

CSEC DESCRIPTION

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- ELECTRONIC DOCUMENT PREPARATION AND MANAGEMENT (EDPM)**

The Electronic Document Preparation and Management (EDPM) syllabus is designed to equip students with knowledge and computer-related skills required to enhance the performance of clerical and administrative tasks.

The EDPM syllabus will provide a holistic approach to acquisition of knowledge and the development of candidates' decision-making and problem-solving skills. It is suited for candidates pursuing any discipline, as the competencies and skills developed in the preparation and management of electronic documents are interdisciplinary and imperative in the world of work or in the pursuit of further studies.

The syllabus is arranged in *nine* sections, subdivided into specific objectives and corresponding content.

Section I	Fundamentals of Computing
Section II	Keyboarding Mastery
Section III	Introduction to Application Software
Section IV	Use of Application Software
Section V	Business Document Preparation
Section VI	Specialised Document Preparation
Section VII	Electronic Communication
Section VIII	Document Management
Section IX	Ethics

The syllabus replaces CSEC Typewriting and uses the computer instead of the typewriter. Unlike the CSEC Information Technology Syllabus, CSEC EDPM emphasises computer applications

related to the production, filing and retrieval of documents, skills that are crucial in today's office environment.

• **ENGLISH**

- Students who do the English course will explore receptively and expressively three major literary modes, Drama, Poetry, and Prose Fiction, in order to become aware of the many functions and purposes of language. In doing so, they will discover that the four facets of language arts, namely, listening, speaking, reading and writing, are closely linked together and are interdependent.
- Syllabus objectives are organized under understanding and expression in order to guide curriculum development, to give meaning to a teaching programme and to define an assessment scheme that reinforces an English syllabus which has been conceived as an integrated approach to language teaching and which enables students to appreciate the holistic nature of language learning.
- The English Syllabus is organized for examination as English A and English B. The former emphasises the development of oral and written language skills among students through a variety of strategies. The latter provides opportunities for students to explore and respond critically to specific literary texts as they observe and appreciate the author's craft.

• **HUMAN AND SOCIAL BIOLOGY**

Human and Social Biology is concerned with the study of the structure and functioning of the human body. It also involves the application of biological principles, knowledge and skills, and technological advances, to the maintenance of health and to solve the problems of living together. The subject incorporates the view that human beings have a responsibility to their environment and, as such, have an obligation to conserve, protect, maintain and improve its quality.

The CSEC Human and Social Biology syllabus is designed to allow students to work individually and cooperatively, utilizing theoretical concepts of the course in interactive and practical activities. Students are expected to apply investigative and problem-solving skills, be effective in communicating scientific knowledge and demonstrate an appreciation for all living organisms in their environment.

The syllabus is organized under five main sections:

Section I	Living organisms and the environment
Section II	Life processes
Section III	Heredity and variation
Section IV	Disease and its impact on humans
Section V	The impact of health practices on the environment

• **INDUSTRIAL TECHNOLOGY**

The Industrial Technology syllabuses is a qualitative response by the Caribbean Examinations Council to the Technical and Vocational Education and Training (TVET) needs which are relevant to manufacturing and industrialization in the Caribbean Region. The cognitive, psychomotor and affective outcomes aimed for in the syllabuses are geared at equipping students with a solid technical foundation for lifelong learning and to enable the students to matriculate seamlessly into entry level occupations in a wide variety of careers and postsecondary institutions. Candidates who successfully complete the CSEC examinations in the Industrial Technology programmes will be awarded two sets of certificates; the CSEC Technical Proficiency and a CVQ Unit award.

The Industrial Technology syllabuses comprise one Compulsory Core and three Options, organized in sections.

THE CORE

The Core is made up of the following Sections.

Section 1	Fundamentals of Industry
Section 2	Design Principles and Processes
Section 3	Information Communications and Graphic Technologies

OPTIONS

Each option provides the foundation competencies relevant to industrial transformation and development in the Caribbean. The options are listed below.

Option A	Electrical and Electronic Technology
Option B	Mechanical Engineering Technology
Option C	Building and Furniture Technology

- **MATHEMATICS**

- The Mathematics syllabus explains general and unifying concepts that facilitate the study of Mathematics as a coherent subject rather than as a set of unrelated topics.
- The syllabus seeks to provide for the needs of specific mathematical techniques in the future careers of students, for example, in agriculture and in commercial and technical fields. By the end of the normal secondary school course, students should appreciate that the various branches of Mathematics are not rigidly segregated and that the approach to the solution of any problem is not necessarily unique.

- **The syllabus is arranged in ten sections:**

Section 1	Computation
Section 2	Number Theory
Section 3	Consumer Arithmetic
Section 4	Sets
Section 5	Measurement
Section 6	Statistics
Section 7	Algebra
Section 8	Relations, Functions and Graphs
Section 9	Geometry and Trigonometry
Section 10	Vectors and Matrices

- **INTEGRATED SCIENCE**

- The CSEC Integrated Science Syllabus is based on three themes, The Organism and Its Environment, The Home and Workplace, and Earth's Place in the Universe which adequately reflect the common areas of human activity and experience. These themes form the unifying points of the syllabus which should, therefore, be seen as a coherent unit.
- The syllabus is redesigned with a greater emphasis on the integration and application of scientific concepts and principles. Such an approach is adopted to develop those long-term transferable skills of ethical conduct, teamwork, problem-solving, critical thinking, and innovation and communication. It encourages the use of various teaching and learning strategies to inculcate these skills that will prove useful in everyday life, while at the same time catering to multiple intelligence and different learning styles and needs.

- The syllabus is arranged in three sections sub-divided into specific objectives, corresponding explanatory notes and suggested practical activities.

SECTION A	THE ORGANISM AND ITS ENVIRONMENT
SECTION B	THE HOME AND WORKPLACE
SECTION C	EARTH'S PLACE IN THE UNIVERSE

- **PHYSICS**

- Physics is a science that deals with matter and energy and their interactions. It is concerned with systems, laws, models, principles and theories that explain the physical behaviour of our world and the universe. Physics is regarded as a fundamental scientific discipline since all advances in technology can be traced either directly or indirectly to the physical laws and theories.
- The CSEC Physics Syllabus is redesigned with a greater emphasis on the application of scientific concepts and principles. Such an approach is adopted in order to develop those long-term transferrable skills of ethical conduct, teamwork, problem solving, critical thinking, innovation and communication. In addition, it encourages the use of various teaching and learning strategies to inculcate these skills while, at the same time catering to multiple intelligences and different learning styles and needs. The syllabus will assist students to develop positive values and attitudes towards the physical components of the environment and will also provide a sound foundation for those who wish to pursue further studies in science.
- The syllabus is arranged in *five* sections, namely:

SECTION A	Mechanics
SECTION B	Thermal Physics and Kinetic Theory
SECTION C	Waves and Optics
SECTION D	Electricity and Magnetism
SECTION E	The Physics of the Atom

- **PRINCIPLES OF ACCOUNTS**

- Principles of Accounts is a course of study that provides an introduction to the principles and techniques that accountants employ in measuring, processing, evaluating and communicating information about the financial performance and position of a business.
- The course in Principles of Accounts helps students to develop an understanding of a range of theoretical and practical techniques used in accounting. It helps to develop skills that should enable them to participate more effectively and responsibly in today's business environment, to improve the management of personal financial activities, such as, budgeting, savings and investment. In addition, this course prepares students for postsecondary and professional studies in accounting.
- The syllabus is arranged in 14 sections consisting of specific objectives and related content.

Section 1	Introduction to Principles of Accounts
Section 2	The Classified Balance Sheet
Section 3	Books of Original Entry
Section 4	Ledgers and the Trial Balance
Section 5	The Preparation and Analysis of Financial Statements of the Sole-trader
Section 6	End of Period Adjustments
Section 7	Control Systems
Section 8	Incomplete Records
Section 9	Accounting for Partnerships
Section 10	Accounting for Corporations (Limited Liability Companies)
Section 11	Accounting for Co-operative Societies
Section 12	Accounting for Non-Trading (Non Profit) Organizations

Section 13	Manufacturing Accounts
Section 14	Payroll Accounting

**Please free to contact us to find out which pathway is for you.
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CAPE DESCRIPTION

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- **ELECTRICAL AND ELECTRONIC ENGINEERING TECHNOLOGY**

- Electrical and Electronic Engineering Technology is a programme of study that offers knowledge and skills for work and lifelong learning in various engineering and technology fields. Electrical and electronics engineers manipulate electricity and use it to design and manufacture products that transmit power or process information. The syllabus, therefore, offers broad-based competencies in an appropriate combination of interdisciplinary processes, evidence-based delivery and assessment and employability skills in a world of school and work training environment.
- The syllabus facilitates articulation with the field of study provided by post-secondary and tertiary institutions. It is appropriate for students aspiring to careers and employment as electrical and electronics technicians, electrical and electronic engineers, repair specialists, electronics tester, design and system engineers, inspectors, utility workers and service technicians. The competencies align with the philosophical foundation for education in the region and international best practices.
- The syllabus consists of two Units, each containing three Modules.
- **UNIT 1: FUNDAMENTALS OF ELECTRICITY AND ELECTRONICS**

Module 1	Occupational Safety, Health and Environmental Practices
Module 2	Electrical and Electronic Related Studies
Module 3	Introduction to Circuit Technology and Devices

- **UNIT 2: APPLIED THEORY IN ELECTRICAL AND ELECTRONIC ENGINEERING TECHNOLOGY**

- Unit 2, comprises **TWO** Options each consisting of three Modules. Students are required to choose **ONE** of the **TWO** Options in Unit 2.

- **OPTION A: ELECTRONIC ENGINEERING TECHNOLOGY**

Module 1	Communication Engineering
Module 2	Analogue and Digital Electronics
Module 3	Control Systems

- **OPTION B: ELECTRICAL ENGINEERING TECHNOLOGY**

Module 1	Power Machines and Systems
Module 2	Introduction to Renewable Energy Systems
Module 3	Power Generation Engineering

- **GREEN ENGINEERING**

- The study of CAPE® Green Engineering will enable students to acquire the knowledge, skills, values and attitudes needed to sustain the natural environment. This course of study will enable students to apply Scientific, Technological, Engineering and Mathematical (STEM) principles to improve their environment at the local, regional and global levels.
- The study of Green Engineering will enhance quality of life for present and future generations, while providing wealth creation through new and innovative job opportunities and other economic possibilities including entrepreneurship. By pursuing this course, students will develop twenty-first century engineering skills and ethics required for sustainable development. The syllabus is designed to provide the knowledge, skills and competencies that are required for further studies, as well as for the world of work.

The syllabus is organized in two (2) Units. A Unit comprises three (3) modules each requiring fifty (50) hours. The total time for each Unit, is therefore, expected to be one hundred and fifty (150) hours.

Each Unit can independently offer students a comprehensive programme of study with appropriate balance between depth and coverage to provide a basis for further study in this field.

Please free to contact us to find out which pathway is for you.
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UNIT 1: INTRODUCTION TO GREEN ENGINEERING

Module 1 – Concepts and Issues

Module 2 – Theoretical Framework of Green Engineering

Module 3 – Green Engineering in Practice

UNIT 2: APPLICATION OF GREEN ENGINEERING PRINCIPLES

Module 1 – Utilisation of Sustainable Materials and Energy

Module 2 – Sustainable Designs

Module 3 – Green Engineering Solutions

• APPLIED MATHEMATICS

- The main emphasis of the applied course is on developing the ability of the students to start with a problem in non-mathematical form and transform it into mathematical language. This will enable them to bring mathematical insights and skills in devising a solution, and then interpreting this solution in real-world terms.
- Students accomplish this by exploring problems using symbolic, graphical, numerical, physical and verbal techniques in the context of finite or discrete real-world situations. Furthermore, students engage in mathematical thinking and modelling to examine and solve problems arising from a wide variety of disciplines including, but not limited to, economics, medicine, agriculture, marine science, law, transportation, engineering, banking, natural sciences, social sciences and computing.
- The syllabus is divided into two (2) Units. Each Unit comprises three (3) Modules.
- **Unit 1: Statistical Analysis**

Module 1	Collecting and Describing Data
Module 2	Managing Uncertainty
Module 3	Analysing and Interpreting Data

- **Unit 2: Mathematical Applications**

Module 1	Discrete Mathematics
Module 2	Probability and Distributions
Module 3	Particle Mechanics

- **BUILDING AND MECHANICAL ENGINEERING DRAWING**

- The Caribbean Advanced Proficiency Examination (CAPE) is designed to provide certification of the academic, vocational and technical achievement of students in the Caribbean who, having completed a minimum of five years of secondary education, wish to further their studies. The examinations address the skills and knowledge acquired by students under a flexible and articulated system where subjects are organised in 1-Unit or 2-Unit courses with each Unit containing three Modules. Subjects examined under CAPE may be studied concurrently or singly.
- The Caribbean Examinations Council offers three types of certification at the CAPE level. The first is the award of a certificate showing each CAPE Unit completed. The second is the CAPE Diploma, awarded to candidates who have satisfactorily completed at least six Units, including Caribbean Studies. The third is the CXC Associate Degree, awarded for the satisfactory completion of a prescribed cluster of eight CAPE Units including Caribbean Studies, Communication Studies and Integrated Mathematics. Integrated Mathematics is not a requirement for the CXC Associate Degree in Mathematics. The complete list of Associate Degrees may be found in the CXC Associate Degree Handbook.
- For the CAPE Diploma and the CXC Associate Degree, candidates must complete the cluster of required Units within a maximum period of five years. To be eligible for a CXC Associate Degree, the educational institution presenting the candidates for the award, must select the Associate Degree of choice at the time of registration at the sitting (year) the candidates are expected to qualify for the award. Candidates will not be awarded an Associate Degree for which they were not registered.

The syllabus is divided into two Units. Each Unit consists of three Modules. The Units are independent of each other. The syllabus consists of two Units of 150 hours each. Each Unit consists of three Modules of 50 hours each. Each Module is compulsory. Together they provide a comprehensive post-secondary course in the field of Building and Mechanical Engineering Drawing.

Unit 1: Building and Mechanical Engineering Drawing contains three Modules of approximately 50 hours each. Unit 1 is designed to provide the students with an all-round development experience in building and engineering drawing. Candidates are required to complete Modules 1 and 2 which are compulsory and either Module 3A or Module 3B. The total time for the syllabus is approximately 150 hours.

Module 1 – Geometry 1

Module 2 – Geometry 2

Options

Module 3A – Engineering Drawing **OR** Module 3B – Building Drawing

Unit 2: Building and Engineering Design contains three Modules of approximately 50 hours each. The total time for the syllabus is approximately 150 hours. Unit 2 offers two options: Option A, Building Drawing and Design, and Option B, Engineering Drawing and Design. Candidates are required to select either Option A or Option B. The total time for the syllabus is approximately 150 hours.

Option A: Mechanical Engineering Drawing and Design

Module 1 – Mechanics of Machines

Module 2 – Engineering Materials and Processes

Module 3 – Management and Design

Option B: Building Drawing and Design

Module 1 – Structural Drawings

Module 2 – Building Materials and Processes

Module 3 – Building Design Elements

• PURE MATHEMATICS

Mathematics is one of the oldest and most universal means of creating, communicating, connecting and applying structural and quantitative ideas. Students doing this syllabus will have already been exposed to Mathematics in some form mainly through courses that emphasise skills in using mathematics as a tool, rather than giving insight into the underlying concepts.

This syllabus will not only provide students with more advanced mathematical ideas, skills and techniques, but encourage them to understand the concepts involved, why and how they “work” and how they are interconnected. It is also to be hoped that, in this way, students will lose the fear associated with having to learn a multiplicity of seemingly unconnected facts, procedures and formulae. In addition, the course should show them that mathematical concepts lend themselves to generalisations, and that there is enormous scope for applications to solving real problems. The course is therefore intended to provide quality in selected areas rather than in a large number of topics.

The syllabus is arranged into two (2) Units, each Unit consists of three Modules.

Unit 1: Algebra, Geometry and Calculus

Module 1	Basic Algebra and Functions
Module 2	Trigonometry, Geometry and Vectors
Module 3	Calculus I

Unit 2: Complex Numbers, Analysis and Matrices

Module 1	Complex Numbers and Calculus II
Module 2	Sequences, Series and Approximations
Module 3	Counting, Matrices and Differential Equations