

Road Pavement Forum  
May 2017

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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**Occupational Certificate:  
Civil Engineering Technician  
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**NQF level 4**

# 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

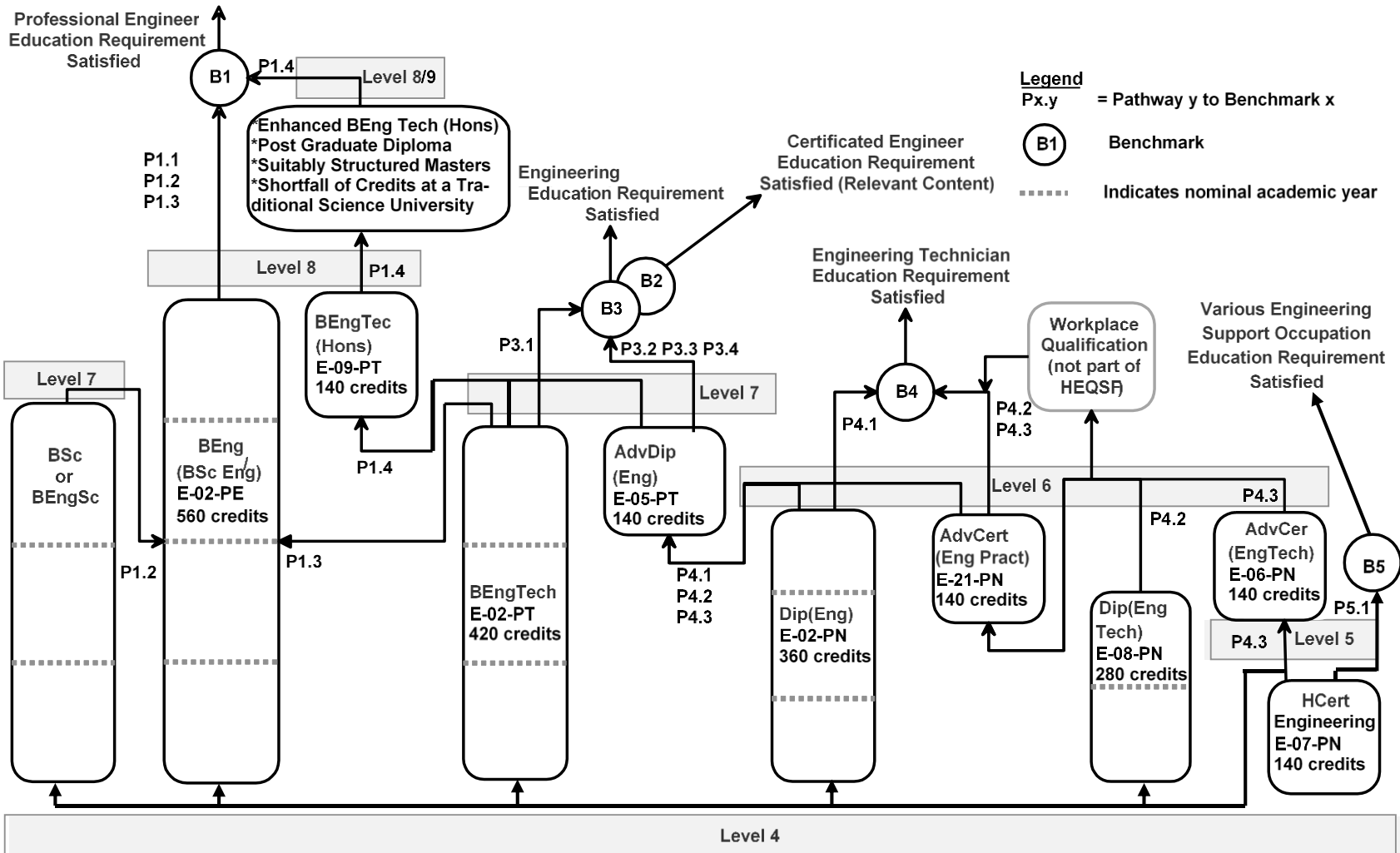
- **Framework:**
  - **Who,**
  - **Where,**
  - **When**
  - **Cost for evaluation**

# AQP progress

- **Timeframes:**
  - **June 2015 – Submit to QCTO,**
  - **June 2017 – Start accrediting trainers,**
  - **December 2017 – Start RPL of candidates**
  - **June 2018 – Start full evaluations**
  - **June 2019 – Full implementation**



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

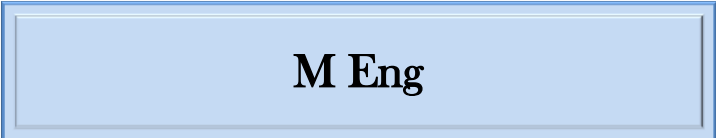


# New Engineering Qualifications

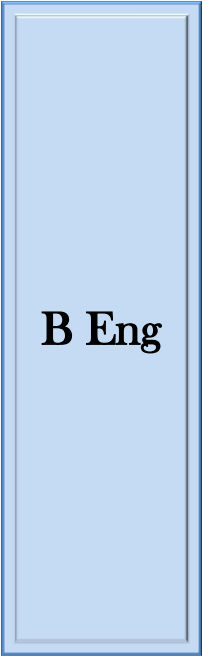
NQF Level 10



NQF Level 9



NQF Level 8



NQF Level 7



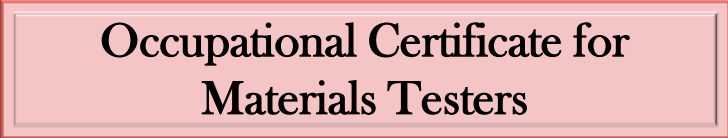
NQF Level 6



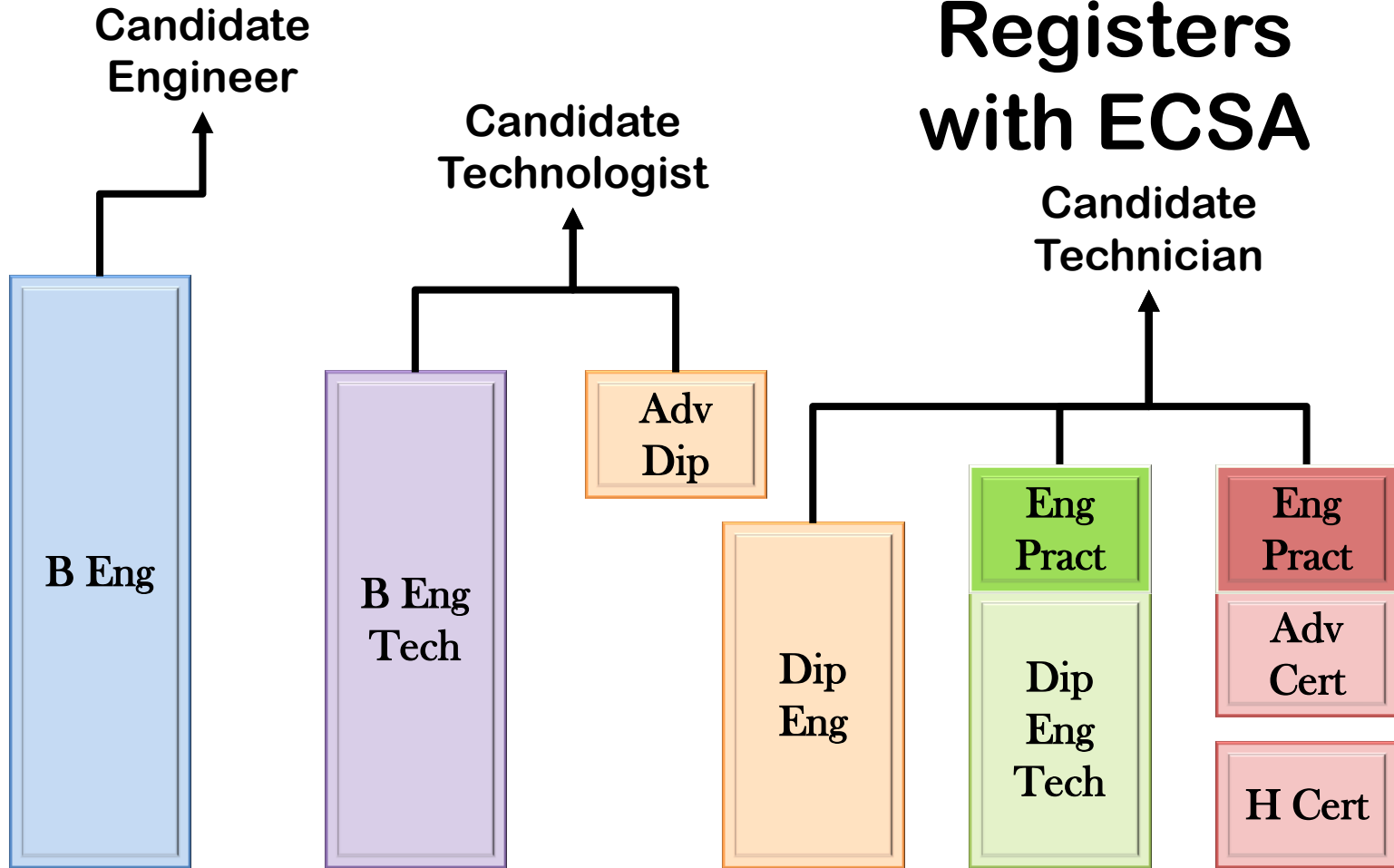
NQF Level 5



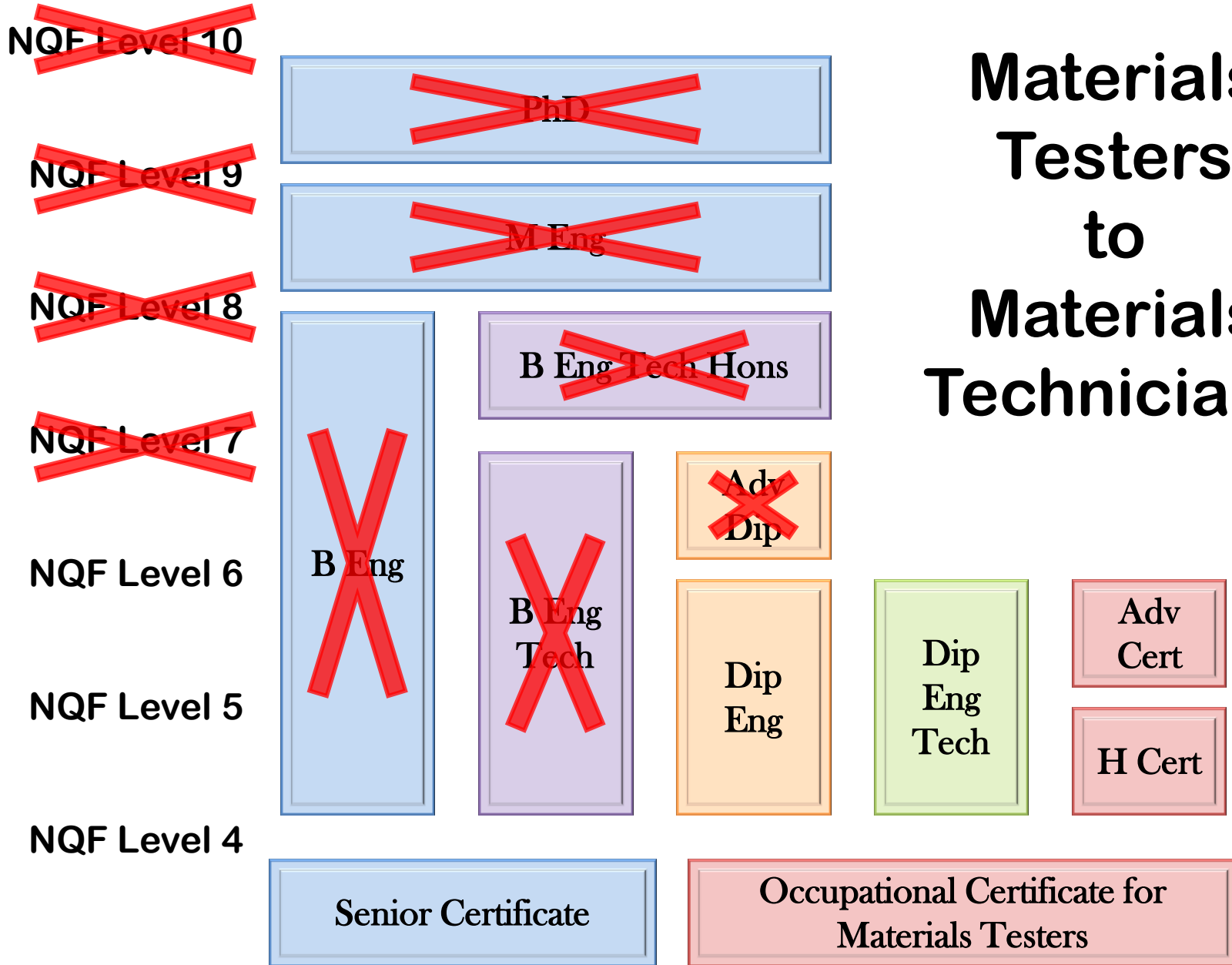
NQF Level 4



# Who Registers with ECSA

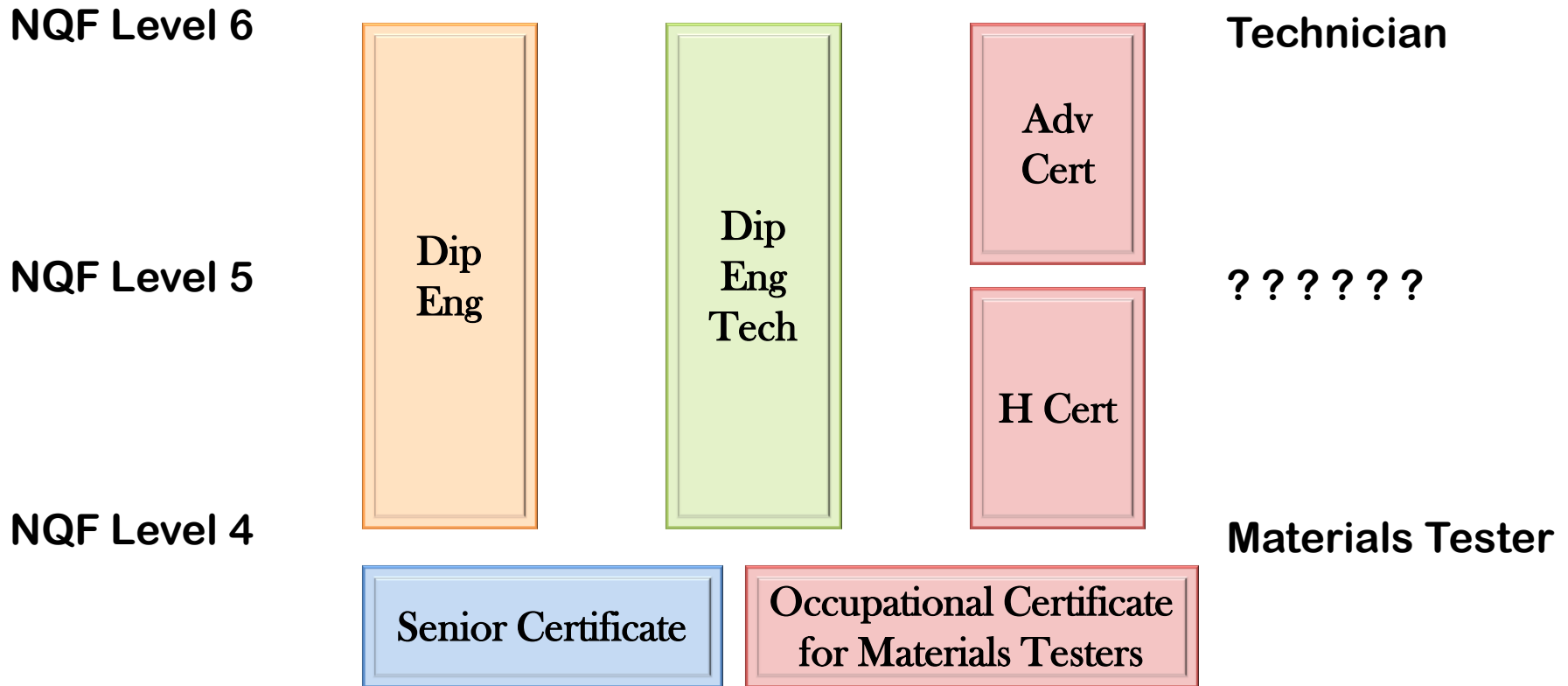


# Materials Testers to Materials Technicians





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



# **New Qualification for Materials Technician**

- **Higher Certificate in Engineering  
in Construction Materials**
- **Advanced Certificate in  
Engineering in Materials  
Technology**
- **Diploma in Engineering  
Technology in Construction  
Materials Technology**

# **New Qualification for Materials Technician**

- **Higher Certificate in Engineering  
in Construction Materials**
- **Exit level NQF 5**
- **One year full time studies**
- **140 credits**

# **New Qualification for Materials Technician**

- **Advanced Certificate in  
Engineering in Materials  
Technology**
- **Exit level NQF 6**
- **One year full time studies**
- **140 Credits**

# **New Qualification for Materials Technician**

- **Diploma in Engineering  
Technology in Construction  
Materials Technology**
- **Exit level NQF 6**
- **Two years full time studies**
- **280 Credits**

# **New Qualification for Materials Technician**

- **Advanced Certificate in  
Engineering Practice**
- **Exit level NQF 6**
- **One year full time studies**
- **140 Credits**

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

- **NQF 4 – Qualified Materials Testers**
- *NQF 5 – Registered Civil Laboratory Technical Controllers*
- **NQF 6 – Professional Engineering Technicians**

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



- **Certified Materials Testers**



- ***Registered Civil Laboratory  
Technical Controllers***



- **Professional Engineering  
Technician**



***THANK YOU***

