



THE REPUBLIC OF UGANDA  
Ministry of Education and Sports

Directorate of Industrial Training

|  |   |
|--|---|
|  | <p><b>Assessment and Training<br/>Package</b></p> <p>For an</p> <p><b>ARCHITECTURAL<br/>DRAFTER</b></p> |
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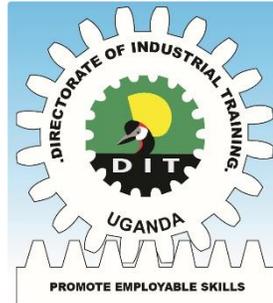
**Qualification Level: 1**

**Occupational Cluster: Technology and Design**

**September 2020**

Developed by:  
Qualifications Standards Department  
Directorate of Industrial Training

Funded by:  
Government of Uganda



## **Assessment and Training Package**

**For an**

**ARCHITECTURAL DRAFTER**

**Qualification Level: 1**

**Occupational Cluster: Technology and Design**

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Under BTVET Act, 2008, the functions of the Directorate of Industrial Training are:

- (a) To identify the needs of the labour market for occupational competencies that fall under the UVQF.
- (b) To regulate apprenticeship schemes.
- (c) To foster and promote entrepreneurial values and skills, as an integral part of the UVQF.
- (d) To secure adequate and sustainable financing for the efficient operations of the Directorate.
- (e) To accredit training institutions or companies as assessment centres.
- (f) To determine fees payable under the Act.
- (g) To develop, apply, expand and improve the purposeful application of Uganda vocational qualifications defined in the UVQF.
- (h) To assess and award Uganda Vocational Qualifications.
- (i) To promote on-the-job training in industry for apprenticeship, traineeship and indenture training and for other training such as further skills training and upgrading.
- (j) To prescribe the procedure for the making of training schemes.

Further to the above provisions, there is an established Uganda Vocational Qualifications Framework (UVQF), under part V of the BTVET Act, 2008. It is stated that:

The purpose of the UVQF is to;

- (a) Define occupational standards in the world of work.
- (b) Define assessment standards.
- (c) Award vocational qualifications of learners who meet the set standards of different studies.
- (d) Provide guidelines for modular training.

The UVQF shall follow principles of Competence Based Education and Training (CBET) which include:

- (a) Flexible training or learning modules.
- (b) Positive assessment and certification.
- (c) Assessment of prior learning.
- (d) Recognition of formal and non-formal training.
- (e) Self-paced or individual learning.
- (f) Work place learning.

For award and recognition of certificates, the BTVET Act, 2008 provides that:

- (1) The Directorate and other examination boards established under the Act shall award certificates and diplomas for Business, Technical or Vocational Education and Training under the UVQF.
- (2) The Certificates and Diplomas to be awarded shall be in the form prescribed by the Minister on the recommendation of the Industrial Training Council.
- (3) The Certificates and Diplomas awarded under the Act shall be recognised in the Uganda education system and by the labour market.

Under the TVET Implementation Standards 2020, the proposed new mandate of the Directorate of Industrial Training shall be restricted to promoting the highest standards in the quality and efficiency of industrial training in the country and ensuring an adequate supply of properly trained manpower at all levels in the industry and the world of work.

The functions shall include:

- (a) Regulating Industrial Training and Trainers.
- (b) Developing Industrial Training Curricula.
- (c) Harmonising Curricula and Certificates of competence.
- (d) Assessing Industrial Training.
- (e) Development of Occupational Standards and Assessment and Training Packages (ATPs) for Trade Testing for the industry and world of work.
- (f) Awarding certificates in that respect.

At operational level in the Directorate, the Qualification Standards Department performs development tasks related to concepts, procedures and instruments for establishment of the UVQF in close collaboration with both public and private stakeholders in vocational training.

In particular, the Department organises and coordinates the development of Assessment and Training Packages for use in competence-based vocational training as well as standards-based assessment and certification.

The Directorate has therefore produced this Assessment and Training Package for use in implementing Competence-Based Education and Training mechanisms.

## TABLE OF CONTENTS

|   |      |
|---|------|
| <b>Word from Permanent Secretary</b> .....                      | iv   |
| <b>Executive Summary</b> .....                                  | vi   |
| <b>Acknowledgement</b> .....                                    | viii |
| <b>Abbreviations and Acronyms</b> .....                         | ix   |
| <b>Key Definitions</b> .....                                    | x    |
| <b>1.0 ATP-PART I</b> .....                                     | 1    |
| <b>Duties and Tasks</b> .....                                   | 4    |
| <b>2.0 ATP-PART II</b> .....                                    | 9    |
| <b>Training Modules for a Architectural Drafter</b> .....       | 9    |
| <b>3.0 ATP-PART III</b> .....                                   | 25   |
| <b>Assessment Instruments for a Architectural Drafter</b> ..... | 25   |
| <b>Written Test Items (Samples)</b> .....                       | 27   |
| <b>Performance Test Items (Samples)</b> .....                   | 35   |
| <b>4.0 ATP- PART IV</b> .....                                   | 43   |
| <b>Information on Development Process</b> .....                 | 43   |

## **Word from Permanent Secretary**

The Kajubi Report (1989) and the Uganda Government White Paper on Education Review (1992) emphasised that the Uganda Secondary School Education should be vocationalised.

The World Bank Report on education in Uganda 2007 observed that although Uganda was experiencing steady economic growth on one hand, the secondary education curriculum was inadequately addressing the social and economic needs of the country on the other. The Report further noted that it is not the very top academic cadres that contribute most to the growth of the GDP but rather the competent middle level technicians that are flexible and technologically literate that the economy needs in the labour market at all levels.

Correspondingly, the NDP III 2020/21- 2024/5 highlights (i) low labour productivity (ii) high youth unemployment (38%) (iii) low transition rates from training to employment (35%) as some of the key challenges to Human Capital Development in Uganda.

In order to overcome these challenges, NDP III 2020/21- 2024/5, under objective 2 peaks the need to train the learners for the urgently needed skills and mainstream a dual education and training system. This paved way for the development of the lower secondary school vocational curriculum which supports both academic and vocational training.

The afore is in line with the Uganda Vision 2040. Under section 261, it emphasises that learners will be accorded opportunities to excel in the skills areas they are placed into. These will range from sports and cut to technical and vocational training. Hitherto, section 262 clearly states that the entire education system will be changed to emphasise practical skills, attitude and moral values.

Government of Uganda through the Ministry of Education and Sports rolled out the New Lower Secondary Curriculum in secondary schools countrywide during the first term of the academic year 2020. The overall goal of this curriculum is to produce graduates with employable skills and who are competitive in the labour market. It should be emphasised that vocational training will produce graduates who are employable. In the New curriculum, emphasis will be on equipping learners with employable skills and competencies. This will enable learners perform the requisite duties of the specified occupations. This is the reason why the lower secondary school vocational curriculum was tailored to the assessment requirements of the world of work.

Reading from the Curriculum Framework page 12, it is stated that the learners will be assessed by DIT. Upon assessment and certification, the graduates will be employable and competitive in the labour market. It's against this background that DIT, within its mandate vested in the BTVET Act, 2008 comes on board to take the lead in the development of the requisite Assessment and Training Packages (ATPs) for the various occupations that will be assessed under the Lower Secondary Curriculum.

The ATPs can be used by any training provider and/or those who wish to present themselves for Occupational Assessment and Certification.

Herewith, the Directorate of Industrial Training presents the Assessment and Training Package for training, assessment and certification of an Architectural Drafter **QUALIFICATION LEVEL 1.**

Finally, I thank all individuals, organisations and review partners who have contributed and/or participated in the review of this noble document.



**Alex Kakooza**  
**Permanent Secretary**

## Executive Summary

This Assessment and Training Package is a Competence-Based Education and Training (CBET) tool and consists of three major parts:

- 0.1 **PART I: The Occupational Profile (OP) of an Architectural Drafter.** This Occupational Profile which was reviewed by Architectural Drafters practicing in the world of work mirrors the duties and tasks that Architectural Drafters are expected to perform.
- 0.2 **PART II: Training Modules** in the form of guidelines to train Architectural Drafters both on the job as well as in training centres (or combinations of both venues of learning). The Training Modules herein have been reviewed basing on the Occupational Profile and hence are directly relevant for employment.
- 0.3 **PART III: Assessment Instruments** in the form of performance (Practical) and written (theory) test items that can and should be used to assess whether a person complies with the requirements of employment as an Architectural Drafter. These assessment instruments were reviewed jointly by job practitioners (Architectural Drafters) and instructors based on the occupational profile and training modules.
- 0.4 While the Occupational Profile (OP) contained in PART I of this document provides the information on **WHAT a person is expected to do** competently in the world of work, the test items, - including performance criteria- of PART III qualify the **HOW and/or HOW WELL a person must do the job.**
- 0.5 The modular format of the curriculum (PART II) allows learners to acquire job specific skills and knowledge (i.e. competencies) module by module. A single module can be accomplished within a relatively short duration allowing flexibility for learners to move directly into an entry level job, go for further modules or advance to higher levels of training. Modular courses allow more learners to access the training system because training centres as well as companies can accommodate more learners in a given period of time.
- 0.6 In addition to improved access, equity and relevance of BTVET, the UVQF will also enable people who are convinced to have acquired competencies laid down in this ATP through prior training and on-the-job experience to access assessment and certification directly; be it on the basis of a single module, a group of modules or all modules pertaining to the occupation at once. This achievement will facilitate Recognition of Prior Learning (RPL).

0.7 The parts of this Assessment and Training Package were sequentially reviewed as follows:

- i Part 1: Occupational Profile: **August 2020**
- ii Part 2: Training Modules: **August 2020**
- iii Part 3: Assessment Instruments (initial bank): **August 2020**

This ATP (or parts of it) may be periodically revised to match the dynamic trends in the occupation and hence issued in different versions.

DIT takes responsibility of any shortcomings that might be identified in this publication and welcomes suggestions for effectively addressing the inadequacies. The suggestion can be communicated to DIT through P.O. Box 20050, Kampala or through email [uvaf.dit@gmail.com](mailto:uvaf.dit@gmail.com).



**Patrick Byakatonda**  
**Ag Director**

## Acknowledgement

The Qualifications Standards Department of DIT wishes to sincerely acknowledge the valuable contributions to the review of this Assessment and Training Package by the following persons, Institutions and organisations:

- Members of the DIT Industrial Training Council,
- The Director and staff of DIT,
- Ministry of Education and Sports,
- The practitioners from the world of work,
- Teachers of Architectural Drafter from various Secondary Schools,
- Technology and Design Curriculum Specialists from NCDC,
- Examination Specialists from UNEB,
- The facilitators involved in guiding the review panel in their activities,
- The Government of Uganda for financing the review of this ATP.

## Abbreviations and Acronyms

|      |   |
|------|---|
| A&C  | Assessment and Certification                  |
| ATP  | Assessment and Training Packages              |
| CBET | Competency Based Education and Training       |
| DIT  | Directorate of Industrial Training            |
| ITC  | Industrial Training Council                   |
| GoU  | Government of Uganda                          |
| LWA  | Learning-Working Assignment                   |
| MC   | Modular Curriculum                            |
| MoES | Ministry of Education and Sports              |
| OP   | Occupational Profile                          |
| PEX  | Practical Exercise                            |
| PTI  | Performance (Practical) Test Item             |
| QS   | Qualification Standards                       |
| RPL  | Recognition of Prior Learning                 |
| TIB  | Test Item Bank                                |
| TVET | Technical, Vocational, Education and Training |
| UVQ  | Uganda Vocational Qualification               |
| UVQF | Uganda Vocational Qualifications Framework    |
| WTI  | Written (Theory) Test Item                    |
| PPE  | Personnel Protective Equipment                |

## Key Definitions

|  |   |
|--|---|
| <b>Assessment</b>                        | Assessment is the means by which evidence is gathered and judged to decide if an individual has met the stipulated assessment standards or not. Testing is a form of formal assessment.   |
| <b>Certification</b>                     | Certification is a formal procedure to issue a certificate (qualification) to an individual that has demonstrated during formal assessment that he/she is competent to perform the tasks specified in the occupational profile.   |
| <b>Competence</b>                        | Integration of skills, knowledge, attitudes, attributes and expertise in doing /performing tasks in the world of work to a set standard.  |
| <b>Competency</b>                        | (Occupational) competence is understood as the ability to perform tasks common to an occupation at an acceptable level.   |
| <b>CBET</b>                              | Competence-based education and training means that programmes: <ol style="list-style-type: none"><li>1. have content directly related to work</li><li>2. focus is on 'doing something well'</li><li>3. assessment is based upon industry work standards, and</li><li>4. curricula are developed in modular form</li></ol> |
| <b>Duty</b>                              | A Duty describes a large area of work in performance terms. A duty serves as a title for a cluster of related Tasks (see also: TASK).   |
| <b>Learning-Working Assignment (LWA)</b> | LWA are simulated or real job situations / assignments that are suitable for learning in a training environment (e.g. "small projects"). In a working environment LWA are real work situations/assignments.   |
| <b>Module</b>                            | Modules are part(s) of a whole curriculum. Modules can be considered as "self-contained" partial qualifications which are described by learning outcomes or competencies and which can be assessed and certified individually.  |
| <b>Occupational Profile (OP)</b>         | An Occupational Profile is an overview of the duties and tasks a job incumbent is expected to perform competently in employment. Occupational Profiles developed by practitioners from the world of work enhance the relevance of training and learning to the requirements of the world of work.                         |

Occupational Profiles which define what a person is supposed to do which become the reference points for developing assessment standards and modular curricula.

**Qualification** A qualification is a formal reward for demonstrating competence, based on formal assessment against set standards and provided to the individual in the form of a certificate specifying the nature of the competence.

**Task** Job tasks represent the smallest unit of job activities with a meaningful outcome. Tasks result in a product, service, or decision. They represent an assignable unit of work and have a definite beginning and ending point. Tasks can be observed and measured.  
*(Also see: Duty)*

## 1.0 ATP-PART I

### Occupational Profile for an ARCHITECTURAL DRAFTER

- 1.1 The OCCUPATIONAL PROFILE (OP) for “ARCHITECTURAL DRAFTER” below defines the **Duties** and **Tasks** a competent Architectural Drafter is expected to perform in the world of work (on the job) in Uganda and the East African region today.
- 1.2 Since it reflects the skill requirements of work life, the Occupational Profile is the reference document for the subsequent development of training modules and assessment instruments (test items) which are directly relevant to employment in Ugandan and the East African businesses and industries.
- 1.3 To ensure that the Occupational Profile is relevant for employment in Uganda and East Africa, the DIT used the method of “occupational/job profiling. This approach involves the brainstorming of a panel of 8 to 12 competent job practitioners guided by trained and experienced facilitators. During a two-day workshop the panellists defined the duties and tasks performed in employment, as well as the prerequisite skills, knowledge, attitudes, tools and equipment, and the future trends and concerns in the occupation/job.
- 1.4 The panellists, facilitators and coordinators who participated in developing this Occupational Profile are listed on the following page.

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Amron international limited

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**Funded by**

Government of Uganda



THE REPUBLIC OF UGANDA  
Ministry of Education and Sports

Directorate of Industrial Training

## Occupational Profile

For an

## "ARCHITECTURAL DRAFTER"

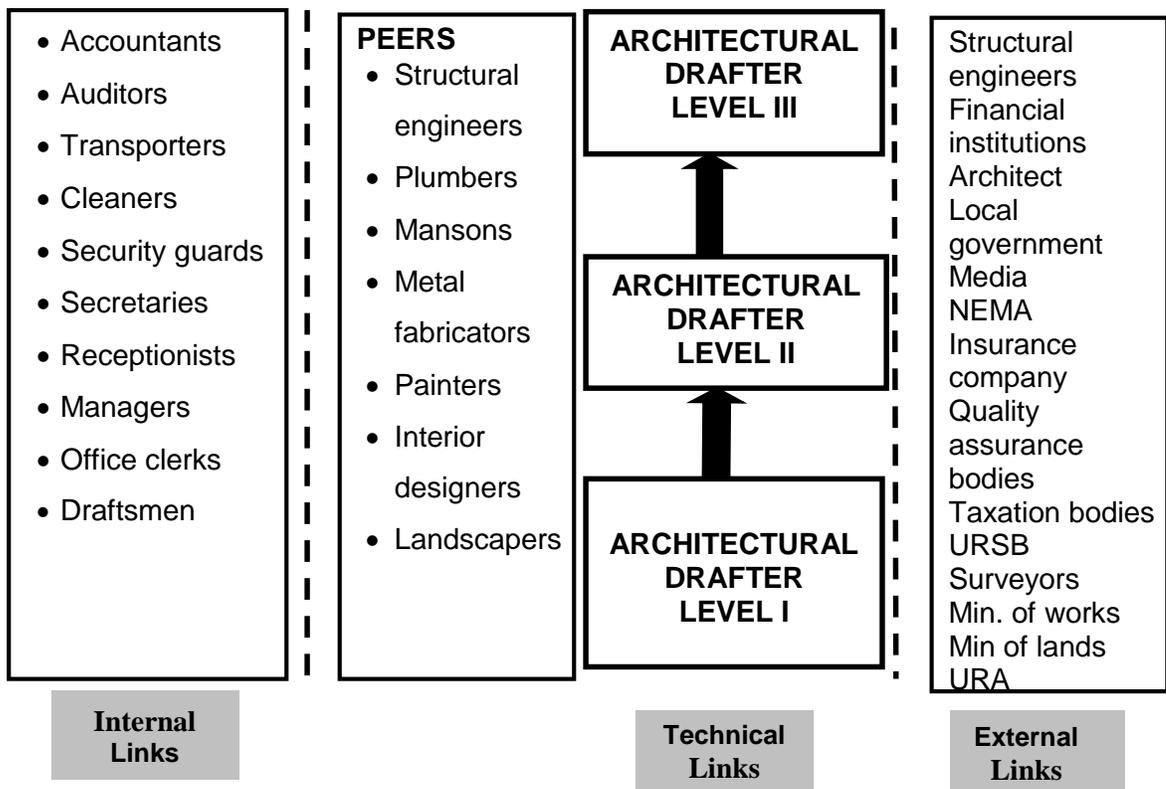
Developed by: Directorate of Industrial Training  
(Qualifications Standards)

Dates of workshop: 14<sup>th</sup> – 18<sup>th</sup> September 2020

## NOMENCLATURE FOR THE OCCUPATION OF ARCHITECTURAL DRAFTER

**Definition:** An ARCHITECTURAL DRAFTER is a person who plans, drafts, draws and documents building works.

### JOB ORGANISATION CHART FOR AN ARCHITECTURAL DRAFTER



### Descriptions for the levels in the occupation of Architectural Drafter

**UVQ Level I Architectural Drafter;** is a person who plans, drafts, draws and documents a straight single storied domestic building with either a lean-to or gable roof.

**UVQ Level II Architectural Drafter;** is a person who plans, drafts, draws and documents a T-shaped, L-shaped and U shaped single storied domestic building with either a butterfly or hipped roof.

**UVQ Level III Architectural Drafter;** is a person who plans, drafts, draws and documents multi-shaped commercial, industrial and institutional buildings with either a dome, monitor or barrel vault roof.

## Duties and Tasks

|                                   |   |   |                                      |
|-----------------------------------|---|---|--------------------------------------|
| <b>A. PLAN ARCHITECTURAL WORK</b> | <b>A1</b> Record client's needs                 | <b>A2</b> Conduct site visit            | <b>A3</b> Prepare preliminary sketch |
|                                   | <b>A4</b> Review preliminary sketch with client | <b>A5</b> Make final sketch of building | <b>A6</b> Cost architectural work    |
|                                   | <b>A7</b> Prepare an MoU                        |   |                                      |

|                                    |                                |                                |                                  |
|------------------------------------|--------------------------------|--------------------------------|----------------------------------|
| <b>B. MAKE ARTISTIC IMPRESSION</b> | <b>B1</b> Sketch drawing media | <b>B2</b> Set drawing defaults | <b>B3</b> Draw walls of building |
|                                    | <b>B4</b> Fit slabs            | <b>B5</b> Fit openings         | <b>B6</b> Fit roof               |
|                                    | <b>B7</b> Apply surfaces       | <b>B8</b> Render building      | <b>B9</b> Create compound layout |

|                                   |  |                                    |  |
|-----------------------------------|--|------------------------------------|--|
| <b>C. DRAW ARTHOGRAPHIC VIEWS</b> | <b>C1</b> Draw floor plan                  | <b>C2</b> Dimension floor plan     | <b>C3</b> Draw building cross sections |
|                                   | <b>C4</b> Dimension building cross section | <b>C5</b> Draw building elevations | <b>C6</b> Draw roof plan               |

|                                      |                                   |                                    |  |
|--------------------------------------|-----------------------------------|------------------------------------|--|
| <b>D. DRAW SEWAGE STORAGE SYSTEM</b> | <b>D1</b> Draw pit latrine plan   | <b>D2</b> Draw pit latrine section | <b>D3</b> Draw pit latrine elevation     |
|                                      | <b>D4</b> Draw man holes          | <b>D5</b> Draw septic tank plan    | <b>D6</b> Draw septic tank cross section |
|                                      | <b>D7</b> Draw percolation trench | <b>D8</b> Draw soak pit plan       |  |

|                            |                                 |                         |                                |
|----------------------------|---------------------------------|-------------------------|--------------------------------|
| <b>E. DRAW SITE LAYOUT</b> | <b>E1</b> Draw boundary outline | <b>E2</b> Draw blocks   | <b>E3</b> Draw drainage system |
|                            | <b>E4</b> Draw drive ways       | <b>E5</b> Draw compound | <b>E6</b> Dimension site       |

|                                   |   |                                |                                   |
|-----------------------------------|---|--------------------------------|-----------------------------------|
| <b>F. DRAW SITE LOCATION PLAN</b> | <b>F1</b> Draw nearby physical features | <b>F2</b> Draw roads           | <b>F3</b> Draw compass directions |
|                                   | <b>F4</b> Locate site                   | <b>F5</b> Name nearby location | <b>F6</b> Name directions         |

|                              |                                   |  |  |
|------------------------------|-----------------------------------|--|--|
| <b>G. DRAW BOUNDARY WALL</b> | <b>G1</b> Draw boundary wall plan | <b>G2</b> Draw boundary wall cross section | <b>G3</b> Draw boundary wall elevation |
|                              | <b>G4</b> Print title             | <b>G5</b> Dimension boundary wall          | <b>G6</b> Name boundary wall parts     |

|  |   |  |                                |
|--|---|--|--------------------------------|
| <b>H. DOCUMENT ARCHITECTURAL INFORMATION</b> | <b>H1</b> Print title block                   | <b>H2</b> Draw door and window schedule          | <b>H3</b> Write specifications |
|  | <b>H4</b> Draw dimension table of septic tank | <b>H5</b> Draw sizes table of inspection chamber | <b>H6</b> Write revision notes |
|  | <b>H7</b> Print architectural documents       |  |                                |

|                                      |   |   |   |
|--------------------------------------|---|---|---|
| <b>I. PRESENT ARCHITECTURAL PLAN</b> | <b>I1</b> Prepare approval forms              | <b>I2</b> Seek architect's verification | <b>I3</b> Submit documents for assessment |
|                                      | <b>I4</b> Pay approval fees                   | <b>I5</b> Submit documents for approval | <b>I6</b> Handover documents to client    |
|                                      | <b>I7</b> Make revision on differed documents |   |   |

|  |   |  |  |
|--|---|--|--|
| <b>J. PERFORM ADMINISTRATIVE TASKS</b> | <b>J1</b> Keep records of previous works          | <b>J2</b> Recruit workers              | <b>J3</b> Communicate with stake holders |
|  | <b>J4</b> Remunerate workers                      | <b>J5</b> Contract/ Sub-construct work | <b>J6</b> Orient workers                 |
|  | <b>J7</b> Assign work                             | <b>J8</b> Supervise work               | <b>J9</b> Manage worker's discipline     |
|  | <b>J10</b> Motivate workers                       | <b>J11</b> Appraise workers            | <b>J12</b> Maintain tools, and equipment |
|  | <b>J13</b> Procure tools, equipment and materials | <b>J14</b> Keep human resource records | <b>J15</b> Keep Inventory                |
|  | <b>J16</b> Keep sales records                     | <b>J17</b> Prepare BOQs/ quotations    |  |

|  |                                      |  |                                     |
|--|--------------------------------------|--|-------------------------------------|
| <b>K. MARKET ARCHITECTURAL DRAFTS MAN SERVICES</b> | <b>K1</b> Advertise services         | <b>K2</b> Maintain customer relationship | <b>K3</b> Market Architectural work |
|  | <b>K4</b> Costing architectural work | <b>K5</b> Advertise services             | <b>K6</b> Network with peers        |
|  | <b>K7</b> Maintain financial records | <b>K8</b> Administer office              | <b>K9</b> Manage risk               |

## Additional Information

### Generic Knowledge & skills

- |  |   |
|--|---|
| 1. Literacy                                  | Interpersonal relations                       |
| 2. Numeracy                                  | 20. Customer care                             |
| 3. Tools and equipment usage                 | 21. Training skills                           |
| 4. Negotiation skills                        | 22. Good with the hands                       |
| 5. Records keeping                           | 23. Problem solving skills                    |
| 6. Analytical skills                         | 24. Safety, health and environment            |
| 7. Measurement                               | 25. Public relations                          |
| 8. Chemical preparation                      | 26. Business                                  |
| 9. Marketing skills                          | 27. Time management                           |
| 10. First aid administration                 | 28. Good hand-eye co-ordination               |
| 11. Waste disposal and management            | 29. An eye for detail                         |
| 12. Communication skills                     | 30. Financial management                      |
| 13. Information and communication technology | 31. Different architectural drafting software |
| 14. Firefighting                             | 32. Structural designing                      |
| 15. Store management                         | 33. Construction management                   |
| 16. Planting seasons                         | 34. Land surveying skills                     |
| 17. Human resource management                | 35. Quantity surveying skills                 |
| 18. Entrepreneurship skills                  | 36. Interior design skills                    |
| 19. Environmental awareness and satiability  | 37. Building material properties              |

### Tools, Equipment and Materials

- |                        |                       |
|------------------------|-----------------------|
| 1. Computer            | 19. Trimmer/cutter    |
| 2. Rulers              | 20. Gloves            |
| 3. Set rulers          | 21. Fire extinguisher |
| 4. Printer             | 22. Ink and ink pot   |
| 5. stepping machine    | 23. Scaled ruler      |
| 6. Punching machine,   | 24. Electric eraser   |
| 7. Gaggles             | 25. Stencils          |
| 8. Ultra-violent glass | 26. Paper clips       |
| 9. Plotter             | 27. Overall           |
| 10. Calculator         | 28. Ear plugs         |
| 11. Led light box      | 29. Drafting chair    |
| 12. Photo copier       | 30. X- Acto knife set |
| 13. Paper clips        | 31. Rubber            |
| 14. Brush              | 32. Flip chart        |
| 15. Box files          | 33. Scissors          |
| 16. Note books         | 34. Graph book        |
| 17. Sharpener          | 35. Drawing board     |
| 18. Helmet             |                       |

**Attitudes/Traits/Behaviour**

- |                          |                                |
|--------------------------|--------------------------------|
| 1. Self-motivated        | 16. Innovative                 |
| 2. Time management       | 17. Diligent                   |
| 3. Patient               | 18. Confidentiality            |
| 4. Observant             | 19. Responsible                |
| 5. Trustworthy           | 20. Physically fit             |
| 6. Honest                | 21. Knowledgeable              |
| 7. Tolerant              | 22. Good hand-eye coordination |
| 8. Hard working          | 23. Respectful                 |
| 9. Customer care         | 24. Intelligent                |
| 10. Disciplined          | 25. Trainable                  |
| 11. Good time management | 26. Creative                   |
| 12. Committed            | 27. Sharing skills             |
| 13. Good listener        | 28. Quality of output          |
| 14. Flexible             | 29. Trustworthy                |
| 15. Result oriented      | 30. Work under pressure        |

**Trends and Concerns**

1. Legal recognition of Architectural Drafter
2. Professional recognition of Architectural Drafter
3. Government policy
4. Software rights
5. Advancement in technology
6. Digital marketing
7. Competition
8. Economy
9. Cost of materials
10. Advancement of materials
11. Computer literacy

## **2.0 ATP-PART II**

### **Training Modules for an ARCHITECTURAL DRAFTER**

- 2.1 A curriculum is a “guide / plan for teaching and learning” which provides a guide to teachers, instructors and learners. In the envisaged system of competence-based or outcome-oriented education and training (CBET), Curricula are no longer the benchmark against which assessment is conducted. It is rather the Occupational Profile and the related Test Items that provide the benchmark for assessment as well as for Curriculum development.
- 2.2 This modular format of the curriculum allows learners of the Architectural Drafter Occupation to acquire job specific skills and knowledge (i.e. competencies) module by module. A single module can be accomplished within a relatively short duration allowing learners to move directly into an entry level job, do further modules and advance to higher levels of training. Modular courses allow more learners to access the training system because training centres as well as companies can accommodate more learners in a given period of time.
- 2.3 The modules were developed jointly by both instructors from training centres and job practitioners. They were developed using the Occupational Profile as a reference point and taking into account the specifications of training and learning outcomes in the form of Test Items described in Part II.
- 2.4 The modules contain “Learning-Working Assignments” (LWAs) and related “Practical Exercises” (PEXs) as key elements.
- LWAs are simulated or real job situations / assignments that are suitable for learning in a training environment (e.g. “small projects”). In a working environment, LWAs are real work situations.
- PEXs are therefore sub-sets of a LWA.
- 2.5 In principle, and following the philosophy of Competence-Based Education and Training (CBET), the modules can be used as a guide for learning in a training centre or at the work place; or combinations of both.

## WHO IS AN ARCHITECTURAL DRAFTER QUALIFICATION LEVEL 1

An **Architectural Drafter level 1** is a person who plans, drafts, draws and documents a straight single storied domestic building with either a lean-to or gable roof.

## TRAINING MODULES FOR ARCHITECTURAL DRAFTER UVQ LEVEL 1

| Code           | Module Title                   | Average duration  |                 |
|----------------|--------------------------------|-------------------|-----------------|
|                |                                | Contact hours     | Weeks           |
| UE/AD/M1.1     | Plan Architectural Work        | 160               | 4               |
| UE/AD/M1.2     | Make Working Drawings          | 400               | 10              |
| UE/AD/M1.3     | Make Artistic Impression       | 320               | 8               |
| UE/AD/M1.4     | Document Architectural Work    | 240               | 6               |
| UE/AD/M1.5     | Perform Entrepreneurship Roles | 160               | 4               |
| <b>Summary</b> | <b>5 Training modules</b>      | <b>1280 hours</b> | <b>32 weeks</b> |

**Note: Average duration is contact time but NOT calendar duration**

It is assumed that:

- 1 day is equivalent to 8 hours of nominal learning and
- 1 month is equivalent to 160 hours of nominal learning.

Information given on the average duration of training should be understood as a guideline. Quick learners may need less time than indicated or vice versa.

At completion of a module, the learner should be able to satisfactorily perform the included Learning Working Assignments, their Practical Exercises and attached theoretical instruction, as the minimum exposure.

Prior to summative assessment by recognised Agencies, the users of these Module Guides are encouraged to carefully consider continuous assessment using samples of (or similar) performance (practical) and written test items available in Part 3 of this ATP.

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| <b>Code</b>                                | <b>UE/AD/M1.1</b>   |
| <b>Module title</b>                        | <b>M1.1: Plan Architectural Work</b>  |
| <b>Related Qualification</b>               | Part of:<br>Uganda Vocational Qualification<br>(Architectural Drafter UVQ1)   |
| <b>Qualification Level</b>                 | 1   |
| <b>Module purpose</b>                      | On completion of this module, a trainee shall be able to record client's ideas, conduct site visits and cost architectural work   |
| <b>Learning-Working Assignments (LWAs)</b> | <p><b>LWA 1/1: Record Client's Ideas</b><br/> <b>LWA 1/2: Conduct Site Visit</b><br/> <b>LWA 1/3: Cost Architectural Work</b><br/> <b>LWA 1/4: Perform Occupational Health, Safety and Environment Protection Practices</b></p> <p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. The learning exercises may be repeated until the trainee acquires targeted competence</li> <li>2. The trainee is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment</li> </ol> |
| <b>Related Practical Exercises (PEXs)</b>  | <p><b>LWA 1/1: Record Client's Ideas</b><br/> PEX 1.1: Write client's ideas<br/> PEX 1.2: Make Conceptual framework<br/> PEX 1.3: Make preliminary sketch</p>   |
|  | <p><b>LWA 1/2: Conduct Site Visit</b><br/> PEX 2.1: Determine gradient<br/> PEX 2.2: Measure site boundary<br/> PEX 2.3: Note removal obstacles<br/> PEX 2.4: Conduct sub soil test<br/> PEX 2.5: Determine services available<br/> PEX 2.6: Position frontage and setback distances</p>  |
|  | <p><b>LWA 1/3: Make Agreement With Client</b><br/> PEX 3.1: Make final sketch<br/> PEX 3.2: Cost labour<br/> PEX 3.3: Sign MOU</p>  |

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|  | <p><b>LWA 1/4: Perform Occupational Health, Safety and Environment Protection Practices</b></p> <p>PEX 4.1: Manage waste<br/> PEX 4.2: Wear protective gear<br/> PEX 4.3: Perform firefighting<br/> PEX 4.4: Administer first aid</p>  |
| <b>Occupational health and safety</b>                              | Precautions, rules and regulations of applications safety and environmental protection, included in the listed related knowledge should be observed and demonstrated during LWAs and PEXs.   |
| <b>Pre-requisite modules</b>                                       | None   |
| <b>Related knowledge/ theory</b>                                   | <p><i>For occupational theory suggested for instruction/ demonstration, the trainer is not limited to the outline below. In any case, related knowledge/ theory may be obtained from various recognised reference materials as appropriate:</i></p> <ul style="list-style-type: none"> <li>• Knowledge of maps</li> <li>• Knowledge of rules and regulations governing building construction</li> <li>• Knowledge of local authority regulations</li> <li>• Knowledge of market prices of architectural materials</li> <li>• Knowledge of plumbing and electrical work</li> <li>• Knowledge of technical drawing</li> <li>• Knowledge of types of foundations</li> </ul> |
| <b>Average duration of learning</b>                                | <p>160 hours (20 days) of nominal learning suggested to include:</p> <ul style="list-style-type: none"> <li>• 05 days of occupational theory and</li> <li>• 15 days of occupational practice</li> </ul>  |
| <b>Suggestions on organisation of learning</b>                     | The acquisition of competencies (skills, knowledge, attitudes) described in this module may take place at a training centre or its equivalent provided that all equipment and materials required for this module training are in place.  |
| <b>Assessment</b>  | Assessment to be conducted according to established regulations by a recognised assessment body using related written test items from item bank.   |
| <b>Minimum required tools/ equipment/ implements or equivalent</b> | computer, rulers, set rulers, printer, stepping machine, punching machine, gaggles, ultra-violent glass, plotter, calculator, led light box, photo copy, paper clips, brush, box files, note books, sharpener, helmet, trimmer/cutter, gloves, fire extinguisher, ink and ink pot, scaled ruler, electric eraser, scissors, graph book, drawing board, rubber, flip chart, x-acto knife set, steel ruler, stencils, paper clips, overall, ear plugs, drafting chair  |

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| <b>Minimum required materials and consumables or equivalent</b> | paper, cartridge, pencils, masks, gloves, rubber, software, sketch book, masking tape, tracing paper, bond paper, flip chart, Ink, graph paper, sanitiser. |
| <b>Special notes</b>  |  |

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| <b>Code</b>                                | <b>UE/AD/M1.2</b>   |
| <b>Module title</b>                        | <b>M1.2: Make Working Drawings</b>  |
| <b>Related Qualification</b>               | <u>Part of:</u><br>Uganda Vocational Qualification<br>(Architectural Drafter UVQ1)  |
| <b>Qualification Level</b>                 | 1   |
| <b>Module purpose</b>                      | On completion of this module, a trainee shall be able to make working drawings  |
| <b>Learning-Working Assignments (LWAs)</b> | <p><b>LWA 2/1: Draw Site Layout Plan</b><br/> <b>LWA 2/2: Draw Site Location Plan</b><br/> <b>LWA 2/3: Draw Orthographic Views</b><br/> <b>LWA 2/4: Draw Sewage Storage System</b><br/> <b>LWA 2/5: Draw Boundary Wall</b><br/> <b>LWA 2/6: Perform Occupational Health, Safety, and Environmental Protection Practices.</b></p> <p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. <i>The learning exercises must be repeated until the trainee acquires a targeted competence.</i></li> <li>2. <i>The trainer is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment.</i></li> </ol> |
| <b>Related Practical Exercises (PEXs)</b>  | <p><b>LWA 2/1: Draw Site Layout Plan</b><br/> PEX 1.1: Draw site boundary outline<br/> PEX 1.2: Draw site blocks<br/> PEX 1.3: Draw site drainage system<br/> PEX 1.4: Draw drive and walk ways<br/> PEX 1.5: Draw compound layout</p>  |
|  | <p><b>LWA 2/2: Draw Site Location Plan</b><br/> PEX 2.1: Draw nearby physical features<br/> PEX 2.2: Draw roads<br/> PEX 2.3: Draw compass<br/> PEX 2.4: Locate site<br/> PEX 2.5: Draw contour lines<br/> PEX 2.6: Draw grid lines<br/> PEX 2.7: Name features</p>   |

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|                                       | <p><b>LWA 2/3: Draw Orthographic Views</b><br/>                 PEX 3.1: Draw floor plan<br/>                 PEX 3.2: Draw building elevations<br/>                 PEX 3.3: Draw building cross section<br/>                 PEX 3.4: Draw roof plan</p> <p><b>LWA 2/4: Draw Sewage Storage System</b><br/>                 PEX 4.1: Draw pit latrine floor plan<br/>                 PEX 4.2: Draw pit latrine floor<br/>                 PEX 4.3: Draw pit latrine cross section<br/>                 PEX 4.4: Draw man hole plan<br/>                 PEX 4.5: Draw man hole cross section<br/>                 PEX 4.6: Draw septic Tank plan<br/>                 PEX 4.7: Draw septic Tank cross section<br/>                 PEX 4.8: Draw inlet and out let pipes<br/>                 PEX 4.9: Draw soak pit/ percolation trench</p> <p><b>LWA 2/5: Draw Boundary Wall</b><br/>                 PEX 5.1: Draw boundary wall plan<br/>                 PEX 5.2: Draw boundary wall elevation<br/>                 PEX 5.3: Draw boundary wall cross section<br/>                 PEX 5.4: Name boundary wall parts</p> <p><b>LWA 2/6: Perform Occupational Health, Safety, and Environmental Protection Practices</b><br/>                 PEX 6.1: Manage waste<br/>                 PEX 6.2: Wear protective gear<br/>                 PEX 6.3: Perform firefighting<br/>                 PEX 6.4: Administer first aid</p> |
| <b>Occupational health and safety</b> | Precautions, rules and regulations on occupational health, safety and environmental protection included in the listed related knowledge should be observed and demonstrated during LWAs and PEXs.   |
| <b>Pre-requisite modules</b>          | None  |
| <b>Related knowledge/ theory</b>      | <p><i>For occupational theory suggested for instruction/ demonstration, the trainer is not limited to the outline below. In any case, related knowledge/ theory may be obtained from various recognised reference materials as appropriate:</i></p> <ul style="list-style-type: none"> <li>• Knowledge of use of computer applications</li> <li>• Knowledge of dimensioning</li> <li>• Knowledge of grid references</li> <li>• Knowledge of contours</li> </ul>   |

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|  | <ul style="list-style-type: none"> <li>• Knowledge of use of scales</li> <li>• Knowledge of technical drawing</li> <li>• Knowledge of imperial and metric unit systems</li> <li>• Knowledge of rules and regulations governing building construction</li> <li>• Knowledge of local authority regulations</li> <li>• Knowledge on maps</li> </ul>  |
| <b>Average duration of learning</b>                                | 400 hours (50 days) of nominal learning suggested to include: <ul style="list-style-type: none"> <li>• <i>15 days of occupational theory and</i></li> <li>• <i>35 days of occupational practice</i></li> </ul>  |
| <b>Suggestions on organisation of learning</b>                     | The acquisition of competencies (skills, knowledge, attitudes) described in this module may take place at a training centre or its equivalent provided that all equipment and materials required for this module training are in place.   |
| <b>Assessment</b>  | Assessment to be conducted according to established regulations by a recognised assessment body using related practical and written test items from item bank.  |
| <b>Minimum required tools/ equipment/ implements or equivalent</b> | computer, rulers, set rulers, printer, stepping machine, punching machine, gaggles, ultra-violent glass, plotter, calculator, led light box, photo copy, paper clips, brush, box files, note books, sharpener, helmet, trimmer/cutter, gloves, fire extinguisher, ink and ink pot, scaled ruler, electric eraser, scissors, graph book, drawing board, rubber, flip chart, X-Acto knife set, steel ruler, stencils, paper clips, overall, ear plugs, drafting chair |
| <b>Minimum required materials and consumables or equivalent</b>    | paper, cartridge, pencils, masks, gloves, rubber, software, sketch book, masking tape, tracing paper, bond paper, flip chart, ink, graph paper, sanitiser.  |
| <b>Special notes</b>   |   |

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| <b>Code</b>                                | <b>UE/AD/M1.3</b>   |
| <b>Module title</b>                        | <b>M1.3: Make Artistic Impression</b>   |
| <b>Related Qualification</b>               | <u>Part of:</u><br>Uganda Vocational Qualification<br>(Architectural Drafter UVQ1)  |
| <b>Qualification Level</b>                 | 1   |
| <b>Module purpose</b>                      | On completion of this module, a trainee shall be able to prepare drawing space, draw and finish the structure   |
| <b>Learning-Working Assignments (LWAs)</b> | <p><b>LWA 3/1: Prepare Drawing Space</b><br/> <b>LWA 3/2: Draw Structure</b><br/> <b>LWA 3/3: Finish Structure</b><br/> <b>LWA 3/4: Perform Occupational Health, Safety and Environmental Protection Practices</b></p> <p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. <i>The learning exercises must be repeated until the trainee acquires a targeted competence.</i></li> <li>2. <i>The trainer is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment.</i></li> </ol> |
| <b>Related Practical Exercises (PEXs)</b>  | <p><b>LWA 3/1: Prepare Drawing Platform</b><br/> PEX 1.1: Select media<br/> PEX 1.2: Set drawing defaults</p>   |
|  | <p><b>LWA 3/2: Draw Structure</b><br/> PEX 2.1: Draw slabs<br/> PEX 2.2: Draw building walls<br/> PEX 2.3: Draw openings<br/> PEX 2.4: Draw roof</p>  |
|  | <p><b>LWA 3/3: Finish Structure</b><br/> PEX 3.1: Apply surfaces<br/> PEX 3.2: Draw compound<br/> PEX 3.3: Render structure</p>   |
|  | <p><b>LWA 3/4: Perform Occupational Health, Safety, and Environmental Protection Practices.</b><br/> PEX 3.1: Manage waste<br/> PEX 3.2: Wear protective gear</p>   |

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|  | <p>PEX 3.3: Perform firefighting<br/> PEX 3.4: Administer fight aid</p>   |
| <b>Occupational health and safety</b>                              | <p>Precautions, rules and regulations on occupational health, safety and environmental protection included in the listed related knowledge should be observed and demonstrated during LWAs and PEXs.</p>  |
| <b>Pre-requisite modules</b>                                       | <p>None</p>   |
| <b>Related knowledge/ theory</b>                                   | <p><i>For occupational theory suggested for instruction/ demonstration, the trainer is not limited to the outline below. In any case, related knowledge/ theory may be obtained from various recognised reference materials as appropriate:</i></p> <ul style="list-style-type: none"> <li>• Knowledge of technical drawing</li> <li>• Knowledge of computer applications</li> <li>• Knowledge of art and design</li> <li>• Knowledge of finishing materials</li> <li>• Knowledge of landscaping</li> <li>• Knowledge of standardisation of building components</li> <li>• Knowledge of empirical and metric unit systems</li> <li>• Knowledge of building materials, characteristics, and usage</li> </ul> |
| <b>Average duration of learning</b>                                | <p>320 hours (40 days) of nominal learning suggested to include:</p> <ul style="list-style-type: none"> <li>• 05 days of occupational theory and</li> <li>• 35 days of occupational practice</li> </ul>   |
| <b>Suggestions on organisation of learning</b>                     | <p>The acquisition of competencies (skills, knowledge, attitudes) described in this module may take place at a training centre or its equivalent provided that all equipment and materials required for this module training are in place.</p>  |
| <b>Assessment</b>  | <p>Assessment to be conducted according to established regulations by a recognised assessment body using related practical and written test items from item bank.</p>   |
| <b>Minimum required tools/ equipment/ implements or equivalent</b> | <p>computer, rulers, set rulers, printer, stepping machine, punching machine, gaggles, ultra-violent glass, plotter, calculator, led light box, photo copy, paper clips, brush, box files, note books, sharpener, helmet, trimmer/cutter, gloves, fire extinguisher, ink and ink pot, scaled ruler, electric eraser, scissors, graph book, drawing board, rubber, flip chart, X-Acto knife set, steel ruler, stencils, paper clips, overall, ear plugs, drafting chair.</p>   |
| <b>Minimum required materials and consumables or equivalent</b>    | <p>paper, cartridge, pencils, masks, gloves, rubber, software, sketch book, masking tape, tracing paper, bond paper, flip chart, Ink, graph paper, sanitiser.</p>   |
| <b>Special notes</b>   |   |

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| <b>Code</b>                                | <b>UE/AD/M1.4</b>   |
| <b>Module title</b>                        | <b>M1.4: Document Architectural Work</b>  |
| <b>Related Qualification</b>               | <u>Part of:</u><br>Uganda Vocational Qualification<br>(Architectural Drafter UVQ1)  |
| <b>Qualification Level</b>                 | 1   |
| <b>Module purpose</b>                      | On completion of this module, the trainee shall be able to make schedules, title blocks, plan notes and architectural documents   |
| <b>Learning-Working Assignments (LWAs)</b> | <p><b>LWA 4/1: Print Schedules</b></p> <p><b>LWA 4/2: Print Title Block</b></p> <p><b>LWA 4/3: Make Plan Notes</b></p> <p><b>LWA 4/4: Prepare Architectural Documents</b></p> <p><b>LWA 4/5: Perform Occupational Health, Safety, and environmental Protection Practices.</b></p> <p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. The learning exercises may be repeated until the trainee acquires targeted competence;</li> <li>2. The trainer is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment.</li> </ol> |
| <b>Related Practical Exercises (PEXs)</b>  | <p><b>LWA 4/1: Print Schedules</b></p> <p>PEX 1.1: Print door information</p> <p>PEX 1.2: Print window information</p>  |
|  | <p><b>LWA 4/2: Print Title Block</b></p> <p>PEX 2.1: Draw title block outline</p> <p>PEX 2.2: Print title block information</p>   |
|  | <p><b>LWA 4/3: Make Plan Notes</b></p> <p>PEX 3.1: Print plan specification</p> <p>PEX 3.2: Draw septic tank dimension table</p> <p>PEX 3.3: Draw inspection chamber sizes table</p> <p>PEX 3.4: Print revision notes</p>   |
|  | <p><b>LWA 4/4: Prepare Architectural Documents</b></p> <p>PEX 4.1: Prepare BOQ</p> <p>PEX 4.2: Prepare quotation</p> <p>PEX 4.3: Prepare invoice</p> <p>PEX 4.4: Print tracing paper</p> <p>PEX 4.5: Make a blueprint of plans</p>  |

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|  | <p><b>LWA 4/5: Perform Occupational Health, Safety, and Environmental Protection Practices</b></p> <p>PEX 5.1: Manage waste<br/> PEX 5.2: Wear protective gear<br/> PEX 5.3: Perform firefighting<br/> PEX 5.4: Administer fight aid</p>  |
| <b>Occupational health and safety</b>          | Precautions, rules and regulations on occupational health, safety and environmental protection, included in the listed related knowledge should be observed and demonstrated during LWAs and PEXs.  |
| <b>Pre-requisite modules</b>                   | None  |
| <b>Related knowledge/ theory</b>               | <p><i>For occupational theory suggested for instruction/ demonstration, the trainer is not limited to the outline below. In any case, related knowledge/ theory may be obtained from various recognised reference materials as appropriate.</i></p> <ul style="list-style-type: none"> <li>• Knowledge of types of doors</li> <li>• Knowledge of types of windows</li> <li>• Knowledge of types materials, characteristics and uses of doors</li> <li>• Knowledge of tools, equipment, and drawing instruments</li> <li>• Knowledge of computer Microsoft office</li> <li>• Knowledge of title block types</li> <li>• Knowledge of arithmetic (addition, subtraction, multiplication, division)</li> <li>• Knowledge of document management i.e. printing and saving</li> <li>• Knowledge of different types of letterings</li> <li>• Knowledge of units of measurement and dimensioning</li> </ul> |
| <b>Average duration of learning</b>            | <p>240 hours (30 days) of nominal learning suggested to include:</p> <ul style="list-style-type: none"> <li>• 10 days of occupational theory and</li> <li>• 20 days of occupational practice</li> </ul>   |
| <b>Suggestions on organisation of learning</b> | The acquisition of competencies (skills, knowledge, attitudes) described in this module may take place at a training centre or its equivalent provided that all equipment and materials required for this module training are in place.   |
| <b>Assessment</b>                              | Assessment to be conducted according to established regulations by a recognised assessment body using related written test items from item bank   |

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| <b>Minimum required tools/ equipment/ implements or equivalent</b> | computer, rulers, set rulers, printer, stepping machine, punching machine, gaggles, ultra-violent glass, plotter, calculator, led light box, photo copy, paper clips, brush, box files, note books, sharpener, helmet, trimmer/cutter, gloves, fire extinguisher, ink and ink pot, scaled ruler, electric eraser, scissors, graph book, drawing board, rubber, flip chart, X-Acto knife set, steel ruler, stencils, paper clips, overall, ear plugs, drafting chair |
| <b>Minimum required materials and consumables or equivalent</b>    | paper, cartridge, pencils, masks, gloves, rubber, software, sketch book, masking tape, tracing paper, bond paper, flip chart, ink, graph paper, sanitiser.  |
| <b>Special notes</b>   |   |

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| <b>Code</b>                                | <b>UE/AD/M1.5</b>   |
| <b>Module title</b>                        | <b>M1.5: Perform Entrepreneurship Roles</b>   |
| <b>Related Qualification</b>               | <u>Part of:</u><br>Uganda Vocational Qualification<br>(Architectural Drafter UVQ1)  |
| <b>Qualification Level</b>                 | 1   |
| <b>Module purpose</b>                      | On completion of this module, the trainee shall be able to perform administrative roles and market architectural work   |
| <b>Learning-Working Assignments (LWAs)</b> | <p><b>LWA 5/1: Market Architectural Work</b><br/> <b>LWA 5/2: Perform Administrative Roles</b><br/> <b>LWA 5/3: Perform Occupational Health, Safety and Environment Protection Practices</b></p> <p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. <i>The learning exercises may be repeated until the trainee acquires targeted competence;</i></li> <li>2. <i>The Trainer is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment</i></li> </ol> |
| <b>Related Practical Exercises (PEXs)</b>  | <p><b>LWA 5/1: Market Architectural Work</b><br/> PEX 1.1: Advertise architectural work<br/> PEX 1.2: Promote architectural work<br/> PEX 1.3: Offer customer care<br/> PEX 1.4: Network with peers</p>   |
|  | <p><b>LWA 5/2: Perform Administrative Roles</b><br/> PEX 2.1: Prepare books of accounts<br/> PEX 2.2: Prepare budget<br/> PEX 2.3: Procure architectural materials, tools and equipment<br/> PEX 2.4: Keep architectural profile<br/> PEX 2.5: Source for funding<br/> PEX 2.6: Maintain tools and equipment<br/> PEX 2.7: Store materials, tools and equipment</p>   |

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|  | <p><b>LWA 5/3: Perform Occupational Health, Safety, and Environmental protection Practices</b></p> <p>PEX 3.1: Manage waste<br/>                 PEX 3.2: Wear protective gear<br/>                 PEX 3.3: Perform firefighting<br/>                 PEX 3.4: Administer fight aid</p>   |
| <b>Occupational health and safety</b>                              | Precautions, rules and regulations on occupational health, safety and environmental protection, included in the listed related knowledge should be observed and demonstrated during LWAs and PEXs.   |
| <b>Pre-requisite modules</b>                                       | None   |
| <b>Related knowledge/ theory</b>                                   | <p><i>For occupational theory suggested for instruction/ demonstration, the trainer is not limited to the outline below. In any case, related knowledge/ theory may be obtained from various recognised reference materials as appropriate:</i></p> <ul style="list-style-type: none"> <li>• Knowledge of marketing strategies</li> <li>• Knowledge of marketing methods</li> <li>• Knowledge of accounts</li> <li>• Knowledge of book keeping</li> <li>• Knowledge of procurement procedures</li> <li>• Knowledge of structure of administration</li> <li>• Knowledge of current affairs</li> </ul> |
| <b>Average duration of learning</b>                                | <p>160 hours (20days) of nominal learning suggested to include:</p> <ul style="list-style-type: none"> <li>• 05 days of occupational theory and</li> <li>• 15 days of occupational practice</li> </ul>   |
| <b>Assessment</b>  | Assessment to be conducted according to established regulations by a recognised assessment body using related written test items from item bank.   |
| <b>Minimum required tools/ equipment/ implements or equivalent</b> | computer, rulers, set rulers, printer, stepping machine, punching machine, gaggles, ultra-violent glass, Plotter, calculator, led light box, photo copy, paper clips, brush, box files, note books, sharpener, helmet, trimmer/cutter, gloves, fire extinguisher, ink and ink pot, scaled ruler, electric eraser, scissors, graph book, drawing board, rubber, flip chart, x-Acto knife set, steel ruler, stencils, paper clips, overall, ear plugs, drafting chair  |
| <b>Minimum required materials and consumables or equivalent</b>    | paper, cartridge, pencils, masks, gloves, rubber, software, sketch book, masking tape, tracing paper, bond paper, flip chart, ink, graph paper, sanitiser.   |

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| <b>Suggestions on organisation of learning</b> | The acquisition of competencies (skills, knowledge, attitudes) described in this module may take place at a training centre or its equivalent provided that all equipment and materials required for this module training are in place. |
| <b>Special notes</b>                           |   |

## 3.0 ATP-PART III

### Assessment Instruments for an ARCHITECTURAL DRAFTER

- 3.1 **Assessment** of occupational competence is the procedure by which evidence is gathered and judged to decide if an individual (candidate) has met the stipulated assessment standards or not. In this ATP the **standards** to assess occupational competences are reflected in the form of the Occupational Profile and related Test Items.
- 3.2 Assessment of occupational competence should comprise both practical (performance) testing and written (theory/knowledge) testing.
- 3.3 Based on the Occupational Profile, a combined panel of job practitioners and Instructors developed a substantial number of test items for assessing (practical) performance as well as items for assessing occupational knowledge (theory) all stored in an electronic Test Item Bank (TIB) at Directorate of Industrial Training.
- 3.4 Performance (Practical) Test Items (PTI) are closely related to typical work situations in Ugandan business and manufacturing enterprises. They comprise a test assignment for candidates and assessment criteria and/or scoring guides for assessors' use.
- 3.5 Written Test items (WTI) for written testing of occupational theory, (knowledge) are presented in different forms which include:
  - Short answer test items.
  - Multiple choice test items and,
  - Matching test items, These WTIs herein focus on functional understanding as well as trouble-shooting typically synonymous with the world of work.
- 3.6 Composition of assessment / test papers will always require good choices of different types of WTI in order to ensure the assessment of relevant occupational knowledge required of candidates to exhibit competence.
- 3.7 The test items contained in the Test Item Bank may be used for continuous / formative assessment during the process of training as well as for summative assessment of candidates who have acquired their competences non-formally/or informally.
- 3.8 In this document, the following samples of test items for assessing both performance (practical) and occupational knowledge (theory) of an ARCHITECTURAL DRAFTER are included:

**Overview of Test Item samples included:**

| No           | Type of test items                              | Numbers  |
|--------------|---|----------|
| 1            | Written (Theory) –short answer                  | 2        |
| 2            | Written (Theory) - multiple choice              | 4        |
| 4            | Written (Theory) - matching with work sequences | 1        |
| 5            | Written (Theory) - matching with generic        | 1        |
| 6            | Performance (Practical) test item               | 1        |
| <b>Total</b> |   | <b>9</b> |

### WRITTEN TEST ITEMS (SAMPLES)

| DIT/ QS                    | Test Item Database<br>Written (Theory) Test Item- No. 1 |         |              |               |
|----------------------------|---|---------|--------------|---------------|
| <b>Occupational Title:</b> | Architectural Drafter                                   |         |              |               |
| <b>Competence level:</b>   | Level 1   |         |              |               |
| <b>Code no.</b>            |   |         |              |               |
| <b>Test Item type:</b>     | Short answer  | ✓       |              |               |
|                            | Multiple choice   |         |              |               |
|                            | Matching item   | Generic | Cause effect | Work sequence |
|                            |   |         |              |               |
| <b>Complexity level:</b>   | C 1   |         |              |               |
| <b>Date of OP:</b>         | September 2020  |         |              |               |
| <b>Related modules:</b>    | M1.1  |         |              |               |
| <b>Time allocation:</b>    | 2 minutes   |         |              |               |

|                         |  |
|-------------------------|--|
| <b>Test Item</b>        | List any five tools and equipment used by an architectural Drafter.  |
| <b>Answer spaces</b>    | (i) .....<br>(ii) .....<br>(iii) .....<br>(iv) .....<br>(v) .....  |
| <b>Expected answers</b> | (i) Note book<br>(ii) Pen<br>(iii) Eraser<br>(iv) Pencil<br>(v) Tape measure<br>(vi) Industrial boots<br>(vii) Helmet<br>(viii) Mask<br>(ix) Refractive jacket |

| DIT/ QS             | Test Item Database<br>Written (Theory) Test Item- No. 2 |         |              |               |
|---------------------|---|---------|--------------|---------------|
| Occupational Title: | Architectural Drafter                                   |         |              |               |
| Competence level:   | Level 1   |         |              |               |
| Code no.            |   |         |              |               |
| Test Item type:     | Short answer  | ✓       |              |               |
|                     | Multiple choice   |         |              |               |
|                     | Matching item   | Generic | Cause effect | Work sequence |
|                     |   |         |              |               |
| Complexity level:   | C 1   |         |              |               |
| Date of OP:         | September 2020  |         |              |               |
| Related modules:    | M1.1  |         |              |               |
| Time allocation:    | 2 minutes   |         |              |               |

|                  |   |  |
|------------------|---|--|
| Test Item        | Give three personal protective equipment a Drafter uses on a site.  |  |
| Answer spaces    | (i) .....<br>(ii) .....<br>(iii) .....<br>(iv) .....<br>(v) .....   |  |
| Expected answers | (i) Helmet<br>(ii) Gumboots<br>(iii) Reflecting jacket<br>(iv) Masks<br>(v) Mason gloves<br>(vi) Safety boots<br>(vii) Safety goggles<br>(viii) Standard quality ear muffs<br>(ix) Rain coat<br>(x) Overall |  |

| DIT/ QS             | Test Item Database<br>Written (Theory) Test Item- No. 3 |         |              |               |
|---------------------|---|---------|--------------|---------------|
| Occupational Title: | Architectural Drafter                                   |         |              |               |
| Competence level:   | Level 1   |         |              |               |
| Code no.            |   |         |              |               |
| Test Item type:     | Short answer  |         |              |               |
|                     | Multiple choice   | ✓       |              |               |
|                     | Matching item   | Generic | Cause effect | Work sequence |
| Complexity level:   | C 2   |         |              |               |
| Date of OP:         | September 2020  |         |              |               |
| Related modules:    | M1.2  |         |              |               |
| Time allocation:    | 1 minute  |         |              |               |

|                                |  |
|--------------------------------|--|
| Test Item                      | .....Is a factor that is used to reduce or magnify a drawing on paper. |
| Distractors and correct answer | A. Default<br>B. Format<br>C. Scale<br>D. Safety                       |

|               |   |
|---------------|---|
| key (answers) | C |
|---------------|---|

| DIT/ QS             | Test Item Database<br>Written (Theory) Test Item- No. 4 |         |              |               |
|---------------------|---|---------|--------------|---------------|
| Occupational Title: | Architectural Drafter                                   |         |              |               |
| Competence level:   | Level 1   |         |              |               |
| Code no.            |   |         |              |               |
| Test Item type:     | Short answer  |         |              |               |
|                     | Multiple choice   | ✓       |              |               |
|                     | Matching item   | Generic | Cause effect | Work sequence |
|                     |   |         |              |               |
| Complexity level:   | C 2   |         |              |               |
| Date of OP:         | September 2020  |         |              |               |
| Related modules:    | M1.2  |         |              |               |
| Time allocation:    | 1 minute  |         |              |               |

|                                |  |
|--------------------------------|--|
| Test Item                      | .....Is the main reason for a drafter to visit the site prior to starting work.  |
| Distractors and correct answer | A. To sign a memorandum of understanding with the client<br>B. To cost the work<br>C. To ascertain the nature of the gradient<br>D. To know the location of the site |

|               |   |
|---------------|---|
| key (answers) | C |
|---------------|---|

| DIT/ QS             | Test Item Database<br>Written (Theory) Test Item- No. 5 |         |              |               |
|---------------------|---|---------|--------------|---------------|
| Occupational Title: | Architectural Drafter                                   |         |              |               |
| Competence level:   | Level 1   |         |              |               |
| Code no.            |   |         |              |               |
| Test Item type:     | Short answer  |         |              |               |
|                     | Multiple choice   | ✓       |              |               |
|                     | Matching item   | Generic | Cause effect | Work sequence |
|                     |   |         |              |               |
| Complexity level:   | C 2   |         |              |               |
| Date of OP:         | September 2020  |         |              |               |
| Related modules:    | M1.2  |         |              |               |
| Time allocation:    | 1 minute  |         |              |               |

|                                |  |
|--------------------------------|--|
| Test Item                      | .....Is the orthographic view that shows the material details of an architectural drawing. |
| Distractors and correct answer | A. The front view<br>B. The plan view<br>C. The cross section<br>D. The site layout        |

|               |   |
|---------------|---|
| key (answers) | C |
|---------------|---|

| DIT/ QS             | Test Item Database<br>Written (Theory) Test Item- No. 6 |         |              |               |
|---------------------|---|---------|--------------|---------------|
| Occupational Title: | Architectural Drafter                                   |         |              |               |
| Competence level:   | Level 1   |         |              |               |
| Code no.            |   |         |              |               |
| Test Item type:     | Short answer  |         |              |               |
|                     | Multiple choice   | ✓       |              |               |
|                     | Matching item   | Generic | Cause effect | Work sequence |
|                     |   |         |              |               |
| Complexity level:   | C 1   |         |              |               |
| Date of OP:         | September 2020  |         |              |               |
| Related modules:    | M1.1  |         |              |               |
| Time allocation:    | 1 minute  |         |              |               |

|                                       |   |
|---------------------------------------|---|
| <b>Test Item</b>                      | When using AUTO CAD in orthographic mode, lines are drawn ..... to each other |
| <b>Distractors and correct answer</b> | A. Inclined<br>B. Perpendicular<br>C. Any direction<br>D. 45 degrees          |

|                      |   |
|----------------------|---|
| <b>key (answers)</b> | B |
|----------------------|---|

|                            |   |         |              |               |
|----------------------------|---|---------|--------------|---------------|
| <b>DIT/ QS</b>             | <b>Test Item Database<br/>Written (Theory) Test Item- No. 7</b> |         |              |               |
| <b>Occupational Title:</b> | Architectural Drafter   |         |              |               |
| <b>Competence level:</b>   | Level 1   |         |              |               |
| <b>Code no.</b>            |   |         |              |               |
| <b>Test Item type:</b>     | Short answer  |         |              |               |
|                            | Multiple choice   |         |              |               |
|                            | Matching item   | Generic | Cause effect | Work sequence |
|                            |   | ✓       |              |               |
| <b>Complexity level:</b>   | C 2   |         |              |               |
| <b>Date of OP:</b>         | September 2020  |         |              |               |
| <b>Related modules:</b>    | M1.2  |         |              |               |
| <b>Time allocation:</b>    | 2 minutes   |         |              |               |

|                  |   |
|------------------|---|
| <b>Test Item</b> | Match the following lines to their uses |
|------------------|---|

| Column A |                         |
|----------|-------------------------|
| 1        | Continuous lines        |
| 2        | Short dash medium lines |
| 3        | Thin chain line         |
| 4        | Thick chain line        |
|          |                         |
|          |                         |

| Column B |                     |
|----------|---------------------|
| A        | Sectioning line     |
| B        | Show hidden details |
| C        | Show final outlines |
| D        | Show center lines   |
| E        | Show movable parts  |
| F        | Show break lines    |

|                    |                    |
|--------------------|--------------------|
| <b>Key(answer)</b> | 1-C, 2-B, 3-D, 4-A |
|--------------------|--------------------|

| DIT/QS              | Test Item Database<br>Written (Theory) Test Item- no.8 |         |               |               |
|---------------------|--|---------|---------------|---------------|
| Occupational Title: | Architectural Drafter                                  |         |               |               |
| Competence level:   | Level 1  |         |               |               |
| Code no.            |  |         |               |               |
| Test Item type:     | Short answer   |         |               |               |
|                     | Multiple choice  |         |               |               |
|                     | Matching item  | Generic | Cause- Effect | Work-sequence |
|                     |  |         |               | √             |
| Complexity level:   | C 2  |         |               |               |
| Date of OP:         | September 2020   |         |               |               |
| Related module:     | M1.1   |         |               |               |
| Time allocation:    | 2 minutes  |         |               |               |

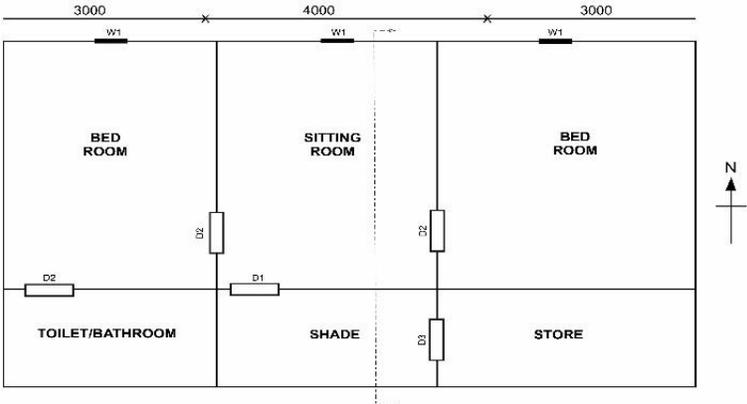
|                  |  |
|------------------|--|
| <b>Test Item</b> | Arrange the following steps in order of execution by the Architectural Drafter |
|------------------|--|

| Column A<br>(chronology) | Column B (work steps) in wrong chronological order |                             |
|--------------------------|--|-----------------------------|
| 1 <sup>st</sup>          | A  | Cost architectural work     |
| 2 <sup>nd</sup>          | B  | Prepare conceptual sketches |
| 3 <sup>rd</sup>          | C  | Review sketches with client |
| 4 <sup>th</sup>          | D  | Conduct site visit          |
| 5 <sup>th</sup>          | E  | Commence drafting           |
| 6 <sup>th</sup>          | F  | Record client's needs       |

|                     |                          |
|---------------------|--------------------------|
| <b>Key (answer)</b> | 1-F,2-B,3-D,4-C,5-A,6-E. |
|---------------------|--------------------------|

## PERFORMANCE TEST ITEMS (SAMPLES)

| DIT/ QS                    | Test Item Database<br>Performance Test Item- No. 9   |
|----------------------------|--|
| <b>Occupational Title:</b> | Architectural Drafter  |
| <b>Competence level:</b>   | Level 1  |
| <b>Code no.</b>            |  |
| <b>Test Item:</b>          | <p>Using the line diagram and specifications of the building shown in the figure, draw the following views and tables using Auto CAD</p> <p>The floor plan<br/>                     Cross section A-A<br/>                     Front elevation<br/>                     Rear elevation<br/>                     East end elevation<br/>                     West end elevation<br/>                     Door and window schedule<br/>                     Specification notes (roof, floors, foundation)<br/>                     Horizontal title block</p> <p style="text-align: center;"><b>Specification</b></p> <p>Doors: D1- Metallic casement 900x2100<br/>                     D2- Flush door 900x2100<br/>                     D2- Metallic door 900x2100</p> <p>Windows: W1- Metallic casement 1200x1200<br/>                     W2- Metallic casement 600x600</p> <p>Splash apron -500mm wide</p> <p>Walls -230mm thick plinth wall and 150mm thick super structure walls. Plastered and rendered either side, 3000mm high from screed to tie beam<br/>                     200mm thick ring beam</p> <p>Roof Gable roof pitched at 22.5° covered with gauge 30 galvanised corrugated iron sheets on; 75x50<br/>                     Timber purlins<br/>                     100x50 Timber rafter<br/>                     100x50 Timber ties &amp; struts<br/>                     150x50 Timber tie beam<br/>                     100x50 Timber wall plate<br/>                     The ridge cap is made from gauge 30 iron sheet</p> |

|   |  |
|---|--|
|   | <p>Foundation - Strip foundation with, 25mm cement sand screed on 100mm thick site concrete on 1000 gauge Polythene dpm on 50mm well compacted sand blinding on 200mm well compacted hard core on well rammed and compacted marram 690x230 concrete strip foundation</p> <p>Ceiling - 50x50mm Timber branderings and joists on an expanded metal lathe with motor mix finished with a cornice</p>  <p>The floor plan shows a rectangular house divided into several rooms. At the top, there are three window openings labeled 'W1' with dimensions 3000, 4000, and 3000 above them. The rooms are: two 'BED ROOM's (left and right), a 'SITTING ROOM' in the center, a 'TOILET/BATHROOM' (bottom left), a 'SHADE' (bottom center), and a 'STORE' (bottom right). There are three door openings labeled 'D1', 'D2', and 'D3'. A north arrow is on the right side.</p> |
| <b>Complexity level:</b>                        | P 3  |
| <b>Date of OP:</b>                              | September 2020   |
| <b>Related module:</b>                          | M1.3, M1.5   |
| <b>Related skills and knowledge:</b>            | <ul style="list-style-type: none"> <li>• Knowledge of technical drawing</li> <li>• Knowledge of computer applications</li> <li>• Knowledge of art and design</li> <li>• Knowledge of finishing materials</li> <li>• Knowledge of landscaping</li> <li>• Knowledge of standardisation of building components</li> <li>• Knowledge of empirical and metric unit systems</li> <li>• Knowledge of building materials , characteristics, and usage</li> </ul>   |
| <b>Required tools, Materials and Equipment:</b> | computer, rulers, set rulers, printer, stepping machine, punching machine, gaggles, ultra-violent glass, calculator, led light box, photo copy, paper clips, brush, box files, note books, sharpener, helmet, trimmer/cutter, gloves, ink and ink pot, scaled ruler, electric eraser, scissors, graph book, drawing board, rubber, flip chart, X-Acto knife set, steel ruler, stencils, paper clips, overall, ear plugs, drafting chair.   |
| <b>Time allocation:</b>                         | 6 hours  |

|                               |  |
|-------------------------------|--|
| <b>Preferred venue:</b>       | A room with power supply   |
| <b>Remarks for candidates</b> | <ul style="list-style-type: none"> <li>Wear personnel protective equipment</li> </ul>              |
| <b>Remarks for assessors</b>  | <ul style="list-style-type: none"> <li>Provide necessary tools, equipment and materials</li> </ul> |

| # | Assessment criteria             | Scoring guide  | Max Score |        |
|---|---------------------------------|--|-----------|--------|
|   |                                 |  | Process   | Result |
| 1 | Planning for architectural work | Wore protective gear   |           | 1      |
|   |                                 | Goggles  |           | 1      |
|   |                                 | Gloves   |           | 1      |
|   |                                 | Ear plugs  |           |        |
|   |                                 | Assembled tools and equipment  |           | 2      |
| 2 | Drawing of the floor plan       | Opened Auto-CAD and created a new project  |           | 1      |
|   |                                 | Set workspace defaults   | 2         |        |
|   |                                 | Units, dimension types and sizes verified  | 2         |        |
|   |                                 | Drew walls   | 2         |        |
|   |                                 | Horizontal and vertical lines drawn to the required dimension (thickness) observed                     |           | 2      |
|   |                                 | Drew doors   | 1         |        |
|   |                                 | Openings created along walls and doors fixed with the hinging side closer to the return angle verified |           | 2      |
|   |                                 | Drew windows   | 1         |        |
|   |                                 | Openings created along wall and windows fixed, including windows sills observed                        |           | 2      |
|   |                                 | Drew Roofline  | 1         |        |
| 2 | Drawing of the floor plan       | Sort dashed lines drawn vertically and horizontally observed   |           | 2      |
|   |                                 | Printed rooms  |           | 2      |
|   |                                 | Printings observed in the bedroom, sitting room, store, toilet/ bathroom                               |           | 2      |
|   |                                 | Dimensioned plan   | 1         |        |
|   |                                 | Vertical and horizontal dimension observed along the plan  |           | 2      |

|  |                                  |   |   |   |
|--|----------------------------------|---|---|---|
|  |                                  | Printed Headings & scale  | 1 |   |
|  |                                  | Headings and scale observed below the drawing   |   | 1 |
| 3  | Drawing of the Cross section A-A | Drew foundation   | 2 |   |
|  |                                  | Hing for concrete strip, Plinth wall, compacted marram observed                           |   | 2 |
|  |                                  | Drew plinth walls   | 1 |   |
|  |                                  | Vertical lines drawn in all required Positions  |   | 2 |
|  |                                  | Drew floor  |   | 1 |
|  |                                  | Straight horizontal lines observed for site concrete, hard core stones at given thickness |   | 2 |
|  |                                  | Drew splash apron   | 1 |   |
|  |                                  | Drew horizontally exceeding the walls   |   | 1 |
|  |                                  | Drawn walls   |   | 1 |
|  |                                  | Vertically drawn walls observed   | 1 |   |
|  |                                  | Drew windows and doors  |   | 1 |
|  |                                  | Vertically positioned in the middle of the wall   | 1 |   |
|  |                                  | Drew roof   |   | 2 |
|  |                                  | Tie beam, struts and ties, purlins, roofing materials, ridge cover indicated              | 2 |   |
|  |                                  | Drew symbols  |   | 2 |
|  |                                  | All hatchings for the wall, concrete, hard core, stones, timber, and marram observed      | 1 |   |
|  |                                  | Dimension section   |   | 2 |
|  |                                  | Vertical and horizontal dimensions observed   | 1 |   |
|  |                                  | Printed heading and scale   |   | 1 |
| Heading and scale observed below the drawing |                                  | 1   |   |   |
| 4  | Drawing of the                   | Drew splash apron and floor   | 1 | 1 |

|   |                               |  |   |   |
|---|-------------------------------|--|---|---|
|   | Front elevation               | Horizontal lines observed  | 1 |   |
|   |                               | Drew walls(vertical)   |   | 2 |
|   |                               | Drew doors and windows   |   | 2 |
|   |                               | Windows and doors drawn vertically with required details observed            |   | 2 |
|   |                               | Drew ring beam   | 1 |   |
|   |                               | Horizontal lines to the required thickness/ spans observed                   |   | 2 |
|   |                               | Drew ventilators   |   | 1 |
|   |                               | Positioned above ring beam and showing all details                           |   | 1 |
|   |                               | Drew fascia board  |   | 1 |
|   |                               | Drew roof  | 2 |   |
|   |                               | Positioned on top of walls and procedure of obtaining pitch height observed  | 1 |   |
|   |                               | Drew symbols   |   | 1 |
|   |                               | Iron sheets and glass hatchings observed                                     |   | 1 |
|   |                               | Printed headings and scale   |   | 1 |
|   |                               | Wordings observed below the drawing  |   | 1 |
| 5 | Drawing of the Rear elevation | Drew splash apron and floor  |   | 2 |
|   |                               | Splash apron drawn to given thickness observed                               | 1 |   |
|   |                               | Drew walls   |   | 2 |
|   |                               | Vertically drawn walls observed  | 1 |   |
|   |                               | Drew windows   |   | 2 |
|   |                               | Windows in accordance to the specification observed                          | 2 |   |
|   |                               | Drew ring beam   |   | 1 |
|   |                               | Horizontal lines drawn to given thickness observed                           |   | 1 |
|   |                               | Drew ventilators   |   | 1 |
|   |                               | Ventilators positioned above the ring beam and to the required specification |   | 1 |

|   |                               |  |   |   |
|---|-------------------------------|--|---|---|
|   |                               | Drew fascia board  |   | 1 |
|   |                               | Fascia board to given specification covering observed                        |   | 1 |
|   |                               | Drew roof  |   | 3 |
|   |                               | Positioned on top of walls and procedures of obtaining pitch height observed | 1 |   |
|   |                               | Drew symbols   |   | 2 |
|   |                               | Iron sheet and glass hatchings observed                                      | 1 |   |
|   |                               | Print headings and scales  |   | 1 |
|   |                               | Observed below the drawing   |   | 1 |
| 6 | Drawing of the East elevation | Drew splash apron and floors   |   | 2 |
|   |                               | Splash apron drawn to given thickness observed                               |   | 1 |
|   |                               | Drew walls   |   | 1 |
|   |                               | Vertically drawn lines observed  |   | 1 |
|   |                               | Drew ring beam   |   | 1 |
|   |                               | Horizontal lines drawn to given thickness observed                           |   | 1 |
|   |                               | Drew barge board   |   | 2 |
|   |                               | Barge board drawn to the given pitch angle                                   | 1 | 1 |
|   |                               | Drew roof  |   | 2 |
|   |                               | Positioned on top of walls with required details                             |   | 1 |
|   |                               | Drew symbols   |   | 2 |
|   |                               | Iron sheet hatchings observed  |   | 1 |
|   |                               | Printed heading and scale  |   | 1 |
|   |                               | Observed below the drawing   |   | 1 |
| 7 | Drawing of the West elevation | Drew splash apron and floor  |   | 2 |
|   |                               | Splash apron drawn to a given thickness observed                             |   | 1 |
|   |                               | Drew walls   |   | 2 |

|   |  |   |   |   |
|---|--|---|---|---|
|   |  | Vertically drawn lines observed                               |   | 1 |
|   |  | Drew windows  |   | 1 |
|   |  | Windows vertically drawn in accordance to given specification |   | 1 |
|   |  | Drew ring beam  |   | 1 |
|   |  | Horizontal lines drawn to given thickness observed            |   | 2 |
|   |  | Drew ventilators  | 2 |   |
|   |  | Observed above the ring beam with all the details             |   | 1 |
|   |  | Drew verge board  | 2 |   |
|   |  | Inclined at 22.5 <sup>0</sup>                                 |   | 2 |
|   |  | Drew roof   | 1 |   |
|   |  | Positioned on top of walls with required details              |   | 2 |
|   |  | Drew symbols  |   | 2 |
|   |  | Iron sheets and glass hatchings observed                      |   | 1 |
|   |  | Printed heading and scale                                     | 2 |   |
|   |  | Observed below the drawing                                    |   | 1 |
| 8 | Drawing of the Draw door and window schedule | Partitions of table drawn on the paper                        |   | 2 |
|   |  | Drew door and window symbols                                  |   | 2 |
|   |  | Printed dimensions of doors and windows                       |   | 1 |
|   |  | Dimensions observed in table                                  |   | 2 |
|   |  | Printed quantity of doors and windows                         |   | 1 |
|   |  | Quantities observed in table                                  |   | 1 |
|   |  | Printed descriptions of each window and door                  |   | 2 |
|   |  | Descriptions observed in table                                |   | 1 |
|   |  | Printed headings  |   | 1 |
|   |  | Observed above the table                                      |   | 1 |
| 9 | Printing                                     | Printed roof specifications                                   |   | 2 |

**UVQF: Assessment and Training Package (ATP) for an ARCHITECTURAL DRAFTER**  
**QUALIFICATION LEVEL: 1** **September 2020**

|    |                            |                                      |           |            |
|----|----------------------------|--------------------------------------|-----------|------------|
|    | specification notes        | Required roof specification observed |           | 1          |
|    |                            | Printed foundation specification     |           | 2          |
|    |                            | Printed floor specification          |           | 2          |
|    |                            | Floor specification observed         |           | 1          |
|    |                            | Printed building notes               |           | 2          |
|    |                            | Building notes observed              |           | 1          |
| 10 | Making of horizontal notes | Drew boarder lines                   |           | 1          |
|    |                            | Boarder line observed                |           | 1          |
|    |                            | Drew title block outline             |           | 1          |
|    |                            | Title block outline observed         |           | 1          |
|    |                            | Printed client details               |           | 1          |
|    |                            | Printed architectural details        |           | 1          |
|    |                            | Printed site location notes          |           | 1          |
|    |                            | Printed revision notes               |           | 1          |
|    |                            | Printed date                         |           | 1          |
|    |                            | Printed scale                        |           | 1          |
|    |                            | Printed drawing number               |           | 1          |
|    | <b>TOTAL</b>               |                                      | <b>40</b> | <b>148</b> |
|    |                            |                                      |           | <b>188</b> |

## 4.0 ATP- PART IV

### INFORMATION ON DEVELOPMENT PROCESS

#### 4.1 Occupational Profile Development (September 2020)

The Occupational Profile was exclusively developed by job practitioners who were working in the Architectural Drafter Occupation. The job expert panel, guided by UVQF Facilitators defined duties and tasks performed and provided additional generic information regarding the occupation.

#### 4.2 Training Module Development (September 2020)

Based on the Occupational Profile for Architectural Drafter of September 2020, Training Modules were developed by job practitioners, guided by UVQF Facilitators.

#### 4.3 Test Item Review (September, 2020)

Based on the Occupational Profile for Architectural Drafter of September, 2020, and Training Modules, Test Items were developed by combined panels of instructors and job practitioners, guided by UVQF Facilitators.

#### 4.4 Methodology

The rationale for the Assessment and Training Package development was to link Vocational Education and Training to the real world of work by bridging Occupational Standards to Training Standards through industry-led Standards-Based Assessment.

Active participation of both instructors and job practitioners' panels consolidated the development philosophy.

The panellists worked as teams in workshop settings complemented by off-workshop field research and literature review activities including international benchmarking.

#### 4.5 Development Panel

The participating panel of Job Practitioners required for different stages of the assessment training package i.e. occupational profile, training modules, assessment instruments were constituted by members from the following organisations;

| Development Panel |                    |   |
|-------------------|--------------------|---|
| No.               | Name               | Institution/ Organisation                   |
| 1.                | Ronald Mutebi      | Kyambogo College School                     |
| 2.                | Aaron Karega       | Amron International Limited                 |
| 3.                | Francis Tumwine    | Mbarara High School                         |
| 4.                | Robert Ntalo       | Converge Technical And Construction Company |
| 5.                | Jonathan Kizito    | Converge Technical And Construction Company |
| 6.                | Michael Kato       | St. Peters S.S Nsambya                      |
| 7.                | Jackson Mosinghi   | Nakawa Vocational Training Institute        |
| 8.                | Andrew Ngolobe     | Andeh Fine Homes Limited                    |
| 9.                | Robert Buyondo Bob | Mengo Senior School                         |
| 10.               | Wiliam Okello      | Mx. Technical Services                      |

#### 4.6 Facilitator team

This Assessment and Training Package was developed by a Facilitator team listed below:

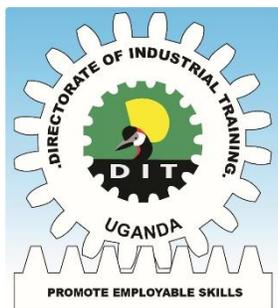
1. **Team Leader:** Ms. Mukyala Ruth, Ag Deputy Director, DIT
2. **Facilitators:** Ms. Lovance Kyarizi, Mr. Lubowa Christopher Derrick., QS, DIT.
3. **Data Entrants:** Ms. Nakato Annet, Muwanguzi Willy, Mr. Twinamatsiko Davis
4. **Compiled by:** Ms. Nakato Annet
5. **Edited by:** Ms. Mukyala Ruth Ag. DD, DIT, Qualification Standards Dept. DIT
6. **Coordinated by:** Mr. Byakatonda Patrick, Ag. Director, DIT; and Ms. Mukyala Ruth Ag. DD Qualification Standards Dept. DIT

#### 4.7 References time:

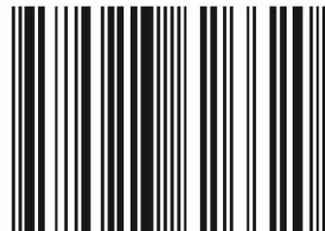
The Assessment and Training Package was compiled in September 2020 and may be periodically revised to msatch the dynamic trends in the occupation and hence issued in different versions.

##### References

1. Ronald, M. (2001). Building construction theory. Kampala: Muro Technical consults.
2. Ronald, M. (2008). Introduction to Building drawing. Kampala: Muro Technical consults.
3. Ronald, M. (2009). Illustrated approach to Technical drawing- Book 1. Kampala: Muro Technical consults.
4. Ronald, M. (2010). Advanced building drawing. Kampala: Muro Technical consults.
5. Ronald, M. (2015). Illustrated approach to Technical drawing- Book 2. Kampala: Muro Technical consults.



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