Occupational Standards for Caribbean Vocational Qualifications (CVQ)

CCPBRE4001   CVQ Level 4 – Research Operations (Counter Drug Intelligence)

Unit Code	Unit Title	Requirement
PB00163	Undertake Research Activities	Mandatory
PB00164	Conduct Planning Scheme Research	Mandatory
PB00165	Initiate and Lead Applied Research	Mandatory
PB00166	Manage Research Activities	Mandatory
PB00167	Produce Research Reports and Make Presentations	Mandatory

To obtain a Caribbean Vocational Qualification (CVQ) all Mandatory Units must be achieved.
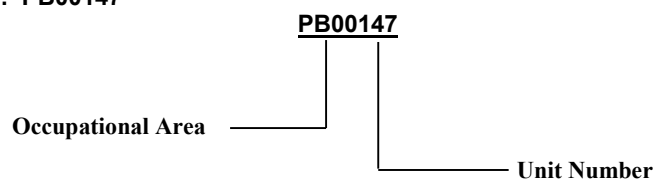
Legend to Occupational Standard code

Example: CCPBRE4001

CCPBRE4001

CARICOM Code ———   ——— Occupational Number

Sector ———   ——— Qualification Level
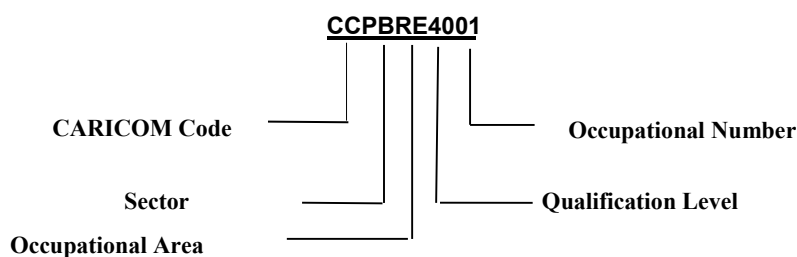
Occupational Area ———

Key: **CC – CARICOM**   **PS – Public Services; RE – Research Operations; 4- Level 4; 001 - Numerical sequence**

Legend to Unit Code

Example: PB00147

PB00147

Occupational Area ──────┐

                              └──────── Unit Number

Key: **PS – Public Services; 00147– unit #;**

Country of Origin

Trinidad and Tobago

Qualification Overview

Occupational Standards can also be used to:

- Prepare job descriptions and specifications
- Determine recruitment criteria
- Appraise staff performance objectively
- Identify skill and training gaps and needs
- Conduct labour market analyses
- Develop curriculum
- Assess the effectiveness of training programmes
- Determine compensation and rewards

The benefits of acquiring the CVQ to Candidates

- Provide a basis for articulation and accreditation
- Provides a broad-based preparation for employment
- Is an alternative route to further / higher education
- Complements and has parallel standing with academic qualifications
- Provides enhanced employability and higher earning potential
- Facilitates an apprenticeship with actual work experience
- Equips candidates with the knowledge, skills and attitudes for the workplace
- Past work experience and skills can count towards achieving the CVQ
- Allows for continuity whereby if a candidate cannot complete the CVQ at a centre or school, they can continue at another approved centre
- CVQ's are recognized qualifications and facilitates free movement of labour throughout CARICOM

The benefits of the CVQ to Employers

- Provides a larger cadre of skilled employees/candidates to choose from
- Reduces cost of recruiting and selecting the ideal job candidate
- Reduces cost for training workers
- Ensures higher levels of productivity

The benefits of the CVQ to the Caribbean region:

- Produces a higher skilled workforce that is ready to adapt to ever-changing global demands
- Provides greater access for persons to achieve higher qualifications
- Contributes to the region's human resource capacity development

PS00163:   Undertake Research Activities

Unit Descriptor:

> This unit deals with the skills and knowledge required to implement research options.

ELEMENTS	PERFORMANCE CRITERIA

Candidates must be able to:

1 Prepare a research plan	1.1	Ensure views and interests of stakeholders are reflected in the research methodology and that it is compatible with workplace policies and procedures
	1.2	Select research methodology suitable to needs, purposes and resources and to maximize credibility of outcomes
	1.3	Select and use research strategies appropriate to subject matter being researched, the outcomes sought and the resources available
	1.4	Ensure research plan incorporates strategies for validating research outcomes
2 Implement appropriate research strategies	2.1	Select and use research strategies appropriate to subject matter being researched, the outcomes sought and the resources available
	2.2	Determine and allocate resources needed to conduct research in accordance with organization's policies and procedures
	2.3	Ensure collection, recording and storage of all relevant information is timely to ensure validity, confidentiality and security
	2.4	Identify a representative range of people and groups with an interest in the issues and consult them in appropriate ways to ensure validity of outcomes
	2.5	Undertake consultation according to agreed practices and protocol of own and other agencies

		2.6	Check that cultural sensitivities and ethical issues are considered throughout consultation
3	Organize and analyze information	3.1	Organize information in a form that allows analysis and suits the research purposes
		3.2	Develop patterns in the data and derive explanations, maintaining validity and reliability
4	Report research findings	4.1	Report complete and accurate details of the research methodology, information and analysis in an accessible and useable style and format
		4.2	Provide opportunities for validation of research findings
		4.3	Report research results and ensure that they are available to all relevant stakeholders in accordance with agency's policies and procedures

RANGE STATEMENT

1. Context for undertaking research includes:
   - preparation of a range of organization information for policy development, strategic planning, providing advice to management
   - responsibility for research specific to a service, its stakeholders, interests and relationship with the wider community
   - specific community or client interests and issues

2. Stakeholders include:
   - within the organisation
   - within the community
   - in other areas of services and agencies
   - national security field
   - other specialists

UNDERPINNING KNOWLEDGE & SKILLS

Candidates must know and understand

1. what are the current research methodologies

2. what are research review techniques, consultation methods, protocols and practice

3. what are information systems

4. what are the cultural implications of research methods

5. what is the cultural analysis of information

6. what is cultural knowledge and ownership issues

7. what is research ethics

8. how to present reports

9. how to interpret and analyze data

10. how to network

11. how to negotiate with a wide range of known and unknown stakeholders

EVIDENCE GUIDE

(1) Critical Aspects of Evidence
Evidence should include a demonstrated ability to:

   a. prepare research plan
   b. implement research strategies
   c. analyze information
   d. report research findings

(2) Method of Assessment
Assessors should gather a range of evidence, over a period of time, which is valid, sufficient and authentic. Evidence should be gathered through a variety of ways including direct observation and oral questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, manufacturer's specifications, codes, standards, manuals and reference materials

(3) Context of Assessment
This unit may be assessed on the job or off the job. Where assessment is done off the job, an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by working individually or as part of a team.

PS00164:   Conduct Planning Scheme Research

Unit Descriptor:	This unit deals with the skills and knowledge required to conduct research to inform senior managers and decision makers of matters that may impact the operation of, or changes to, the local planning scheme. Research and analytical skills and the capacity to ensure the currency and accuracy of information are critical to effective performance in this unit.

ELEMENTS	**PERFORMANCE CRITERIA**
Candidates must be able to:	
1 Clarify purpose of the planning scheme research	1.1 Confirm purpose, parameters and brief for planning scheme research to be conducted with relevant senior staff according to workplace policies and procedures
	1.2 Confirm time frame to conduct research with relevant senior staff in accordance with workplace requirements
	1.3 Confirm required output format for research results with senior staff in accordance with workplace requirements
2 Identify and access relevant information sources	2.1 Scan information sources to identify relevant information that may impact planning process and scheme.
	2.2 Search online and print-based resources for information in accordance with organizational policies and procedures
	2.3 Identify strategies for verifying the accuracy, authorship, currency and relevance of sources and utilize in accordance with workplace policies and procedures
3 Identify and analyze the impact of the information on the planning research task	3.1 Source information related to the research project and check for reliability and accuracy in accordance with workplace guidelines
	3.2 Source and consider examples of best practice relevant to research task in accordance with research objectives

		3.3	Ensure that information gathered is collated, analysed and interpreted in accordance with research project requirements
		3.4	Document results of research process according to standard operating procedures
4	Provide research report	4.1	Ensure that conclusions are drawn from available information in accordance with research project requirements
		4.2	Ensure that report of research findings and conclusions are prepared in required format
		4.3	Ensure that report and other information gathered as part of the research process are stored for easy retrieval using standard processes
		4.4	Present report in a timely manner according to workplace policies and procedures

RANGE STATEMENT

1. Information sources include:
   - national security agencies'
   - websites
   - research bodies
   - industry associations
   - government
   - publications

3. Strategies for ensuring the accuracy, authorship, currency and relevance of sources include:
   - authority of website and content providers
   - date the information was created or added
   - copyright details of information to confirm information from multiple sources

2. Techniques for searching information includes:
   - use of standard online search engines
   - use of advanced search functions, such as Boolean searches
   - use of library catalogues and indices

UNDERPINNING KNOWLEDGE & SKILLS

Candidates must know and understand:

1. what are the relevant research procedures

2. what is the organization's planning processes and requirements

3. what are the sources of information related to planning, urban design, population and demographic trends

4. what is the code of conduct and ethics in the field of research

12. how to research, analyze and interpret information

13. how to access, verify and check the validity of online and other sources

14. how to interpret a range of information relevant to the research task

15. how to communicate and liaise with internal and external stakeholders

16. how to manage stakeholder relationships using a range of communication techniques

17. how to achieve effective working relationships that demonstrate an ability to work collaboratively with people from diverse backgrounds and all sections of the organisation

18. how to solve problems and manage conflict

19. how to monitor own work

20. how to use technology for conducting research

21. how to manage records

22. how to write reports

23. how to present research reports

EVIDENCE GUIDE

(1)   Critical Aspects of Evidence
Evidence should include a demonstrated ability to:

a.   source and analyze complex information
b.   conduct research that addresses a specific brief
c.   provide accurate, timely and clear research reports

(2)   Method of Assessment
Assessors should gather a range of evidence, over a period of time, which is valid, sufficient and authentic. Evidence should be gathered through a variety of ways including direct

observation and oral questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, manufacturer's specifications, codes, standards, manuals and reference materials

(3)   Context of Assessment

This unit may be assessed on the job or off the job. Where assessment is done off the job, an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by working individually or as part of a team.

PS00165:   Initiate and Lead Applied Research

Unit Descriptor:	This unit deals with the skills and knowledge required to plan, conduct and report on applied research to influence strategic practices and outcomes within an organizational context.

ELEMENTS		PERFORMANCE CRITERIA	
	Candidates must be able to:		
1	Construct an applied research strategy	1.1	Clarify and confirm applied research purpose and needs of the target group with senior personnel in accordance with workplace policies and procedures
		1.2	Determine policies in relation to conducting applied research
		1.3	Establish mechanisms for collecting and maintaining data in a systematic manner
		1.4	Analyze factors affecting the reliability and validity of data
		1.5	Review relevant research ethics and codes of conduct
		1.6	Frame a research strategy in consideration of available tools and resources in accordance with workplace guidelines
2	Use a range of applied research techniques	2.1	Review and evaluate a range of applied research methods, theories and data collection techniques in accordance with research strategy
		2.2	Select appropriate methods to gather and analyse data in accordance with research strategy
		2.3	Ensure that suitable technology is used to support data collection and analysis in accordance with workplace policies and procedures
		2.4	Access appropriate sources of information and contributors relevant to the research study
		2.5	Optimize relevance of the research through integrity of the data collected and analysis tools used

3	Analyze and present findings	3.1	Evaluate how research findings such as trends and changes will impact on strategy in accordance with workplace policies and procedures
		3.2	Review data and research findings for accuracy of details and adherence to any legal requirements
		3.3	Collate and analyse data for relevance against the original applied research strategy
		3.4	Document and present research findings in a clear and logical manner consistent with target audience needs

RANGE STATEMENT

1. Evaluate research finding includes:
   - the value of its usefulness
   - the feasibility of implementing the recommendations
   - the findings of previous and current research
   - available time and resources
   - the value of the information and data
   - the quality and credibility of the methodology

3. Contexts for initiating and coordinating research includes:
   - policy making
   - strategic planning
   - preparation of a range of data
   - service development and delivery

5. Funding proposals include:
   - submissions
   - expressions of interest

2. Resources include:
   1. budget
   2. human resources:
      - specialist researchers
      - data entry staff
      - administrative support
   3. previous research data written, oral and audio-visual sources
   4. equipment e.g. computer, electronic recording equipment

4. Criteria to assess research proposal includes"
   - the size and nature of the research sample i.e. Who and how many will be researched
   - research methods
   - purpose of research and for whom
   - the human, financial and physical resources required
   - the nature and scope of the information to be gathered
   - the timetable

6. Support and promotion includes:
   - the promotion and dissemination of information about research findings

- tenders
- sponsorship
- fee for service
- contracting

7. Evaluate research finding includes:
   - the value of its usefulness
   - the feasibility of implementing the recommendations
   - the findings of previous and current research
   - available time and resources
   - the value of the information and data
   - the quality and credibility of the methodology

- organization of meetings/forums for broader involvement and interaction with stakeholders
- recruitment of people with research skills and experience
- recruitment of resources and funding

8. Resources include:
   - budget
   - human resources:
     - specialist researchers
     - data entry staff
     - administrative support
   - previous research data written, oral and audio-visual sources
   - equipment e.g. computer, electronic recording equipment

UNDERPINNING KNOWLEDGE & SKILLS

Candidates must know and understand

1. how to collect, analyse, compare and evaluate information from a range of resources to inform research strategies

2. how to convey information, requirements and recommendations in accordance with legal, ethical and organizational requirements

3. how to confirm research requirements

4. how to use specialized vocabulary appropriate to context and target audience

5. how to statistically analyze data and identify possible trends

6. how to confirm reliability and validity of data

7. how to determine policies in relation to conducting research

8. how to establish mechanisms for collecting and maintaining data

9. how to frame a research strategy

10. how to monitor work

11. how to adhere to legal and regulatory rights and responsibilities for self and possibly for others

12. how to use analytical thinking to make informed decisions about research strategies and techniques, seeking input, advice and feedback as required

EVIDENCE GUIDE

(1)   Critical Aspects of Evidence
Evidence should include a demonstrated ability to:

      a.   construct an applied research strategy
      b.   use a range of applied research techniques
      c.   analyze and present findings

(2)   Method of Assessment
Assessors should gather a range of evidence, over a period of time, which is valid, sufficient and authentic. Evidence should be gathered through a variety of ways including direct observation and oral questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, manufacturer's specifications, codes, standards, manuals and reference materials

(3)   Context of Assessment
This unit may be assessed on the job or off the job. Where assessment is done off the job, an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by working individually or as part of a team.

PS00166:   Manage Research Activities

Unit Descriptor:

This unit deals with the skills and knowledge required to initiate and manage research activities.

ELEMENTS	PERFORMANCE CRITERIA
Candidates must be able to:	
1 Initiate research efforts	1.1 Identify and define need for further research and develop proposals in consultation with relevant stakeholders
	1.2 Develop research concepts, designs and proposals and test with relevant stakeholders according to needs, timeframes, resources and desired outcomes
	1.3 Assess feasibility of research proposals against determined criteria
2 Identify and acquire resources	2.1 Devise and implement strategies to obtain and use necessary human, financial and physical resources to achieve research outcomes
	2.2 Ensure that written and oral submissions are made to obtain resources, addressing standard requirements in accordance with organisational practice
3 Supervise research being undertaken	3.1 Implement work plan and budget, considering resource and time constraints
	3.2 Monitor regularly progress against the work plan and budget and make changes as necessary in accordance with workplace procedures
	3.3 Elicit feedback, support, advice and debriefing from research workers to ensure quality outcomes

		3.4	Ensure that stakeholders evaluate research findings and processes in accordance with workplace policies and procedures
4	Interpret and act on analysis of research	4.1	Derive recommendations from analysis of the research to address desired outcomes
		4.2	Test validity and reliability of research findings against original research plan and confirm with key stakeholders in accordance with workplace policies and procedures
		4.3	Make recommendations for actioning research results in accordance with organizational policies and procedures

RANGE STATEMENT

1. Evaluate research finding includes:
   - the value of its usefulness
   - the feasibility of implementing the recommendations
   - the findings of previous and current research
   - available time and resources
   - the value of the information and data
   - the quality and credibility of the methodology

3. Contexts for initiating and coordinating research includes:
   - policy making
   - strategic planning
   - preparation of a range of data
   - service development and delivery

2. Resources include:
   5. budget
   6. human resources:
      - specialist researchers
      - data entry staff
      - administrative support
   7. previous research data written, oral and audio-visual sources
   8. equipment e.g. computer, electronic recording equipment

4. Criteria to assess research proposal includes"
   - the size and nature of the research sample i.e. Who and how many will be researched
   - research methods
   - purpose of research and for whom
   - the human, financial and physical resources required
   - the nature and scope of the information to be gathered
   - the timetable

5. Funding proposals include:
    *   submissions
    *   expressions of interest
    *   tenders
    *   sponsorship
    *   fee for service
    *   contracting

6. Support and promotion includes:
    *   the promotion and dissemination of information about research findings
    *   organization of meetings/forums for broader involvement and interaction with stakeholders
    *   recruitment of people with research skills and experience
    *   recruitment of resources and funding

UNDERPINNING KNOWLEDGE & SKILLS

Candidates must know and understand

1. how to manage research models/practices
2. what are project management models/practices
3. what are research ethics and codes of conduct
4. what are consultation models/practices
5. what are resource management models/practices
6. how to manage resources effectively
7. what are people management models/practices
8. how to negotiate with research workers and participants
9. how to devise and implement strategies to obtain human, financial and physical resources
10. how to make written and oral submissions
11. how to implement work plan and budget
12. how to regularly monitor progress against the work plan and budget
13. how to manage budget and equipment
14. what are consultation protocols
15. how to facilitate consultations
16. how to communicate effectively
17. how to use technology
18. how to manage people in a research environment

EVIDENCE GUIDE

(1)   Critical Aspects of Evidence
Evidence should include a demonstrated ability to:

a. initiate research efforts
b. develop research concepts, designs and proposals
c. interpret and analyze research
d. identify and acquire resources
e. supervise people in a research environment

(2)   Method of Assessment
Assessors should gather a range of evidence, over a period of time, which is valid, sufficient and authentic. Evidence should be gathered through a variety of ways including direct observation and oral questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, manufacturer's specifications, codes, standards, manuals and reference materials

(3)   Context of Assessment
This unit may be assessed on the job or off the job. Where assessment is done off the job, an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by working individually or as part of a team.

PS00167:   Produce Research Reports and Make Presentation

Unit Descriptor:	This unit deals with the skills and knowledge required to produce workplace research reports and present these reports to appropriate personnel.

ELEMENTS		PERFORMANCE CRITERIA	
	Candidates must be able to:		
1	Clarify the purpose of the report	1.1	Clarify the purpose of the report with appropriate personnel in accordance with workplace procedures
		1.2	Determine the audience for the report in accordance with workplace policies and procedures
		1.3	Determine the scope of the report and establish deadline for the research and production of the report in accordance with research plan
		1.4	Ensure that the format, style and deadline for delivery of the report are agreed on with relevant personnel
2	Collect information	2.1	Identify sources of information and establish strategies for obtaining the information in accordance with organizational policies and procedures
		2.2	Ensure that information is collected from a range of sources using appropriate techniques
		2.3	Ensure that accurate records of information and sources are maintained in accordance with organizational policies and procedures
3	Analyze research findings	3.1	Ensure that data is analyzed and interpreted in accordance with research project parameters
		3.2	Check accuracy and completeness of information in accordance with established procedures
		3.3	Develop conclusions and recommendations in accordance with research findings

4	Report on research findings	4.1	Ensure that information on which the conclusions are based is organised in a clear and logical format in line within report writing conventions
		4.2	Check that draft report is prepared for discussion and review in accordance with organizational procedures
		4.3	Check that daft report is edited in light of comments and is presented to appropriate personnel in accordance with workplace procedures
5	Make presentations	5.1	Check that presentations are relevant and appropriately researched in accordance with workplace policies and procedures
		5.2	Ensure that sources of information are acknowledged in line with research conventions
		5.3	Ensure that presentations are clear and sequential and delivered within a predetermined time, using appropriate methods and equipment to enhance the presentation
		5.4	Ensure that questions from the audience are responded to in a manner consistent with organizational standards

RANGE STATEMENT

1. Format, style includes:
   - formal or informal
   - following report writing conventions
   - summary report
   - acknowledgement of sources

3. Appropriate techniques includes:
   - accessing agency's data
   - library research
   - internet searching
   - discussions with experts (internal, external) personal reflective attitudinal strategies

2. Range of sources include:
   - agency's documents and databases
   - libraries
   - internet
   - national security organizations

UNDERPINNING KNOWLEDGE & SKILLS

Candidates must know and understand

1. what are research techniques

2. what are conventions of report writing

3. what are presentation approaches and principles

4. how to conduct research

5. how to write research reports clearly and logically

6. how to communicate effectively

7. how to apply problem solving skills

8. how to collect and organise information

9. how to manage time

10. how to follow workplace policies and procedures

EVIDENCE GUIDE

(1)   Critical Aspects of Evidence
Evidence should include a demonstrated ability to:

a. clarify the purpose of the report
b. collect information
c. analyze research findings
d. report on research findings
e. make presentations

(2)   Method of Assessment
Assessors should gather a range of evidence, over a period of time, which is valid, sufficient and authentic. Evidence should be gathered through a variety of ways including direct observation and oral questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, manufacturer's specifications, codes, standards, manuals and reference materials.

(3)   **Context of Assessment**
This unit may be assessed on the job or off the job. Where assessment is done off the job, an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by working individually or as part of a team.