Government of the Republic of Trinidad and Tobago
Ministry of Education
Curriculum Planning and Development Division

Criteria for Assessment of Qualifications for Teaching at the Secondary Level in Trinidad and Tobago

Effective January 1, 2019

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OVERVIEW of ASSESSMENT of Qualifications for Teaching at the Secondary Level

The assessment of qualifications for teaching at the secondary level in Trinidad and Tobago is done using guidelines that have been established based on the minimum competencies necessary for teaching at the different levels of the secondary education sector. These guidelines are determined by the specifics of the relevant Job Description and the detailed requirements for implementation of the curriculum at the different levels of the education system. These requirements are articulated through the identification of relevant subject content matter and skills that are required for competent functioning as a teacher at an identified level.

For teaching at the secondary level, one of the immediate aims of the Ministry of Education is to have all secondary schools staffed with teachers who possess at least a Bachelor's Degree with specialization in their particular subject area. To this end, the information in this document provides an overview of the subject content and skill criteria for assessment of teachers at the highest possible assessment in the respective subject areas.

A summary of each identified criteria and the relative credit weighting is provided so that prospective applicants may select courses at any institution where the programme of study offered meets the stated requirement. Attention needs to be paid also to the level of the content specified, introductory in some cases, but more advanced or specialized studies in others. For the purpose of this document, one (1) credit is accepted as being equivalent to twelve (12) to fifteen (15) hours of contact time for the university course taken. Since programmes of study with similar titles have variability across tertiary institutions the world over, detailed course outlines may be required in order to ascertain the breadth and depth of content and skill covered by a particular programme or institution.

For each of the subjects listed below, if an applicant has completed all core areas of study and the degree has been awarded, a Teacher Three (T III) status may be awarded. In cases where at least fifty percent (50%) of the degree is completed and the core areas of study identified have been successfully credited to the applicant on an official transcript from the institution, a status of Teacher Two (T II) may be awarded. An applicant who may have successfully completed all required core areas of study, but may not yet have been awarded the Degree will also be assessed as Teacher Two (T II). Upon award of the Degree, an upgrade to Teacher Three (T III) may be obtained with a written request and an accompanying transcript.

In Trinidad and Tobago, Teacher Three (T III) status allows a teacher to teach at all levels in the secondary school system i.e. from Forms One (1) to Six (6) or equivalent, while a status of Teacher Two (T II) allows for teaching up to the Ordinary level or Form Five (5).

For the Technical Vocational areas, both an academic and technical qualification are required, together with five years post qualification industrial experience in the specific occupational field.

The table below summarizes the educational and experiential requirements for the teaching posts at the secondary level.

It is required that the criteria for assessment be reviewed at least every 5 years or earlier based on any significant change that may have been made to the secondary school curriculum. Please note that the Curriculum Planning and Development Division, through its Director is the final judge of qualifications for teaching in Trinidad and Tobago.

EDUCATIONAL AND EXPERIENTIAL REQUIREMENTS – TEACHING POSTS (SECONDARY LEVEL)

TEACHING POST	TEACHER III	TEACHER II	TVTI	TVTII	TVT III	TVTIV
QUALFICATION	Bachelor's Degree	Minimum 50 % Incomplete Bachelor's Degree	National Craftsman Certificate	National Technician's Diploma	National Craftsman Certificate	National Technician's Diploma
PRE-REQUISITE STUDY	Advanced level (7 yrs)/ CSEC Plus/Work Experience	Advanced level (7 yrs)	3 O'Levels (which may include 1 CVQ Level 1 ROS in occupational area of Craftsman Certificate), including Mathematics and English Language (5 yrs)	5 O'Levels (which may include 1 CVQ Level 1 ROS in occupational area of Technician's Diploma), including Mathematics and English Language (5 yrs)	5 O'Levels (which may include 1 CVQ Level 1 ROS in occupational area of Craftsman Certificate), including Mathematics and English Language (5 yrs)	5 O'Levels (which may include 1 CVQ Level 1 ROS in occupational area of Technician's Diploma), including Mathematics and English Language (5 yrs)
EXPERIENTIAL REQUIREMENT	NIL	NIL	5 years pre-qualification OR 2 years post-qualification experience in occupational field	5 years pre-qualification OR 2 years post-qualification experience in occupational field	5 years pre-qualification OR 2 years post-qualification experience in occupational field	5 years pre-qualification OR 2 years post-qualification experience in occupational field
PROFESSIONAL TEACHING QUALIFICATION	Post-graduate Diploma in Education	NIL	NIL	NIL	Technical Teacher's Diploma (2 yrs)	Technical Teacher's Diploma (2 yrs)
ASSESSED TO TEACH	SECONDARY FORMS 1- 6	SECONDARY FORMS 1- 5	SECONDARY FORMS 1- 5	SECONDARY FORMS 1- 5	SECONDARY FORMS 1- 5	SECONDARY FORMS 1- 5
SALARY RANGE	GRADE 4	GRADE 3	GRADE 2	GRADE 3	GRADE 3	GRADE 4

TEACHER THREE (TIII) AND TEACHER TWO (TII) ASSESSMENT CRITERIA FOR ALL SUBJECTS

ENGLISH LANGUAGE, ENGLISH LITERATURE & COMMUNICATION STUDIES

An applicant assessed as Teacher III English (Secondary) is considered qualified to teach English Language Arts at the Lower Secondary level, CSEC English A, CSEC English B at the Ordinary level and CAPE Literatures in English as well as CAPE Communications Studies at the Advanced Level.

An applicant assessed as Teacher II English (Secondary) is considered qualified to teach English Language Arts at the Lower Secondary level, CSEC English A, CSEC English B at the Ordinary level.

ENGLISH

Post: Teacher III
Qualifications: Awarded Bachelor's Degree

Core areas of study:

For Teacher III status, core areas of study **must include English Literature** and **Linguistics.**

English Literature (a minimum of **21 credits):** Applicants will survey and study English Literature and effectively engage in literary analysis in **ALL** three genres (drama, poetry, prose).

Studies must include:

- West Indian Literature (drama, poetry, prose)
- A range of literary periods (drama, poetry, prose)
- The drama of William Shakespeare

Linguistics (a minimum of **15 credits**)**:** Applicants will have an appreciation for the structure of language in general and of English language in particular. An understanding and appreciation of dialects in the Caribbean is also crucial.

Studies in the area of Linguistics will consist of at least fifteen (15) credits from among the following areas of study:

- Morphology, Syntax, Phonology and Phonetics, Semantics;
- Caribbean Dialectology;
- Sociolinguistics;
- Psycholinguistics;
- Educational Linguistics;
- Applied Linguistics;
- Language Acquisition.

A further Twelve (12) credits may be gained from additional studies in Literature, Linguistics or any of the following areas that enhance the teaching of English at the secondary school level:

- Literacy Development;
- Literary Criticism;
- Perspective and Literary Discourse;
- Reading in the Content Areas.

ENGLISH

Post: Teacher II

Qualifications: Bachelor's Degree minimum 50 % completed or not yet awarded

Core areas of study:

English Literature (15 credits): Applicants will survey and study English Literature and effectively engage in literary analysis in **ALL** three genres of prose, poetry and drama.

Studies must include:

- West Indian Literature (poetry, prose, drama)
- A range of literary periods (poetry, prose, drama)
- The drama of William Shakespeare

Linguistics (12 credits): Applicants will have an appreciation for the structure of language in general and of English language in particular. An understanding and appreciation of dialects in the Caribbean is also crucial.

Linguistics courses will consist of at least twelve (12) credits from among the following areas of study:

- Morphology, Syntax, Phonology and Phonetics, Semantics;
- Caribbean Dialectology;
- Sociolinguistics;
- Psycholinguistics;

- Educational Linguistics;
- Applied Linguistics;
- Language Acquisition.

INFORMATION TECHNOLOGY

COMPUTER SCIENCE/INFORMATION TECHNOLOGY

Post: Teacher III
Qualifications: Awarded Bachelor's Degree

Core areas of study:

Programming (minimum 6 credits):

- Algorithm development, programming constructs, coding, testing, and debugging computer programmes;
- Manipulating abstract data types, searching and sorting methods, manipulation of one-dimensional and multi-dimensional arrays, file processing, stages in the programming translation.

Information Systems (minimum 3 credits): Types of information systems, role of IT professionals, software applications, system requirements, Internet and Internet protocols, web design, e-commerce, information security, privacy and ethical issues.

Design, Implementation and Management of Database Systems (minimum 3 credits): Relational databases, data flow diagrams, entity relationships, normalization, database security and database construction and maintenance.

Computer Networking (minimum 3 credits): Network protocols, architecture, topologies, devices, configuration and security; transmission media; network security and configuration.

Operating Systems (minimum 3 credits): Process management, memory management, file management, file security, device management, user interfaces.

Mathematics/Computer Architecture (minimum 3 credits): Boolean algebra, logical reasoning, sets, functions, permutations and combinations, Data representation and computer arithmetic.

Data structures (minimum 3 credits): The creation and manipulation of abstract data types, queues, stacks, linked lists, advanced sorting methods.

Software Engineering (minimum 3 credits): Software / system development life cycles, user interface design, life cycle models, decision trees and tables, human computer interface, risk management**,** computer-aided software engineering (CASE) tools, Gantt charts, prototypes.

Additional computer - relevant courses of study (minimum 18 credits).

COMPUTER SCIENCE/INFORMATION TECHNOLOGY

Post: Teacher II

Qualifications: Bachelor's Degree minimum 50 % completed or not yet awarded

Core areas of study:

Programming (minimum 6 credits):

- Algorithm development, programming constructs, coding, testing, and debugging computer programmes;
- Manipulating abstract data types, searching and sorting methods, manipulation of one-dimensional and multi-dimensional arrays, file processing, stages in programming translation.

Information Systems (minimum 3 credits): Types of information systems, role of IT professionals, software applications, system requirements, Internet and Internet protocols, web design, e-commerce, information security, privacy and ethical issues.

Design, Implementation and Management of Database Systems (minimum 3 credits):
Relational databases, data flow diagrams, entity relationships, normalization, database security and database construction and maintenance

EITHER:

Computer Networking (minimum 3 credits): Network protocols, architecture, topologies, devices, configuration and security; transmission media; network security and configuration;

OR:

Operating Systems (minimum 3 credits): Process management, memory management, file management, file security, device management, user interfaces.

Additional computer - relevant courses of study (minimum 18 credits):

MATHEMATICS

An applicant assessed as Teacher III Mathematics (Secondary) is considered qualified to teach Mathematics at the Lower Secondary level, Mathematics, Additional Mathematics at the Ordinary level and Pure Mathematics and Applied Mathematics at the Advanced level.

An applicant assessed as Teacher II Mathematics (Secondary) is considered qualified to teach mathematics at the Lower Secondary level, Mathematics and Additional Mathematics at the Ordinary level.

MATHEMATICS

Post: Teacher III
Qualifications: Awarded Bachelor's Degree

Core areas of study:

Statistics (3 credits): Basic descriptive statistics; basic concepts and terms in inferential Statistics; discrete and continuous distributions; analysis of categorical data.

Probability (3 credits): Probability theory; discrete random variables; continuous random variables.

Analytical Geometry and Trigonometry (3 credits): Geometric operations; trigonometric functions; identities and equations; coordinate geometry.

Abstract Algebra (3 credits): Reasoning and logic; number system; algebraic operations; functions; injective, subjective, objective functions; inverse functions; modulus functions; exponential and logarithmic functions.

Linear Algebra (3 credits): Vectors; matrices; systems of linear equations.

Mathematical Analysis (3 credits): Differentiation; integration; definite integrals; complex numbers; sequences; series; approximation; binomial theorem; existence of roots of equations.

Mathematical Modeling (3 credits): Differential equations and modeling.

Advanced Calculus (3 credits): Mathematical induction; limits.

Differential Equations (3 credits): First order differential equations; second order differential equations.

Statistical Methods (3 credits): Sources of data; data collection; data analysis; sampling distributions and estimation; hypothesis testing; t-tests; chi-squared tests; correlation and simple linear regression; bivariate data; confidence intervals.

Discrete Mathematics (3 credits): Linear programming; assignment models; graph theory; critical path analysis; logic; Boolean algebra; counting.

Particle Mechanics (3 credits): Coplanar forces and equilibrium; graphs in kinematics; particle dynamics; Newton's three laws of motion; connected particles; projectiles; kinetic and potential energy; mechanical energy; conservation of mechanical energy; impulse and momentum; conservation of momentum.

MATHEMATICS

Post: Teacher II

Qualifications: Bachelor's Degree minimum 50 % completed or not yet awarded

Core areas of study:

Statistics (3 credits): Basic descriptive statistics; basic concepts and terms in inferential statistics; discrete and continuous distributions; analysis of categorical data.

Probability (3 credits): Probability theory; discrete random variables; continuous random variables.

Analytical Geometry and Trigonometry (3 credits): Geometric operations; trigonometric functions; identities and equations; coordinate geometry.

Abstract Algebra (3 credits): Reasoning and logic; number system; algebraic operations; functions; injective, subjective, objective functions; inverse functions; modulus functions; exponential and logarithmic functions.

Linear Algebra (3 credits): Vectors; matrices; systems of linear equations.

Mathematical Analysis (3 credits): Differentiation; integration; definite integrals; complex numbers; sequences; series; approximation; binomial theorem; existence of roots of equations.

Statistical Methods (3 credits): Sources of data; data collection; data analysis; sampling distributions and estimation; hypothesis testing; t-tests; chi-squared tests; correlation and simple linear regression; bivariate data; confidence intervals.

MODERN LANGUAGES

FRENCH

Post: Teacher III
Qualifications: Awarded Bachelor's Degree

Core areas of study:

French Language (18 credits): Applicants will have attained an Advanced High level of French Language Proficiency (On the ACTFL Proficiency Rating Scale or B2 on the CEFR Rating Scale) in the skills of Listening, Speaking, Reading and Writing. They will be able to understand and use language to engage in communication on current affairs and issues of regional and international significance, including those of a political, economic, social, environmental, technological and recreational nature.

French Literature (**15 credits):** Applicants will survey and study literature of the Francophone world, including that of the French Caribbean territories, and effectively engage in literary analysis in the genres of prose fiction, drama and poetry. They will have an appreciation of the literary and aesthetic qualities of significant writers and works, as well as noteworthy themes, movements and cultural perspectives.

Linguistics (**3 credits**)**:** Applicants will have an appreciation for analysis, recognition, reproduction and transcription of speech sounds as a means to understanding sound patterns within languages.

FRENCH

Post: Teacher II

Qualifications: Bachelor's Degree minimum 50 % completed or not yet awarded

French Language (18 credits): Applicants will have attained an Advanced High level of French Language Proficiency (On the ACTFL Proficiency Rating Scale or B2 on the CEFR Rating Scale) in the skills of Listening, Speaking, Reading and Writing. They will be able to understand and use language to engage in communication on current affairs and issues of regional and international significance, including those of a political, economic, social, environmental, technological and recreational nature.

SPANISH

Post: Teacher III

Qualifications: Awarded Bachelor's Degree

Core areas of study:

Spanish Language (18 credits): Applicants will have attained an Advanced High level of Spanish Language Proficiency (On the ACTFL Proficiency Rating Scale or B2 on the CEFR Rating Scale) in the skills of Listening, Speaking, Reading and Writing. They will be able to understand and use language to engage in communication on current affairs and issues of regional and international significance, including those of a political, economic, social, environmental, technological and recreational nature.

Hispanic Literature (**15 credits):** Applicants will survey and study literature of the Hispanic world, including that of the Spanish Caribbean, and effectively engage in literary analysis in the genres of prose fiction, drama and poetry. They will have an appreciation of the literary and aesthetic qualities of significant writers and works, as well as noteworthy themes, movements and cultural perspectives.

Linguistics (**3 credits**)**:** Applicants will have an appreciation for analysis, recognition, reproduction and transcription of speech sounds as a means to understanding sound patterns within languages.

SPANISH

Post: Teacher II

Qualifications: Bachelor's Degree minimum 50 % completed or not yet awarded

Core areas of study:

Spanish Language(18 credits): Applicants will have attained an Advanced High level of Spanish Language Proficiency (On the ACTFL Proficiency Rating Scale or B2 on the CEFR Rating Scale) in the skills of Listening, Speaking, Reading and Writing. They will be able to understand and use language to engage in communication on current affairs and issues of regional and international significance, including those of a political, economic, social, environmental, technological and recreational nature.

PHYSICAL EDUCATION

Post: Teacher III
Qualifications: Awarded Bachelor's Degree

Core areas of study:

History and Foundations of Physical Education and Sport (3 credits): An overview of the major foundation areas: historical, psychological, philosophical, sociological, vocational/career development. Capacity to analyse the major historical developments in Physical Education and sport from Ancient to Modern Times. Special emphasis on the influence of the Olympic Games/ Olympism and the contribution of regional and international sports movements to human development.

Care, Prevention and Treatment of athletic injuries (3 credits): In-depth knowledge of the scientific principles related to injury prevention, care and physical safety in sporting environments. Recognition and assessment of common sport related injuries; strategies used in emergency situations and basic First Aid. Appreciation of the procedures and techniques utilized in the management of injuries: soft and hard tissues; therapeutic modalities and exercise rehabilitation.

Skill Performance and Motor Learning (3 credits): Concepts, principles and theories dealing with the acquisition and performance of motor skills. Analysis of movement to identify and eliminate factors that affect motor skill acquisition, performance, retention, and transfer. Understanding of styles of instruction, types of practice and use of feedback

Functional Anatomy (3 credits): In-depth knowledge of all body systems: structures, functions and dysfunction in human movement. Understanding of structural anatomy and analysis of movement; mechanical properties of anatomical structures; responses of neuro-musculoskeletal structures to injury; disease and rehabilitation. Normal mechanisms of postural and movement control and changes occurring due to aging or pathological conditions.

Physiology (3 credits): An understanding of the effects of exercise on body systems. In-depth knowledge of the principle of integration in the human organism. Application of basic concepts that govern integrated body function; the interdependence of the energy supply systems and acute responses of the cardio-respiratory system to exercise. Environmental influences on performance (Thermoregulation); neuromuscular adaptations to resistance training; nutrition and physiological capacity in sport.

Health, Fitness and Nutrition (3 credits): In-depth understanding of the integration and application of principles of sound nutrition and physical activity to optimize the physiological, psychological and social development of the individual. Application of scientific principles and technological advances in assessing, evaluating and designing programmes to maximize individuals' health and physical fitness. Knowledge of the inter-relationship among body composition, dietary patterns, energy expenditure and specific nutritional conditions.

Psychology of Physical Education and Sport (3 credits): Scientific knowledge of human behaviour during physical activity: biological, behavioural, cognitive perspectives. Understanding of the impact of psychological variables on learning and sporting performance. Knowledge of various theoretical constructs: motivation theory, group dynamics, leadership, moral development and ethical considerations in sport.

Sociology of Sport (3 credits): An understanding of the social significance of physical activity and sport in contemporary society. Analysis of sociological issues in sport from various theoretical perspectives: functionalist, feminist, interactionist etc. Characteristics and processes of sport in the Modern World. In-depth knowledge of mainstream theoretical frameworks, group dynamics, conflict, leadership and deviance. Sport as a transformation agent (social, cultural and political).

Sport Technology (3 credits): In depth knowledge of the use of technological advances to quantify and enhance human movement and performance. Use of computer applications and techniques in the collection and analysis of data. Application of the use of technological innovations to enhance event management, sport marketing, athletic training and information communication.

Adaptive Physical Education (3 credits): Knowledge of: the history of adapted physical education; the psychological, psychomotor, social and behavioral characteristics of individuals with disabilities; and the implications for motor learning and adaption of the environment to support skill acquisition in mainstream context.

Management of Sport (3 credits): Scientific principles and concepts of management, sport law and legal and ethical issues in sport. Issues related to the administrative tasks of planning, managing, budgeting and operating various types of sports programmes. Key elements of management and leadership as they relate to sport management, sport marketing principles, their application to professional sports as well as the effects of marketing on an athletic enterprise.

Statistics in Physical Education and Sport (3 credits): Application of statistical theory (descriptive) re: athletic training and analysis of performance during physical activity and sport. Understanding of data types, tabulation, graphical techniques, probability theory and analysis of variance. Competencies in the use of computerized programmes/applications for database management and analysis of sporting performance

Biomechanics and Movement Analysis (3 credits): In-depth knowledge and understanding of biomechanical principles used in the analysis of human movement. Application and analysis of modeling methods, which combine kinetic and kinematic data to improve understanding of human movement and performance in sport. Knowledge of load estimates experienced by structures of the human body during different tasks.

Study of at least (10) practical courses from specific sporting disciplines: **Badminton; Basketball; Cricket; Educational Gymnastics; Football; Hockey; Netball, Tennis; Track and Field; Volleyball**
3 credits each (30 credits): Demonstrate and apply related skills and tactics in static and dynamic practices. Possess in depth knowledge of the historical development, law/regulations, and strategies/tactics each discipline. Apply theoretically-based coaching strategies and analysis of

performance in sports sciences principles. Show an appreciation of safety precautions/ practices and preparation techniques necessary for coaching and officiating of various athletic activities.
Study of at least (2) practical courses from specific sporting disciplines: Baseball; Dance, Martial Arts; Orienteering; Rugby; Soft Ball; Squash; Swimming; Table Tennis (6 credits -3 credits each):

Demonstrate and apply related skills and tactics in static and dynamic practices. Possess in depth knowledge of the historical development, law/regulations, and strategies/tactics each discipline. Apply theoretically-based coaching strategies and analysis of performance in sports sciences principles. Show an appreciation of safety precautions/ practices and preparation techniques necessary for coaching and officiating of various athletic activities.

PHYSICAL EDUCATION

Post: Teacher II
Qualifications: Bachelor's Degree minimum 50 % completed or not yet awarded

Core areas of study:

History and Foundations of Physical Education and Sport (3 credits): An overview of the major foundation areas: historical, psychological, philosophical, sociological, vocational/career development. Capacity to analyse the major historical developments in Physical Education and sport from Ancient to Modern Times. Special emphasis on the influence of the Olympic Games/ Olympism and the contribution of regional and international sports movements to human development.

Care, Prevention and Treatment of athletic injuries (3 credits): In-depth knowledge of the scientific principles related to injury prevention, care and physical safety in sporting environments. Recognition and assessment of common sport related injuries; strategies used in emergency situations and basic First Aid. Appreciation of the procedures and techniques utilized in the management of injuries: soft and hard tissues; therapeutic modalities and exercise rehabilitation.

Skill Performance and Motor Learning (3 credits): Concepts, principles and theories dealing with the acquisition and performance of motor skills. Analysis of movement to identify and eliminate factors that affect motor skill acquisition, performance, retention, and transfer. Understanding of styles of instruction, types of practice and use of feedback

Functional Anatomy (3 credits): In-depth knowledge of all body systems: structures, functions and dysfunction in human movement. Understanding of structural anatomy and analysis of movement; mechanical properties of anatomical structures; responses of neuro-musculoskeletal structures to injury; disease and rehabilitation. Normal mechanisms of postural and movement control and changes occurring due to aging or pathological conditions.

Physiology (3 credits): An understanding of the effects of exercise on body systems. In-depth knowledge of the principle of integration in the human organism. Application of basic concepts that

govern integrated body function; the interdependence of the energy supply systems and acute responses of the cardio-respiratory system to exercise. Environmental influences on performance (Thermoregulation); neuromuscular adaptations to resistance training; nutrition and physiological capacity in sport.

Health, Fitness and Nutrition (3 credits): In-depth understanding of the integration and application of principles of sound nutrition and physical activity to optimize the physiological, psychological and social development of the individual. Application of scientific principles and technological advances in assessing, evaluating and designing programmes to maximize individuals' health and physical fitness. Knowledge of the inter-relationship among body composition, dietary patterns, energy expenditure and specific nutritional conditions.

Sociology of Sport (3 credits): An understanding of the social significance of physical activity and sport in contemporary society. Analysis of sociological issues in sport from various theoretical perspectives: functionalist, feminist, interactionist etc. Characteristics and processes of sport in the Modern World. In-depth knowledge of mainstream theoretical frameworks, group dynamics, conflict, leadership and deviance. Sport as a transformation agent (social, cultural and political).

Sport Technology (3 credits): In depth knowledge of the use of technological advances to quantify and enhance human movement and performance. Use of computer applications and techniques in the collection and analysis of data. Application of the use of technological innovations to enhance event management, sport marketing, athletic training and information communication.

Adaptive Physical Education (3 credits): Knowledge of: the history of adapted physical education; the psychological, psychomotor, social and behavioral characteristics of individuals with disabilities; and the implications for motor learning and adaption of the environment to support skill acquisition in mainstream context.

Study of at least (10) practical courses from specific sporting disciplines: **Badminton; Basketball; Cricket; Educational Gymnastics; Football; Hockey; Netball, Tennis; Track and Field; Volleyball**
3 credits each (30 credits): Demonstrate and apply related skills and tactics in static and dynamic practices. Possess in depth knowledge of the historical development, law/regulations, and strategies/tactics each discipline. Apply theoretically-based coaching strategies and analysis of performance in sports sciences principles. Show an appreciation of safety precautions/ practices and preparation techniques necessary for coaching and officiating of various athletic activities.

Study of at least (2) practical courses from specific sporting disciplines: Baseball; Dance, Martial Arts; Orienteering; Rugby; Soft Ball; Squash; Swimming; Table Tennis (6 credits -3 credits each): Demonstrate and apply related skills and tactics in static and dynamic practices. Possess in depth knowledge of the historical development, law/regulations, and strategies/tactics each discipline. Apply theoretically-based coaching strategies and analysis of performance in sports sciences principles. Show an appreciation of safety precautions/ practices and preparation techniques necessary for coaching and officiating of various athletic activities.

SCIENCES

BIOLOGY
Post: Teacher III
Qualifications: Awarded Bachelor's Degree

The areas of study pursued in attaining the degree must include theoretical and practical knowledge, inclusive of laboratory techniques and skills acquired from performing laboratory work in the content areas in the Advanced part of the degree.

Core areas of study:

Animal Physiology (3 credits):

- Systems and processes of a range of animals involving cellular physiology & molecular physiology;
- Physiological concepts in osmoregulation, excretion, respiration, circulation, endocrinology;
- Role of physiological systems in maintaining homeostasis, including muscle physiology, thermo-physiology, cardiovascular physiology, neurophysiology;
- Effects of major stressors such as osmotic pressure, water limitation, hypoxia, altitude, depth, temperature extremes, exercise;
- Role of pH and buffer systems in circulatory fluids such as blood.

Plant Physiology (3 credits):

- Concepts in plant physiology such as water relations, ion uptake, mineral nutrition, photosynthesis, translocation, sink/ source relationships, plant growth;
- Mechanisms of tropisms in relation to light, water, temperature;
- Role of hormones and growth regulators in germination, flowering, fruit development, differentiation;
- Effects of the environment on plant growth and development.

Four Additional areas of study (12 credits) should be taken from the following:

Advanced Genetics (3 credits): Chemistry and structure of nucleotides, nucleic acids, chromosomes; genetic study of viruses, prokaryotes, eukaryotes; molecular genetics; chromosomal macro-mutations; gene expression; DNA repair mechanisms**;** methods of gene transformation; epigenetics; mutagenesis; genetic engineering in plants; cloning.

Ecology (3 credits): Characteristics and biodiversity of tropical ecosystems; nature of island environments and their biotas; species interactions e.g. competition, predation, commensalism, mutualism; ecological efficiencies; nutrient cycles and energy flow; ecological succession; population structure and demography; management strategies to provide sustainable benefits to both the ecosystems and humans; legal and institutional aspects to conservation; field and laboratory approaches to studying ecosystems.

Evolution and Biosystematics (3 credits): Nature of species; population genetics; evolutionary mechanisms; patterns of natural selection; phylogenetic analysis; evolution of a particular organism or group of organisms e.g. vascular plants; role of fossils; anatomical and physiological adaptations to diverse environments; biosystematics and nomenclature; practical focus on identifying local plants and animals.

General Microbiology (3 credits): Taxonomy and phylogeny of viruses, bacteria, fungi; molecular based methods used in identification of microorganisms; bacterial carbon and energy metabolism; genetic recombination in bacteria; reproduction in microorganisms; nutrition in microorganisms; biology of plant pathogens and their interactions with their hosts; biotechnological applications of microorganisms in processes which are beneficial to human health, the environment, agriculture.

Metabolism (3 credits): Relevant metabolic pathways for carbohydrates, amino acids, lipids; role of main hormones in metabolism; common metabolic disorders in the Caribbean; regulation mechanisms of enzymes in biological systems; plant and fungal respiratory chain; absorption spectrum in green plants, algae and bacteria; photosynthetic light reactions in plants; Calvin Cycle; C_3, C_4 and CAM metabolism; photorespiration.

Molecular Biology (3 credits): Structure of carbohydrates, lipids and protein; process of protein synthesis; relationship between structure and function of protein; methods of gene location; organization of eukaryotic genome; gene cloning and the importance of restriction endonucleases; importance of developing gene libraries; principles of Polymerase Chain Reaction (PCR) and its applications e.g. paternity testing; developing areas in Microbiology such as genomics, transcriptomics, proteomics and metabolomics.

BIOLOGY

Post: Teacher II

Qualifications: Bachelor's Degree minimum 50 % completed or not yet awarded

The areas of study pursued in attaining the degree must include theoretical and practical knowledge, inclusive of laboratory techniques and skills acquired from performing laboratory work in the content area in the Advanced part of the degree.

Core areas of study:

Animal Physiology (3 credits):

- Systems and processes of a range of animals involving cellular physiology & molecular physiology;
- Physiological concepts in osmoregulation, excretion, respiration, circulation, endocrinology;
- Role of physiological systems in maintaining homeostasis, including muscle physiology, thermo-physiology, cardiovascular physiology, neurophysiology;
- Effects of major stressors such as osmotic pressure, water limitation, hypoxia, altitude, depth, temperature extremes, exercise;
- Role of pH and buffer systems in circulatory fluids such as blood.

Plant Physiology (3 credits):

- Concepts in plant physiology such as water relations, ion uptake, mineral nutrition, photosynthesis, translocation, sink/ source relationships, plant growth;
- Mechanisms of tropisms in relation to light, water, temperature;
- Role of hormones and growth regulators in germination, flowering, fruit development, differentiation;
- Effects of the environment on plant growth and development

Two Additional areas of study (6 credits) should be taken from the following:

Advanced Genetics (3 credits): Chemistry and structure of nucleotides, nucleic acids, chromosomes; genetic study of viruses, prokaryotes, eukaryotes; molecular genetics; chromosomal macro-mutations; gene expression; DNA repair mechanisms**;** methods of gene transformation; epigenetics; mutagenesis; genetic engineering in plants; cloning.

Ecology (3 credits): Characteristics and biodiversity of tropical ecosystems; nature of island environments and their biotas; species interactions e.g. competition, predation, commensalism, mutualism; ecological efficiencies; nutrient cycles and energy flow; ecological succession;

population structure and demography; management strategies to provide sustainable benefits to both the ecosystems and humans; legal and institutional aspects to conservation; field and laboratory approaches to studying ecosystems.

Evolution and Biosystematics (3 credits): Nature of species; population genetics; evolutionary mechanisms; patterns of natural selection; phylogenetic analysis; evolution of a particular organism or group of organisms e.g. vascular plants; role of fossils; anatomical and physiological adaptations to diverse environments; biosystematics and nomenclature; practical focus on identifying local plants and animals.

General Microbiology (3 credits): Taxonomy and phylogeny of viruses, bacteria, fungi; molecular based methods used in identification of microorganisms; bacterial carbon and energy metabolism; genetic recombination in bacteria; reproduction in microorganisms; nutrition in microorganisms; biology of plant pathogens and their interactions with their hosts; biotechnological applications of microorganisms in processes which are beneficial to human health, the environment, agriculture.

Metabolism (3 credits): Relevant metabolic pathways for carbohydrates, amino acids, lipids; role of main hormones in metabolism; common metabolic disorders in the Caribbean; regulation mechanisms of enzymes in biological systems; plant and fungal respiratory chain; absorption spectrum in green plants, algae and bacteria; photosynthetic light reactions in plants; Calvin Cycle; C_3, C_4 and CAM metabolism; photorespiration.

Molecular Biology (3 credits): Structure of carbohydrates, lipids and protein; process of protein synthesis; relationship between structure and function of protein; methods of gene location; organization of eukaryotic genome; gene cloning and the importance of restriction endonucleases; importance of developing gene libraries; principles of Polymerase Chain Reaction (PCR) and its applications e.g. paternity testing; developing areas in Microbiology such as genomics, transcriptomics, proteomics and metabolomics.

CHEMISTRY

Post: Teacher III

Qualifications: Awarded Bachelor's Degree

The areas of study pursued in attaining the degree must include theoretical and practical knowledge, inclusive of laboratory techniques and skills acquired from performing laboratory work in the content area in the Advanced part of the degree.

Core areas of study:

Physical Chemistry (3 credits): Understanding of the principles of Physical Chemistry at the advanced part of the degree in the following areas: Gas laws; Ideal and non- ideal gases; Electrochemistry; Redox reactions; Fundamental theory of spectroscopic techniques; Chemical Equilibria.

Organic Chemistry (3 credits): Principles of Organic Chemistry which must be covered in the advanced part of the degree in the following areas: Synthetic methodology/design; Spectroscopy as it relates to the structure and reactions, including reaction pathways of aromatic and carboanion compounds; Stereochemistry; Reaction mechanisms of the various functional groups, including aliphatic and aromatic compounds.

Inorganic Chemistry (3 credits): Fundamental concepts in Inorganic Chemistry which must be covered in the advanced part of the degree: Descriptive transition metal Chemistry; Bonding theories; Aqueous and redox chemistry of ionic compounds; Principles of group theory; Reaction kinetics; Chemical equilibria.

Spectroscopy (3 credits):Fundamental concepts in the area of Spectroscopy which must be covered in the advanced part of the degree: Rotational Spectroscopy; Vibrational Spectroscopy; Nuclear Magnetic Spectroscopy; Resonance Spectroscopy; Mass Spectroscopy.

Kinetics (3 credits): Fundamental concepts in the area of Kinetics which must be covered in the advanced part of the degree: Reaction Rate Theory; Instrumental kinetic Methods; Reaction kinetics in solution; Enzyme catalysis; Reaction Mechanisms (1st order and 2^{nd} order reaction).

Three Additional areas of study (3 credits each) are required, two of which must be taken from the following:

Thermodynamics (3 credits): Understanding of fundamental concepts in the area of Thermodynamics to be covered in the advanced part of the degree: Statistical Thermodynamics; Boltzmann distribution; Entropy; Ideal gas law.

Further Organic Chemistry (3 credits): Principles of Organic Chemistry which must be covered in the advanced part of the degree in the following areas: Synthetic methodology/design; Spectroscopy as it relates to the structure and reactions, including reaction pathways of heterocyclic compounds, amino acids, peptides and carbohydrates; Stereochemistry; Organic reactions, such as substitution and elimination; Reaction mechanisms of the various functional groups, including reactive intermediates, carbocations, carbenes, nitrenes and radicals.

Further Inorganic Chemistry (3 credits): Fundamental concepts in Inorganic Chemistry which must be covered in the advanced part of the degree: Descriptive Chemistry of main group elements, including the hydrides, oxides and halides; Chemistry of the Lanthanides and Actinides.

CHEMISTRY

Post: Teacher II

Qualifications: Bachelor's Degree minimum 50 % completed or not yet awarded

The areas of study pursued in attaining the degree must include theoretical and practical knowledge, inclusive of laboratory techniques and skills acquired from performing laboratory work in the content areas in the Advanced part of the degree.

Core areas of study:

FOUR areas of study (3 credits each) are required from the following:

Physical Chemistry (3 credits): Understanding of the principles of Physical Chemistry at the advanced part of the degree in the following areas: Gas laws; Ideal and non- ideal gases; Electrochemistry; Redox reactions; Fundamental theory of spectroscopic techniques; Chemical Equilibria.

Organic Chemistry (3 credits): Principles of Organic Chemistry which must be covered in the advanced part of the degree in the following areas: Synthetic methodology/design; Spectroscopy as it relates to the structure and reactions, including reaction pathways of aromatic and carboanion compounds; Stereochemistry; Reaction mechanisms of the various functional groups, including aliphatic and aromatic compounds

Inorganic Chemistry (3 credits): Fundamental concepts in Inorganic Chemistry which must be covered in the advanced part of the degree: Descriptive transition metal Chemistry; Bonding theories; Aqueous and redox chemistry of ionic compounds; Principles of group theory; Reaction kinetics; Chemical equilibria.

Spectroscopy (3 credits): Fundamental concepts in the area of Spectroscopy which must be covered in the advanced part of the degree: Rotational Spectroscopy; Vibrational Spectroscopy; Nuclear Magnetic Spectroscopy; Resonance Spectroscopy; Mass Spectroscopy.

Kinetics (3 credits): Fundamental concepts in the area of Kinetics which must be covered in the advanced part of the degree: Reaction Rate Theory; Instrumental kinetic Methods; Reaction kinetics in solution; Enzyme catalysis; Reaction Mechanisms (1st order and 2^{nd} order reaction).

Thermodynamics (3 credits): Understanding of fundamental concepts in the area of Thermodynamics to be covered in the advanced part of the degree: Statistical Thermodynamics; Boltzmann distribution; Entropy; Ideal gas law.

Further Organic Chemistry (3 credits): Principles of Organic Chemistry which must be covered in the advanced part of the degree in the following areas: Synthetic methodology/design;

Spectroscopy as it relates to the structure and reactions, including reaction pathways of heterocyclic compounds, amino acids, peptides and carbohydrates; Stereochemistry; Organic reactions, such as substitution and elimination; Reaction mechanisms of the various functional groups, including reactive intermediates, carbocations, carbenes, nitrenes and radicals.

Further Inorganic Chemistry (3 credits): Fundamental concepts in Inorganic Chemistry which must be covered in the advanced part of the degree: Descriptive Chemistry of main group elements, including the hydrides, oxides and halides; Chemistry of the Lanthanides and Actinides.

PHYSICS

Post: Teacher III

Qualifications: Awarded Bachelor's Degree

The areas of study pursued in attaining the degree must include theoretical and practical knowledge, inclusive of laboratory techniques and skills acquired from performing laboratory work in the content areas in the Advanced part of the degree

Core areas of study:

Mathematical Methods in Physics (3 credits): Functions of distribution, Cartesian Coordinate Systems, Vector Analysis, Complex Variable, Fourier Series, Differential Equations.

Oscillations, Waves and Optics (3 credits): Optics: reflection and refraction at a spherical surface; Lens maker formula; Matrix methods; Oscillations and Waves: Simple, damped and forced harmonic motion; Equations of motion and their solutions.

Electromagnetic Theory and Applications (3 credits): The electric field, The electric potential, The magnetic field, Electromagnetic waves Waveguides, Antennas: types of antennas, theory and parameters.

Modern Physics (3 credits): Photo-electric effect**,** Atomic structure**,** Radioactivity**,** Quantum physics, Schrödinger equation, eigenvalues, angular momentum.

Advanced Thermodynamics (3 credits): Heat, work, first and second laws of thermodynamics – applications: heat engines, refrigerators, Entropy, Maxwell's relations, Joule-Thomson effect.

Circuit theory and Electronics (3 credits): analog electronics fundamentals: AC/DC theory, semiconductor theory, p-n junction diodes, Zener diodes, transistors, I/V characteristics, biasing, transducers, LEDs, photovoltaic cells (solar cells); Operational amplifiers: inverting and non-inverting, characteristics. logic gates: boolean algebra, binary codes; Combinational and sequential logic circuit design, registers and counters with design and applications; flip-flop types, applications of digital systems in home and industry.

Physics Research Project (3 credits): Completion of a research project in a topic or area of physics that qualifies for a Major in Physics. Projects should involve a research study that focuses on some fundamental aspects of Physics.

PHYSICS

Post: Teacher II

Qualifications: Bachelor's Degree minimum 50 % completed or not yet awarded

The areas of study pursued in attaining the degree must include theoretical and practical knowledge, inclusive of laboratory techniques and skills acquired from performing laboratory work in the content areas in the Advanced part of the degree

Core areas of study:

THREE areas of study (3 credits each) are required from the following:

Mathematical Methods in Physics (3 credits): Functions of distribution, Cartesian Coordinate Systems, Vector Analysis, Complex Variable, Fourier Series, Differential Equations.

Oscillations, Waves and Optics (3 credits): Optics: reflection and refraction at a spherical surface; Lens maker formula; Matrix methods; Oscillations and Waves: Simple, damped and forced harmonic motion; Equations of motion and their solutions.

Electromagnetic Theory and Applications (3 credits): The electric field, The electric potential, The magnetic field, Electromagnetic waves Waveguides, Antennas: types of antennas, theory and parameters.

Modern Physics (3 credits): Photo-electric effect**,** Atomic structure**,** Radioactivity**,** Quantum physics, Schrödinger equation, eigenvalues, angular momentum.

Advanced Thermodynamics (3 credits): Heat, work, first and second laws of thermodynamics – applications: heat engines, refrigerators, Entropy, Maxwell's relations, Joule-Thomson effect.

Circuit theory and Electronics (3 credits): analog electronics fundamentals: AC/DC theory, semiconductor theory, p-n junction diodes, Zener diodes, transistors, I/V characteristics, biasing, transducers, LEDs, photovoltaic cells (solar cells); Operational amplifiers: inverting and non-inverting, characteristics. logic gates: boolean algebra, binary codes; Combinational and sequential logic circuit design, registers and counters with design and applications; flip-flop types, applications of digital systems in home and industry.

GEOGRAPHY

Post: Teacher III

Qualifications: Awarded Bachelor's Degree

Core areas of study:

Physical Geography (Introductory) (3 credits): the study of processes and patterns in natural systems (lithosphere, hydrosphere, biosphere, atmosphere).

Human Geography (Introductory) (3 credits): the study of processes and patterns in man-made systems (population, urbanization, industrialization and development and agriculture).

Quantitative Research Methods (3 credits).

Development of the Caribbean Region (3 credits): Physical and Human.

Natural Events and Hazards (3 credits): Volcanism, earthquakes, flooding, landslips and tropical storms/hurricanes and drought.

Geomorphic Landforms and Processes (3 credits): Tectonic, hillslope, fluvial and marine.

Climatology (3 credits): Weather and climatic processes and patterns, climate change, present-trends such as el niño/la niña, global warming.

Biogeography and Soils processes (3 credits): Variations in the pattern and distribution of vegetation and soils. Content must include tropical vegetation and soils.

Urban Geography (3 credits): Processes and patterns in towns and cities.

Agricultural Systems and Development (3 credits): Agricultural systems and trends in development

Geography and Development (3 credits): Qualitative and quantitative changes in the quality of life of persons; present-day trends and patterns.

Industrial/Economic/Tourism (3 credits): Content must include relevant theories, case studies, impact on the physical environment.

Representation of Geographical Information (3 credits): GIS, remote sensing, Geography Research Paper.

GEOGRAPHY
Post: Teacher II
Qualifications: Bachelor's Degree minimum 50 % completed or not yet awarded

Core areas of study:

Physical Geography Introductory (3 credits): The study of processes and patterns in natural systems (lithosphere, hydrosphere, biosphere, atmosphere).

Human Geography Introductory (3 credits): The study of processes and patterns in man-made systems (population, urbanization, industrialization and development and agriculture).

Quantitative Research Methods (3 credits).

Development of the Caribbean Region (3 credits): Physical and Human.

Natural Events and Hazards (3 credits): Volcanism, earthquakes, flooding, landslips and tropical storms/hurricanes and drought.

Geomorphic Landforms and Processes (3 credits): Tectonic, hillslope, fluvial and marine.

Industrial/Economic/Tourism (3 credits): Content must include relevant theories, case studies, impact on the physical environment.

EITHER:
Urban Geography (3 credits): Processes and patterns in towns and cities.

OR:
Geography and Development (3 credits): Qualitative and quantitative changes in the quality of life of persons, present-day trends and patterns.

HISTORY

Post: Teacher III

Qualifications: Awarded Bachelor's Degree

Core areas of study:

Introduction to History (3 credits): Nature, purpose and methodology of the academic discipline.

History of the First Peoples (3 credits): History before the advent of European colonization-political organization, migration patterns, technology and trade including colonization and enslavement.

History of the Caribbean from 1492 to the 20th century (6 credits): Major developments including colonialism, anti-slavery, constitutional reform and post emancipation.

History of Africa ca. 1000-1900 (6 credits): The culture and history of Africa including the empires of Mali, Songhai and Ghana and the impact of the trans-Atlantic slave trade.

History of Trinidad and Tobago (3 credits): Political, social, economic developments to the 20th century.

History of Modern India (3 credits): India in the age of colonialism.

History of South Africa in the 20th century (3 credits): Apartheid and the anti-apartheid movement to 1994.

History of Latin America-Colonial Latin America (3 credits): Independence movements including Brazil and the Cuban revolution.

History of Modern Europe to 1945 (3 credits): Social, economic and political environment of Europe from the 18th to the 20th centuries, including French Revolution, industrial revolution in Britain, World Wars.

U.S. relations with the Caribbean 1783-1990 (3 credits): U.S. expansionism (economic, military/ security and social policies) and its effect on the Caribbean (social, economic, political), the Grenada revolution.

History of Culture and Heritage in the Caribbean (3 credits): Popular culture and its role in processes such as enslavement and resistance as well as the built heritage and its contribution to an understanding of the region's history and experiences.
A minimum of two additional university level specialized content areas of study in the History of the Caribbean (3 credits each) may be taken from:

Gender in Caribbean History (3 credits): Evolution of Caribbean societies from the experiences and perspectives of women.

Caribbean Economic History (3 credits): An understanding of economic developments in the region from ca. 1500.

History of a Caribbean territory (3 credits) (except Trinidad and Tobago): Social, political and economic development.

The Diaspora (3 credits): African, Chinese, Indian, Lebanese (ONE ONLY)-major developments shaping the various diasporic communities.

HISTORY

Post: Teacher II

Qualifications: Bachelor's Degree minimum 50 % completed or not yet awarded

Core areas of study:

Introduction to History (3 credits): Nature, purpose and methodology of the academic discipline.

History of the First Peoples (3 credits): History before the advent of European colonization-political organization, migration patterns, technology and trade including colonization and enslavement.

History of the Caribbean from 1492 to the 20th century (3 credits): Major developments, including colonialism, anti-slavery, constitutional reform and post emancipation.

History of Africa ca. 1000-1900 (3 credits): The culture and history of Africa including the empires of Mali, Songhai and Ghana and the impact of the trans-Atlantic slave trade.

History of Trinidad and Tobago (3 credits): Political, social, economic developments to the 20th century.

U.S. relations with the Caribbean 1783-1990 (3 credits): U.S. expansionism (economic, military/ security and social policies) and its effect on the Caribbean (social, economic, political), the Grenada revolution.

History of Culture and Heritage in the Caribbean (3 credits): Popular culture and its role in processes such as enslavement and resistance as well as the built heritage and its contribution to an understanding of the region's history and experiences.

RELIGIOUS EDUCATION

Post: Teacher III

Qualifications: Awarded Bachelor's Degree

Core areas of study:

Interreligious studies about world religions (9 credits): Abrahamic Religions (Judaism, Christianity and Islam), Dharmic Religions (Hinduism, Buddhism and Sikhi), African Diasporic Religions (Shango, Orisha, Voodoo, Kumina), Spiritual Baptists, First Peoples, Shinto, Bahai, Confucianism, Mythology, Witchcraft, Cults.

Interpretation Theory/ Principles (3 credits): Analysis and interpretation of sacred and related works to promote understanding of the importance of factual representation as opposed to personal interpretation. These theories/principles include Symbolic Interaction Theory, Hermeneutics, Comparative Mention Principle.

The role religion plays in personal development (3 credits): The development of virtues, values, and morals across religions, faith traditions and belief systems from a comparative perspective.

Classic and contemporary views of religion (3 credits): Views of religion, faith traditions and belief systems from psychological, educational and sociological perspectives.

Impact or influence of religion on the development of civilization (3 credits): The role played by religion, faith traditions and belief systems from an historical and cultural perspective in the development of civilization.

Contribution of religion to the visual and performing arts, architecture, literature, science (6 credits): The contribution religion has made in the development of visual and performing arts in terms of musical composition, dance and dramatic interpretations; in architectural structures such as intricately styled gargoyles, dragons, etc.; ideas of religiosity found in literary works in terms of characters, plots, settings born out of religious taboos and the like; interpretation of scientific information and data.

Contributions by social thinkers to ideas of religiosity (3 credits): Ideas and ideologies posited by social theorists in relation to religiosity and attendant cultures.

Contemporary ethical issues and religion (3 credits): Various contemporary ethical issues requiring a religious frame of reference.

Intercultural studies and conflict resolution (3 credits): Exploration of stereotypes, generalizations, communication styles, strategies and orientations from a religious perspective and in matters involving religious themes.

RELIGIOUS EDUCATION

Post: Teacher II

Qualifications: Bachelor's Degree minimum 50 % completed or not yet awarded

Core areas of study:

Interreligious studies about world religions (9 credits): Abrahamic Religions (Judaism, Christianity and Islam), Dharmic Religions (Hinduism, Buddhism and Sikhi), African Diasporic Religions (Shango, Orisha, Voodoo, Kumina), Spiritual Baptists, First Peoples, Shinto, Bahai, Confucianism, Mythology, Witchcraft, Cults.

Interpretation Theory/ Principles (3 credits): Analysis and interpretation of sacred and related works to promote understanding of the importance of factual representation as opposed to personal interpretation. These theories/principles include Symbolic Interaction Theory, Hermeneutics, Comparative Mention Principle.

The role religion plays in personal development (3 credits): The development of virtues, values, and morals across religions, faith traditions and belief systems from a comparative perspective.

Impact or influence of religion on the development of civilization (3 credits): The role played by religion, faith traditions and belief systems from an historical and cultural perspective in the development of civilization.

Intercultural studies and conflict resolution (3 credits): Exploration of stereotypes, generalizations, communication styles, strategies and orientations from a religious perspective and in matters involving religious themes.

SOCIAL STUDIES/SOCIOLOGY
Post: Teacher III
Qualifications: Awarded Bachelor's Degree

Core areas of study:

Introductory study in Sociology, Economics, Political Science, Psychology and Geography (15 credits).

Methods in Research Quantitative & Qualitative (6 credits)

- must include surveys and analysis
- at least one (1) field research component

History of the Caribbean (6 credits)**:** from earliest times to 1838; from 1838 to present

Anthropology of the Caribbean (3 credits)

History of Trinidad and Tobago (3 credits)

Classical Social Theory (3 credits)

Modern Social Theory (3 credits)

Social Change and Development (3 credits)

Social Structure of the Caribbean (3 credits)

Areas of study should include:

- sustainable development and regional integration
- development and change at the personal, national and regional level
- communication and tourism

SOCIAL STUDIES

Post: Teacher II

Qualifications: Bachelor's Degree minimum 50 % completed or not yet awarded

Core areas of study:

Introductory study in Sociology, Economics, Political Science, Psychology and Geography (15 credits).

Methods in Research Quantitative & Qualitative (6 credits)

- must include surveys and analysis
- at least one (1) field research component

History of the Caribbean (6 credits)**:** from earliest times to 1838; from 1838 to present

Anthropology of the Caribbean (3 credits)

History of Trinidad and Tobago (3 credits)

Areas of study should include:

- sustainable development and regional integration
- development and change at the personal, national and regional level
- communication and tourism

VISUAL AND PERFORMING ARTS

DANCE

Post: Teacher III
Qualifications: Awarded Bachelor's Degree

Core areas of study:

Dance and the Human Body (3 credits): The causes, preventive methods and care of injuries; the function of bones and muscles in movement, the importance of proper alignment and physical conditioning to supplement dance training; nutrition as an important component to the health of a dancer.

World Dance History (3 credits): The evolution of dance from 15th century to the present time; a historical overview of dance from India, the Caribbean and Europe and the influence on present day dance forms.

Fundamentals of Dance (3 credits): The theoretical exploration of dance, together with the concepts applied to dance training. Historical; social and cultural influences on dance forms; exploring the what, how, where and with whom or with what of creative movement.

Elements of Dance Composition (3 credits): Improvisation as a tool to explore movement; the fundamentals of dance composition; the choreographic process; the use of Laban's theory of space, time, flow and weight to formulate movement sequences; the application of the elements of technical theatre- costume, lighting, make-up, scenery, props to composition.

History of Dance in the Caribbean (3 credits): Exploration of the history and social behaviours that influenced Caribbean Dance; the investigation of the process of the changing of cultural behaviour and thinking through contact with other cultures and the merging of different philosophical and religious beliefs; examination of the works of dance pioneers and practitioners from Trinidad and Tobago, the Caribbean region based on African, East Indian and European influences.

Folk Dances of the Caribbean (3 credits): Exploration of the general history of the Caribbean through the mastery of Caribbean dance forms, knowledge of the related folk songs, chants and drum rhythms; investigation of the traditions, folklore, performance, ritual, drama/mime as they relate to a Caribbean context.

Ballet (3 credits): Knowledge of correct Ballet technique at an elementary level –alignment, classical ballet vocabulary; proficiency in execution of ballet steps and sequences; an

understanding of ballet in a broad cultural and artistic context.

Indian Dance (3 credits): Knowledge and proficiency in the execution of classical Indian styles e.g. Kathak and Orissi; execution and knowledge of Indian folk dances practiced in the Caribbean e.g. Ghadka, Jharoo.

Modern Dance (3 credits): The development, knowledge of and proficiency in technical skills with influences from Lester Horton, Martha Graham and other modern dance pioneers; movement potential, body awareness, balance, coordination, speed, alignment, flexibility etc.

Music for Dance (3 credits): The rudiments of music that will guide appropriate accompaniment for dance; exposure to varying rhythms, tempo, beats and phrasing; including examination of compositions for dance from contemporary composers e.g. John Cage, and Emile Jacques – Dalcroze.

DANCE

Post: Teacher II

Qualifications: Bachelor's Degree minimum 50 % completed or not yet awarded

Core areas of study:

Fundamentals of Dance (3 credits): The theoretical exploration of dance, together with the concepts applied to dance training. Historical; social and cultural influences on dance forms; exploring the what, how, where and with whom or with what of creative movement.

Elements of Dance Composition (3 credits): Improvisation as a tool to explore movement; the fundamentals of dance composition; the choreographic process; the use of Laban's theory of space, time, flow and weight to formulate movement sequences; the application of the elements of technical theatre- costume, lighting, make-up, scenery, props to composition.

History of Dance in the Caribbean (3 credits): Exploration of the history and social behaviours that influenced Caribbean Dance; the investigation of the process of the changing of cultural behaviour and thinking through contact with other cultures and the merging of different philosophical and religious beliefs; examination of the works of dance pioneers and practitioners from Trinidad and Tobago, the Caribbean region based on African, East Indian and European influences.

Folk Dances of the Caribbean (3 credits): Exploration of the general history of the Caribbean through the mastery of Caribbean dance forms, knowledge of the related folk songs, chants and drum rhythms; investigation of the traditions, folklore, performance, ritual, drama/mime as they relate to a Caribbean context.

Modern Dance (3 credits): The development, knowledge of and proficiency in technical skills with influences from Lester Horton, Martha Graham and other modern dance pioneers; movement potential, body awareness, balance, coordination, speed, alignment, flexibility etc.

DRAMA

An applicant assessed as Teacher III Drama is considered qualified to teach Drama to:
Lower Secondary level, as a component of Visual and Performing Arts (VAPA);
Ordinary level, as a component of CSEC Theatre Arts;
Advanced level as a component of CAPE Performing Arts.

DRAMA

Post: Teacher III
Qualifications: Awarded Bachelor's Degree

Core areas of study:

Foundations of Drama (3 credits): Introduction to Drama using Literature texts.

Production : Introductory (6 credits) - Theoretical and practical process for production including knowledge of set, lighting, props, costume, makeup, stage management, house management, marketing. Must include practical component.

Production: Advanced (6 credits): Preparation and realisation of a full-length production for public audience, in acting/ stage management/ production management or front of house management. Must include practical component.

Western Theatre History (3 credits): Study of development and history of major production genres and styles through the ages. Must include practical component.

Caribbean Theatre History (3 credits): Study of historical influences and development of major production genres and styles through the ages in the Dutch, Spanish, French and English-speaking Caribbean. Must include practical component.

Caribbean Culture and Philosophy (6 credits): Defining the Caribbean and cultural formation: philosophy, sociology and culture of the Caribbean, in relation to cultural theory and aesthetics. Arts, artists and activists in the Caribbean and diaspora - including French, Spanish, Dutch, English. Must include seminar presentations.

Caribbean Drama (3 credits): Relationship between drama/theatre and the Caribbean.

Caribbean Festival Drama (3 credits): Role and significance of drama in the Caribbean society with emphasis on the role of festivals. Must include practical component.

Performance (6 credits): Performance Styles: Self-development in acting through study of performance techniques in body and voice, relationships, imagination. Investigation into performance techniques referencing theories and genres such as Stanislavski, Brecht, Artaud, Grotowski, including Caribbean styles. Must include practical component.

Cultural Research Methods (3 credits): Techniques and methodology in conducting research on cultural issues.

Theatre in Education (3 credits): Theory and Practice of Educative Theatre - referencing theorists such as Boal, to demonstrate use of theatre as teaching and learning tool. Must include practical component.

Entrepreneurship (3 credits): Preparation for business planning and management of Caribbean artistic practices. Must include practical component.

Playwriting (3 credits): Practical process of constructing script showing dramatic structure - for radio, film and stage.

Directing (3 credits): Directing styles and practice to stage an in-house production. Must include practical component.

Contemporary Theatre (3 credits): Examination of key concepts and movements in current theatre theory and practice referencing literature and performance. Must include seminar component.

DRAMA/THEATRE ARTS

Post: Teacher II

Qualifications: Bachelor's Degree minimum 50 % completed or not yet awarded

Core areas of study:

Foundations of Drama (3 credits): Introduction to Drama using Literature texts.

Production : Introductory (6 credits) - Theoretical and practical process for production including knowledge of set, lighting, props, costume, makeup, stage management, house management, marketing. Must include practical component.

Production: Advanced (6 credits): Preparation and realisation of a full-length production for public audience, in acting/ stage management/ production management or front of house management. Must include practical component.

Theatre History (3 credits): Western Theatre History: Study of development and history of major production genres and styles through the ages. Must include practical component.

Performance (6 credits): Performance Styles. Self-development in acting through study of performance techniques in body and voice, relationships, imagination. Investigation into performance techniques referencing theories and genres such as Stanislavski, Brecht, Artaud, Grotowski, including Caribbean styles. Must include practical component.

Caribbean Festival Drama (3 credits): Role and significance of drama in the Caribbean society with emphasis on the role of festivals. Must include practical component.

Directing (3 credits): Directing styles and practice to stage an in-house production. Must include practical component.

MUSIC

Post: Teacher III

Qualifications: Awarded Bachelor's Degree

Core areas of study:

Aural /Ear Training (6 credits): Development of aural skills by listening, identifying and discriminating elements of music. Specific components include sight-reading, rhythmic and melodic phrases and songs; discriminating and dictating exercises in rhythmic and melodic patterns.

Choral/ Instrumental Arranging (3 credits): Voice-type ranges and intensities for voice and instruments, arranging techniques for choirs in various combinations 2-part, 4-part: SSA, SATB and instruments in different genres of music.

Vocal/Choral Techniques (3 credits): Preparation to conduct a choral group. The components to be covered include musical, technical and psychological elements of conducting; analyzing, compiling and performing a repertoire of choral literature; rehearsal and performance techniques.

Orchestral Techniques (3 credits): Preparation to conduct an instrumental group. The components to be covered include musical, technical and psychological elements of conducting; compiling and performing a repertoire of orchestral literature; rehearsal and performance techniques.

Principles of Music (6 credits): Thinking critically about music during its process and production. It may answer questions as to who, what, how, when and why. This should be linked to the philosophies and approaches of music such as Orff, Kodaly and Suzuki etc. in the final analysis observing, listening and implementation of music is the key.

Music Theory (6 credits): Music theory identifies the basis of music composition and arrangement as it explains the fundamentals of general music and specifically Western Music. Content includes simple and compound time; scales including pentatonic and whole tone; intervals; triads; melodic analysis and introduction to diatonic harmony.

Performance (18 credits): Music performance would allow an individual to develop from beginner to advanced. The student would be able to perform as a soloist, in an ensemble and as an accompanist. This would be attained via individual and group instruction in voice or the playing of an instrument as a MAJOR and at least one SECONDARY instrument.

History of Western Music (3 credits): Exploration of music history from the Medieval times to the 20th century eras involving musical traits that characterize the periods of music history being studied.

Music Composition (3 credits): The practice of creating a new piece of music. The area of study treats with the structure of a musical piece which combines different elements.

Jazz Theory (3 credits): Jazz Theory involves studying the music genre of Jazz with focus on its rudiments and theory. This includes chord and scale construction and principles of chord voicing an arrangement.

MUSIC

Post: Teacher II

Qualifications: Bachelor's Degree minimum 50 % completed or not yet awarded

Core areas of study:

Aural /Ear Training (6 credits): Development of aural skills by listening, identifying and discriminating elements of music. Specific components include sight-reading, rhythmic and melodic phrases and songs; discriminating and dictating exercises in rhythmic and melodic patterns.

Choral/ Instrumental Arranging (3 credits): Voice-type ranges and intensities for voice and instruments, arranging techniques for choirs in various combinations 2-part, 4-part: SSA, SATB and instruments in different genres of music.

Vocal/Choral Techniques (3 credits): Preparation to conduct a choral group. The components to be covered include musical, technical and psychological elements of conducting; analyzing, compiling and performing a repertoire of choral literature; rehearsal and performance techniques.

Orchestral Techniques (3 credits): Preparation to conduct an instrumental group. The components to be covered include musical, technical and psychological elements of conducting; compiling and performing a repertoire of orchestral literature; rehearsal and performance techniques.

Principles of Music (6 credits): Thinking critically about music during its process and production. It may answer questions as to who, what, how, when and why. This should be linked to the philosophies and approaches of music such as Orff, Kodaly and Suzuki etc. in the final analysis observing, listening and implementation of music is the key.

Music Theory (6 credits): Music theory identifies the basis of music composition and arrangement as it explains the fundamentals of general music and specifically Western Music. Content includes simple and compound time; scales including pentatonic and whole tone; intervals; triads; melodic analysis and introduction to diatonic harmony.

Performance (12 credits): Music performance would allow an individual to develop from beginner to advanced. The student would be able to perform as a soloist, in an ensemble and as an accompanist. This would be attained via individual and group instruction in voice or the playing of an instrument as a MAJOR and at least one SECONDARY instrument.

VISUAL ARTS

Post: Teacher III

Qualifications: Awarded Bachelor's Degree

Core areas of study:

Drawing (18 credits): Elements and principles of drawing; observational drawing; figure drawing.

Colour and Design (18 credits): Elements & Principles; Painting & Mixed Media; Printmaking, Textiles; Graphic Design; Photography

Three Dimensional Art and Design (18 credits): Elements & Principles of three dimensional art and design; Sculpture, Ceramics, Leather Craft, Decorative Arts

Art History and Appreciation (6 credits): Art Criticism; Origins of Art –Cave Art to present; Caribbean Art & Artists.

VISUAL ARTS

Post: Teacher II

Qualifications: Bachelor's Degree minimum 50 % completed or not yet awarded

Core areas of study:

Drawing (9 credits): Elements and principles of drawing; observational drawing; figure drawing.

Colour and Design (9 credits): Elements & Principles; Painting & Mixed Media; Printmaking, Textiles; Graphic Design; Photography

Three Dimensional Art and Design (9 credits): Elements & Principles of three dimensional art and design; Sculpture, Ceramics, Leather Craft, Decorative Arts.

Art History and Appreciation (3 credits): Art Criticism; Origins of Art –Cave Art to present; Caribbean Art & Artists.

ASSESSMENT CRITERIA FOR TECHNICAL VOCATIONAL EDUCATION AND TRAINING (TEACHER III and TEACHER II) POSTS

Subject: **AGRICULTURAL SCIENCE**
Post: Teacher III
Qualifications: Awarded Bachelor's Degree **in Tropical Agriculture**

Core areas of study:

Mathematics for Agriculture and /or Mathematics for Scientists (3 credits)

Biochemistry (3 credits)

Microbiology and/or Biotechnology (3 credits)

General Genetics and/or Plant and Animal Breeding (3 credits)

Farm Mechanization and/or Biosystems Engineering Principles (3 credits)

Statistics (3 credits)

Post-harvest, Crops and Livestock Products Technology (3 credits)

Research Project and/or Thematic Agricultural Project (3 credits)

Soil Chemistry and/or Soil Fertility & Fertilizer Technology (3 credits)

Soils & the Environment and/or Agriculture & the Environment (3 credits)

Soil Physics and/or Physical Properties of Soils, Drainage and Conservation and/or Irrigation & Drainage Technology and/or Soil & Water Management (3 credits)

Plant Anatomy & Physiology (3 credits)

Principles of Crop Science & Production (3 credits)

Tropical Crop Protection and/or Pests and Diseases of Crops (3 credits)

Major Caribbean Export Crops and/or Tropical Food Crops (3 credits)

Anatomy & Physiology of Animals (3 credits)

Animal Nutrition and/or Feeds & Feeding of Livestock (3 credits)

Animal Health & Diseases (3 credits)

Non-Ruminant Production Systems (3 credits)

Micro-economics (3 credits)

Macro-economics (3 credits)

Practical Skills in Crop & Livestock Production (3 credits)

Internship / Practicum in Crops, Livestock or Agricultural Economics (3 credits)

Caribbean Agriculture – History, Sociology & Economics (3 credits)

Agricultural Extension in the Caribbean and/or Teaching Agriculture in Secondary Schools (3 credits)

ADDITIONALLY, 4 areas of study (3 credits each) from the following:

Ruminant Production Systems (3 credits)

Agricultural Production & Marketing (3 credits)

Farm Business Management (3 credits)

Plant Propagation & Nursery Management (3 credits)

Landscaping and/or Amenity Horticulture (3 credits)

Aquaculture (3 credits)

Apiculture (3 credits)

Subject: **AGRICULTURAL SCIENCE**

Post: Teacher II
Qualifications: Bachelor's Degree in Tropical Agriculture minimum 50 % completed or not yet awarded

Core areas of study:
Mathematics for Agriculture and /or Mathematics for Scientists (3 credits)

Biochemistry (3 credits)

Microbiology and/or Biotechnology (3 credits)

General Genetics and/or Plant and Animal Breeding (3 credits)

Farm Mechanization and/or Biosystems Engineering Principles (3 credits)

Statistics (3 credits)

Post-harvest, Crops and Livestock Products Technology (3 credits)

Research Project and/or Thematic Agricultural Project (3 credits)

Soil Chemistry and/or Soil Fertility & Fertilizer Technology (3 credits)

Soils & the Environment and/or Agriculture & the Environment (3 credits)

Soil Physics and/or Physical Properties of Soils, Drainage and Conservation and/or Irrigation & Drainage Technology and/or Soil & Water Management (3 credits)

Plant Anatomy & Physiology (3 credits)

Principles of Crop Science & Production (3 credits)

Tropical Crop Protection and/or Pests and Diseases of Crops (3 credits)

Major Caribbean Export Crops and/or Tropical Food Crops (3 credits)

Anatomy & Physiology of Animals (3 credits)

Animal Nutrition and/or Feeds & Feeding of Livestock (3 credits)

Animal Health & Diseases (3 credits)

Non-Ruminant Production Systems (3 credits)

Micro-economics (3 credits)

Macro-economics (3 credits)

Practical Skills in Crop & Livestock Production (3 credits)

Internship / Practicum in Crops, Livestock or Agricultural Economics (3 credits)

Caribbean Agriculture – History, Sociology & Economics (3 credits)

Agricultural Extension in the Caribbean and/or Teaching Agriculture in Secondary Schools (3 credits)

BUSINESS STUDIES

ACCOUNTING/ PRINCIPLES OF ACCOUNTS

Post: Teacher III
Qualifications: Awarded Bachelor's Degree

Core areas of study:

Introductory Financial Accounting (3 credits)

Intermediate Financial Accounting(3 credits)

Advanced Financial Accounting (3 credits)

Introductory Cost & Management Accounting (3 credits)

Intermediate Cost & Management Accounting (3 credits)

Advanced Cost & Management Accounting (3 credits)

Introduction to Management Studies (3 credits)

Business/Company Law (3 credits)

Business Ethics (3 credits)

Theory of Accounting (3 credits)

Auditing (3 credits)

Business Environment with a Caribbean Perspective (3 credits).

OR

Qualifications: Association of Chartered Certified Accountants (ACCA) Levels 1, 2 & 3 AND award of the Applied Accounting Degree from Oxford Brookes University or equivalent.

Core areas of study:

Accountant in Business, Management Accounting, Financial Accounting, Corporate and Business Law, Performance Management, Taxation, Financial Reporting, Audit and Assurance,

Financial Management, Governance Risk and Ethics, Corporate Reporting, Business Analysis, Advanced Financial Management, Advanced Performance Management.

PRINCIPLES OF ACCOUNTS

Post: Teacher II
Qualifications: Bachelor's Degree minimum 50 % completed or not yet awarded

Core areas of study:

Introductory Financial Accounting (3 credits)

Introductory Cost & Management Accounting (3 credits)

Introduction to Management Studies (3 credits)

Business Ethics (3 credits)

Intermediate Financial Accounting (3 credits)

Intermediate Cost & Management Accounting (3 credits)

OR

Qualifications: Association of Chartered Certified Accountants (ACCA) Levels 1 & 2

Core areas of study:

Accountant in Business, Management Accounting, Financial Accounting, Corporate and Business Law, Performance Management, Taxation, Financial Reporting, Audit and Assurance, Financial Management.

MANAGEMENT OF BUSINESS

Post: Teacher III
Qualifications: Awarded Bachelor's Degree

Core areas of study:

Introductory Microeconomics (3 credits)

Introductory Macroeconomics (3 credits)

Introduction to Management Studies (3 credits)

Concepts and principles of management of human resources (3 credits)

Concepts and principles of development of human resources (3 credits)

Concepts and principles of marketing (3 credits)

Concepts and principles of international marketing management (3 credits)

Introductory Financial Accounting (3 credits)

Introductory Cost and Management Accounting (3 credits)

Concepts and principles of management of manufacturing entities (Production) and service entities (Operations) (3 credits)

Concepts and principles of managing small businesses (3 credits)

Business Environment (with a Caribbean Perspective) (3 credits)

Business/Company Law (3 credits)

PRINCIPLES OF BUSINESS

Post: Teacher II
Qualifications: Bachelor's Degree minimum 50 % completed or not yet awarded

Core areas of study:

Introductory Microeconomics/ Introduction to Management Studies (3 credits)

Introductory Macroeconomics (3 credits)

Concepts and principles of management of human resources or Business/Company Law (3 credits)

Concepts and principles of marketing (3 credits)

Introductory Financial Accounting (3 credits)

Introductory Cost & Management Accounting (3 credits)

Concepts and principles of managing small businesses (3 credits)

ECONOMICS
Post: Teacher III
Qualifications: Awarded Bachelor's Degree

Core areas of study:

Introductory microeconomics (3 credits)

Introductory macroeconomics (3 credits)

Intermediate/Advanced microeconomics (6 credits)

Intermediate/Advanced macroeconomics (6 credits)

The Caribbean economy and poverty (3 credits)

The use of monetary and fiscal policy as intervention strategies (3 credits)

The importance of international trade (3 credits)

International economics (3 credits)

The use of and interpretation of economics statistics (3 credits)

ECONOMICS

Post: Teacher II
Qualifications: Bachelor's Degree minimum 50 % completed or not yet awarded

Core areas of study:

Introductory microeconomics (3 credits)

Introductory macroeconomics (3 credits)

The Caribbean economy and poverty (3 credits)

The use of monetary and fiscal policy as intervention strategies (3 credits)

The importance of international trade (3 credits)

International economics (3 credits)

HOME ECONOMICS

HOME ECONOMICS: CLOTHING AND TEXTILES/HOME MANAGEMENT

Post: Teacher III
Qualifications: Awarded Bachelor's Degree

Post: Teacher II
Qualifications: Bachelor's Degree minimum 50 % completed or not yet awarded

Core areas of study:

Garment Construction (12 credits)

Textiles (3 credits)

Textiles Science (3 credits)

Pattern Drafting (6 credits)

Pattern Grading (3 credits)

Draping (6 credits)

Computer-aided design (3 credits)

Fashion Management (3 credits)

Institution Management (3 credits)

Nutrition (3 credits)

Art History (3 credits)

History of Clothing (3 credits)

Fashion Illustration (3 credits)

Wardrobe Planning (3 credits)

Human Physiology (3 credits)

Biochemistry (3 credits)

Social and Psychological Aspects of Clothing (3 credits)

Apparel and Textiles Merchandising (3 credits)

Three (3) additional areas of study (3 credits each) are required from the following:

Entrepreneurship & Business Development (3 credits)

Money Management (3 credits)

Housing and the Environment (3 credits)

Management of Special Events (3 credits)

FOOD AND NUTRITION/HOME MANAGEMENT

Post: Teacher III
Qualifications: Awarded Bachelor's Degree

Post: Teacher II
Qualifications: Bachelor's Degree minimum 50 % completed or not yet awarded

Core areas of study:

Practical Food Skills (6 credits)

Introductory Nutrition (3 credits)

Community Nutrition (3 credits)

Nutrition throughout the life cycle (3 credits)

Institutional/ Home Management (3 credits)

Food Service Management which includes Quantity Food Service (3 credits)

Clothing and Textiles (3 credits)

Biochemistry (3 credits)

Microbiology (3 credits)

Human Physiology (3 credits)

Foundations of Social Sciences (3 credits)

INDUSTRIAL TECHNOLOGY STUDIES

BUILDING & FURNITURE MAKING TECHNOLOGY

Post: Teacher III
Qualifications: Awarded Bachelor's Degree

Post: Teacher II
Qualifications: Bachelor's Degree minimum 50 % completed or not yet awarded

Core areas of study:

Information Technology for Engineers (3 credits)

Mechanics of Solids (3 credits)

Materials Science (3 credits)

Building Services Engineering (3 credits)

The Civil Engineer in Society (3 credits)

Workshop Technology (6 credits)

Engineering Graphics (3 credits)

Foundation Engineering (3 credits)

Civil Engineering Design (12 credits)

Environmental Geotechnics (3 credits)

Environmental Engineering (3 credits)

ELECTRONIC AND ELECTRICAL TECHNOLOGY

Post: Teacher III
Qualifications: Bachelor's Degree in Electrical Engineering or equivalent

Core areas of study:

Electrical Circuit Theory (6 credits)

Introductory Engineering Mathematics (3 credits)

Intermediate Engineering Mathematics (3 credits)

Introductory Digital Electronics (3 credits)

Microprocessor Systems (3 credits)

Introductory Analog Electronics (3 credits)

Introductory Computer Programming/Computer Systems (3 credits)

Electrical Power Systems (3 credits)

Electrical Power Machines (3 credits)

Control/Instrumentation Systems (3 credits)

Communication Systems (3 credits)

Final Project (6 credits)

ELECTRONIC AND ELECTRICAL TECHNOLOGY

Post: Teacher II
Qualifications: Bachelor's Degree minimum 50 % completed or not yet awarded

Core areas of study:

Electrical Circuit Theory (6 credits)

Introductory Engineering Mathematics (3 credits)

Introductory Digital Electronics (3 credits)

Introductory Analog Electronics (3 credits)

Intermediate Analog Electronics (3 credits) .

Introductory Computer Programming/Computer Systems (3 credits)

Electrical Power Systems (3 credits)

Electrical Power Machines (3 credits)

MECHANICAL ENGINEERING TECHNOLOGY

Post: Teacher III
Qualifications: Awarded Bachelor's Degree in Mechanical Engineering or equivalent

Post: Teacher II
Qualifications: Bachelor's Degree minimum 50 % completed or not yet awarded

Core areas of study:

Introduction to Engineering (3 credits)

Materials Technology (6 credits)

Engineering Mathematics (6 credits)

Engineering Drawing (6 credits)

Workshop Technology (6 credits)

Mechanics of Machines (3 credits)

Strengths of Materials (3 credits)

Manufacturing Technology (6 credits)

Maintenance & Safety Engineering (3 credits)

Thermodynamics (6 credits)

Mechanics of Solids (3 credits)

Fluid Mechanics (3 credits)

Engineering Mechanics Labs (6 credits)

Major project (6 credits)

MECHANICAL ENGINEERING TECHNOLOGY

Post: Teacher II
Qualifications: Bachelor's Degree minimum 50 % completed or not yet awarded

Core areas of study:

Introduction to Engineering (3 credits)

Materials Technology (6 credits)

Engineering Mathematics (6 credits)

Engineering Drawing (6 credits)

Workshop Technology (6 credits)

Engineering Mechanics Labs (6 credits)

Strength of Materials (3 credits)

TECHNICAL DRAWING/DRAFTING

Post: Teacher III
Qualifications: Awarded Bachelor's Degree with a concentration in Building and Mechanical Engineering Drawing or equivalent

Core areas of study:

2D & 3D Computer-aided design (CAD) for drafting (3 credits)

Applied Engineering Mathematics (3 credits)

Introduction to Architectural/Civil Design (3 credits)

Advanced Architectural Design (3 credits)

Structural Design (3 credits)

Engineering Drawing (3 credits)

Advanced Machine Design (3 credits)
Manufacturing Processes (3 credits).

Engineering Design (Practical) (3 credits).

Technical Project (6 credits).

TECHNICAL DRAWING/DRAFTING

Post: Teacher II
Qualifications: Bachelor's Degree with a concentration in Building and Mechanical Engineering Drawing or equivalent minimum 50 % completed or not yet awarded

Core areas of study:

2D & 3D Computer-aided design (CAD) for drafting (3 credits)

Introduction to Architectural/Civil Design (3 credits)

Engineering Drawing (3 credits)
Engineering Design (3 credits)

Technical Project (3 credits)

ASSESSMENT CRITERIA FOR TECHNICAL VOCATIONAL EDUCATION AND TRAINING (Technical Vocational Teacher I, II, III, IV) POSTS

Technical Vocational Education and Training posts range from Technical Vocational Teacher One (TVT I) to Technical Vocational Teacher Four (TVT IV). The requirements for assessment as a Technical Vocational Teacher include:

1. **Base academic qualifications**:

   - TVTI and TVTIII - Three (3) GCE 'O' Level/CXC CSEC General Proficiency Level subjects (which may include 1 CVQ Level 1 Regional Occupational Standard in a relevant occupational area) including Mathematics and English Language
   - TVTII and TVTIV - Five (5) GCE 'O' Level/CXC CSEC General Proficiency Level subjects (which may include 1 CVQ Level 1 Regional Occupational Standard in a relevant occupational area) including Mathematics and English Language;
   - Applicants for Technical Drawing posts must also possess a CSEC General Proficiency pass in Technical Drawing.
   - It should be noted that Grades I, II and III are considered passes in CXC CSEC subjects with effect from June 1998. Applicants with certification from previous to this point should possess a minimum of Grade II CXC.

2. **Evidence of work experience in the related occupational field**: either 5 years pre-qualification or 2 years post-qualification experience in the occupational field.

3. **Certifiable qualifications in the occupational area**: in the case of TVTI, a National Craftsman Certificate is required; in the case of TVTII a National Technician's Diploma is required.

4. **For upgrade from TVTI to TVTIII and TVTII to TVTIV**, a Technical Teacher Training Diploma or equivalent is required.

SPECIALIZED CRAFT AND OTHER OCCUPATIONAL AREAS

AGRICULTURAL SCIENCE

Post:	Teacher TVT II
Qualifications:	Diploma in **Tropical** Agriculture OR Associate in Applied Science Degree in **Tropical** Agriculture or equivalent

Post:	Teacher TVT IV
Qualifications:	Applicant **MUST** satisfy the requirements for TVTII and possess a Technical Teacher Training Diploma or equivalent

Core areas of study:

Agricultural Mathematics

Introduction to Agriculture (crop and animal production)

Introduction to Agricultural Engineering

Agricultural Biology

Agricultural Chemistry

Statistics & Agricultural Research Methods

Introduction to Soil Science

Soil and Water Management

Vegetables & Food Crop Production

Horticultural Crop Production

Commodity Crop Production

Non-Ruminant Production (poultry, pigs, rabbits, fish, bees)

Ruminant Production (small ruminants, cattle -dairy, beef)

Animal Nutrition

Animal Health

Farm Business Management

Agricultural Marketing

Caribbean Agricultural Issues

Agricultural Extension

Practical Activity in Soils, Crops and Livestock Management

Research Project related to areas of study

AIR CONDITIONING AND REFRIGERATION (AC&R)

Post: Teacher TVT I
Qualifications: Craftsman's Certificate in Air Conditioning and Refrigeration or equivalent

Post: Teacher TVT III
Qualifications: Applicant **MUST** satisfy the requirements for TVTI and possess a Technical Teacher Training Diploma or equivalent

Core Areas of Study:

Applied Mathematics, Applied Engineering Science, Communication, Electrical Theory, Electrical Workshop Practice, Air Conditioning &Refrigeration Theory, Air Conditioning & Refrigeration Workshop Practice and Technical Drawing (Mechanical)

AIR CONDITIONING AND REFRIGERATION

Post: Teacher TVT II
Qualifications: Technician's Diploma in Air Conditioning and Refrigeration or an Associate Degree in Air Conditioning and Refrigeration or equivalent

Post: Teacher TVT IV
Qualifications: Applicant **MUST** satisfy the requirements for TVTII and possess a Technical Teacher Training Diploma or equivalent

Core Areas of Study:

Applied Mathematics, Communication Industrial Safety, Refrigeration Systems, Air Condition Systems, Electrical Theory, Electrical Workshop, Mechanical Systems, Air Distribution, Heating Systems, Advanced Automatic Controls

AUTO MECHANICS

Post: Teacher TVT I
Qualifications: Craftsman's Certificate in Auto & Diesel or equivalent

Post: Teacher TVT III
Qualifications: Applicant **MUST** satisfy the requirements for TVTI and possess a Technical Teacher Training Diploma or equivalent

Core Areas of Study:

Relevant Applied Mathematics, Communications/Technical English, Applied Science, Auto & Diesel Theory and Practice, Technical Drawing (Mechanical)

AUTO MECHANICS

Post: Teacher TVT II
Qualifications: Technician's Diploma in Auto & Diesel
OR an Associate Degree in Auto & Diesel or equivalent

Post: Teacher TVT IV
Qualifications: Applicant **MUST** satisfy the requirements for TVTII and possess a Technical Teacher Training Diploma or equivalent

Core Areas of Study:

Relevant Applied Mathematics, Advanced Automotive Theory, Materials Technology Thermo-Dynamics, Electronic Systems, Engineering Drawing and Design, Automotive Diagnostic Techniques, Automotive Service and Repairs (Gas and Diesel), Emission Systems.

BUILDING & FURNITURE MAKING TECHNOLOGY (CONSTRUCTION CARPENTRY& JOINERY)

Post: Teacher TVT I
Qualifications: Craftsman's Certificate in Construction Carpentry & Joinery or equivalent

Post: Teacher TVT III
Qualifications: Applicant **MUST** satisfy the requirements for TVTI and possess a Technical Teacher Training Diploma or equivalent

Core Areas of Study:

Applied Mathematics, Building & Joinery Theory, Blueprint Reading (Building & Joinery), Communication/Technical English, Applied Science.

BUILDING & FURNITURE MAKING TECHNOLOGY (CONSTRUCTION CARPENTRY & JOINERY)

Post: Teacher TVT II
Qualifications: Technician's Diploma in Civil or Construction Engineering or an Associate Degree in Civil or Construction Engineering or equivalent

Post: Teacher TVT IV
Qualifications: Applicant **MUST** satisfy the requirements for TVTII and possess a Technical Teacher Training Diploma or equivalent

Core Areas of Study:

Construction Technology, Structural Mechanics, Environmental Science, Materials in Construction, The Built Environment, Building Construction, Construction Science, Relevant Applied Mathematics, Site Surveying and Leveling, Civil Engineering Construction, Technical Drawing.

BEAUTY CULTURE

Post: Teacher TVT I
Qualifications: Craftsman's Certificate in Beauty Culture or equivalent

Post: Teacher TVT III
Qualifications: Applicant **MUST** satisfy the requirements for TVTI and possess a Technical Teacher Training Diploma or equivalent

Core Areas of Study:

Manicuring; Pedicuring; Facial Theory; Facial Practice; Hairdressing; Applied Mathematics; Communication/Technical English; Relevant Applied Science

BEAUTY CULTURE

Post: Teacher TVT II
Qualifications: Technician's Diploma in Beauty Culture or equivalent

Post: Teacher TVT IV
Qualifications: Technician's Diploma in Beauty Culture or equivalent
Applicant **MUST** satisfy the requirements for TVTII and possess a Technical Teacher Training Diploma or equivalent

Core Areas of Study:

Manicuring; Pedicuring; Facial Theory; Facial Practice; Hairdressing; Applied Mathematics; Communication/Technical English; Relevant Applied Science

ELECTRICAL INSTALLATION

Post: Teacher TVT I
Qualifications: Craftsman's (Wireman's and Industrial Certificates) or equivalent

Post: Teacher TVT III
Qualifications: Applicant **MUST** satisfy the requirements for TVTI and possess a Technical Teacher Training Diploma or equivalent

Core Areas of Study:

Relevant Applied Mathematics, Relevant Applied Science, Electrical Drawing and Blue Print Reading, Electrical Theory, Workshop Practice (Electrical), Communication/Technical English

ELECTRICAL AND ELECTRONIC TECHNOLOGY

Post: Teacher TVT II
Qualifications: Technician's Diploma in Electrical/ Electronic Technology or equivalent

Post: Teacher TVT IV
Qualifications: Applicant **MUST** satisfy the requirements for TVTII and possess a Technical Teacher Training Diploma or equivalent

Core areas of study:

Electrical Circuit Theory

Introductory Engineering Mathematics

Introductory Digital Electronics

Introductory Analog Electronics

Intermediate Analog Electronics

Introductory Computer Programming/Computer Systems

Electrical Power Systems

Electrical Power Machines

ELECTRONIC DOCUMENT PREPARATION AND MANAGEMENT (EDPM) & OFFICE ADMINISTRATION (OA)

Post: Teacher TVT I
Qualifications: Craftsman's Certificate in Clerk Typist OR Certified Professional Secretary or equivalent

Post: Teacher TVT III
Qualifications: Applicant **MUST** satisfy the requirements for TVTI and possess a Technical Teacher Training Diploma or equivalent

Core Areas of Study:

Business Communication, Typewriting/Keyboarding (50 wpm), General Office Skills/Office Management, Secretarial Procedures, Advanced Word-processing, Advanced Database, Advanced Spreadsheet, Advanced Power Point Presentation, File Management/Records Management, Accounting, Sales and Marketing, Human Resource Management, Production and Operations Management and Business Law

ELECTRONIC DOCUMENT PREPARATION AND MANAGEMENT (EDPM) & OFFICE ADMINISTRATION (OA)

Post: Teacher TVT II
Qualifications: Technician's Diploma in Secretarial/Office Management OR Business Management/Executive Secretary OR Associate of Science in Administrative Professional Office Management /Office Administration

Post: Teacher TVT IV
Qualifications: Applicant **MUST** satisfy the requirements for TVTII and possess a Technical Teacher Training Diploma or equivalent

Core Areas of Study:

Business Communication, Typewriting/Keyboarding (50 wpm), General Office Skills/Office Management, Secretarial Procedures, Advanced Word-processing, Advanced Database, Advanced Spreadsheet, Advanced Power Point Presentation, File Management/Records

Management, Financial Accounting, Microeconomics, Sales and Marketing, Human Resource Management, Production and Operations Management and Business Law.

HOME ECONOMICS: GARMENT PRODUCTION

Post:	Teacher TVT I
Qualifications	Craftsman's Certificate in Dressmaking and Design at Basic, Intermediate and Advanced Levels/Advanced Certificate in Tailoring or equivalent
Post:	Teacher TVT III
Qualifications:	Applicant **MUST** satisfy the requirements for TVTI and possess a Technical Teacher Training Diploma or equivalent

Core Areas of Study:

Advanced Pattern Drafting Theory, Advanced Pattern Drafting Practice, Advanced Styles and Garment Design, Advanced Garment Construction OR Advanced Garment and Pattern Construction, Advanced Textiles Theory, Communication/Technical English

HOME ECONOMICS: CLOTHING AND TEXTILES

Post:	Teacher TVT II
Qualifications:	Technician's Diploma in Fashion, Clothing and Textiles or an Associate Degree in Clothing and Textiles or equivalent
Post:	Teacher TVT IV
Qualifications:	Applicant **MUST** satisfy the requirements for TVTII and possess a Technical Teacher Training Diploma or equivalent

Core Areas of Study:

Textile Science, Textiles, Clothing Practical, Clothing Theory, Pattern Drafting, Relevant Biology or Chemistry.

HOME ECONOMICS: FOOD AND NUTRITION

Post:	Teacher TVT II
Qualifications:	Technician Diploma in Home Economics OR Dietary Technician OR Nutrition or equivalent
Post:	Teacher TVT IV
Qualifications:	Applicant **MUST** satisfy the requirements for TVTII and possess a Technical Teacher Training Diploma or equivalent

Core Areas of Study:

Food Science, Nutrition, Food Practical, Food Theory, Institutional Management, Biology OR Chemistry

MASONRY

Post: Teacher TVT I
Qualifications: Craftsman's Certificate in Masonry or equivalent

Post: Teacher TVT III
Qualifications: Applicant **MUST** satisfy the requirements for TVTI and possess a Technical Teacher Training Diploma or equivalent

Core Areas of Study:

Applied Mathematics, Building Theory, Blue Print Reading (Building), Communication/Technical English, Applied Science, Practical Workshop Skill Building activities

MASONRY

Post: Teacher TVT II
Qualifications: Technician's Diploma in Civil Engineering or equivalent

Post: Teacher TVT IV
Qualifications: Applicant **MUST** satisfy the requirements for TVTII and possess a Technical Teacher Training Diploma or equivalent

Core Areas of Study:

Construction Technology, Environmental Science, Materials in Construction, The Built Environment, Building Construction Science, Applied Mathematics, Site Surveying and Leveling, Civil Engineering Construction, Technical Drawing, Structural Mechanics.

MECHANICAL ENGINEERING TECHNOLOGY/METALWORK ENGINEERING

Post: Teacher TVT I
Qualifications: Craftsman's Certificate in Mechanical Engineering or equivalent

Post: Teacher TVT III
Qualifications: Applicant **MUST** satisfy the requirements for TVTI and possess a Technical Teacher Training Diploma or equivalent

Core Areas of Study:

Calculations within Applied/Engineering Mathematics, Communication/Technical English, Engineering Science, Mechanical Engineering Theory, Mechanical Workshop Practice, Engineering Drawing & Design, Jigs and Fixtures

MECHANICAL ENGINEERING TECHNOLOGY/METALWORK ENGINEERING

Post: Teacher TVT II
Qualifications: Technician's Diploma in Mechanical Engineering or equivalent

Post: Teacher TVT IV
Qualifications: Applicant **MUST** satisfy the requirements for TVTII and possess a Technical Teacher Training Diploma or equivalent

Core Areas of Study:

Materials Technology, Engineering Mathematics, Workshop Technology & Workshop Practice, Introduction to Industrial Management, Plant Engineering and Services Technology, Strengths of Materials and Mechanics of Solids, Engineering Science (Applied Physics), Engineering Drawing

PLUMBING

Post: Teacher TVT I
Qualifications: Craftsman Certificate in Plumbing or equivalent

Post: Teacher TVT III
Qualifications: Applicant **MUST** satisfy the requirements for TVTI and possess a Technical Teacher Training Diploma or equivalent

Core Areas of Study:

Relevant Applied Mathematics, Plumbing Theory, Blue Print Reading (Building), Communication/Technical English, Relevant Applied Science, Practical Workshop Skill Building.

PLUMBING

Post: Teacher TVT II
Qualifications: Technician's Diploma in Plumbing or equivalent

Post: Teacher TVT IV
Qualifications: Applicant **MUST** satisfy the requirements for TVTII and possess a Technical Teacher Training Diploma or equivalent

Core Areas of Study:

Pipe Fitting Basics, Pipe Fitting Lab, Blueprint Reading and Drafting, Drainage, Waste and Vent Design, Potable Water Piping Design, Drainage, Waste and Vent, and Potable Water System Lab, Plumbing Fixture, Appliance and Appurtenance, Plumbing System Design and Fixture Installation Lab, Troubleshooting and Repair, Basic Electricity, Pump System Design, Pump System Design Lab, Final Project applying theory learnt.

PRINCIPLES OF BUSINESS/PRINCIPLES OF ACCOUNTS

Post:	Teacher TVT II
Qualifications:	Technician's Diploma in Business or equivalent

Post:	Teacher TVT IV
Qualifications:	Applicant **MUST** satisfy the requirements for TVTII and possess a Technical Teacher Training Diploma or equivalent

Core areas of study:

Introductory Microeconomics OR Introduction to Management Studies

Introductory Macroeconomics

Concepts and principles of management of human resources OR Business/Company Law

Concepts and principles of marketing

Introductory financial accounting

Introductory Cost & Management Accounting

Concepts and principles of managing small businesses

TECHNICAL DRAWING/DRAFTING

Post:	Teacher TVT II
Qualifications:	Technician's Diploma in General Drafting or equivalent

Post:	Teacher TVT IV
Qualifications:	Applicant **MUST** satisfy the requirements for TVTII and possess a Technical Teacher Training Diploma or equivalent

Core Areas of Study:

Geometrical Drawing: Plane and solid graphical geometrical concepts & constructions.

Mechanical Drawing: Mechanical drafting principles; concepts and skills in 2D and 3D applications.

Building Drawing: Foundation and advanced skills to design complex architectural representations to satisfy technical and aesthetic requirements.

Applied Mathematics: Mathematical and physics concepts applied to engineering and building applications/operations.

Computer Aided Design (CAD): Basic & Intermediate CAD skills for 2D & 3D drawing

WELDING

Post:	Teacher TVT I
Qualifications:	Craftsman's Certificate/Journeyman certificate in Welding or equivalent

Post:	Teacher TVT III
Qualifications:	Applicant **MUST** satisfy the requirements for TVTI and possess a Technical Teacher Training Diploma or equivalent

Core Areas of Study:

Applied/Engineering Mathematics, Engineering Science, Welding Theory (Arc), Welding Theory (Gas), Welding Workshop Practice (Oxy/Acetylene, Arc, MIG & TIG), Engineering Drawing & Design, Communication/Technical English