	65%	35%	100%
SEMESTER 2	CORE SUBJECTS + FA	SUPPORT SUBJECTS	TOTAL

Number of hours	180+240=420	180	600
Number of periods (1 period = 45 Minutes	240+FA	240	480
Percentage	70%	30%	100%

e) Career Opportunities

- i. Auto Electric Mechanic
- ii. Maintenance Technician
- iii. Field Service Technician
- iv. Workshop Mechanic

g) Certification

Successful candidates will be awarded a Level II Certificate of Auto Electric.

3.2.6 Auto Electric (AE) - Level III

a) Program Overview

The Auto Electric provides students with the knowledge and skills required to repair, maintain, and troubleshoot electric systems. This program focuses on the mechanical, and electrical systems found in heavy-duty equipment, and motor vehicles.

b) Duration of Study

Duration of study for Auto Electric Level III is one (1) year which involves institutional training, and Industrial Practical Training practice (IPT).

c) Entry Requirements

To join this programme an applicant must have:

- i. Completion of Auto Electric NTA Level II or equivalent.
- ii. Basic mechanical aptitude is an advantage.

d) Scheme of Study

i) Semester 1

	LEVEL THREE				
Sn	Code	Module	HRS	NO OF PERIODS (1 period = 45 Minutes)	
1	AE 301	Servicing electrical accessories	133	178	
2	AE 302	Maintaining electronic components.	55	74	
3	AE 303	Maintaining safe work environment	67	90	
4	AE 304	Managing preventive maintenance	45	60	
5	AE 305	Carrying out engine management	94	126	
6	AE 306	Maintaining automotive air condition system.	85	114	
SUI	PORTING SU	BJECTS			
1	MATH	01. Performing statistics	24	32	
2	Eng & Comm.	01. Speaking and listening skills	30	40	
3	TD	01. Drawing Loci (Unit 8.2)	6	8	
		02. Construction of development and Interpretation	15	20	
		3. Working drawing	9	12	
4	CA	01. Office application (Unit 2.5)	9	12	
		02. Internet and Emails	21	28	

ii) Semester 2

	LEVEL THREE				
Sn	Code	Module	HRS	NO OF PERIODS (1 period = 45 Minutes)	
1	FA 301		240		
2	AE 307	Servicing electronic chassis and accessories system.	66	88	
3	AE 308	Carrying out maintenance of dash and displace instruments.	54	72	
4	AE 309	Managing workshop activities.	120	160	
SUI	PORTING SUI	BJECTS	•		
1	MATH	01. Performing matrices calculations	15	20	
		02. Performing calculation of vectors	15	20	
		03. Performing Matrices	30	40	
		04. Performing linear programming	21	48	
2	CA	01. Computer Aided Design	60	80	

iii) Summary Distribution of Time

SEMESTER 1	CORE SUBJECTS	SUPPORT SUBJECTS	TOTAL
Number of hours	480	120	600

Number of periods (1 period = 45 Minutes	640	160	800
Percentage	80%	20%	100%
SEMESTER 2	CORE SUBJECTS +	SUPPORT	TOTAL
	FA	SUBJECTS	
Number of hours	FA 180+240=420	SUBJECTS 120	540
Number of hours Number of periods (1 period = 45			540 480
	180+240=420	120	

e) Career Opportunities

- i. Auto Electric Mechanic
- ii. Maintenance Technician
- iii. Field Service Technician
- iv. Workshop Mechanic

g) Certification

Successful candidates will be awarded a Certificate in Auto Electric Level III.

3.2.7 Welding and Metal Fabrication (WF) - Level I a) Program Overview

The Welding and Fabrication course provides students with the knowledge and skills required for welding and fabrication.

b) Duration of Study

Duration of study for Welding and Fabrication Level I is one (1) year which involves institutional training, and Industrial Practical Training practice (IPT).

c) Entry Requirements

To join this programme an applicant must have:

- iii. Completion of Form IV (O-Level) or equivalent.
- iv. Basic mechanical or welding and fabrication aptitude is an advantage.

d) Scheme of Study

i) Semester 1

	LEVEL ONE				
Sn	Code	Module	HRS	NO OF PERIODS (1 period = 45 Minutes)	
1	WF101	Maintaining safety of workshop and surroundings.	30	40	
2	WF102	Performing Preventive maintenance of tools, machine and equipment.	60	80	
3	WF103	Performing bench work.	300	400	
SUI	PORTING SUI	BJECTS			
1	MATH	1. Performing arithmetic operations.	12	16	
		2. Performing algebra.3. Performing geometric expressions (Unit 5.1: 5.1.1, 5.1.2, 5.1.4 & 5.1.5)	9	12	
		(2)	9	12	

2	Eng & Comm.	01. Grammar (1.11.2)	30	40
3	TD	1. Drawing plain geometry.	30	40
4	ES	1. Basic concepts of engineering science.	18	24
		2. Force in equilibrium.	12	16
5	EET	1. Entrepreneurship concept.	18	24
		2. Generating feasible business idea (unit 2.1)	12	16
6	LS	1.Understanding personalities.	24	32
		2. Good interpersonal relationship and effective communication.	15	20
		3. Creative problem solving and effective	12	16
		decision making.	9	12
		4. Negotiation and conflict resolution.		

ii) Semester 2

	LEVEL ONE					
Sn	Code	Module	HRS	NO OF PERIODS (1 period = 45 Minutes)		
1	WF104	Performing sheet metal work.	210	280		
2	WF105	Performing all positions ARC welding and ARC cutting.	60	160		

WF106	Performing gas welding, brazing on ferrous and non- ferrous metal.	120	160			
SUPORTING SUBJECTS						
MATH	1. Performing geometric expressions (Unit 5.1: 5.1.4 & Unit 5.2: 5.2.1 & 5.2.2)	12	16			
	2. Performing mesuration calculations	15	20			
	3. Performing exponents, radicals and logarithms (unit 2.1.)	3	4			
Eng &	1. Grammar (Unit 1.3)	12	16			
Comm.	2. Word formation	6	8			
TD	1. Scale drawing.	3	4			
	2. Construction of pictorial drawing.	27	36			
ES	1. Dynamics (Unit 3.2)	24	32			
	2. Determination of pressure.	18	24			
EET	1. Generating feasible business idea (unit	10.5	14			
	2. Starting a business.	19.5	26			
LS	1. Sexual and reproductive health	27	36			
	2. Gender concern.	6	8			
	3. Achieving career goals and vision.	3	4			
	4. Creative and critical thinking.	9	12			
	5. Referrals and linkages.		$\begin{vmatrix} 1 & 1 & 1 \\ 4 & 1 & 1 \end{vmatrix}$			
	6. Customer care.	12	16			
	Eng & Comm. TD ES	Performing gas welding, brazing on ferrous and non- ferrous metal. **PORTING SUBJECTS** **MATH** 1. Performing geometric expressions (Unit 5.1: 5.1.4 & Unit 5.2: 5.2.1 & 5.2.2) 2. Performing mesuration calculations 3. Performing exponents, radicals and logarithms (unit 2.1.) **Eng & Comm.** 1. Grammar (Unit 1.3) 2. Word formation **TD** 1. Scale drawing. 2. Construction of pictorial drawing. **ES** 1. Dynamics (Unit 3.2) 2. Determination of pressure. **EET** 1. Generating feasible business idea (unit 2.2) 2. Starting a business. **LS** 1. Sexual and reproductive health 2. Gender concern. 3. Achieving career goals and vision. 4. Creative and critical thinking. 5. Referrals and linkages.	Performing gas welding, brazing on ferrous and non-ferrous metal. **PORTING SUBJECTS** **MATH** 1. Performing geometric expressions (Unit 5.1: 5.1.4 & Unit 5.2: 5.2.1 & 5.2.2) 2. Performing mesuration calculations 3. Performing exponents, radicals and logarithms (unit 2.1.) **Eng & Comm.** 1. Grammar (Unit 1.3) 2. Word formation 4. Scale drawing. 2. Construction of pictorial drawing. 2. Construction of pressure. **ES** 1. Dynamics (Unit 3.2) 2. Determination of pressure. **EET** 1. Generating feasible business idea (unit 2.2) 2. Starting a business. **EET** 1. Sexual and reproductive health 2. Gender concern. 3. Achieving career goals and vision. 4. Creative and critical thinking. 5. Referrals and linkages. 6. Customer care. **Total Committee of the productive of the p			

iii) Summary Distribution of Time

SEMESTER 1	CORE SUBJECTS	SUPPORT SUBJECTS	TOTAL
Number of hours	390	210	600
Number of periods (1 period = 45 Minutes	520	280	800
Percentage	65%	35%	100%
SEMESTER 2	CORE SUBJECTS	SUPPORT SUBJECTS	TOTAL
Number of hours	390	210	600
Number of periods (1 period = 45 Minutes	520	280	800
Percentage	65%	35%	100%

e) Career Opportunities

- iii. Welder
- iv. Maintenance Artisan
- v. Field Service Artisan
- vi. Workshop Mechanic

f) Certification

Successful candidates will be awarded a Level I Certificate of Welding and Fabrication.

3.2.8 Welding and Metal Fabrication - NTA Level II

a) Program Overview

The Welding and Fabrication Level II provides students with the knowledge and skills required welding and fabrication.

b) Duration of Study

Duration of study for Welding and Fabrication Level II is one (1) year which involves institutional training, and Industrial Practical Training practice (IPT).

c) Entry Requirements

To join this programme an applicant must have:

- i. Completion of Welding and Fabrication NTA Level I or equivalent.
- ii. Basic mechanical or welding and fabrication aptitude is an advantage.

d) Scheme of Study

i) Semester 1

	LEVEL TWO				
Sn	Code	Module	HRS	NO OF PERIODS (1 period = 45 Minutes)	
1	WF201	Performing ARC welding on alloy steel and ferrous metal.	180	240	
2	WF202	Performing gas welding on ferrous and non-ferrous metals.	210	280	
SUI	PORTING SUI	BJECTS			
1	MATH	 Performing exponents, radicals and logarithms (unit 2.2 – 2.3)) Solving equation (Unit 4.1: 4.1.1 & 4.1.2) 	21 9	28 12	
2	Eng & Comm.	01. Conversation	30	40	

3	TD	1. Construction of orthographic projection.	15	20
		2. Construction of sectional view	15	20
4	ES	1. Simple machines	9	12
		2. Heat	21	28
		3. Strength of materials	7.5	10
		4. Work energy and power	12	16
		5. Friction	10.5	14
5	EET	1. Managing business (Unit 4.1 -4.3)	30	40
6	CA	1. Introduction to computer	3	4
		2. Office application (Unit 2.1 – 2.2)	27	36

ii) Semester 2

	LEVEL TWO					
Sn	Code	Module	HRS	NO OF PERIODS (1 period = 45 Minutes)		
1	FA 201		240			
2	WF203	Performing fabrication work according to drawing.	90	120		
3	WF204	Performing site installation involving welding.	60	80		
4	WF205	Performing resistance welding.	30	40		

SUI	SUPORTING SUBJECTS				
1	MATH	1. Solving equations (Unit 4.2 & 4.3)	15	20	
		2. Performing trigonometry	15	20	
2	Eng &	01. Communication concept	12	16	
	Comm.	02. Applying writing and reading skills	18	24	
3	TD	1. Drawing Descriptive geometry and auxiliary views	18	24	
		2. Drawing of similar and equivalent	6	6	
		areas.	6	6	
		3. Drawing Loci (Unit 8.1)			
4	ES	1. Electricity and magnetism	30	40	
5	EET	1. Managing business (unit 4.5)	6	8	
		2. Getting into business.	24	32	
6	CA	1. Office application (2.3 – 2.4)	30	40	

iii) Summary Distribution of Time

SEMESTER 1	CORE SUBJECTS	SUPPORT SUBJECTS	TOTAL
Number of hours	390	210	600
Number of periods (1 period = 45 Minutes	520	280	800
Percentage	65%	35%	100%

SEMESTER 2	CORE SUBJECTS + FA	SUPPORT SUBJECTS	TOTAL
Number of hours	180+240=420	180	600
Number of periods (1 period = 45 Minutes	240+320=560	240	480
Percentage	70%	35%	100%

e) Career Opportunities

- i. Welder
- ii. Maintenance Technician
- iii. Field Service Technician
- iv. Workshop Mechanic

h) Certification

Successful candidates will be awarded a Level II Certificate of Welding and Fabrication.

3.2.6 Welding and Metal Fabrication (WF) - Level III

a) Program Overview

The Welding and Fabrication provides students with the knowledge and skills required welding and fabrication.

b) Duration of Study

Duration of study for Welding and Fabrication Level III is one (1) year which involves institutional training, and Industrial Practical Training practice (IPT).

c) Entry Requirements

To join this programme an applicant must have:

- i. Completion of Welding and Fabrication NTA Level II or equivalent.
- ii. Basic mechanical or welding and fabrication aptitude is an advantage.

d) Scheme of Study

i) Semester 1

	LEVEL THREE				
Sn	Code	Module	HRS	NO OF PERIODS (1 period = 45 Minutes)	
1	WF301	Performing ARC welding on ferrous and non-ferrous metals.	180	240	
2	WF302	Performing gas welding on ferrous and non-ferrous metals.	150	200	
3	WF303	Performing advanced gas flame cutting on ferrous metals.	120	160	
4	WF304	Performing metal spraying on metal surfaces.	30	40	
SUI	PORTING SU	BJECTS			
1	MATH	1. Performing statistics	15	20	
		2. Performing matrices Calculations	15	20	
2	Eng & Comm.	01. Speaking and listening skills	30	40	
3	TD	1. Drawing Loci (Unit 8.2)	6	8	
		2. Construction of development and Interpretation	15	20	
		3. Working drawing	9	12	
4	CA	1. Office application (Unit 2,5)	9	12	

	2. Internet and Emails	21	28

ii) Semester 2

	LEVEL THREE					
Sn	on Code Module		HRS	NO OF PERIODS (1 period = 45 Minutes)		
1	FA301		240			
2	WF305	Performing fabrication works according to drawing.	100	134		
3	WF306	Performing planning and managerial duties on preventive maintenance.	50	66		
4	WF307	Managing a fabrication shop.	30	40		
5	WF308	Managing safe working environment.	60	80		
SUI	PORTING SU	BJECTS	L			
1	MATH	1. Performing calculation of vectors	15	20		
		2. Performing statistics	9	12		
		3. Performing Matrices	15	20		
		4. Performing linear programming	21	28		
2	CA	1. Computer Aided Design	60	80		

iii) Summary Distribution of time

SEMESTER 1	CORE SUBJECTS	SUPPORT SUBJECTS	TOTAL
Number of hours	480	120	600
Number of periods (1 period = 45 Minutes	640	160	800
Percentage	80%	20%	100%
SEMESTER 2	CORE SUBJECTS + FA	SUPPORT SUBJECTS	TOTAL
Number of hours	240+240=480	120	600
Number of periods (1 period = 45 Minutes	320+320=640	160	800
Percentage	80%	20%	100%

e) Career Opportunities

- i. Welder
- ii. Maintenance Technician
- iii. Field Service Technician
- iv. Workshop Mechanic

h) Certification

Successful candidates will be awarded a Certificate of Welding and Fabrication Level III.

3.3 Heavy Duty Equipment Operations

3.3.1 Heavy Duty Equipment Operations (Short Course)

a) Program Overview

The Certificate in Heavy Duty Equipment Operations is a hands-on program that trains students to safely operate and manage heavy machinery such as forklifts, cranes, bulldozers, excavators, loaders, compactors and graders. The course emphasizes safety procedures, operational techniques, and maintenance requirements for heavy-duty equipment.

b) Duration of Study

Duration of study for Heavy duty Equipment Operation is two months (8 weeks) course which involves class hours, and Practical Training.

c) Entry Requirements

- i. Completion of Form IV (O-Level) or equivalent.
- ii. Physical fitness and good vision are required.

d) Key Modules

- i. Introduction to Heavy Duty Machinery
- ii. Equipment Operation and Maintenance
- iii. Hydraulic Systems and Troubleshooting
- iv. Equipment Operation Techniques
- v. Basic Equipment Maintenance

e) Career Opportunities

- i. Heavy Equipment Operator
- ii. Forklift Operator
- iii. Crane Operator
- iv. Construction Site Technician

f) Certification

Graduates will receive an Operator Certificate of Heavy-Duty Equipment Operations for a specific machine/equipment.

3.4 Short-term Programmes

This program focuses on the short courses including, computer course, equipment operations, designs, welding and fabrication and auto electric.

3.4.1 Plant Mechanics

a) Program Overview

The Plant Mechanics short course provides students with the knowledge and skills required to repair, maintain, and troubleshoot heavy machinery such as bulldozers, cranes, and excavators. This program focuses on the mechanical, hydraulic, and electrical systems found in heavy-duty equipment.

b) Duration of Study

Duration of study for Plant Mechanics is three months (12 weeks) which involves class hours, and Practical Training.

c) Entry Requirements

- i. Completion of Form IV (O-Level) or equivalent.
- ii. Basic mechanical aptitude is an advantage.

d) Key Modules

- i. Introduction to Heavy Equipment Mechanics
- ii. Engine Systems and Maintenance
- iii. Equipment Operation and Maintenance
- iv. Basic Equipment Maintenance

e) Career Opportunities

- i. Artisan
- ii. Mechanic Artisan

f) Certification

Graduates will receive a Certificate of Plant Mechanics.

3.4.2 Motor Vehicle Mechanics

a) Program Overview

The Motor Vehicle Mechanics short course provides students with the knowledge and skills required to repair, maintain, and troubleshoot motor vehicles. This program focuses on the mechanical, hydraulic, and electrical systems found in moto vehicles.

b) Duration of Study

Duration of study for Motor Vehicle Mechanics is three months (12 weeks) which involves class hours, and Practical Training.

c) Entry Requirements

- i. Completion of Form IV (O-Level) or equivalent.
- ii. Basic mechanical aptitude is an advantage.

d) Key Modules

- i. Introduction to Motor Vehicles
- ii. Engine Systems and Maintenance
- iii. Equipment Operation and Maintenance
- iv. Basic Equipment Maintenance

e) Career Opportunities

- i. Artisan
- ii. Mechanic Artisan

g) Certification

Graduates will receive a Certificate of Motor Vehicle Mechanics.

3.4.3 Truck Mechanics

a) Program Overview

The Motor Vehicle Mechanics short course provides students with the knowledge and skills required to repair, maintain, and troubleshoot trucks. This program focuses on the mechanical, hydraulic, and electrical systems found in trucks.

b) Duration of Study

Duration of study for Truck Mechanics is three months (12 weeks) which involves class hours, and Practical Training.

c) Entry Requirements

- i. Completion of Form IV (O-Level) or equivalent.
- ii. Basic mechanical aptitude is an advantage.

d) Key Modules

- i. Introduction to Truck Mechanics
- ii. Engine Systems and Maintenance
- iii. Equipment Operation and Maintenance
- iv. Basic Equipment Maintenance

e) Career Opportunities

- v. Artisan
- vi. Mechanic Artisan

h) Certification

Graduates will receive a Certificate of Truck Mechanics.

3.4.4 Auto Electric

a) Program Overview

The Auto Electric short course provides students with the knowledge and skills required to repair, maintain, and troubleshoot electric systems. This program focuses on the mechanical, and electrical systems found in vehicles.

b) Duration of Study

Duration of study for Auto Electric is three months (12 weeks) which involves class hours, and Practical Training.

c) Entry Requirements

i. Completion of Form IV (O-Level) or equivalent.

ii. Basic mechanical aptitude is an advantage.

d) Key Modules

- i. Introduction to Electrical Systems
- ii. Engine Systems and Maintenance
- iii. Equipment Operation and Maintenance
- iv. Basic Auto Electric Maintenance

e) Career Opportunities

- i. Artisan
- ii. Mechanic Artisan
- iii. Auto Electric Artisan

i) Certification

Graduates will receive a Certificate of Auto Electric.

3.4.5 Computer Course

a) Program Overview

These are computer short courses designed to provide students with the knowledge and skills required to use and manage computers, repair, maintain, and troubleshoot computers. This program focuses on the Information and Communication Technology.

b) Scheme of Study

SNO	COURSE	ENTRY REQUIREMENTS	DURATION
1	General Introduction to Computer fundamentals	All candidates with the ability to Understand English Language	4 Months
2	Basic Computer Applications (MS office)	All candidates with the ability to Understand English Language	3 months

3	Refresher in basic computer Application	A candidate who is familiar with the uses of basic computer application	1 Month
4	Computer troubleshooting maintenance and repair	A candidate with Standard 7, Form 4 etc.	2 months
5	Introduction Computer Graphics	A candidate who are familiar with the uses of computer	3 Months
6	Website Design and Development	A candidate with can write and understand English	2 Months
7	Basic Database Development	A candidate with can write and understand English	2 Months
8	Intermediate/Advance Database Development	A candidate with Basic Database Development	2 Months
9	Beginner Programming	A candidate with good computer skills with ability to understand well English Language	2 Months
10	Advance Programming	A candidate with good computer skills with a basic Programming Skills	3 Months

4.1 Admissions Process

To apply for any of the programs at IHET, prospective students must complete the following steps:

- i. Complete the Online Application Form available on the IHET website or pick up a physical application form from the admissions office.
- ii. Submit Supporting Documents, including academic certificates, identification, and any other relevant qualifications.
- iii. Pay the Application Fee as detailed in the admissions section of the IHET website.
- iv. Attend an Admission Interview (if required for the program applied for).

4.2 Tuition Fees and Financial Aid

IHET offers affordable tuition rates, flexible payment plans, and financial aid options to ensure access to quality education for all students. Scholarships and bursaries are available for eligible students based on academic performance and financial need. For more information on tuition fees and financial aid, please visit our website or contact the admissions office.

5.1 Campus Life and Student Support Services

At IHET, we believe that learning extends beyond the classroom. Our students benefit from a range of support services and extracurricular activities, including:

- i. **Student Accommodation:** Comfortable on-campus and off-campus housing options for both local and international students.
- ii. **Library and Learning Resources**: Access to a modern library, online databases, and learning materials.
- iii. **Career Services:** Internship placements, job search assistance, and career counselling to help students transition into the workforce.
- iv. **Sports and Clubs**: A variety of sports, clubs, and societies that promote personal growth, leadership, and networking.

6.1 Contact Us

For more information about our programs, admissions, or campus life, please feel free to reach out to us:

Institute of Heavy Equipment and Technology (IHET)

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We look forward to welcoming you to IHET, where your future begins!