



# SNS COLLEGE OF ENGINEERING

Coimbatore-35  
An Autonomous Institution



Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A+' Grade  
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

## DEPARTMENT OF CSE ( IoT, Cyber Security including Blockchain Technology)

### 19SB623 – ETHICAL HACKING AND CYBER LAWS

III YEAR<sub>1</sub>/ VI SEMESTER

### UNIT 2 – REGULATION TO CYBERCRIMES

### TOPIC 3 - License to Issue Electronic Signature Certificates

2/16/2025



# Electronic Signature

An electronic signature or e-signature, indicates either that a person who demands to have created a message is the one who created it.

A signature can be defined as a schematic script related with a person. A signature on a document is a sign that the person accepts the purposes recorded in the document. In many engineering companies digital seals are also required for another layer of authentication and security. Digital seals and signatures are same as handwritten signatures and stamped seals.



## Table Showing Differences Between Digital Signature and Electronic Signature



Digital Signature	Electronic Signature
Used to secure a document	Mainly used to verify a document
A digital signature is non authorised	Authorized and regulated by certification authorities
Comprised of more security features	Comprised of less security features
Common types of digital signature are based on Adobe and Microsoft	Main types of electronic signature include verbal, electronic ticks or scanned signatures.
A digital signature can be verified	An electronic signature cannot be verified.
Preferred more than electronic signature due to high levels of authenticity	Easy to use but less authentic
Particularly concerned about securing the document	Shows intent to sign the contract





According to the UNCITRAL (United Nations Commission on International Trade Law) **MODEL LAW on Electronic Signatures**, the following technologies are presently in use –

- Digital Signature within a public key infrastructure (PKI)
- Biometric Device
- PINs
- Passwords
- Scanned handwritten signature
- Signature by Digital Pen
- Clickable “OK” or “I Accept” or “I Agree” click boxes



## Digital Signature to Electronic Signature

**Digital Signature** was the term defined in the old I.T. Act, 2000. **Electronic Signature** is the term defined by the amended act (I.T. Act, 2008). The concept of Electronic Signature is broader than Digital Signature. Section 3 of the Act delivers for the verification of Electronic Records by affixing Digital Signature.



## Types of signatures

- Two common types of digital signatures are mainly based on document processing platforms namely Adobe PDF and Microsoft
- An electronic signature can be in the following forms: scanned image, verbal or a tick can be used on an electronic document. The main idea behind is to identify the person who has signed the document for contractual purposes





## Verification

- A digital signature can be verified to see if the document has not been tempered with. A digital certificate can be used to track the original author of the document.
- It may be difficult to verify the real owner of the signature since it is not certified. This compromises the authenticity as well as integrity of the document.



## Intention

- A digital signature is usually meant for securing a document so that it is not tampered with by unauthorized people. All the same, it is legally binding and preferred since it is authentic by virtue of its traceability to the owner of the document.
- An electronic signature usually shows the intent to sign the document or contract. In most cases, when people want to enter into a contract, they show their commitment by signing a document that will become legally binding between them.





## What is the process of obtaining DSC from Certifying Authority?

- Digital Signature Certificate (DSC) Applicants can directly approach Certifying Authorities (CAs) with original supporting documents, and self-attested copies will be sufficient in this case
- DSCs can also be obtained, wherever offered by CA, using Aadhar eKYC based authentication, and supporting documents are not required in this case
- A letter/certificate issued by a Bank containing the DSC applicant's information as retained in the Bank database can be accepted. Such letter/certificate should be certified by the Bank Manager .



### Certifying Authorities

Certifying Authorities (CA) has been granted a license to issue a digital signature certificate under Section 24 of the Indian IT-Act 2000. One can procure Class 2 or 3 certificates from any of the certifying authorities.

National Informatics Center (NIC)



E-MUDHRA



Tata Consultancy Services



NSDL



Capricorn





# Best E-Signature Softwares



Adobe Sign



DocuSign



eSignLive



SignNow





## What is the cost of obtaining a Digital Signature Certificate?

- The cost of obtaining a digital signature certificate may vary as there are many entities issuing DSCs and their charges may differ. Kindly check with Certifying Authority directly for charges.









**THANK YOU**