

A Leading Private Universities in Latin America Eliminates Diploma Fraud and Issues Secure e-Diplomas using eMudhra emSigner



Client Overview

The organisation is one of the largest private sector universities in Latin America, with an enrolment of more than 20,000 students across a range of undergraduate and postgraduate programmes. Renowned for its academic excellence and culture of innovation, the institution sought to take a leadership position in combating the growing regional problem of diploma fraud, while simultaneously giving students the freedom to share and validate the authenticity of their transcripts and diplomas from anywhere in the world, at any time.

The Challenge

The organisation was deeply concerned about the escalating trend of diploma fraud across the region, which undermined the value of legitimate qualifications and damaged trust in educational institutions. The traditional process of issuing physical diplomas was both slow and inherently vulnerable — physical documents could be forged, and there was no mechanism for a third party to independently verify the authenticity of a qualification without contacting the institution directly.

Beyond fraud prevention, the institution needed the diploma issuance process itself to be faster and more operationally efficient. Generating and issuing diplomas for thousands of graduates manually was resource-intensive and slow. The solution needed to support bulk generation of digital diplomas, multi-party signing by authorised academic signatories, and secure distribution in both digital and printed formats — while maintaining the highest standards of cryptographic integrity.

“Diploma fraud was becoming a real threat to the credibility of qualifications issued by institutions across our region. We needed a solution that would make our diplomas impossible to forge, instantly verifiable by any employer or institution globally, and significantly more convenient for our graduates to share and use.”

Director of Registrar Services and Digital Credentials

The Solution

eMudhra implemented emSigner to enable a PKI-based digital diploma workflow. The solution pulls student data directly from the university's academic system via Web Services API and maps it to diploma templates created in emSigner. Diplomas are then generated in bulk using the Flexiform capability, and routed to all authorised signatories — supporting serial, parallel, and bulk signing options as required by institutional protocols.

Once all designated signatories have signed the diploma using a Document Signer Certificate, the system automatically generates a unique, encrypted QR code embedded within the digital diploma. This QR code contains the signature of the signing authority along with other critical verification data. Any employer, institution, or third party can scan this QR code — either online or offline via the emSigner verification app — to instantly confirm the authenticity and data integrity of the diploma.

The platform was deployed in an on-premise configuration, with Hardware Security Modules (HSMs) protecting the cryptographic infrastructure. The eMudhra Authentication Server (emAS) was used to automatically validate signed documents received by the institution. The solution supports certificates issued by the local Certificate Authority as well as eMudhra's globally trusted AATL certificates, ensuring that diploma signatures are natively trusted in standard PDF viewers worldwide.

Smart diplomas are delivered to graduates in both printed and digital format. The system enables real-time tracking of signature progress, automatically prompts all stakeholders with email alerts for pending actions, and supports zero-loss-of-quality printing for physical copies. The diploma template design is robust and flexible, accommodating varying sizes and institutional formatting requirements.

Results

By digitising its diploma issuance process with emSigner, the organisation eliminated diploma fraud risk, dramatically reduced issuance cycle time, and delivered a significantly improved credential experience for its graduates.

Metric	Before	After
Diploma fraud risk	High — physical documents easily forged	Eliminated — cryptographically signed, QR-verified
Diploma issuance cycle time	Slow — manual generation, signing, printing, dispatch	Significantly reduced — bulk generation and automated signing
Third-party verification of credentials	Manual — required contacting the institution directly	Instant — QR scan for online or offline verification
Multi-signatory signing process	Sequential manual signing — days per batch	Automated — serial, parallel, or bulk signing in minutes
Graduate credential format	Physical diploma only	Both digital (emailed) and printed — student's choice
Audit trail for issued diplomas	Manual record-keeping — incomplete	Complete traceability — real-time signature progress tracking

About eMudhra

eMudhra is a globally trusted provider of digital trust services, offering eSignatures, PKI, Certificate Lifecycle Management, Multi-Factor Authentication, and Identity & Access Management solutions. Licensed by the Controller of Certifying Authorities (CCA), India, eMudhra serves 1000+ enterprises across 40+ countries, helping organisations build secure, compliant, and paperless digital ecosystems.