

Road Pavement Forum  
November 2016

South Africa

**COTO**

Committee of Transport  
Officials

# Materials Tester to Materials Technicians: Career Path Development

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# Materials

## Tester Qualification

- **Quality Committee for Trades & Occupations (QCTO)**
- **SABITA → Development Quality Partner (DQP)**
- **NLA-SA → Assessment Quality Partner (AQP)**

# **Materials Tester Qualification**

**Occupational Certificate:  
Civil Engineering Technician  
(Civil Engineering Materials Tester)**

**NQF level 4**

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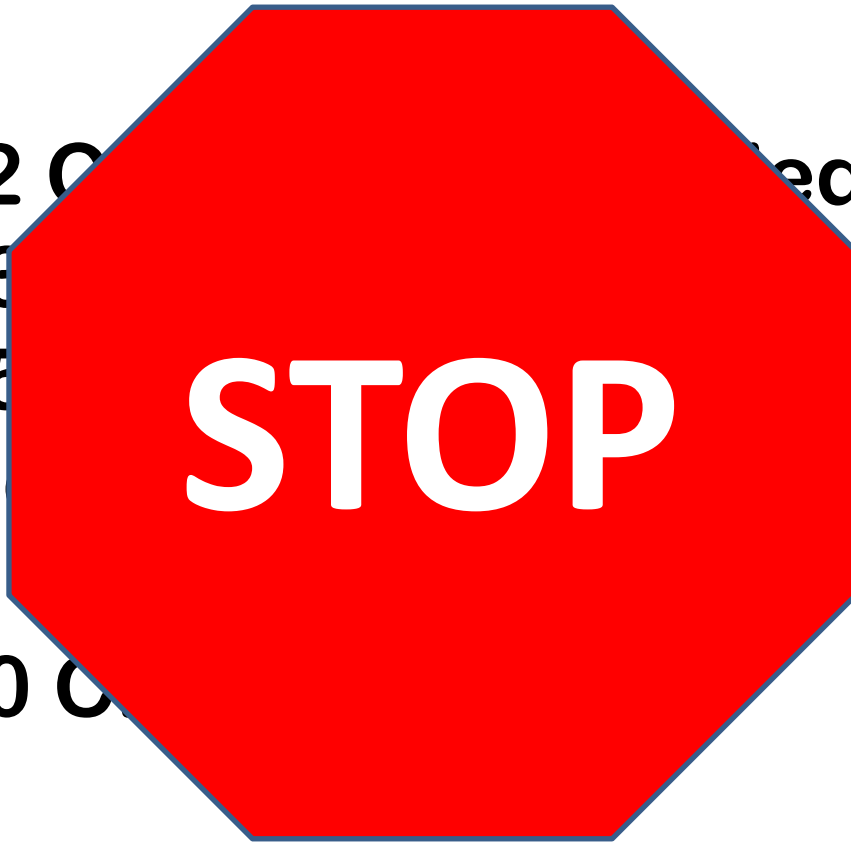
**NQF level 4**

# Qualification Details

- **72 Credits for Knowledge Modules**
- **123 Credits for Practical Modules**
- **165 Credits for Workplace Experience Modules**
  
- **360 Credits in Total**

# Qualification Details

- 720 Core Knowledge Modules
- 123 Core Skill Modules
- 165 Core Experience Modules
- 360 Core Competencies



# Qualification Details

- **72 Credits for 13 Knowledge Modules**
- **95 Credits for 20 Practical Modules**
- **175 Credits for 9 Workplace Experience Modules**
  
- **342 Credits in Total**

# 5 Part Qualifications

- **Aggregates Tester**
- **Soils, Gravel And Crushed Stone Base Materials Tester**
- **Bituminous Binders Tester**
- **Asphalt Tester**
- **Concrete Tester**



# Evaluation

- **Formative Assessment**
  - **Knowledge Modules**
  - **Practical Modules**
  - **Work Experience Modules**

# Evaluation

- **Formative Assessment**
  - **Knowledge Modules**
  - **Practical Modules**
  - **Work Experience Modules**
- **Summative Assessment**

# Evaluation

- **Registration of Assessors**
  - **Qualified Civil Materials Tester**
  - **Min 5 years as Tech Signatory, or**
  - **Tech Assessor with SANAS, or**
  - **ECSA Pr registration with 5 years lab experience**

# AQP progress

- **Framework:**
  - **Who,**
  - **Where,**
  - **When**
  - **Cost for evaluation**

# AQP progress

- **Timeframes:**
  - **June 2015 – Submit to QCTO,**
  - **December 2015 – Start accrediting trainers,**
  - **June 2016 – Start RPL of candidates**
  - **December 2016 – Start full evaluations**
  - **December 2017 – Full implementation**

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**New Engineering  
Qualifications and the where  
are we going to get *Materials  
Technicians* in the future?**

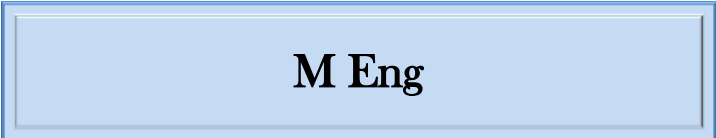


# New Engineering Qualifications

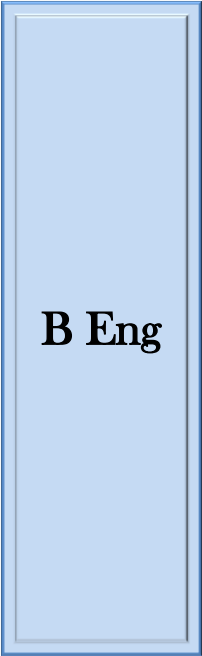
NQF Level 10



NQF Level 9



NQF Level 8



NQF Level 7



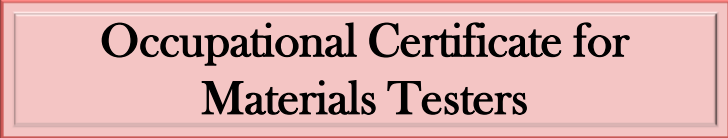
NQF Level 6



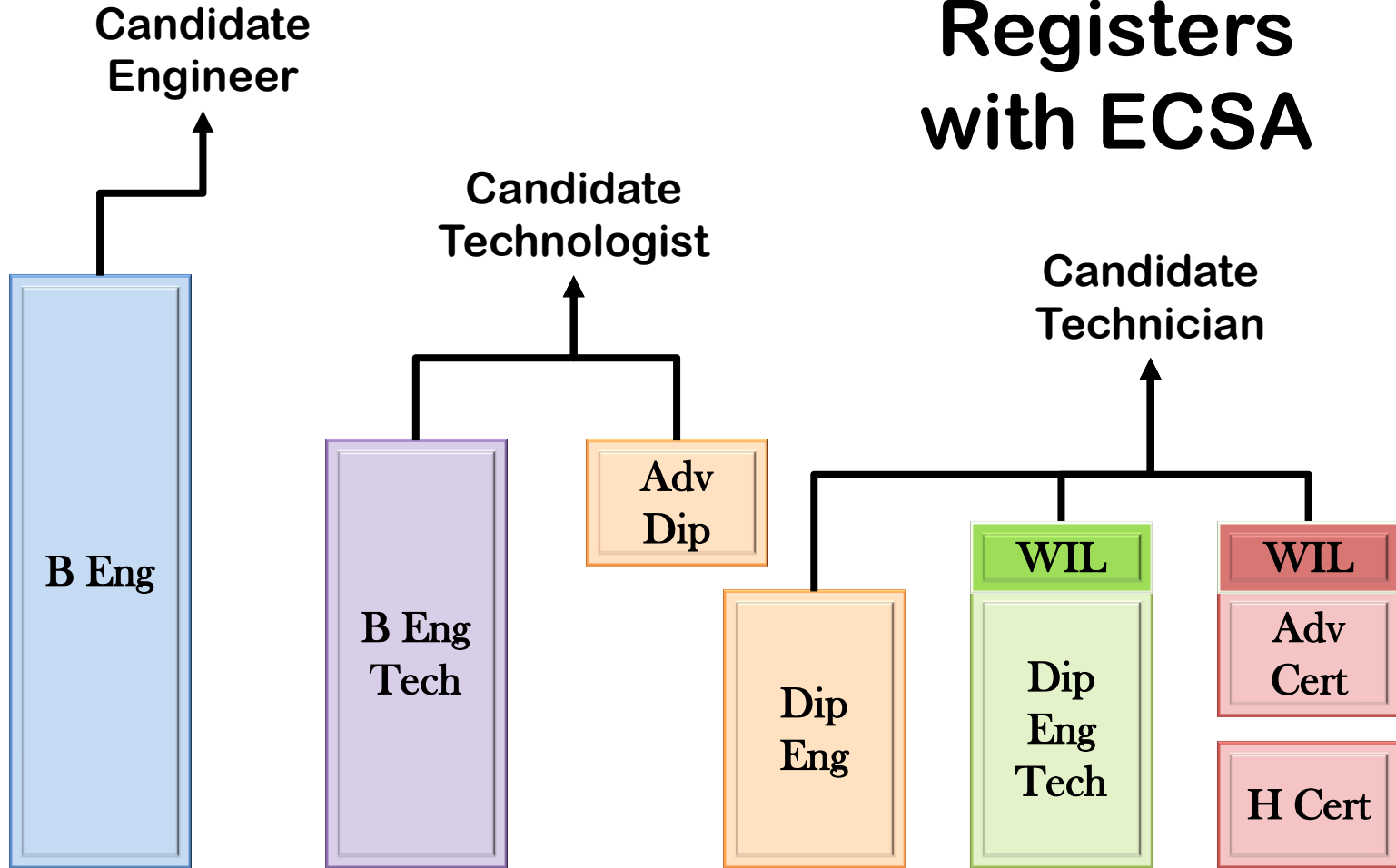
NQF Level 5



NQF Level 4



# Who Registers with ECSA



~~NQF Level 10~~

~~PhD~~

~~NQF Level 9~~

~~M Eng~~

~~NQF Level 8~~

~~B Eng~~

~~B Eng Tech Hons~~

~~NQF Level 7~~

~~B Eng Tech~~

~~Adv Dip~~

NQF Level 6

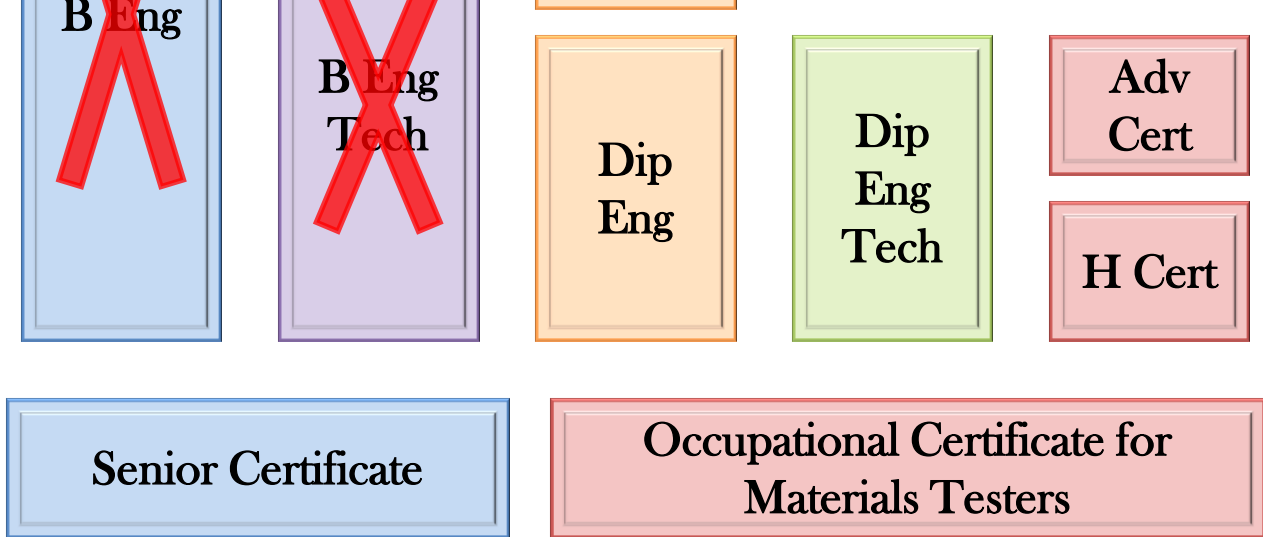
NQF Level 5

NQF Level 4

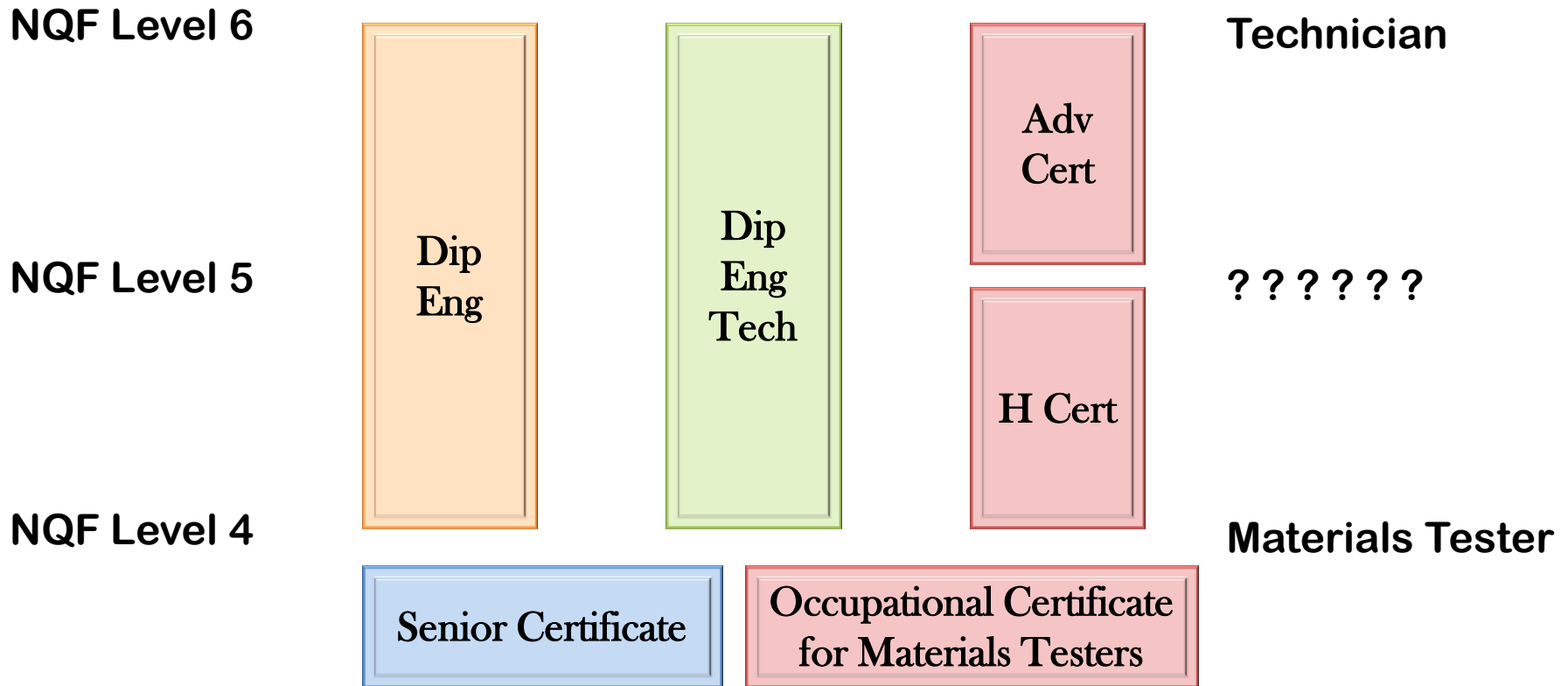
Senior Certificate

Occupational Certificate for Materials Testers

# Materials Testers to Materials Technicians



# Materials Testers to Materials Technicians (and something in between)



# Materials Testers to Materials Technicians (and something in between)

NQF Level 6



NQF Level 5

Dip  
Eng

Dip  
Eng  
Tech

Adv  
Cert

Technician



??????

H Cert

NQF Level 4

Materials Tester

Senior Certificate

Occupational Certificate  
for Materials Testers

# Recognition of Materials Testers, Technicians and *Something in Between*

- **NQF 4 – Qualified Materials Testers**
- *NQF 5 – Registered Civil Laboratory Manager*
- **NQF 6 – Professional Engineering Technician**

# Recognition of Materials Testers, Technicians and *Something in Between*



- **Certified Materials Testers**



- ***Registered Civil Laboratory  
Manager***



- **Professional Engineering  
Technician**

***ROAD AHEAD***

