

Subject Name-COMMUNICATION SKILLS

Code	Course Tittle	Pap er Cod e	Topics	Links
6801	COMMUNIC ATION SKILLS	6801	Grammar(parts of speech)	https://www.youtube.com/watch?v=7WVnd07KCKY
			tenses	https://www.youtube.com/watch?v=3iHVNcxN37k
			auxillary verb	https://www.youtube.com/watch?v=Vr3w73ZbfpU
			Determiners	https://www.youtube.com/watch?v=j3OCs_t2kaE
			Active and passive voice	https://www.youtube.com/watch?v=vdFVjGeAd1w
			preposition	https://www.youtube.com/watch?v=HRZZIwIHeUM
			Definition,process,t ypes	https://www.youtube.com/watch?v=RkebtEk2zUO
			Barriers of communication	https://www.youtube.com/watch?v=ZzuYQfszCKE
			Letter of enquiry	https://www.youtube.com/watch?v=iQY2I9-IDmI
			letter placing order	https://www.youtube.com/watch?v=8mwWLswFMhY
			complaint letter	https://www.youtube.com/watch?v=vf1wINpZWWA

			Report writing	https://www.youtube.com/watch?v=860LtRxP3rw
			diff between resume and cv	https://www.youtube.com/watch?v=D-V5i_t165w

PHYSICS-6802

Code	Course Title	Paper Code	Topics		Links
6802	PHYSICS	6802	UNITS, DIMENSIONS & MEASUREMENTS		https://youtu.be/HQdy2Z-GmdY
				Measurement	https://nptel.ac.in/courses/112/103/112103290/
				Accuracy	https://www.youtube.com/watch?v=Mdn2VbIACAU
				Instruments	https://www.youtube.com/watch?v=J8dAiop3ZJs
			GENERAL PROPERTIES OF MATTER		https://youtu.be/Yl43KpsNncw
				Elasticity	https://swayam.gov.in/nd1_noc20_c_e42
				Surface Tension	https://www.youtube.com/watch?v=goYiq_P0hIE
				Viscosity	https://www.youtube.com/watch?v=0EZlA4eTuzI
			HEAT AND THERMODYNAMICS		https://youtu.be/jQepo3O4IN8
				Transmission of heat and expansion of solids	https://www.toppr.com/guides/physics/thermal-properties-of-matter/heat-transfer/
				Gas laws and specific heats of gases	https://www.youtube.com/watch?v=3dyxjBwqF-8
			LIGHT		
				Properties of light	https://www.google.co.in/search?biw=1366&bih=657&tbm=vid&sxsrf=ALeKk03f3wkNiIrG4GvfemJmOe5ld5WOMA%3A1593082259687&ei=k4H0XtS-

					Kc7yrAGVj53I&q=Properties+of+light+nptel&oq=Properties+of+light+nptel&gs_l=psy-ab.3...33356.33356.0.34402.1.1.0.0.0.0.209.209.2-1.1.0....0...1c.1.64.psy-ab..0.0.0....0.qL.OsuN8Saew#
				Wave theory of light & Interference	https://youtu.be/PEXSH8dB-Uk
				Laser	https://youtu.be/FNp81kkxj5c
			MODERN PHYSICS		
				Photo electricity	https://youtu.be/6xxqhAOzAXg
				X-rays	https://youtu.be/iPTZJy0lios https://youtu.be/Nos_SQ2DpRw7

CHEMISTRY-6803

Code	Course Title	Paper Code	Topics		Links
6803	CHEMISTRY	6803	ATOMIC STRUCTURE AND CHEMICAL BONDING		https://nptel.ac.in/courses/104/106/104106096/
				Bohr Burry scheme of filling the electrons in various orbits.	https://www.youtube.com/watch?v=UB5mzqW-SxE
				Hunds rule and filling of orbitals by Aufbau principle	https://study.com/academy/lesson/atomic-structures-pauli-exclusion-principle-aufbau-principle-hunds-rule.html
				Bonding: Nature of bonds	https://www.khanacademy.org/science/biology/chemistry--of-life/chemical-bonds-and-reactions/v/electronegativity-and-chemical-bonds
			THEORIES OF IONISATION, ELECTROCHEMISTRY, FUEL CELLS. WATER		
				Arrhenius theory of ionization	https://www.youtube.com/watch?v=kevmGZkO0s
				Electrolysis	https://www.youtube.com/watch?v=dRtSjJCKkIo
				hardness of water	https://www.youtube.com/watch?v=eR2_bNTZ4Qo
				Determination of hardness of water by O. Hohner's method, EDTA and soap solution method	https://www.youtube.com/watch?v=Zprqah_29Zk

			METALS AND ALLOYS , CORROSION		https://www.youtube.com/watch?v=Ipzq5lRIIdY
				Explanation of alloying process	https://www.youtube.com/watch?v=4k8Bl6SUnyA
				Corrosion & types of corrosion	https://www.coursera.org/lecture/corrosion/types-of-corrosion-TXKrG
				Corrosion control	https://www.toppr.com/guides/chemistry/electrochemistry/corrosion-prevention-method/
			ENGINEERING MATERIALS		
				Glass	https://study.com/academy/lesson/types-of-glasses-uses-properties.html
				Cement	https://www.youtube.com/watch?v=cx5gPKp9QEc
				Refractories	https://www.youtube.com/watch?v=YH-00EOnfEE&vI=en
				Lubricants	https://www.youtube.com/watch?v=HTIzWP8BKC8
				Nanomaterials and its applications	https://www.youtube.com/watch?v=11PynxAhebs
			NON METALLIC COMPOUNDS AND FUELS		https://www.youtube.com/watch?v=8KqhoV-v5ks&list=PLvWjkcLjGrfVwTOV8eg6S SX2m5cw -kl&index=75&t=0s
				Polymers	https://www.youtube.com/watch?v=28qrk9RY-es
				Insulators	https://www.youtube.com/watch?v=tM9QT1v0zq0
				Combustion and fuel	https://www.youtube.com/watch?v=ub86Dhg67tM

MATHS-6804

Code	Course Title	Paper Code	Topics		Links
6804	MATHS	6804	Metrics and Determinants		https://youtu.be/SJOTtb1FTfs
			Calculus		https://youtu.be/UukVP7Mg3TU
			Coordinate Geometry		https://youtu.be/8Oe_kswv0Pg

Subject Name- Applied mechanics					
Code	Course Tittle	Paper Code	Topics		Links
6805	Applied mechanics	6805	Composition and resolution of force		https://youtu.be/KKeXsGKPu1I
			Parallel forces and force couple		https://youtu.be/XOj-ToMZVx0
			Moments and their applications		https://youtu.be/wacoFm53rBg
			Equilibrium of forces		https://youtu.be/M28TDk48Sa4
			Centre of gravity		https://youtu.be/sYktzlvZOJc https://youtu.be/0tymrp3SXXO
			Friction		https://youtu.be/EPMafoCAuts
			Simple lifting machnes		https://www.youtube.com/playlist?list=PLkipyWs8l0t6-0d8wPfXOGP6xr837uMSh
			Motion of a particle		https://youtu.be/QkD5rl_uf4k

			Laws of motion		https://youtu.be/NkT0tQhWthM
			Work , power , and energy		https://youtu.be/r_1BOXzAw_A

ENVIRONMENTAL ENGG AND SAFETY-6806

Code	Course Title	Paper Code	Topics		Links
6806	ENVIRONMENTAL ENGG AND SAFETY	6806	INTRODUCTION TO ENVIRONMENT		
				Ecosystem	https://swayam.gov.in/nd1_noc19_ge23/
				Biodiversity	https://www.youtube.com/watch?v=hihFHam_wNE
				Environmental protection laws	https://www.youtube.com/watch?v=CTUOchYZG2k
			AIR POLLUTION		
				Classification & sources of air pollutants	https://nptel.ac.in/courses/105/104/105104099/
				Acid rain	https://www.toppr.com/guides/chemistry/environmental-chemistry/acid-rain/
				Global warming & green house effect	https://www.toppr.com/guides/chemistry/environmental-chemistry/greenhouse-effect-and-global-warming/
				Ozone layer depletion	https://www.youtube.com/watch?v=Bz9sc5Jgsvc
			WATER POLLUTION AND WASTE WATER TREATMENT METHOD		https://www.youtube.com/watch?v=w-f-IrsadxmU
				Theory of industrial waste treatment process	https://nptel.ac.in/courses/105/106/105106119/
				Biochemical oxygen demand	https://www.youtube.com/watch?v=eDTAW0ZvQI8

				Chemical oxygen demand	https://www.youtube.com/watch?v=qABQpTNYVkc
			ENERGY ENVIRONMENT CLIMATE CHANGE		
				Bureau of Energy Efficiency (BEE)	https://www.youtube.com/watch?v=nOAegfwW02k
				National Action Plan on Climate Change (NAPCC)	https://www.youtube.com/watch?v=uQudtjW6tJE
				National Mission for Enhanced Energy Efficiency (NMEEE)	https://www.youtube.com/watch?v=tgJHnKdU_WU
				Kyoto Protocol	https://www.youtube.com/watch?v=IZgBPL17a6M
				Energy Conservation Building Code (ECBC)	https://www.youtube.com/watch?v=nOAegfwW02k
			SOLID WASTE MANAGEMENT& NOISE POLLUTION		https://youtu.be/pGAouXqulNI
				Sources and classification of solid waste	http://www.digimat.in/nptel/courses/video/105105160/L07.html
				Disposal methods	https://youtu.be/lDrIGTnTuBI
				Noise pollution	https://youtu.be/OpR39D-IlvY

VIDEO LECTURES ON INTRODUCTION TO COMPUTERS 6807

S.NO.	SEM	SUBJECT	SUBJECT CODE	TOPIC	AVAILABLE URL	
1	II	INTRODUCTION TO COMPUTERS	6807	COMPUTER-BLOCK DIAGRAM	https://www.tutorialandexample.com	
2				generation of computers	https://www.tutorialspoint.com	
3				computer languages	https://www.toppr.com	
4				low level language	https://www.javapoint.com	
5				high level language	https://www.javapoint.com	
6				number system	https://www.tutorialspoint.com	
7				number system conversion	https://www.tutorialspoint.com	
8				function of email	https://study.com	
9				hardware devices	https://www.tutorialspoint.com	
10				software devices	https://www.tutorialspoint.com	
11				power point presentation	https://www.slideshare.net	
12				internet	https://www.internetsociety.org	
13				input ands output devices	https://www.tutorialandexample.com	

Subject Name-ENGINEERING DRAWING (OCBC SCHEME)

Code	Course Tittle	Paper Code	Topics		Links
6808	Engineering drawing	6808	Orthographic projection	Basics of projection	https://youtu.be/SB83cUaAiCM
				Projection of point	https://youtu.be/aZ3gnOQIFHI
				Projection of lines I	https://youtu.be/MSg7DpKgaK8
				Projection of lines II	https://youtu.be/wzxAFXejw8
			Projection of planes	Basics of projection of planes	https://youtu.be/SNWhs81ho0Q
				Projection of solids	https://youtu.be/S3ma-LKVJdl
			Plane and diagonal scales		https://youtu.be/yneCL-mXeH8
			Projection of point		https://youtu.be/MzbxVLFKN9g
			Projection of planes I		https://youtu.be/anG2oGzGgF8
			Projection of planes II		https://youtu.be/qQsdiV9PPWI
			Projection of planes III		https://youtu.be/r7O9SU9w_Eg
			Projection of solids I		https://youtu.be/gb3OCnkr5Ts

			Projection of solids II		https://youtu.be/2HA5eTpO6ec
			Projection of surfaces I		https://youtu.be/8qpTtaTSdBA
			Projection of surfaces II		https://youtu.be/8yWsVAeeB78
			Conic sections I		https://youtu.be/3V_k9u3Uny8
			Conic section II		https://youtu.be/OM6FB3DWFTI
			Conic section III		https://youtu.be/t5szsD_4kG4
			Conic section IV		https://youtu.be/UFpKFyLt8lw
			Development of prism and pyramids		https://youtu.be/8qpTtaTSdBA
			Isometric projection I		https://youtu.be/9aFDVSIcdvI
			Isometric projection II		https://youtu.be/tLFjCS3h9MY
			Isometric projection III		https://youtu.be/TqrID4SeFTo
			Development of cone and cylinder		https://youtu.be/8yWsVAeeB78

Subject Name- Basic electronics					
Code	Course Tittle	Paper Code	Topics		Links
6811	Basic electronics	6811	Basics of semiconductor		https://youtu.be/N4HJDxr1Ugl https://youtu.be/vKBKKqvpvrk https://youtu.be/1zpvjKWwMLA https://youtu.be/0R1UOcNvzGc https://youtu.be/2U5X4W6Pj1c https://youtu.be/435UtPEYURg
			Pn junction diode		https://youtu.be/h3fHg6z9wsA https://youtu.be/vadxA7LEjBc https://youtu.be/kOHHIC_euZM https://youtu.be/kM-o_m74E_U https://youtu.be/S8pBNda9rFY https://youtu.be/wzE1VE0-Yd8 https://youtu.be/eXvsMlczu8E https://youtu.be/ZBq76Ecisdw https://youtu.be/7nUxbzdTG6s https://youtu.be/W7Is13QZoel
			Special purpose diode		https://youtu.be/I2nrBITEVls https://youtu.be/dTEOVD0eBsM https://youtu.be/BzkipfwR9bUO https://youtu.be/dTEOVD0eBsM

			Bipolar junction transistor		https://youtu.be/0C4uxtS-tlQ
			Junction field effect transistor		https://youtu.be/xgYdLvWcvms
			Mosfet		https://youtu.be/MuBiC9yz2fc
			Rectifier		https://youtu.be/ofW4DZH83JQ

Subject Name- Basics of Electrical Engineering					
Code	Course Title	Paper Code	Topics		Links
6812	Basics of Electrical Engineering	6812	Fundamentals of D.C. circuits	Electric current and voltage	https://www.youtube.com/watch?v=ul3fXTKEeLA
				Ohms law	https://www.youtube.com/watch?v=JkCcjK0yRjk
				Resistance and Resistivity	https://www.youtube.com/watch?v=GHRHRBMjno0
				Voltage Division Rule	https://www.youtube.com/watch?v=AvJr8soYdrA
				Star-Delta Transformation	https://www.youtube.com/watch?v=bv8E0nxfvgY
				KCL and KVL	https://www.youtube.com/watch?v=vHORBJCiv5w
				Working principle and application of primary and secondary cell.	https://www.youtube.com/watch?v=QWPVzHhXnQA
			Fundamentals of A.C. circuits	Basic of AC circuit	https://www.youtube.com/watch?v=bfR0k0BJeBE&list=PL4K9r9dYCOooGgiUI3yVbej4MirBBglhK
				Generation of Sinusoidal AC Voltage,	https://www.youtube.com/watch?v=V7TFtK6epOg&list=PL4K9r9dYCOooGgiUI3yVbej4MirBBglhK&index=2
				Standard terminology of AC waveform	https://www.youtube.com/watch?v=HAXnJXX762k&list=PL4K9r9dYCOooGgiUI3yVbej4MirBBglhK&index=3

				RMS value	https://www.youtube.com/watch?v=3BsNaoY9CVs&list=PL4K9r9dYCOooGgiUI3yVbej4MlrBBglhK&index=4
				Average Value	https://www.youtube.com/watch?v=EjvBytl98UQ&list=PL4K9r9dYCOooGgiUI3yVbej4MlrBBglhK&index=5
				Concept of phase and phase difference	https://www.youtube.com/watch?v=y9YKcsCWy4s&list=PL4K9r9dYCOooGgiUI3yVbej4MlrBBglhK&index=12
				AC quantities as phasor	https://www.youtube.com/watch?v=ATcAZqLux6o&list=PL4K9r9dYCOooGgiUI3yVbej4MlrBBglhK&index=13
				Form factor and peak factor	https://www.youtube.com/watch?v=6ZOJwCQwQ34&list=PL4K9r9dYCOooGgiUI3yVbej4MlrBBglhK&index=6
				AC through pure R	https://www.youtube.com/watch?v=hrM21Pi3ByY&list=PL4K9r9dYCOooGgiUI3yVbej4MlrBBglhK&index=20
				AC through pure L	https://www.youtube.com/watch?v=_UTegajMHpw&list=PL4K9r9dYCOooGgiUI3yVbej4MlrBBglhK&index=21
				AC through pure C	https://www.youtube.com/watch?v=GOK4IJXzJqE&list=PL4K9r9dYCOooGgiUI3yVbej4MlrBBglhK&index=22
			Fundamentals of Magnetic circuits	Basics of magnetic circuit	https://www.youtube.com/watch?v=M-QfX2fvpp4
				Terminologies	https://www.youtube.com/watch?v=M-QfX2fvpp4
				Magnetic circuit with air gap	https://www.youtube.com/watch?v=-2OxPbm71WY
				Farady's Law	https://www.youtube.com/watch?v=deI8cJiCKEo
				Fleming's rule	https://www.youtube.com/watch?v=F_7SNQfHtTQ
				Lenz's law	https://www.youtube.com/watch?v=EYYNRubHIIno
				Electrical Engine	https://www.youtube.com/watch?v=PBRacxU6nBY
				Classification of Materials	

		Engineering Materials	Magnetic Materials	https://www.youtube.com/watch?v=zFdf2SxHz6s
			Ferrous and Non-ferrous materials	https://www.youtube.com/watch?v=AqSQCu3lc3Q
			Conducting Materials	https://www.youtube.com/watch?v=xe7ux2i0srQ
			Energy Band diagram	https://www.youtube.com/watch?v=jJf7tqN4OmA
		Electrical Machines	Construction, Classification & Working Principle of DC machine,	https://www.youtube.com/watch?v=NiHPu5PltCY&t=989s https://www.youtube.com/watch?v=CSnTL9ndyis
			Transformer,	https://www.youtube.com/watch?v=NkRk_xaRwjg
			Induction machine	https://www.youtube.com/watch?v=dZyO5gcWP-o&list=PLLQjBbMXyg7zALKpbP87g4QaS9YGesZ5
			Synchronous machine.	https://www.youtube.com/watch?v=caVDiKY5AKE&list=PLYJnm0x0HwNvFlvP2OEppMCv9Dt1X3SS2
			Stepper motor	https://www.youtube.com/watch?v=dYR3quvIVZU
			permanent magnet motor	https://www.youtube.com/watch?v=dYR3quvIVZU
			universal motor & servomotors	https://www.youtube.com/watch?v=gTslo6k_r8M

Subject Name- Basic Mechanical Engineering				
Code	Course Title	Paper Code	Topics	Links
	Basic Mechanical Engineering		Engineering Material	https://www.youtube.com/watch?v=yVS4hccf6xo
			Mechanical Properties and Tests	https://www.youtube.com/watch?v=c6woVjc-q8
			Heat Treatment	https://www.youtube.com/watch?v=bnmlu2if7Wg
			Thermodynamics	https://www.youtube.com/watch?v=9kiaOhMSPSc
			I.C. Engine	https://www.youtube.com/watch?v=K-Z5jAHJdlc
			Air Compressor	https://www.youtube.com/watch?v=TAo5c2fbXOQ
			Hydro Dynamics	https://www.youtube.com/watch?v=F7L4ZCWtp94
			Power Transmission	https://www.youtube.com/watch?v=XTogm8Ui1Ds
			Renewable Sources of Energy	https://www.youtube.com/watch?v=olPqmTBY9Lg