



**STEP INTO PROFESSIONAL EXCELLENCE: UNDERSTAND THE LICENSING PROCESS WITH THE BOARD OF ENGINEERING OF TRINIDAD AND TOBAGO**





## PRESENTATION OUTLINE

1. THE ENGINEERING PROFESSION ACT AND THE ROLE OF THE BOETT
2. FUNCTIONS OF THE BOARD OF ENGINEERING OF TRINIDAD AND TOBAGO
3. REQUIREMENTS FOR REGISTRATION WITH THE BOETT
4. THE REGISTRATION PROCESS
5. CATEGORIES OF REGISTRATION
6. WHAT DOES BOARD REGISTRATION MEANS?
7. THE BENEFITS OF BOARD CERTIFICATION

## 1. THE ENGINEERING PROFESSION ACT AND THE ROLE OF THE BOETT

The BOETT was established as a corporate body by the **Engineering Profession Act No 34 of 1985**, which is an Act respecting the registration of engineers and otherwise regulating the practice of Engineering

The Act prescribes that

No person, not being a registered engineer shall: -

- (a) use any title or description that leads to the belief that he is registered as a registered engineer;
- (b) advertise himself as a registered engineer;
- (c) act in a manner so as to create or induce the belief that he is a registered engineer; or
- (d) sign or stamp any plans, drawings, designs or specifications purporting to be acting in the capacity of such registered engineer.

## 2. FUNCTIONS OF THE BOARD OF ENGINEERING OF TRINIDAD AND TOBAGO

The functions of the Board as prescribed by the Act are:

- a) To assess the **qualifications and experience** of persons applying for registration as a **Registered Engineer**;
- b) To conduct **examinations** of persons applying for registration as a **Registered Engineer**;
- c) To register engineers and issue **Certificates of Registration**;
- d) To monitor adherence to and investigate breaches of the **Code of Ethics**
- e) To keep published for public scrutiny and notified in the **Gazette** a list of qualifications and institutions recognized by the Board in respect of engineering training required by the Act.
- f) To advise the **Minister** on such amendments to the Act as considered desirable
- g) Generally, to regulate the practice of engineering in accordance with the Act.



### 3. REQUIREMENTS FOR REGISTRATION WITH THE BOETT

- ❖ The main prerequisite is graduation from an accredited **Engineering Programme**.
- ❖ If graduated after **2009**, a further requirement is evidence of further learning equivalent to a **MSc. Degree**. Although a MSc. Degree is a sure route it is not necessarily the only route once there is equivalency in the number of Credits otherwise acquired.
- ❖ The Engineer can apply for Registration only after no less than **4 years** in engineering training/practice **after** he/she graduates. Application Forms and instructions are available on the Board's Website, [www.boett.org](http://www.boett.org)

## 4. THE REGISTRATION PROCESS

### General

The **BOETT** ensures that the qualifications of a registered engineer conform to accreditation standards that are acceptable to such **internationally recognized authorities** as: -

- ❖ The **Engineering Council of the United Kingdom (EC UK)**
- ❖ The **Accreditation Board for Engineering and Technology (ABET)**
- ❖ Similar accreditation to **Professional or Chartered Engineer** status or the equivalent and
- ❖ That they are appropriately experienced and agree to conform to a legislated **Code of Ethics**.

## Registration Committees of the Board

There are **two committees** of the Board which are responsible for assessing qualifications and competency for registration with the BOETT

These are the **Accreditation Committee** and the **Assessment Committee**.

- The **Accreditation Committee** assesses, reviews, scrutinizes, examines and investigates the academic qualifications of applicants for registration as registered engineers.
- The **Assessment Committee** reviews the engineering work done by applicants and assesses the practical engineering experience, proficiency and competency of the applicant and make recommendations to the Board with regard to the area of competency in which the applicant can be registered.

## The Registration Process

The registration process is **two-fold**.

1. First the application has to meet the requirements and approval of the **Accreditation Committee**.
2. Secondly, the application is scrutinized and assessed by the **Assessment Committee** by way of review of the **engineering experience, competency and proficiency** acquired by the applicant or in combination with an **interview/oral examination** of the applicant.



## Professional Engineer Candidate Interview

Where an applicant is to be evaluated by way of **interview/oral examination**, the Assessment Committee may pursue an additional review and assessment of the Candidate to seek to confirm his/her competency and knowledge in some of the following areas:

- ❖ Knowledge of the **Principles of Project Management** (For Project Management Category Only)
- ❖ Knowledge and application of **Engineering Technology** (As it relates to the specific engineering discipline, expertise or specialty of the candidate)
- ❖ **Professionalism** and **ethics**.
- ❖ **Health, Safety** and **Environment** considerations.
- ❖ **Communication** and **Teamwork**.
- ❖ **Finance** and **Economics** in Construction/Manufacturing/or other fields of engineering operations
- ❖ **Contracts Administration/Engineering Management**.
- ❖ The role of **Specifications, Testing** and **Inspection**

## Assessment of Competency

A Member of the Board has oversight of the **Assessment Committee** but it is comprised of a number of **Sub-Committees** of **specialists registered engineers** in various fields of engineering practice, disciplines and expertise and who are constituted to review and examine the practical engineering credentials of applicants in the various categories of registration

## Engineering Activities and Tasks for Assessment of Engineering Competency

An Applicant for Registration with the BOETT is expected to demonstrated a satisfactory level experience and competency in at least 60% of the listed areas of Competencies and in-dept competency in at least four (4) of the listed Categories.

<b>Competencies</b>	<b>Activities and Tasks</b>
<b>Project Management</b>	Planning, scheduling, and overseeing engineering projects from conception to completion and knowledge of the key Principles of Project Management
	Coordinating with clients, stakeholders, and team members to ensure project objectives are met within specified timelines and budgets.
	Utilizing project management software tools for efficient task allocation and progress tracking.
	Define Project Organization Structure, Set Clear Project Goals & Objectives, Create Communication Plan, Define Roles & Responsibilities, Create Risk Management Plan, Set Project Performance Baseline,
	Create a Change Management Plan, Focus on Value Delivery, communicate roles, expectations, and objectives to the team, monitor progress and identify roadblocks, make sure all deliverables have been met and finalize the project.
<b>Design and Analysis</b>	Conducting engineering analyses and knowledge and application of engineering principles in the engineering discipline in which Registration is requested.
	Design analyses requirements for Specialty areas (e.g. structural) will require demonstration of an in-depth level of analytical competency as determined by the Assessment Committees
	Developing detailed engineering designs using CAD software.
	Ensuring designs comply with relevant codes, standards, and regulations.
	Iteratively refining designs based on feedback, testing, and optimization.

## Competencies

## Activities and Tasks

### Research and Development

Conducting research to explore innovative engineering solutions and technologies

Participating in experimental studies, prototype development, and testing.

Collaborating with interdisciplinary teams to explore emerging technologies and their potential applications in engineering projects.

### Technical Documentation

Preparing technical reports, specifications, and documentation for engineering projects.

Creating detailed engineering drawings, schematics, and diagrams.

Documenting project progress, deviations from plans, and resolution of technical issues.

### Regulatory Compliance

Ensuring compliance with relevant local, national, and international regulations, codes, and standards.

Facilitating permit acquisition and regulatory approvals for engineering projects.

Conducting environmental impact assessments and incorporating sustainability principles into engineering designs.

### Quality Assurance and Control

Implementing quality assurance processes to ensure the integrity and reliability of engineering deliverables.

Conducting inspections, audits, and quality control checks throughout project lifecycles.

Addressing non-conformities and implementing corrective and preventive actions as necessary.

### Client Communication and Stakeholder Engagement

Interfacing with clients to understand project requirements, address concerns, and manage expectations.

Providing technical expertise and guidance to clients and stakeholders.

Facilitating effective communication between project teams, clients, and regulatory authorities.



## Competencies

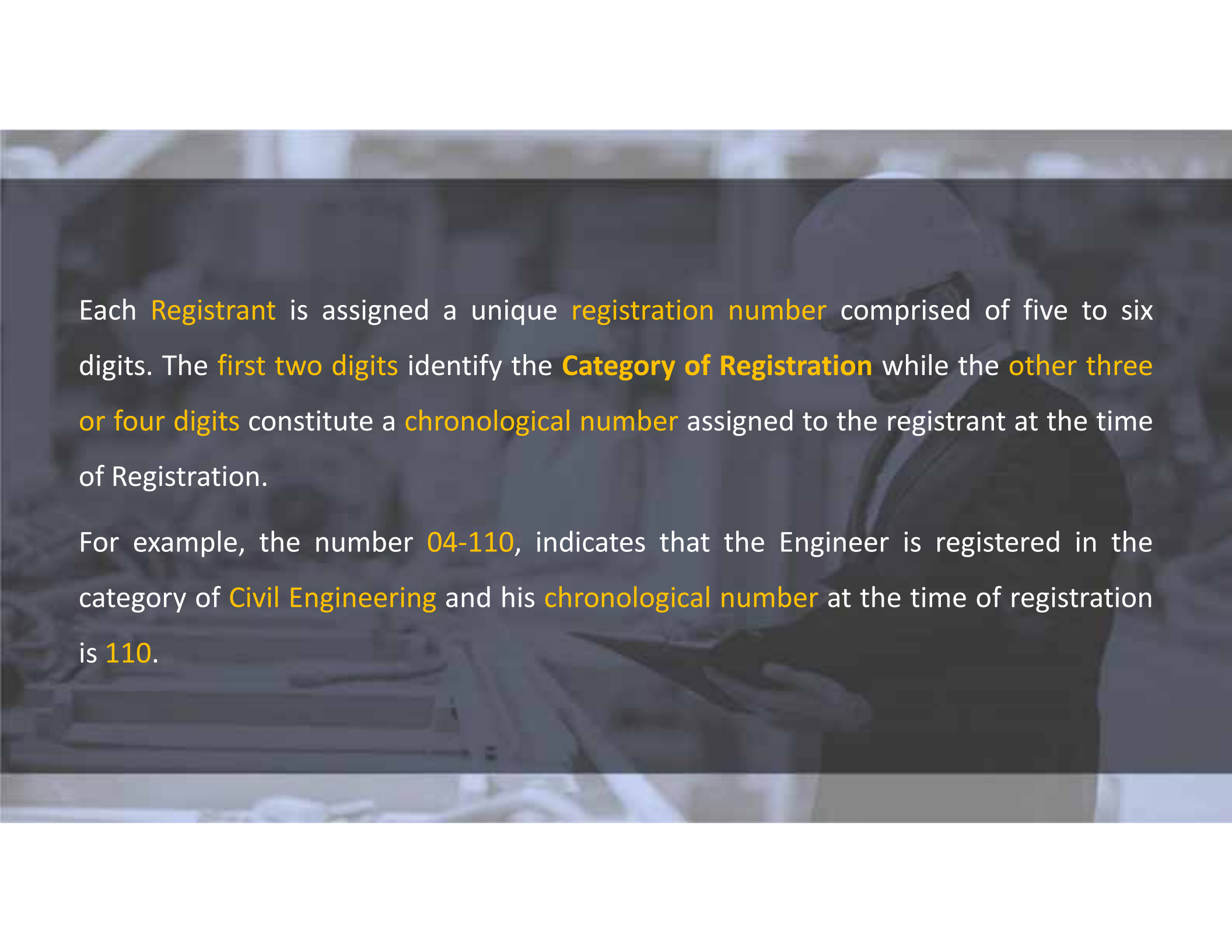
## Activities and Tasks

<b>Continuing Professional Development</b>	Participating in relevant seminars, workshops, and professional development courses to stay abreast of advances in the field.
	Pursuing additional certifications to expand professional competency.
	Engaging in mentoring or knowledge-sharing activities within the engineering community.
<b>Health and Safety</b>	Implementing safety protocols and procedures to ensure a safe working environment for personnel and the public.
	Conducting risk assessments and hazard analyses for engineering projects.
	Promoting a culture of safety awareness and adherence to safety standards among project teams.
<b>Problem-solving and Innovation</b>	Identifying and resolving technical challenges encountered during engineering projects.
	Proposing innovative solutions to optimize project performance, efficiency, and cost-effectiveness.
	Encouraging a culture of creativity and continuous improvement within engineering teams.

## 5. CATEGORIES OF REGISTRATION

There are currently **twenty-one (21) Categories of Registration** with the Board or Engineering.

ID No.	Category	ID No.	Category	ID No.	Category
01	AERONAUTICAL	08	GEOLOGICAL	15	PETROLEUM & NATURAL GAS
02	AGRICULTURAL	09	INDUSTRIAL	16	PROJECT MANAGEMENT
03	CHEMICAL	10	MARINE	17	REFRIGERATION & AIR CONDITIONING
04	CIVIL	11	MECHANICAL	18	SANITARY
05	COMMUNICATIONS	12	METALLURGICAL	19	STRUCTURAL
06	ELECTRICAL	13	MINING	20	SPECIALIST ENGINEERING
07	ELECTRONIC	14	NUCLEAR	21	ENVIRONMENTAL ENGINEERING



Each **Registrant** is assigned a unique **registration number** comprised of five to six digits. The **first two digits** identify the **Category of Registration** while the **other three or four digits** constitute a **chronological number** assigned to the registrant at the time of Registration.

For example, the number **04-110**, indicates that the Engineer is registered in the category of **Civil Engineering** and his **chronological number** at the time of registration is **110**.



## Specialist Engineering Certification

**Certification** in a specialist area of engineering requires that the individual demonstrate that he/she has worked in the **speciality discipline** and concentrated their work in that area and has attained the **expertise** within the specific body of knowledge in that area of speciality, e.g., manufacturing, lubrication, geotechnical, transportation, etc.



## 6. WHAT DOES BOARD REGISTRATION MEAN?

- ❖ **BOETT Certification** is a critical way for engineers to differentiate themselves among their peers and for employers to recognize and hire the best talent.
- ❖ **Board certification** is your next career step after earning your professional qualifications and acquiring appropriate experience in the practice of your profession.
- ❖ **Board Certification** is the only **legislated professional credential** for engineers practicing in Trinidad and Tobago.

## 6. WHAT DOES BOARD REGISTRATION MEAN?

- ❖ This **credential** is most valuable in that it represents, among other things, a **commitment** to a **legislated code of ethics** which serves to **protect the public interest**, elevate the **level of professionalism in engineering practice** and brings more value and benefits to engineering stakeholders, including the public, clients, employers, and practicing engineers themselves.
- ❖ **Board Registered credential** is represented by the designation **“R.Eng.”** This signals to clients, employers, peers, and the public, **certified competency** in the general area of engineering practice or mastery of an engineering specialty, as well as a commitment to stay current with innovations, and the highest standard of professionalism and ethics.

## Registration Certification by the Board of Engineering means the following:

- That the **Credentials** claimed by the Engineer are actually held
- That the Engineer has satisfied a **rigorous assessment** of his/her professional competency
- That the **Engineer's expertise** in a specialty area is **demonstrated** and **validated**
- That the **Engineer** has demonstrated a level of **competency** and **professional commitment**
- That **Board Certification** is a benchmark through which the Public, Employers and Clients can have **confidence** and **trust** that an Engineer has met **recognized professional standards** in his/her profession
- That the Engineer is **obliged** to conform to a **legislated Code of Ethics** in his/her conduct with the Public, Employer and Clients and is prepared to be held accountable for any unethical practice.

## What does “Board Registration” tell people about the engineer who has the credential?

- ❖ Board certification demonstrates that an individual has acquired knowledge, training, and skills in a particular area of engineering practice or specialty and that the engineer has the qualifications that he or she claims to have.
- ❖ The “R.Eng.” designation distinguishes you as a competent practitioner in your area of engineering practice and the public can therefore have a level of confidence that the right engineers are working on the right projects.



## Why should Employers want their engineers to have this credential?

- ❖ **Board certification eligibility** is typically **four years** of training in engineering practice after completion of an accredited engineering programme.
- ❖ Employers are likely to look at individuals who can provide **legislatively certified evidence of experience, skills and knowledge** in their **particular discipline** so that they are getting the right engineer working on their project.

## Why should an engineer want to have this credential behind his/her name?

- **Board certification**, in addition to showing that you are a **specialist** in a certain discipline, indicates that you are dedicated to **continuing education** and **professional development**.
- In due course, maintaining certification will require the acquisition of **10 Continuing Professional Development (CPD) Units every year** or a combined total of **30 CPD Units over successive three-year periods**. This will demonstrate the **dedication** and **commitment** required to continue to build on your knowledge in your discipline.
- **Board certification** is a step in your engineering career to distinguish yourself among your peers.
- It's a step to indicate a **level of achievement** in your career whereby you have developed an **evidential level of expertise** in a particular discipline or speciality in engineering.

## Is Board certification equally important for individual Engineers, Employers and the Public?

- ❖ **Board certification** is absolutely and equally important for the profession and for the public. As engineering becomes increasingly more complex, the requirement for **evidential competency** and **specialization** is becoming more and more evident.
- ❖ **Engineering competency** and **capability** can be translated to economic prosperity and having the right individuals with the requisite **certified training, skills and experience** working on the right projects can ensure successful execution of the project with the ensuing benefits to all stakeholders.

## Is Board certification equally important for individual Engineers, Employers and the Public?

- ❖ **Engineers** in the public and private sectors are responsible for the **planning, design, construction, inspection and project management** of buildings and infrastructure required to meet our development needs as well as the **operation** and **maintenance** of our utilities and the management and operation of the substantial plant and machinery in our manufacturing sector and the oil, gas and energy industry.
- ❖ All of this relies on engineers carrying out their duties, and having an elevated level of **certification** for the engineers responsible for these activities ensures that disasters don't happen. It is therefore vitally important and in the public interest to **elevate the level of engineering practice** in our society, and **board certification** does that.



## 7. THE BENEFITS OF BOARD CERTIFICATION

### Practicing Engineers in Trinidad and Tobago

- ❖ **BOETT Registration** help you establish yourself as among the best industry professionals and leaders.
- ❖ **Registration** confirms your **academic and professional qualifications** and provides **recognition** of engineers who have demonstrated **knowledge, experience and competency** in a specific specialty area, bringing more **value** to employers, clients, and the public.
- ❖ **Registered status** shows employers and clients that you have and are **committed** to maintaining and enhancing the **knowledge, skills and competence** required to meet the engineering and technological needs of today.
- ❖ The **prestige of your title** will improve your CV and may lead to **wider professional engagements** or **employment options, career progression and promotion**.

## Employers of Engineers and those who engage the services of Engineers

When an Employer or Client engages the services of a **Board-Certified Engineer** you can be assured of the following:

- ❖ That the **Credentials** claimed by the Engineer are actually held
- ❖ That the Engineer has satisfied a **rigorous assessment** of his/her professional competency
- ❖ That the **Engineer's expertise** in a specialty area is **demonstrated** and **validated**
- ❖ That the Engineer has demonstrated a level of **competency** and **professional commitment**
- ❖ That **Board Certification** is a benchmark through which Employers and Clients can have **confidence** and **trust** that an Engineer has met **recognized professional standards** in his/her profession

## Employers of Engineers and those who engage the services of Engineers

When an Employer or Client engages the services of a **Board-Certified Engineer** you can be assured of the following:

- ❖ That the Engineer is **obliged** to conform to a **legislated Code of Ethics** in his/her conduct with Employer and Clients and is prepared to be held **accountable** for any unethical practice.
- ❖ That the Engineer is **obliged** to protect the **public health, safety and welfare** and to demonstrate **professional competency, objectivity, confidentiality and ethicality**.

## The General Public

The **general public** ought to be aware of the following:

- ❖ **Registration** with the Board of Engineering is the only **legislatively established professional certification** for engineers practicing in Trinidad and Tobago
- ❖ If a member of the public who engages the services of an engineer is for any reason dissatisfied with any aspect of the performance of the services provided by that engineer, then there is a **recourse** for redress through the BOETT **if, and only if**, that Engineer is a **Registered Engineer** with the Board of Engineering.
- ❖ By engaging the services of a **Board-Certified Engineer**, the Public can have **confidence and trust** that such an Engineer is obliged to demonstrate professional competency, objectivity, confidentiality and ethicality in the performance of his/her services and in his/her interaction with the public.



**THANK YOU!**

*Questions???*

