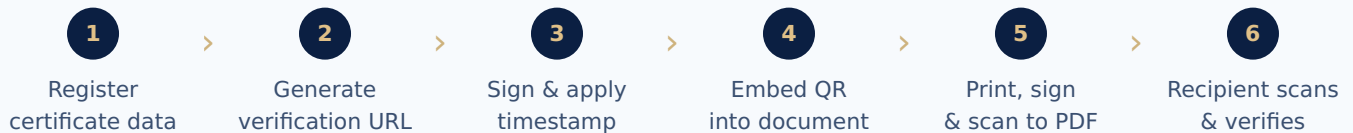


A **QR-integrated certificate issuance & verification system** that lets recipients instantly confirm a document's authenticity — whether a paper original, a printout, or a scanned PDF — all from a single QR code.

End-to-end workflow



How integrity is protected

At issuance, e-COT generates a **SHA-256 cryptographic hash** — a unique 256-bit fingerprint of the certificate's core data — stored securely on the server.

Any later modification produces a completely different hash, making **tampering immediately detectable**. A **digital signature** and **timestamp** prove the issuer's identity and exact moment of issue.

Recipient verification page



Digital Signature **Verified**

Timestamp **Synced**

Data Integrity **Clean**

VALID

Current, submittable document

REISSUED

Superseded by newer copy

INVALID

Data mismatch detected

Key features

- Single QR works on paper, printouts & scanned PDFs
- Auto-numbered certificates with real-time status
- Full audit log — datetime, IP, browser
- Verification link emailed on issuance
- High-resolution QR output at 300 dpi
- Mobile-ready page, no installation

Security specifications

256-bit
HASH LENGTH

128-bit
COLLISION RESIST.

2^{128}
OPS TO BREAK

SHA-256 is the internationally recognised cryptographic standard. Finding two documents with an identical hash requires about **2^{128} operations** — far beyond any foreseeable computing power.