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ARTIFICIAL INTELLIGENCE DATA TECHNICIAN

CBT CURRICULUM

National Vocational Certificate Level 2

Version 1 - November, 2019

NAVTTC

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Introduction

Definition/ Description of the training program for Artificial Intelligence Data Technician

In order to build the capacity of technical and vocational training institutes in Pakistan through provision of demand driven competencies-based trainings in Information technology sector the NAVTTC, and TEVT Sector Support Program (TSSP) have joined hands together to develop qualifications for Information Technology sector. These qualifications will not only build the capacity of existing workers of this sector but also support the youth to acquire skills best fit for this sector. The benefits and impact of development of these qualifications will be on both demand and supply side.

Based upon this demand of industry these competency-based qualifications for Artificial Intelligence Data Technician are developed under National Vocational Qualification Framework (NVQF) (Level 1 to 4). The qualifications mainly cover competencies along with related knowledge and professional skills which are essential for getting a job or self-employed.

The qualifications are also in line with the vision of Pakistan's National Skills Strategy (NSS), National TVET Policy and National Vocational Qualification Framework (NVQF). This provides policy directions, support and an enabling environment to the public and private sectors to impart training for skills development to enhance social and economic profile. The National Vocational & Technical Training Commission (NAVTTC) has approved the Qualification Development Committee (QDC). The QDC consists experts from the relevant industries from different geographical locations across Pakistan and academicians who were consulted during the development process to ensure input and ownership of all the stakeholders. The National Competency Standards could be used as a referral document for the development of curricula to be used by training institutions.

Purpose of the training program

The purpose of the training is to provide skilled manpower to improve the existing capacity of Information Technology sector. This training will provide the requisite skills to the trainees to become Artificial Intelligence Data Technician. It will enable the participants to meet the challenges in the field of Artificial Intelligence. Further, to improve the skill level of the technician and prepare them for the information technology industry to meet the market competition nationally and internationally.

The core purpose of this qualification is to produce employable Artificial Intelligence Data Technicians who can work as Artificial Intelligence Data Technician according to national and international standards. In addition, this qualification will prepare unemployable youth to employees in this sector.

Overall objectives of training program

The Artificial Intelligence Data Technician qualification from level 1- 4 consists of theoretical and practical details required for Artificial Intelligence Data Technician in information technology industries. However, this will require providing additional input on

entrepreneurship development for the one who is willing to start his/her own business. The main objective of the qualification is to prepare Artificial Intelligence Data technician having set of skills as follows:

- Comply with Work Health and Safety Policies
- Obey the Workplace Policies and Procedures
- Follow Basic Communication Skills (General)
- Demonstrate Basic Literacy Skills
- Operate Computer Functions (General)
- Use Word Processing Software
- Use of Spreadsheet
- Comply Personal Health and Safety Guidelines
- Communicate the Workplace Policy and Procedure
- Perform Basic Communication (Specific)
- Demonstrate Basic Numeracy Skills
- Use Multimedia Processing
- Pre-Process Data
- Perform Basic Computer Application (Specific)
- Apply Work Health and Safety Practices (WHS)
- Identify and Implement Workplace Policy and Procedures
- Communicate at Workplace
- Manage Personal Finances
- Code in Programming Language suitable for AI
- Setup Environment
- Perform Computer Application Skills
- Contribute to Work Related Health and Safety (WHS) Initiatives
- Comply with Workplace Policy and Procedures
- Perform Advanced Communication
- Manage Human Resource Services
- Scrape data from the web
- Process Images through Image Processing software
- Work with Data Manipulation Toolkit
- Work with Multidimensional Arrays' Manipulation and Computation Package
- Develop Advance Computer Application Skills
- Develop Entrepreneurial Skills

Competencies to be gained after completion of course

At the end of the course, the trainee must have attained the following competencies:

1. Comply with Work Health and Safety Policies
2. Obey the Workplace Policies and Procedures
3. Follow Basic Communication Skills (General)
4. Demonstrate Basic Literacy Skills
5. Operate Computer Functions (General)
6. Use Word Processing Software
7. Use of Spreadsheet
8. Comply Personal Health and Safety Guidelines
9. Communicate the Workplace Policy and Procedure
10. Perform Basic Communication (Specific)
11. Demonstrate Basic Numeracy Skills
12. Use Multimedia Processing
13. Pre-Process Data
14. Perform Basic Computer Application (Specific)
15. Apply Work Health and Safety Practices (WHS)
16. Identify and Implement Workplace Policy and Procedures
17. Communicate at Workplace
18. Manage Personal Finances
19. Code in Programming Language suitable for AI
20. Setup Environment
21. Perform Computer Application Skills
22. Contribute to Work Related Health and Safety (WHS) Initiatives
23. Comply with Workplace Policy and Procedures
24. Perform Advanced Communication
25. Manage Human Resource Services
26. Scrape data from the web
27. Process Images through Image Processing software
28. Work with Data Manipulation Toolkit
29. Work with Multidimensional Arrays' Manipulation and Computation Package
30. Develop Advance Computer Application Skills
31. Develop Entrepreneurial Skills

Possible available job opportunities available immediately and later in the future

Artificial Intelligence Data Technician are employed in Information Technology Sector. Experienced Artificial Intelligence Data Technician may advance through promotions with the same employer or by moving to more advanced positions with other employers. They can become:

- Artificial Intelligence Data Technician
- Data Entry Operator
- Financial Forecasting
- Media House Data Technician
- Computer Operator

Trainee entry level

- Middle (Grade 8) for level-1
- Level-1 for level-2
- Level-2 for level-3
- Level-3 for level-4

Minimum qualification for trainer

- BS in (Artificial Intelligence/Data Science/Computer Science/Computer Engineering/Software Engineering/Information Technology/Electrical) or relevant fields.

Recommended trainer: trainee ratio

The recommended maximum trainer: trainee ratio for this program is 1 trainer for 20 trainees

Medium of instruction i.e. language of instruction

Instructions will be in English/Urdu language.

Duration of the course (Total time, Theory & Practical time)

This curriculum document for level 2 comprises of 08 modules. The recommended delivery time for technical modules is 400 hours.

- Delivery of the course can therefore be full time (8 hours a business day), 6 days a week, for 24 months (on average 26 working days a month) for each level. Training providers are at liberty to develop other models of delivery, including part-time and evening delivery. OR
- Delivery of the course can therefore be full time (9 hours a business day), 5 days a week, for 24 months (on average 22 working days a month). Training providers are at liberty to develop other models of delivery, including part-time and evening delivery.

The full structure of the course is as follows:

Sr. No.	Module	Theory hours	Workplace hours	Total hours
01	Use of Spreadsheet	20	80	100
02	Comply Personal Health and Safety Guidelines			
03	Communicate the Workplace Policy and Procedure			
04	Perform Basic Communication			
05	Demonstrate Basic Numeracy Skills			
06	Use Multimedia Processing	40	60	100
07	Pre-Process Data	20	80	100
08	Perform Basic Computer Application (Specific)			

Sequence of the modules

This qualification is made up of 08 modules. A suggested distribution of these modules is presented overleaf. This is not prescriptive and training providers may modify this if they wish.

The following technical modules will be followed as require for the training purpose.

Module 01

Module 06

Module 07

Each module covers a range of learning components. These are intended to provide detailed guidance to teachers (for example the Learning Elements component) and give them additional support for preparing their lessons (for example the Materials Required component). The detail provided by each module will contribute to a standardized approach to teaching, ensuring that training providers in different parts of the country have clear information on what should be taught. Each module also incorporates the industrial demand of Pakistan that make this qualification unique to Pakistan's industry needs.

ARTIFICIAL INTELLIGENCE DATA TECHNICIAN

Module-1

CBT CURRICULUM

National Vocational Certificate Level 2

Version 1 - November, 2019

Summary – Overview of the curriculum

After completing the level candidate will be able to use spreadsheet effectively, work safely, communicate better at workplace, perform basic numeracy skill, use multimedia processing and pre-processing of data.

Module 01: 061900925 Use of Spreadsheet

Objective of the Module: After this compete module the candidate will be able to gain the skills to operate the spreadsheets and work with it to manage and manipulate the documents and the different types of data.

Duration: 100 hrs. Theory: 20 hrs. Practice: 80 hrs.

Learning Unit	Learning Outcomes	Learning Elements	Duration	Material/Tools Required	Learning Place
LU1: Perform Cell Data Manipulation	**You will be able to** 1. Format cell as required 2. Insert data in multiple cells 3. Edit data in multiple cells 4. Delete data in multiple cells 5. Copy data from specified cells 6. Paste data into specified cells 7. Move data to or from specified cells 8. Merge multiple	• Understand the concept of rows and columns • Demonstrate different rows and columns operations • Have knowledge about using mouse and keyboard • Understand the meaning of different operations • Knowledge of shortcuts • Demonstrate different data formats used in spreadsheets Practical-1 Apply different number formats and insert data as plain text, number, percentage, scientific notation, currency, date and time into cell. Practical-2 Given data in a cell, copy data from it, paste it with	**Total 35 Hrs** **Theory: 05 Hrs** **Practical: 30 Hrs**	• Computer system • Microsoft Office - Spreadsheet	Theory: Class Practical: Lab

	cells 9. Unmerge cells 10. Freeze specified cell 11. Hide specified row(s) 12. Unhide row(s) 13. Hide specified column(s) 14. Unhide column (s) 15. Insert row(s) at desired location in a worksheet 16. Delete specified row(s) 17. Insert column at desired location 18. Delete specified column(s) 19. Apply cell referencing 20. Import data from external source	different options or move it to a specific cell, freeze that cell and delete the data from the original cell. Practical-3 Merge, unmerge, hide, unhide, insert and delete specified cells. Practical-4 Use absolute referencing, relative referencing, mix referencing and reference to other sheet on a given formula. Practical-5 Import data into spreadsheet as a table from SQL server or an .xml /.doc files.			
LU2: Perform Filtering and Sorting of	**You will be able to**	• Understand the concept of ascending and	**Total 10 Hrs**		Theory: Class

numerical data	1. Sort data in ascending order 2. Sort data in descending order 3. Apply single level filter 4. Apply multi-level filter	descending order • Understand comparison operators such as equal to, less than, greater than, etc. Practical-1 Write 10 random numbers in two different rows/column. Arrange them in ascending or descending order. Apply filter on one particular number from table.	**Theory: 01 Hrs** **Practical: 09 Hrs**		Practical Lab
LU3: Apply Basic and Database Formulae	**You will be able to** 1. Create different types of data series 2. Apply arithmetic formula 3. Apply concatenation formula 4. Calculate string length using formula 5. Select desired part of string using formula 6. Copy formula using different cell	• Understand different types of series in spreadsheet • Understand the concept of formula • Learn different formulas and their syntax • Understand basics of statistics Practical-1 Create arithmetic and geometric series with given seed values and increment intervals Practical-2 Apply formulas for concatenation, string selection, string length calculation using different cell referencing Practical-3 Use find and look-up functions, different forms of count formula and	**Total 35 Hrs** **Theory: 12 Hrs** **Practical: 23 Hrs**		Theory: Class Practical Lab

	referencing. 7. Use Look-up function 8. Use Count Formula 9. Use Find formula 10. Take data sum, sub, max, min, variance, mean, median, average, round using formula 11. Take count of entities using formula 12. Take count of blanks using formula 13. Calculate minimum of entities using formula 14. Calculate maximum of entities using formula 15. Select entity based on condition	apply specified arithmetic and statistical operations on given data using specified formulas.			
LU4: Create Pivot Table	**You will be able to**	• Understand basic concepts and application	**Total 10 Hrs**		Theory: Class

	1. Select input data 2. Arrange data in an appropriate format 3. Specify output location 4. Apply pivot table operation	of pivot table Practical-1 Use data in a pivot table according to given requirements	**Theory: 01 Hrs** **Practical: 09 Hrs**		Practical Lab
LU5: Perform Data Plotting	**You will be able to** 1. Specify data to plot 2. Specify chart type 3. Format chart 4. Apply designs to chart	• Understand different types of plots Practical-1 Plot tabular data in the form of desired chart format	**Total 10 Hrs** **Theory: 01 Hrs** **Practical: 09 Hrs**		Theory: Class Practical Lab

ARTIFICIAL INTELLIGENCE DATA TECHNICIAN

Module-6

CBT CURRICULUM

National Vocational Certificate Level 2

Version 1 - November, 2019

Module 06: 061900926 Use Multimedia Processing

Objective of the Module: This module deals with the skills and knowledge required to perform multimedia processing, manipulate AV data in various forms for further processing

Duration: 100 hrs. Theory: 40 hrs. Practice: 60 hrs.

Learning Unit	Learning Outcomes	Learning Elements	Duration	Material/Tools Required	Learning Place
LU1: Manipulate Image for Pre-processing	**You will be able to** 1. Convert image into specified format using suitable tools 2. Change resolution to the specified requirements 3. Crop the image to remove unwanted artifacts using suitable tools 4. Merge multiple images using suitable tools 5. Overlay text using suitable tools 6. Resize the image to specified size using suitable tools 7. Adjust image orientation to specified requirement using suitable tools 8. Prepare text	• Describe basic concept of digital images • Show different for formats of images • Understand basics of image resolution • Identify specified requirements for resolution changes • Identify required tools for image cropping to remove artifacts • Demonstrate images merging tool and it usage • Identify and demonstrate use suitable tool for text overlay • Identify suitable tools and demonstrate its usage for resize of image • Identify and demonstrate suitable tools that can be used for adjustment of image orientation • Demonstrate basics of OCR (optical	**Total 20 Hrs** **Theory: 10 Hrs** **Practical: 10 Hrs**	• Computer system with high performance GPU(s) • High speed high capacity storage • High resolution display • Software application(s) for image manipulation • Computer system with high performance GPU(s) and audio card • High quality sound system • Software application(s) for video manipulation and processing • Computer system with high performance	Theory: Class Practical: Lab

	based images for OCR (optical character recognition) using suitable tools	character recognition) • Demonstrate tool to prepare text based image for OCR (Optical Character Recognition) Practical-1 Crop two images, change their orientations and merge them into single image with reduced size. Save the image in two different formats. Practical-2 Overlay text on an image and prepare it for Optical Character Recognition		GPU(s) and audio card • Software application(s) for audio editing • High quality sound system • Noise absorbers	
LU2: Manipulate Video for Pre-processing	**You will be able to** 1. Convert video into specified format using suitable tools 2. Change resolution of the video to the specified requirements using suitable tools 3. Crop the video to remove unwanted duration using	• Demonstrate basic formats of digital video • Identify and Demonstrate required tool for video format conversion • Understand basics of video resolution • Know about specified requirements for resolution changes • Identify and demonstrate required tools for video cropping to remove unwanted interval • Select suitable tools for video merging • Demonstrate of frames rate and	**Total 45 Hrs** **Theory: 15 Hrs** **Practical: 30 Hrs**		Theory: Class Practical: Lab

	suitable tools 4. Crop the video to remove unwanted contents using suitable tools 5. Merge multiple videos using suitable tools 6. Adjust frame rate of video 7. Extract frames from video to save them in image format 8. Modify audio tracks of video using suitable tools 9. Insert identifier in a video	its adjustment • Perform frames extraction form videos to save it as image file • Identify and Demonstrate audio editing tools and its use Practical-1 Crop two different videos into half, save them into specific video formats, reduce videos size by changing resolution and merge it into single video Practical-2 Demonstrate frame rate adjustment of video and extract specified frames in image format			
LU3: Manipulate Audio for Pre-processing	**You will be able to** 1. Convert audio into specified format using suitable tools 2. Adjust bit rate of audio using	• Understand and Demonstrate basic formats of audios • Identify required tool for audio format conversion • Pinpoint suitable	**Total 35 Hrs** **Theory: 15 Hrs** **Practical: 20 Hrs**		Theory: Class Practical: Lab

	suitable tools 3. Reduce noise from audio using suitable tools 4. Enhance audio for pre processing	tool for noise reduction • Demonstrate audio enhancement requirement for pre processing Practical-1 Enlist different formats of audios and perform bit rate adjustment Practical-2 Perform preprocessing of an audio file to reduce noise and enhance audio			

ARTIFICIAL INTELLIGENCE DATA TECHNICIAN

Module-7

CBT CURRICULUM

National Vocational Certificate Level 2

Version 1 - November, 2019

Module 07: 061900927 Pre-Process Data

Objective of the Module:

This module deals with the formats of digital data/files. It enables the trainee to use appropriate software for image, audio and video processing. Understand different annotation standards, time stamp in audio and video files.

Duration: 100 hrs. Theory: 40 hrs. Practice: 60 hrs.

Learning Unit	Learning Outcomes	Learning Elements	Duration	Material/Tools Required	Learning Place
LU1: Digitize Manual Data	**You will be able to** 1. Scan text documents 2. Scan pictures 3. Perform OCR using suitable tool(s) 4. Enter data into text document 5. Enter data into spreadsheet 6. Digitize analogue video using suitable device 7. Digitize analogue audio using suitable device 8. Arrange audio data using suitable tools 9. Adjust image orientation to specified requirement using suitable tools 10. Prepare text	• Understand different digital file formats. • Demonstrate the interface of different software working environments for image, audio and video data pre-processing Practical-1 Scan a document, extract data from the scanned image using OCR and enter the data into a specified document or spreadsheet Practical-2 Use appropriate hardware and software tools to convert and save provided analogue audio and/or video to specified digital formats. Practical-3 Edit given digital images, audio and video files according to specified requirements	**Total 10 Hrs** **Theory: 04 Hrs** **Practical: 06 Hrs**	• Computer system with high performance GPU(s) and audio card • High speed high capacity storage • High resolution display • Software application(s) for audio editing • Scanner • Digital Camera	Theory: Class Practical: Lab

	based images for OCR(optical character recognition) using suitable tools				
LU2: Prepare Data in required format	**You will be able to** 1. Arrange data in specified order 2. Correct errors in digitized textual data 3. Organize data as per requirements 4. Remove unwanted data 5. Convert the digitized data into desired format and correct errors in transcribed data	• Understand and Demonstrate different data formatting instructions Practical-1 Given an OCR generated file, edit the file i.e. arrange, remove, organize, correct and convert data based on given specifications	**Total 20 Hrs** **Theory: 16 Hrs** **Practical: 04 Hrs**	•	Theory: Class Practical: Lab
LU3: Label Image Data	**You will be able to** 1. Annotate images by text labels 2. Annotate images by bounding box 3. Type text contained in images	• Understand different annotation standards Practical-1 Perform annotations on given images as per requirements	**Total 15Hrs** **Theory: 03 Hrs** **Practical: 12 Hrs**	• Software application(s) for image manipulation •	Theory: Class Practical Lab
LU4: Label Audio Data	**You will be able to** 1. Apply Timestamp to transcript	• Understand the concept of timestamp in audio • Understand	**Total 20 Hrs** **Theory: 04 Hrs**	• High quality sound system •	Theory: Class

	2. Label audio data with text as per requirements 3. Label audio data with noise as per requirement	audio labelling standards • Knowledge of audio labelling tools Practical-1 Apply timestamps and label given audio data as per requirements	**Practical: 16 Hrs**		Practical: Lab
LU5: Label Text Data	**You will be able to** 1. Annotate text data based on desired features 2. Annotate text data word by word for identification (Name, City etc.) 3. Annotate text data word by word for classification	• Understand the concept of features • Demonstrate annotation of text data based on desired features • Demonstrate textual labelling standards • Knowledge of text labelling tools Practical-1 Point out relevant features and label given text data as per requirements such as identification and classification.	**Total 15 Hrs** **Theory: 02 Hrs** **Practical: 13 Hrs**	•	Theory: Class Practical Lab
LU6: Label Video Data	**You will be able to** 1. Apply Timestamp 2. Label video data with text as per requirements 3. Label video data with specified noise 4. Annotate image frames by text labels 5. Annotate image frames by	• Demonstrate the timestamp in videos • Demonstrate video labelling standards • Demonstrate of video labelling tools Practical-1 Apply timestamps and label given video data as per requirements	**Total 20 Hrs** **Theory: 03 Hrs** **Practical: 17 Hrs**	• High quality sound system • Software application(s) for video manipulation and processing •	Theory: Class Practical Lab

	bounding box 6. Type text contained in video				

General assessment guidance for *Artificial Intelligence Data Technician*

Good practice in Pakistan makes, use of sessional and final assessments, the basis of which is described below. Good practice by vocational training providers in Pakistan, is to use a combination of these sessional and final assessments, combined to produce the final qualification result.

Sessional assessment is going on all the time. Its purpose is to provide feedback on what students are learning:

- To the student: to identify achievement and areas for further work
- To the teacher: to evaluate the effectiveness of teaching to date, and to focus future plans.

Assessors need to devise sessional assessments for both theoretical and practical work. Guidance is provided in the assessment strategy

Final assessment is the assessment, usually on completion of a course or Level, which says whether or not the student has "passed". It is – or should be – undertaken with reference to all the objectives or outcomes of the course, and is usually fairly formal. Considerations of security – ensuring that the student who gets the credit is the person who did the work – assume considerable importance in final assessment.

Methods of assessment

For lessons with a high quantity of theory, written or oral tests related to learning outcomes and/ or learning content can be conducted. For workplace lessons, assessment can focus on the quality of planning the related process, the quality of executing the process, the quality of the product and/or evaluation of the process.

Methods include direct assessment, which is the most desirable form of assessment. For this method, evidence is obtained by direct observation of the student's performance.

Examples for direct assessment of Artificial Intelligence Data Technician Lev-2 include:

- Demonstrations, for example demonstrating spreadsheet usage skill.
- Paper-based tests, such as multiple choice or short answer questions on data processing and multimedia processing.

Indirect assessment is the method used where the performance could not be watched and evidence is gained indirectly. Indirect assessment should only be a second choice. (In some cases, it may not even be guaranteed that the work products were produced by the person being assessed.)

Examples for direct assessment of Artificial Intelligence Data Technician Lev-2 include:

- Portfolio, for example students are asked to bring his previous spreadsheet that has been developed by them.

Principles of assessment

All assessments must meet all the following principles, regardless of the method of assessment used to evidence learners' attainment.

All assessments must produce outcomes that are:

1. Valid: the assessment evidence meets all assessment criteria and all learning outcomes
2. Authentic: all the work is the learner's own
3. Reliable: assessment evidence is consistent and generates outcomes that would be replicated were the assessment repeated
4. Current: assessment evidence is up-to-date
5. Sufficient: enough work is available to justify the credit value, and to enable a consistent and reliable judgement about the learner's achievement
6. Comparable: all assessment evidence is comparable in standard between assessments within a unit/qualification, and between learners of the same level
7. Manageable: all assessment places reasonable demands on all learners
8. Fair and minimize bias: assessments are fair to all learners irrespective of their characteristics (for example, age, gender, etc.)

Assessment strategy for Artificial Intelligence Data Technician Level 2 Curriculum

This curriculum consists of 08 modules:

Module-01	Use of Spreadsheet
Module-02	Comply Personal Health and Safety Guidelines
Module-03	Communicate the Workplace Policy and Procedure
Module-04	Perform Basic Communication
Module-05	Demonstrate Basic Numeracy Skills
Module-06	Use Multimedia Processing
Module-07	Pre-Process Data
Module-08	Perform Basic Computer Application (Specific)

Sessional or Developmental assessment

The sessional/developmental assessment shall be conducted after completion of each module in two parts: theoretical assessment and practical assessment.

Theoretical assessment for all learning modules must consist of a written paper lasting at least 30 minutes per module. This can be a combination of multiple choice and short answer questions.

For practical assessment, all procedures and methods for the modules must be assessed on a sessional basis. Guidance is provided below under Planning for assessment.

Final assessment

Final assessment shall also be in two parts: theoretical assessment and practical assessment.

For the final practical assessment, each student shall be assessed over a period of 4-5 hours session. During this period, each student must be assessed on his ability to perform a complete job for all Technical and functional modules.

Generic modules shall be assessed comprising with other modules at the time of final assessment. Practical work for this module could be assessed on a sessional basis.

Planning of assessment.

Plaining of assessment will plan by the assessment Centre as per CBT/A policy. But for development assessment it could be plan by the Trainer during the course.

As for final assessment as concern, certified assessor must be contacted and the assessor must meet the needs of the students and the training provider. For example, where two assessors are conducting the assessment, there must be a maximum of five students per assessor. In this example, a group of 20 students shall therefore require assessments to be carried out over a four-day period. For a group of only 10 students, assessments would be carried out over a two-day period only or it could be formulated as per CBT/A Centre policies.

Complete list of tools and equipment – Non Consumable

S. No	Description	Quantity
1	Printer	5
2	High performance Computer system with • GPU(s) • Audio card • High speed high capacity storage • Drivers • Compatibility with Python, OpenCV	20
3	Software and Libraries packages: • Microsoft Office • Python Software Package • BeautifulSoup Python Library • Request Python Library • OpenCV software package (latest version) • Pip package manager • Stable version of pandas • Stable version of numpy and pickle	20
4	High quality sound system	20
5	High resolution display	20
6	Software application(s) for image manipulation	20
7	Software application(s) for audio editing	20
8	Software application(s) for video manipulation and processing	20
9	Noise absorbers	20
1(	Scanner	05
1	Digital Camera	05
1	Internet facility	-
1	Virtual environment package	20

Complete list of tools and equipment - Consumable

S. No.	Items
1.	Different Tags and Locks
2.	Paper Ream
3.	Process SOPs
4.	Equipment Maintenance Manuals
5.	Log Book
6.	Handbooks
7.	Design Books/ Sheets
8.	Pencils
9.	Erasers
10.	Pencil Sharpeners
11.	Paper Cutter
12.	Scissors
13.	Color Pencils
14.	White chart paper
15.	Brown Sheets
16.	White Board Markers (red, blue, green, black)
17.	Permanent markers (black)
18.	File covers

Credit values

The credit value of the National Certificate Level 02 in Artificial Intelligence Data Technician is defined by estimating the amount of time/ instruction hours required to complete each competency unit and competency standard. The NVQF uses a standard credit value of 1 credit = 10 hours of learning (Following TVET guidelines.

The credit values are as follows:

Code	Name of Duty or (Module)	Level	Credit	Category
	Use of Spreadsheet	2	10	Technical
	Comply Personal Health and Safety Guidelines	2		Generic
	Communicate the Workplace Policy and Procedure	2		Generic
	Perform Basic Communication (Specific)	2		Generic
101200831	Demonstrate Basic Numeracy Skills	2	05	Generic
	Use Multimedia Processing	2	10	Technical
	Pre-Process Data	2	10	Technical
	Perform Basic Computer Application (Specific)	2		Generic

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