

## GANESH INSTITUTE OF ENGINEERING AND TECHNOLOGY, POLYTECHNIC

## DEPARTMENT OF COMPUTER SCIENCE &amp; ENGINEERING

NAME: RAJKUMAR MISHRA

LESSON PLAN CUM PROGRESS REPORT

SUBJECT: CRYPTOGRAPHY &amp; NETWORK SECURITY

SEMESTER: 6th

BRANCH: COMPUTER SCIENCE &amp; ENGINEERING

LECTURE NO.	CO	BTL	TOPIC TO BE COVERED	WEB REFERENCE IF ANY	PLAN DATE	ACTION DATE	REVIEW BY HOD
1	C01	1	Possible attacks on Computers	<a href="https://youtu.be/d30n-YxOHO4?si=zjFsM47tDenz0TDb">https://youtu.be/d30n-YxOHO4?si=zjFsM47tDenz0TDb</a>	04-02-2025		
2	C01	1	The need for security	<a href="https://youtu.be/ISAlDhEC8Fs?si=uUkoo6WI2r9ij5Tj">https://youtu.be/ISAlDhEC8Fs?si=uUkoo6WI2r9ij5Tj</a>	05-02-2025		
3	C01	1	Security approach	<a href="https://youtu.be/obKfiU3uTsc?si=bT56I176bSVg5s5K">https://youtu.be/obKfiU3uTsc?si=bT56I176bSVg5s5K</a>	06-02-2025		
4	C01	2	Principles of security	<a href="https://youtu.be/MxTyX897BZk?si=Lee90VFFLO9lvD5i">https://youtu.be/MxTyX897BZk?si=Lee90VFFLO9lvD5i</a>	07-02-2025		
5	C01	2	Principles of security	<a href="https://youtu.be/MxTyX897BZk?si=Lee90VFFLO9lvD5i">https://youtu.be/MxTyX897BZk?si=Lee90VFFLO9lvD5i</a>	08-02-2025		
6	C01	3	Types of attacks	<a href="https://youtu.be/ylm0OI9Dg4Y?si=tIWXC7SbC80LHzvK">https://youtu.be/ylm0OI9Dg4Y?si=tIWXC7SbC80LHzvK</a>	10-02-2025		
7	C01	3	Types of attacks	<a href="https://youtu.be/ylm0OI9Dg4Y?si=tIWXC7SbC80LHzvK">https://youtu.be/ylm0OI9Dg4Y?si=tIWXC7SbC80LHzvK</a>	11-02-2025		
8	C02	3	<b>Cryptography Concepts</b>	<a href="https://youtu.be/NuyzuNBFwxQ?si=o4ldirEcHtlmVq2F">https://youtu.be/NuyzuNBFwxQ?si=o4ldirEcHtlmVq2F</a>	12-02-2025		
9	C02	2	Plain text & Cipher Text	<a href="https://youtu.be/Xu409FFpX5k?si=UX9Uu6qwE_C5yXFY">https://youtu.be/Xu409FFpX5k?si=UX9Uu6qwE_C5yXFY</a>	13-02-2025		
10	C02	2	Plain text & Cipher Text	<a href="https://youtu.be/Xu409FFpX5k?si=UX9Uu6qwE_C5yXFY">https://youtu.be/Xu409FFpX5k?si=UX9Uu6qwE_C5yXFY</a>	14-02-2025		

11	C02	1	Substitution techniques	<a href="https://youtu.be/bZBVbvNjxKY?si=WHpJYO5dKqInOSJ3">https://youtu.be/bZBVbvNjxKY?si=WHpJYO5dKqInOSJ3</a>	17-02-2025		
12	C02	1	Substitution techniques	<a href="https://youtu.be/bZBVbvNjxKY?si=WHpJYO5dKqInOSJ3">https://youtu.be/bZBVbvNjxKY?si=WHpJYO5dKqInOSJ3</a>	18-02-2025		
13	C02	1	Transposition techniques	<a href="https://youtu.be/eKMmrDy3LCCQ?si=N1OG1s_YXjJ655T-">https://youtu.be/eKMmrDy3LCCQ?si=N1OG1s_YXjJ655T-</a>	19-02-2025		
14	C02	2	Encryption & Decryption	<a href="https://youtu.be/4KiwoeDJFiA?si=fRaz_Sa7abuQw0A4">https://youtu.be/4KiwoeDJFiA?si=fRaz_Sa7abuQw0A4</a>	20-02-2025		
15	C02	1	Symmetric & Asymmetric key cryptography	<a href="https://youtu.be/9OjK9NNIXY?si=wCA4t4BrcSF2gqVmi">https://youtu.be/9OjK9NNIXY?si=wCA4t4BrcSF2gqVmi</a>	22-02-2025		
16	C02	2	Symmetric & Asymmetric key cryptography	<a href="https://youtu.be/9OjK9NNIXY?si=wCA4t4BrcSF2gqVmi">https://youtu.be/9OjK9NNIXY?si=wCA4t4BrcSF2gqVmi</a>	23-02-2025		
17	C03	1	<b>Symmetric &amp; Asymmetric key algorithms</b>	<a href="https://youtu.be/6AmmQiOWoXM?si=hN9InGEkyulzGFqK">https://youtu.be/6AmmQiOWoXM?si=hN9InGEkyulzGFqK</a>	24-02-2025		
18	C03	2	<b>Symmetric &amp; Asymmetric key algorithms</b>	<a href="https://youtu.be/6AmmQiOWoXM?si=hN9InGEkyulzGFqK">https://youtu.be/6AmmQiOWoXM?si=hN9InGEkyulzGFqK</a>	27-02-2025		
19	C03	1	Symmetric key algorithm types	<a href="https://youtu.be/6AmmQiOWoXM?si=NZtaeUIGDq845o4u">https://youtu.be/6AmmQiOWoXM?si=NZtaeUIGDq845o4u</a>	28-02-2025		
20	C03	3	Symmetric key algorithm types	<a href="https://youtu.be/6AmmQiOWoXM?si=NZtaeUIGDq845o4u">https://youtu.be/6AmmQiOWoXM?si=NZtaeUIGDq845o4u</a>	01-03-2025		
21	C03	1	Overview of Symmetric key cryptography	<a href="https://youtu.be/6AmmQiOWoXM?si=elsdLXrICwl61-sA">https://youtu.be/6AmmQiOWoXM?si=elsdLXrICwl61-sA</a>	03-03-2025		
22	C03	2	Overview of Symmetric key cryptography	<a href="https://youtu.be/6AmmQiOWoXM?si=elsdLXrICwl61-sA">https://youtu.be/6AmmQiOWoXM?si=elsdLXrICwl61-sA</a>	04-03-2025		
23	C03	1	Data encryption standards	<a href="https://youtu.be/j53iXhTSi_s?si=9cy6z4oDuORCdlu8">https://youtu.be/j53iXhTSi_s?si=9cy6z4oDuORCdlu8</a>	06-03-2025		
24	C03	2	Data encryption standards	<a href="https://youtu.be/j53iXhTSi_s?si=9cy6z4oDuORCdlu8">https://youtu.be/j53iXhTSi_s?si=9cy6z4oDuORCdlu8</a>	07-03-2025		

25	C03	1	Over view of Asymmetric key cryptography	<a href="https://youtu.be/xw19eT5thE?si=FRG7eoYuFf15S3bU">https://youtu.be/xw19eT5thE?si=FRG7eoYuFf15S3bU</a>	08-03-2025		
26	C03	2	Over view of Asymmetric key cryptography	<a href="https://youtu.be/xw19eT5thE?si=FRG7eoYuFf15S3bU">https://youtu.be/xw19eT5thE?si=FRG7eoYuFf15S3bU</a>	10-03-2025		
27	C03	1	The RSA algorithm	<a href="https://youtu.be/VUxfDCmWM0U?si=DDPGvykglmXvGtIG">https://youtu.be/VUxfDCmWM0U?si=DDPGvykglmXvGtIG</a>	11-03-2025		
28	C03	2	The RSA algorithm	<a href="https://youtu.be/VUxfDCmWM0U?si=DDPGvykglmXvGtIG">https://youtu.be/VUxfDCmWM0U?si=DDPGvykglmXvGtIG</a>	12-03-2025		
29	C03	2	Symmetric & Asymmetric key cryptography	<a href="https://youtu.be/9OjK9NNIXY?si=EK8sLYYMP2O8F5h3">https://youtu.be/9OjK9NNIXY?si=EK8sLYYMP2O8F5h3</a>	13-03-2025		
30	C03	1	Symmetric & Asymmetric key cryptography	<a href="https://youtu.be/9OjK9NNIXY?si=EK8sLYYMP2O8F5h3">https://youtu.be/9OjK9NNIXY?si=EK8sLYYMP2O8F5h3</a>	17-03-2025		
31	CO3	3	Digital signature	<a href="https://youtu.be/yUel4nqvNs8?si=JMqA5LMcdqG32LBV">https://youtu.be/yUel4nqvNs8?si=JMqA5LMcdqG32LBV</a>	18-03-2025		
32	CO3	2	Digital signature	<a href="https://youtu.be/yUel4nqvNs8?si=JMqA5LMcdqG32LBV">https://youtu.be/yUel4nqvNs8?si=JMqA5LMcdqG32LBV</a>	19-03-2025		
33	CO4	3	<b>Digital certificate &amp; Public key infrastructure</b>	<a href="https://youtu.be/y72Udn5uJZk?si=IHQmA_2BOgvE4uVe">https://youtu.be/y72Udn5uJZk?si=IHQmA_2BOgvE4uVe</a>	20-03-2025		
34	CO4	3	<b>Digital certificate &amp; Public key infrastructure</b>	<a href="https://youtu.be/y72Udn5uJZk?si=IHQmA_2BOgvE4uVe">https://youtu.be/y72Udn5uJZk?si=IHQmA_2BOgvE4uVe</a>	22-03-2025		
35	CO4	3	Digital certificates	<a href="https://youtu.be/y72Udn5uJZk?si=IHQmA_2BOgvE4uVe">https://youtu.be/y72Udn5uJZk?si=IHQmA_2BOgvE4uVe</a>	24-03-2025		
36	CO4	3	Private key management	<a href="https://youtu.be/y72Udn5uJZk?si=IHQmA_2BOgvE4uVe">https://youtu.be/y72Udn5uJZk?si=IHQmA_2BOgvE4uVe</a>	25-03-2025		

37	CO4	1	PKIX Model	<a href="https://youtu.be/y72Udn5uJZk?si=Q33vDko5P003MFGY">https://youtu.be/y72Udn5uJZk?si=Q33vDko5P003MFGY</a>	26-03-2025		
38	CO4	2	PKIX Model	<a href="https://youtu.be/y72Udn5uJZk?si=Q33vDko5P003MFGY">https://youtu.be/y72Udn5uJZk?si=Q33vDko5P003MFGY</a>	27-03-2025		
39	CO4	3	Public key cryptography standards	<a href="https://youtu.be/Jo2yMtSdBtM?si=8qvDbSJIP4Noo8JL">https://youtu.be/Jo2yMtSdBtM?si=8qvDbSJIP4Noo8JL</a>	29-03-2025		
40	CO4	3	Public key cryptography standards	<a href="https://youtu.be/Jo2yMtSdBtM?si=8qvDbSJIP4Noo8JL">https://youtu.be/Jo2yMtSdBtM?si=8qvDbSJIP4Noo8JL</a>	30-03-2025		
41	CO5	1	<b>Internet security protocols</b>	<a href="https://youtu.be/G9Px24hHIUA?si=EqOKIJJID3_UyQq0">https://youtu.be/G9Px24hHIUA?si=EqOKIJJID3_UyQq0</a>	02-04-2025		
42	CO5	1	Basic concept	<a href="https://youtu.be/G9Px24hHIUA?si=EqOKIJJID3_UyQq0">https://youtu.be/G9Px24hHIUA?si=EqOKIJJID3_UyQq0</a>	03-04-2025		
43	CO5	1	Secure socket layer	<a href="https://youtu.be/SXErMCgrT0o?si=RFLhc4Hcj8cKFVa2">https://youtu.be/SXErMCgrT0o?si=RFLhc4Hcj8cKFVa2</a>	04-04-2025		
44	CO5	2	Secure socket layer	<a href="https://youtu.be/SXErMCgrT0o?si=RFLhc4Hcj8cKFVa2">https://youtu.be/SXErMCgrT0o?si=RFLhc4Hcj8cKFVa2</a>	05-04-2025		
45	CO5	1	Transport layer security	<a href="https://youtu.be/LcdIBTYe6vo?si=SCRcnuOvaOg6Mgrz">https://youtu.be/LcdIBTYe6vo?si=SCRcnuOvaOg6Mgrz</a>	07-04-2025		
46	CO5	1	Secure Hyper text transfer protocol(SHHTTP)	<a href="https://youtu.be/HEvWtaQTP4U?si=I0NEWkHsVEllg7Ua">https://youtu.be/HEvWtaQTP4U?si=I0NEWkHsVEllg7Ua</a>	09-04-2026		
47	CO5	2	Time stamping protocol (TSP)	<a href="https://youtu.be/k0Tuf2weFyA?si=p3TwMhoJdoj42rMV">https://youtu.be/k0Tuf2weFyA?si=p3TwMhoJdoj42rMV</a>	10-04-2026		
48	CO5	1	Secure electronic transaction (SET)	<a href="https://youtu.be/3pneMvEsEgo?si=TpgJVPEGxJjciil">https://youtu.be/3pneMvEsEgo?si=TpgJVPEGxJjciil</a>	13-04-2026		
49	CO6	3	<b>User authentication</b>	<a href="https://youtu.be/UBUNrFtufWo?si=BoSnqhc1e0psmtHc">https://youtu.be/UBUNrFtufWo?si=BoSnqhc1e0psmtHc</a>	15-04-2026		
50	CO6	2	Authentication basics	<a href="https://youtu.be/fbSVGC8nGz4?si=N85hPqa4TBU77YMM">https://youtu.be/fbSVGC8nGz4?si=N85hPqa4TBU77YMM</a>	16-04-2026		
51	CO6	3	Password	<a href="https://youtu.be/6R1DfG8HiCs?si=w8n7rBMLiau_3Je0s">https://youtu.be/6R1DfG8HiCs?si=w8n7rBMLiau_3Je0s</a>	17-04-2026		

52	CO6	1	Authentication Tokens	<a href="https://youtu.be/VPnYuwwg0rU?si=5Awk6mfJ39aDYoUm">https://youtu.be/VPnYuwwg0rU?si=5Awk6mfJ39aDYoUm</a>	18-04-2026		
53	CO6	1	Certificate based authentication	<a href="https://youtu.be/EHd-FvKMLuM?si=Ww8_ywazyloGSmHy">https://youtu.be/EHd-FvKMLuM?si=Ww8_ywazyloGSmHy</a>	20-04-2026		
54	CO6	2	Biometric authentication	<a href="https://youtu.be/MBtzOzPakt8?si=RZJFbjA82gV-V66l">https://youtu.be/MBtzOzPakt8?si=RZJFbjA82gV-V66l</a>	21-04-2026		
55	CO7	3	<b>Network Security &amp; VPN</b>	<a href="https://youtu.be/JFXBjIT5cGU?si=mcco0Q79bZVtaVxo">https://youtu.be/JFXBjIT5cGU?si=mcco0Q79bZVtaVxo</a>	22-04-2026		
56	CO7	3	Brief introduction of TCP/IP	<a href="https://youtu.be/TVr0RZ1-74g?si=YbN26JPbwkC7vgo4">https://youtu.be/TVr0RZ1-74g?si=YbN26JPbwkC7vgo4</a>	23-04-2026		
57	CO7	2	Firewall	<a href="https://youtu.be/9GZIVOafYtg?si=QFZMrQ-br18WbSpn">https://youtu.be/9GZIVOafYtg?si=QFZMrQ-br18WbSpn</a>	24-04-2026		
58	CO7	2	IP Security	<a href="https://youtu.be/xwtZBLxbjaU?si=vPx1qlC0BmvBcvl7">https://youtu.be/xwtZBLxbjaU?si=vPx1qlC0BmvBcvl7</a>	25-04-2026		
59	CO7	1	IP Security	<a href="https://youtu.be/xwtZBLxbjaU?si=vPx1qlC0BmvBcvl7">https://youtu.be/xwtZBLxbjaU?si=vPx1qlC0BmvBcvl7</a>	27-04-2026		
60	CO7	1	Virtual Private Network (VPN)	<a href="https://youtu.be/JFXBjIT5cGU?si=wjz4CiF53wCSuVHj">https://youtu.be/JFXBjIT5cGU?si=wjz4CiF53wCSuVHj</a>	28-04-2026		

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