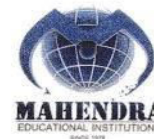




## 2.3.2 - Teachers use ICT enabled tools for effective teaching-learning process.

### B.E Biomedical Engineering

S.NO.	NAME OF THE SUBJECT	TOPICS COVERED	LINK
1	RADIOLOGICAL EQUIPMENTS (SEM VI YEAR III)	1. Working of an X-Ray Tube:	<a href="https://www.youtube.com/watch?v=m6SC7hOnAEI">https://www.youtube.com/watch?v=m6SC7hOnAEI</a>
		2. Principles of Computed tomography:	<a href="https://www.youtube.com/watch?v=mBhaNXOj9WQ">https://www.youtube.com/watch?v=mBhaNXOj9WQ</a>
		3. Image processing in CT:	<a href="https://www.youtube.com/watch?v=BmkdAqd5ReY">https://www.youtube.com/watch?v=BmkdAqd5ReY</a>
		4. Generations of CT:	<a href="https://www.youtube.com/watch?v=9SUHgtREWQc">https://www.youtube.com/watch?v=9SUHgtREWQc</a>
		5. Principles of MRI:	<a href="https://www.youtube.com/watch?v=SwH2OEB0DKU">https://www.youtube.com/watch?v=SwH2OEB0DKU</a>
		6. Working of FMRI:	<a href="https://www.youtube.com/watch?v=Rb_mdzgw-Jc">https://www.youtube.com/watch?v=Rb_mdzgw-Jc</a>
		7. Gamma Camera:	<a href="https://www.youtube.com/watch?v=I0re3ncCKvM">https://www.youtube.com/watch?v=I0re3ncCKvM</a>
		8. PET and SPECT:	<a href="https://www.youtube.com/watch?v=wx2zyfgYZrE&amp;t=51s">https://www.youtube.com/watch?v=wx2zyfgYZrE&amp;t=51s</a>
		9. Radiation safety principles:	<a href="https://www.youtube.com/watch?v=3975kVgVaJk">https://www.youtube.com/watch?v=3975kVgVaJk</a>
			<a href="https://www.youtube.com/watch?v=5b7nnb6spvo">https://www.youtube.com/watch?v=5b7nnb6spvo</a>
		10. Cyberknife:	<a href="https://www.youtube.com/watch?v=ikHqxQGRdfc">https://www.youtube.com/watch?v=ikHqxQGRdfc</a>
11. Dosimeters:	<a href="https://www.youtube.com/watch?v=5XIUWqOPEEc">https://www.youtube.com/watch?v=5XIUWqOPEEc</a>		



2	FIBER OPTICS AND LASER IN MEDICINE(SEM VIII YEAR IV)	Fiber optics and its application	<a href="https://www.youtube.com/watch?v=3bgaOvd2ZTQ">https://www.youtube.com/watch?v=3bgaOvd2ZTQ</a>
		Fiber optics and laser in medicine	<a href="https://www.youtube.com/watch?v=Xz6ERWeSvs8">https://www.youtube.com/watch?v=Xz6ERWeSvs8</a>
		Laser applications in medicine:	<a href="https://www.youtube.com/watch?v=kn7JXDGPefl">https://www.youtube.com/watch?v=kn7JXDGPefl</a>
		Optical holography	<a href="https://www.youtube.com/watch?v=WoMLI1bVSck&amp;t=41s">https://www.youtube.com/watch?v=WoMLI1bVSck&amp;t=41s</a>
		Microscopes	<a href="https://www.youtube.com/watch?v=GG3CK7copdA">https://www.youtube.com/watch?v=GG3CK7copdA</a>
3	SENSORS & MEASUREMENTS(SEM III YEAR II)	Science of measurement:	<a href="https://www.youtube.com/watch?v=oAtDAoqdExw">https://www.youtube.com/watch?v=oAtDAoqdExw</a>
		Types of transducers:	<a href="https://www.youtube.com/watch?v=FYggY7LLDrw">https://www.youtube.com/watch?v=FYggY7LLDrw</a>
		Standards in india	<a href="https://www.youtube.com/watch?v=G6W-aHme3Ns">https://www.youtube.com/watch?v=G6W-aHme3Ns</a>
		LVDT	<a href="https://www.youtube.com/watch?v=1dx-Dyk2L18">https://www.youtube.com/watch?v=1dx-Dyk2L18</a>
		Strain Gauge:	<a href="https://www.youtube.com/watch?v=9IWpPOGI42Y">https://www.youtube.com/watch?v=9IWpPOGI42Y</a>
		Temperature sensor:	<a href="https://www.youtube.com/watch?v=99IsI-eP0hE">https://www.youtube.com/watch?v=99IsI-eP0hE</a>
		Photoelectric sensors:	<a href="https://www.youtube.com/watch?v=7IU_GsgXR00">https://www.youtube.com/watch?v=7IU_GsgXR00</a>
		Piezoelectric transducers:	<a href="https://www.youtube.com/watch?v=pbp1uoTJkF8">https://www.youtube.com/watch?v=pbp1uoTJkF8</a>
		Ultrasound in medicine:	<a href="https://www.youtube.com/watch?v=sTcqtIjxLOk">https://www.youtube.com/watch?v=sTcqtIjxLOk</a>
		AC and DC Bridges:	<a href="https://www.youtube.com/watch?v=S89ixehZRb8">https://www.youtube.com/watch?v=S89ixehZRb8</a>



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		Digital Voltmeter:	<a href="https://www.youtube.com/watch?v=4nD4JqikrNM">https://www.youtube.com/watch?v=4nD4JqikrNM</a>
		CRO	<a href="https://www.youtube.com/watch?v=xugZ3oM1bPg">https://www.youtube.com/watch?v=xugZ3oM1bPg</a>
		XY Recorder	<a href="https://www.youtube.com/watch?v=BSJu9jdbOM0">https://www.youtube.com/watch?v=BSJu9jdbOM0</a>
		Strip Chart recorder	<a href="https://www.youtube.com/watch?v=RCa4nE6Z-SE&amp;pbjreload=10">https://www.youtube.com/watch?v=RCa4nE6Z-SE&amp;pbjreload=10</a>
		Photographic film recorder	<a href="https://www.youtube.com/watch?v=RCa4nE6Z-SE&amp;pbjreload=10">https://www.youtube.com/watch?v=RCa4nE6Z-SE&amp;pbjreload=10</a>
4	BIOMEDICAL INSTRUMENTATION (SEM V - YEAR III)	Action potential:	<a href="https://www.youtube.com/watch?v=OZG8M_ldA1M">https://www.youtube.com/watch?v=OZG8M_ldA1M</a>
		Electrode electrolyte interface:	<a href="https://www.youtube.com/watch?v=49CWbXNJ3WE">https://www.youtube.com/watch?v=49CWbXNJ3WE</a>
		Basics of ECG:	<a href="https://www.youtube.com/watch?v=HDyqXNHLjug">https://www.youtube.com/watch?v=HDyqXNHLjug</a>
		Basics of EEG:	<a href="https://www.youtube.com/watch?v=XMizSSOejg0&amp;list=PLxaiR6teSdjoEZWaDWm28A9QjFN7eguAp">https://www.youtube.com/watch?v=XMizSSOejg0&amp;list=PLxaiR6teSdjoEZWaDWm28A9QjFN7eguAp</a>
		Blood flow measurement:	<a href="https://www.youtube.com/watch?v=psiUv9z6RVg">https://www.youtube.com/watch?v=psiUv9z6RVg</a>
		Blood pressure measurements:	<a href="https://www.youtube.com/watch?v=C4wo18LoNEE">https://www.youtube.com/watch?v=C4wo18LoNEE</a>
5	BIOCHEMISTRY (SEM III-II YEAR II-I)	Biochemistry	<a href="https://freevideolectures.com/course-2524-biochemistry">https://freevideolectures.com/course-2524-biochemistry</a>
		Carbohydrates- classification and metabolic pathways	<a href="http://www.sparknotes.com/health/carbohydrates-section3-">http://www.sparknotes.com/health/carbohydrates-section3-</a>
		Enzymes clinical significance	<a href="http://www.biologydiscussion.com/enzymes-importance-importance-of-enzymes-in-the-diagnosis-of-diseases-11184">http://www.biologydiscussion.com/enzymes-importance-importance-of-enzymes-in-the-diagnosis-of-diseases-11184</a>
		Structure of protein	<a href="https://www.youtube.com/watch?v=zg9wErje4E4">https://www.youtube.com/watch?v=zg9wErje4E4</a>
6	PATHOLOGY AND MICROBIOLOGY (SEM IV YEAR II)	Isolation of Bacteria	<a href="http://www.nios.ac.in/media-documents-dmlt-microbiology-lesson-10.pdf">http://www.nios.ac.in/media-documents-dmlt-microbiology-lesson-10.pdf</a>
		Immunochemical techniques	<a href="http://www.nios.ac.in/media-documents-dmlt-Biochemistry-Lesson-24.pdf">http://www.nios.ac.in/media-documents-dmlt-Biochemistry-Lesson-24.pdf</a>
		Immunology	<a href="https://www.youtube.com/watch?v=LjddsUi78sg">https://www.youtube.com/watch?v=LjddsUi78sg</a>
		Microbial cell structure and function	<a href="https://nptel.ac.in/courses-102103015-pdf-mod2.pdf">https://nptel.ac.in/courses-102103015-pdf-mod2.pdf</a>
		Staining techniques	<a href="http://www.nios.ac.in/media-documents-dmlt-Microbiology-Lesson-02.pdf">http://www.nios.ac.in/media-documents-dmlt-Microbiology-Lesson-02.pdf</a>



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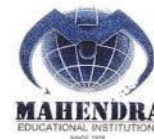
		Preparation and staining of specimen	<a href="https://nptel.ac.in/courses-102103015-8">https://nptel.ac.in/courses-102103015-8</a>
7	DIAGNOSTIC AND THERAPEUTIC EQUIPMENT 1(SEM V YEAR III)	12 LEAD SYSTEM	<a href="https://www.youtube.com/watch?v=kwlBsx9BNbU&amp;feature=youtu.be">https://www.youtube.com/watch?v=kwlBsx9BNbU&amp;feature=youtu.be</a>
		EEG electrode placements	<a href="https://www.sciencedirect.com/topics/biochemistry-genetics-and-molecular-biology/10-20-system-ecg">https://www.sciencedirect.com/topics/biochemistry-genetics-and-molecular-biology/10-20-system-ecg</a>
		TENS	<a href="https://www.physio-pedia.com/Transcutaneous_Electrical_Nerve_Stimulation_%28TENS_%29">https://www.physio-pedia.com/Transcutaneous Electrical Nerve Stimulation %28TENS %29</a>
		PMS	<a href="https://link.springer.com/chapter/10.1007-0-387-36278-9_17">https://link.springer.com/chapter-10.1007-0-387-36278-9_17</a>
		HLM	<a href="https://www.youtube.com/watch?v=RmwMzw_YTNU">https://www.youtube.com/watch?v=RmwMzw_YTNU</a>
			<a href="https://www.youtube.com/watch?v=Cx7uPuRqNME">https://www.youtube.com/watch?v=Cx7uPuRqNME</a>
		Artificial kidney	<a href="https://www.youtube.com/watch?v=sT5SmIM60zo">https://www.youtube.com/watch?v=sT5SmIM60zo</a>
8	MICROPROCESSOR AND MICROCONTROLLER(SEM V - YEAR III)	Working of digital clock using 8051 with 7 segment display	<a href="https://www.youtube.com/watch?v=7z2yLCq9Qk4">https://www.youtube.com/watch?v=7z2yLCq9Qk4</a>
		Interfacing Seven Segment Display With 8051 Microcontroller	<a href="https://www.youtube.com/watch?v=VEdeR1i6oaE">https://www.youtube.com/watch?v=VEdeR1i6oaE</a>
		Working of Traffic light controller	<a href="https://www.youtube.com/watch?v=z1yZ7kWkA7U">https://www.youtube.com/watch?v=z1yZ7kWkA7U</a>
		Working of stepper motor	<a href="https://www.youtube.com/watch?v=TWMai3oirmM&amp;feature=youtu.be">https://www.youtube.com/watch?v=TWMai3oirmM&amp;feature=youtu.be</a>
		Alarm controller	<a href="https://www.youtube.com/watch?v=QxIc0QcFLyw&amp;feature=youtu.be">https://www.youtube.com/watch?v=QxIc0QcFLyw&amp;feature=youtu.be</a>
9	BIOMETRIC SYSTEMS (SEM VI - YEAR III)	Types of biometric identification	<a href="https://www.youtube.com/watch?v=eZTfgNIiNUA&amp;feature=youtu.be">https://www.youtube.com/watch?v=eZTfgNIiNUA&amp;feature=youtu.be</a>
		Biometric Fingerprint Attendance System Demo Training	<a href="https://www.youtube.com/watch?v=kfEtHoN_8Ms">https://www.youtube.com/watch?v=kfEtHoN_8Ms</a>
		Mobile payment using biometric authentication	<a href="https://www.youtube.com/watch?v=C2zLrQSRMWg&amp;feature=youtu.be">https://www.youtube.com/watch?v=C2zLrQSRMWg&amp;feature=youtu.be</a>
		Face ID	<a href="https://www.youtube.com/watch?v=NwsIXitj15M&amp;feature=youtu.be">https://www.youtube.com/watch?v=NwsIXitj15M&amp;feature=youtu.be</a>
		Biometrics for automatic access control system	<a href="https://www.youtube.com/watch?v=9zCBFnIJaQw&amp;feature=youtu.be">https://www.youtube.com/watch?v=9zCBFnIJaQw&amp;feature=youtu.be</a>
10	ANALOG AND DIGITAL COMMUNICATION (SEM IV - II YEAR)	Need for modulation	<a href="https://www.youtube.com/watch?v=00ZbuhPruJw&amp;feature=youtu.be">https://www.youtube.com/watch?v=00ZbuhPruJw&amp;feature=youtu.be</a>
		Pwm	<a href="https://www.youtube.com/watch?v=B_YsdvIxRbA&amp;feature=youtu.be">https://www.youtube.com/watch?v=B_YsdvIxRbA&amp;feature=youtu.be</a>



	Network topology	<a href="https://www.youtube.com/watch?v=F35sSPTahS8&amp;feature=youtu.be">https://www.youtube.com/watch?v=F35sSPTahS8&amp;feature=youtu.be</a>
	Mobile communication	<a href="https://www.youtube.com/watch?v=tt1-Ohe9QQU&amp;feature=youtu.be">https://www.youtube.com/watch?v=tt1-Ohe9QQU&amp;feature=youtu.be</a>
	Multiple access scheme	<a href="https://www.youtube.com/watch?v=oYRMYSIVj1o&amp;feature=youtu.be">https://www.youtube.com/watch?v=oYRMYSIVj1o&amp;feature=youtu.be</a>

## B.E Civil Engineering

S. NO	SUBJECT NAME	TOPIC	LINK
1	Engineering Mechanics	Internal Forces In Beams	<a href="http://nptel.ac.in/courses-11210/3108-7">http://nptel.ac.in/courses-11210/3108-7</a>
		Stresses And Strength - Application In Structural Mechanics	<a href="https://ocw.mit.edu/courses-civil-and-environmental-engineering-1-050-engineering-mechanics-i-fall-2007-lecture-notes-lec8.pdf">https://ocw.mit.edu/courses-civil-and-environmental-engineering-1-050-engineering-mechanics-i-fall-2007-lecture-notes-lec8.pdf</a>
2	Environmental Science and Engineering	Municipal Solid Waste Management	<a href="http://nptel.ac.in/courses-12010/8005-3">http://nptel.ac.in/courses-12010/8005-3</a>
3	Engineering Geology	Origin And Types Of Rocks	<a href="https://nptel.ac.in/courses-12010/8005-3">https://nptel.ac.in/courses-12010/8005-3</a>
4	Mechanics Of Solids	Composite Beam	<a href="https://nptel.ac.in/courses-12010/8005-3">https://nptel.ac.in/courses-12010/8005-3</a>
5	Fluid Mechanics And Machinery	Kinematics Of Fluid	<a href="https://nptel.ac.in/courses-10510/2090-16">https://nptel.ac.in/courses-10510/2090-16</a>
6	Mechanics Of Fluids	Compressibility Of Fluids	<a href="https://ocw.mit.edu/courses-civil-and-environmental-engineering-1-060-engineering-mechanics-ii-spring-2006-lecture-notes-lecture2.pdf">https://ocw.mit.edu/courses-civil-and-environmental-engineering-1-060-engineering-mechanics-ii-spring-2006-lecture-notes-lecture2.pdf</a>
7	Surveying I	Classifications of Surveying	<a href="https://nptel.ac.in/courses-10510/7122-">https://nptel.ac.in/courses-10510/7122-</a>
8	Construction Materials	Concrete: Material	<a href="http://nptel.ac.in/courses-10510/2088-3">http://nptel.ac.in/courses-10510/2088-3</a>
9	Strength Of Materials	Torsion- Real Life Application	<a href="http://nptel.ac.in/courses-11210/6141-5">http://nptel.ac.in/courses-11210/6141-5</a>
		Mohr stress plane and strength criteria	<a href="https://ocw.mit.edu/courses-civil-and-environmental-engineering-1-050-engineering-mechanics-i-fall-2007-lecture-notes-lec11.pdf">https://ocw.mit.edu/courses-civil-and-environmental-engineering-1-050-engineering-mechanics-i-fall-2007-lecture-notes-lec11.pdf</a>
10	Applied Hydraulic Engineering	Uniform Flow	<a href="http://nptel.ac.in/courses-10510/3021-10">http://nptel.ac.in/courses-10510/3021-10</a>



		Turbines	<a href="http://nptel.ac.in/courses-10510/3021-42">http://nptel.ac.in/courses-10510/3021-42</a>
11	Surveying II	Remote sensing system	<a href="http://nptel.ac.in/courses-10510/4100-23">http://nptel.ac.in/courses-10510/4100-23</a>
12	Soil Mechanics	Slope Stability	<a href="http://nptel.ac.in/courses-10510/1001-41">http://nptel.ac.in/courses-10510/1001-41</a>
13	Structural Analysis - I	Deflection of Structures	<a href="http://nptel.ac.in/courses-10510/1085-25">http://nptel.ac.in/courses-10510/1085-25</a>
14	Foundation Engineering	Shallow Foundation: Bearing Capacity-	<a href="http://nptel.ac.in/courses-10510/5039-6">http://nptel.ac.in/courses-10510/5039-6</a>
15	Environmental Engineering I	Environmental Engineering-Chemical Processes	<a href="https://onlinecourses.nptel.ac.in/noc18_ce29-preview">https://onlinecourses.nptel.ac.in/noc18_ce29-preview</a>
16	Highway Engineering	Cross Section Elements	<a href="http://nptel.ac.in/courses-10510/5107-9">http://nptel.ac.in/courses-10510/5107-9</a>
17	Design of Reinforced Concrete Structures	Design of RC Slender Columns	<a href="http://nptel.ac.in/courses-10510/5105-29">http://nptel.ac.in/courses-10510/5105-29</a>
18	Structural Analysis - II	Kinematic Indeterminacy of the structure	<a href="http://nptel.ac.in/courses-10510/1086-2">http://nptel.ac.in/courses-10510/1086-2</a>
19	Design of Steel Structures	Compression Members	<a href="http://nptel.ac.in/courses-10510/6112-25">http://nptel.ac.in/courses-10510/6112-25</a>
20	Railways, Airports and Harbour Engineering	Creep in Rails	<a href="http://nptel.ac.in/courses-10510/7123-8">http://nptel.ac.in/courses-10510/7123-8</a>
21	Environmental Engineering II	Classification Of Water Pollutants And Effects On Environment	<a href="http://nptel.ac.in/courses-10510/5048-">http://nptel.ac.in/courses-10510/5048-</a>
22	Concrete Technology	Chemical Admixtures	<a href="http://nptel.ac.in/courses-105102012-9">http://nptel.ac.in/courses-105102012-9</a>
23	Structural Dynamics and Earthquake Engineering	Dynamics of SDOF Structure	<a href="http://nptel.ac.in/courses-10510/1006-3">http://nptel.ac.in/courses-10510/1006-3</a>
		Response Analysis for Specified Ground Motion	<a href="http://nptel.ac.in/courses-10510/2016-9">http://nptel.ac.in/courses-10510/2016-9</a>



## B.E – ECE

S. NO	SUBJECT NAME	TOPI C	LINK
1	Digital Image Processing	Image enhancement and restoration	<a href="http://nptel.ac.in/courses/117105079/">http://nptel.ac.in/courses-117105079-</a>
2	Wireless Networks	Routing, topologies, sonnet, switches	<a href="http://nptel.ac.in/courses/106105081/">http://nptel.ac.in/courses-106105081-</a>
3	Control System	Nonlinear system, Matrix theory	<a href="http://nptel.ac.in/courses/101108047/">http://nptel.ac.in/courses-101108047-</a>
4	Signals and System	Linear signal models, Z transform	<a href="http://nptel.ac.in/courses/108105059/">http://nptel.ac.in/courses-108105059-</a>
5	Mircoprocessor and Microcontroller	Intel 8051. Architectures, PIC	<a href="http://nptel.ac.in/courses/117104072/">http://nptel.ac.in/courses-117104072-</a>
6	Digital Communication	Signal and Sampling Theory	<a href="http://nptel.ac.in/courses/117105077/">http://nptel.ac.in/courses-117105077-</a>
7	Antenna and Wave Propagation	Radiation, pointing vector	<a href="http://nptel.ac.in/courses/117107035/">http://nptel.ac.in/courses-117107035-</a>
8	Digital Electronics	Numbering system, K-Map, Combinational circuits	<a href="http://nptel.ac.in/courses/117103064/">http://nptel.ac.in/courses-117103064-</a>
9	VLSI Design	Low power design priinciples	<a href="http://nptel.ac.in/courses/117101004/">http://nptel.ac.in/courses-117101004-</a>
10	Electromagnetic Fields	Time varying field, Maxwell, stokes theorem	<a href="http://nptel.ac.in/courses/117103065/">http://nptel.ac.in/courses-117103065-</a>
11	Microwave Engineering	Measurement of unknown impedance, smith chart calculation	<a href="http://nptel.ac.in/courses/117105122/">http://nptel.ac.in/courses-117105122-</a>
12	Electronic Circuits	Waveform generator, PLL, FLL	<a href="http://nptel.ac.in/courses/117108107/">http://nptel.ac.in/courses-117108107-</a>
13	Computer Architecture	Pipeline processor, memory hierarchy	<a href="http://nptel.ac.in/courses/106102062/">http://nptel.ac.in/courses-106102062-</a>
14	Computer Networks	Routing, topologies, sonnet, switches	<a href="http://nptel.ac.in/courses/106105081/">http://nptel.ac.in/courses-106105081-</a>
15	PLC and Microcontroller	Intel 8051. Architectures, PIC	<a href="http://nptel.ac.in/courses/117104072/">http://nptel.ac.in/courses-117104072-</a>
16	Transmission and Line Wave	Uniform planes, Maxwell ,	<a href="http://nptel.ac.in/courses/11710">http://nptel.ac.in/courses-11710</a>



### B.E MECH

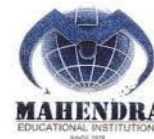
S.No	SUBJECT NAME	TOPIC	LINK
1	Engineering Mechanics	Internal forces in Beams	<a href="http://nptel.ac.in/courses-11210310-8-7">http://nptel.ac.in/courses-11210310-8-7</a>
		Stresses and Strength - Application in Structural Mechanics	<a href="https://ocw.mit.edu/courses-civil-and-environmental-engineering-1-050-engineering-mechanics-i-fall-2007-lecture-notes-lec8.pdf">https://ocw.mit.edu/courses-civil-and-environmental-engineering-1-050-engineering-mechanics-i-fall-2007-lecture-notes-lec8.pdf</a>
2	Strength of Materials	Torsion- Real Life Application	<a href="http://nptel.ac.in/courses-11210614-1-5">http://nptel.ac.in/courses-11210614-1-5</a>
		Mohr stress plane and strength criteria	<a href="https://ocw.mit.edu/courses-civil-and-environmental-engineering-1-050-engineering-mechanics-i-fall-2007-lecture-notes-lec11.pdf">https://ocw.mit.edu/courses-civil-and-environmental-engineering-1-050-engineering-mechanics-i-fall-2007-lecture-notes-lec11.pdf</a>
3	Engineering Thermodynamics	Application of First Law of Thermodynamics to Open System	<a href="http://nptel.ac.in/courses-11210301-6-7">http://nptel.ac.in/courses-11210301-6-7</a>
		Steady-state and equilibrium approximations	<a href="https://ocw.mit.edu/courses-chemistry-5-60-thermodynamics-kinetics-spring-2008-lecture-notes-5-60-lecture32.pdf">https://ocw.mit.edu/courses-chemistry-5-60-thermodynamics-kinetics-spring-2008-lecture-notes-5-60-lecture32.pdf</a>
		Kinematics of Fluid	<a href="https://nptel.ac.in/courses-1121041-18-6">https://nptel.ac.in/courses-1121041-18-6</a>
		Compressibility of fluids	<a href="https://ocw.mit.edu/courses-civil-and-environmental-engineering-1-060-engineering-mechanics-ii-spring-2006-lecture-notes-lecture2.pdf">https://ocw.mit.edu/courses-civil-and-environmental-engineering-1-060-engineering-mechanics-ii-spring-2006-lecture-notes-lecture2.pdf</a>
		Advanced Metal Casting Processes	<a href="https://nptel.ac.in/courses-1121070-77-5">https://nptel.ac.in/courses-1121070-77-5</a>
		Metal casting	<a href="https://ocw.mit.edu/courses-mechanical-engineering-2-008-design-and-manufacturing-ii-spring-2004-lecture-notes-19casting.pdf">https://ocw.mit.edu/courses-mechanical-engineering-2-008-design-and-manufacturing-ii-spring-2004-lecture-notes-19casting.pdf</a>
		Kutzbach and Grubler's criterion	<a href="https://nptel.ac.in/courses-1121041-21-4">https://nptel.ac.in/courses-1121041-21-4</a>





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		Mechanisms - 2D kinematic analysis	<a href="https://ocw.mit.edu/courses/mechanical-engineering-2-007-design-and-manufacturing-i-spring-2009-lecture-notes-MIT2_007s09_lec06.pdf">https://ocw.mit.edu/courses/mechanical-engineering-2-007-design-and-manufacturing-i-spring-2009-lecture-notes-MIT2_007s09_lec06.pdf</a>
		advanced material removal processes	<a href="https://nptel.ac.in/courses-112107077-15">https://nptel.ac.in/courses-112107077-15</a>
		Metal Cutting	<a href="https://ocw.mit.edu/courses/mechanical-engineering-2-008-design-and-manufacturing-ii-spring-2004-lecture-notes-08cutting_2_6_f.pdf">https://ocw.mit.edu/courses/mechanical-engineering-2-008-design-and-manufacturing-ii-spring-2004-lecture-notes-08cutting_2_6_f.pdf</a>
		Phase Diagrams	<a href="https://nptel.ac.in/courses-1121081_50-7">https://nptel.ac.in/courses-1121081_50-7</a>
		Non-crystalline Materials	<a href="https://ocw.mit.edu/courses/materials-science-and-engineering-3-012-fundamentals-of-materials-science-fall-2005-lecture-notes-lec21b.pdf">https://ocw.mit.edu/courses/materials-science-and-engineering-3-012-fundamentals-of-materials-science-fall-2005-lecture-notes-lec21b.pdf</a>
		Municipal Solid Waste Management	<a href="https://nptel.ac.in/courses-1201080_05-3">https://nptel.ac.in/courses-1201080_05-3</a>
		Ecology - Engineering for Sustainability	<a href="https://ocw.mit.edu/courses/civil-and-environmental-engineering-1-020-ecology-ii-engineering-for-sustainability-spring-2008-lecture-notes-lec21_22.pdf">https://ocw.mit.edu/courses/civil-and-environmental-engineering-1-020-ecology-ii-engineering-for-sustainability-spring-2008-lecture-notes-lec21_22.pdf</a>
		Air Standard Otto Cycle	<a href="https://nptel.ac.in/courses-1121061_33-5">https://nptel.ac.in/courses-1121061_33-5</a>
		Power cycles	<a href="https://ocw.mit.edu/courses/aeronautics-and-astronautics-16-050-thermal-energy-fall-2002-lecture-notes-07_part2a.pdf">https://ocw.mit.edu/courses/aeronautics-and-astronautics-16-050-thermal-energy-fall-2002-lecture-notes-07_part2a.pdf</a>
		3D transformations and projections	<a href="https://nptel.ac.in/courses-1121021_01-9">https://nptel.ac.in/courses-1121021_01-9</a>
		Mechanical Design Process	<a href="https://ocw.mit.edu/courses/mechanical-engineering-2-007-design-and-manufacturing-i-spring-2009-lecture-notes-MIT2_007s09_lec02.pdf">https://ocw.mit.edu/courses/mechanical-engineering-2-007-design-and-manufacturing-i-spring-2009-lecture-notes-MIT2_007s09_lec02.pdf</a>



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	Solution of Navier-Stokes and Energy Equations for Incompressible Internal Flows	<a href="https://nptel.ac.in/courses-112104159-18">https://nptel.ac.in/courses-112104159-18</a>
	Radiative properties of gases	<a href="https://ocw.mit.edu/courses/mechanical-engineering-2-58j-radiative-transfer-spring-2006-lecture-notes-lecture12.pdf">https://ocw.mit.edu/courses/mechanical-engineering-2-58j-radiative-transfer-spring-2006-lecture-notes-lecture12.pdf</a>

	Stresses in machine elements	<a href="https://nptel.ac.in/courses-112105125-4">https://nptel.ac.in/courses-112105125-4</a>
	Bolted joints	<a href="https://ocw.mit.edu/courses/mechanical-engineering-2-72-elements-of-mechanical-design-spring-2009-lecture-notes-MIT2_72s09 lec10.pdf">https://ocw.mit.edu/courses/mechanical-engineering-2-72-elements-of-mechanical-design-spring-2009-lecture-notes-MIT2_72s09 lec10.pdf</a>
	Error estimation	<a href="https://nptel.ac.in/courses-112106139-4">https://nptel.ac.in/courses-112106139-4</a>
	Dynamics of Rigid Bodies in Plane Motion; Dynamic Force Analysis of Machines	<a href="https://nptel.ac.in/courses-112101096-2">https://nptel.ac.in/courses-112101096-2</a>
	Single Particle Dynamics: Linear and Angular Momentum Principles, Work- energy Principle	<a href="https://ocw.mit.edu/courses/mechanical-engineering-2-032-dynamics-fall-2004-lecture-notes-session_1.pdf">https://ocw.mit.edu/courses/mechanical-engineering-2-032-dynamics-fall-2004-lecture-notes-session_1.pdf</a>
	Hydrodynamic Lubrication Of Journal Bearings	<a href="https://nptel.ac.in/courses-112106137-39">https://nptel.ac.in/courses-112106137-39</a>
	Gears and springs	<a href="https://ocw.mit.edu/courses/mechanical-engineering-2-007-design-and-manufacturing-i-spring-2009-lecture-notes-MIT2_007s09 lec13.pdf">https://ocw.mit.edu/courses/mechanical-engineering-2-007-design-and-manufacturing-i-spring-2009-lecture-notes-MIT2_007s09 lec13.pdf</a>
	Engine Emissions and Air Pollution	<a href="https://nptel.ac.in/courses-112104033-2">https://nptel.ac.in/courses-112104033-2</a>
	Hydrogen, Biofuels; design process, importance metrics	<a href="https://ocw.mit.edu/courses/nuclear-engineering-22-033-nuclear-systems-design-project-fall-2011-videos-class-notes-lecture-3-hydrogen-and-biofuel-production-design-process-">https://ocw.mit.edu/courses/nuclear-engineering-22-033-nuclear-systems-design-project-fall-2011-videos-class-notes-lecture-3-hydrogen-and-biofuel-production-design-process-</a>



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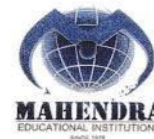
		Ritz Method	<a href="https://nptel.ac.in/courses-1121041-16-3">https://nptel.ac.in/courses-1121041-16-3</a>
		Analysis of solids-structures and fluids	<a href="https://ocw.mit.edu/courses/mechanical-engineering-2-092-finite-element-analysis-of-solids-and-fluids-i-fall-2009-lecture-notes/MIT2_092F09_lec03.pdf">https://ocw.mit.edu/courses/mechanical-engineering-2-092-finite-element-analysis-of-solids-and-fluids-i-fall-2009-lecture-notes/MIT2_092F09_lec03.pdf</a>
		Speed of Sound and Mach Number	<a href="https://nptel.ac.in/courses-1121030-21-5">https://nptel.ac.in/courses-1121030-21-5</a>
		Flow with Heat Addition, Rayleigh Line; Shock Waves:	<a href="https://ocw.mit.edu/courses/mechanical-engineering-2-26-compressible-fluid-dynamics-">https://ocw.mit.edu/courses/mechanical-engineering-2-26-compressible-fluid-dynamics-</a>

## B.E – CSE

S.NO	Subject Name	Topic name	Link
1	Microprocessor and Micro Controller	Architectures of microprocessor	<a href="https://nptel.ac.in/courses-1061-08100-1">https://nptel.ac.in/courses-1061-08100-1</a>
2	Artificial Intelligence	Introduction	<a href="http://nptel.ac.in/courses-10610-5077-">http://nptel.ac.in/courses-10610-5077-</a>
		Heuristics	<a href="http://nptel.ac.in/courses-10610-6126-">http://nptel.ac.in/courses-10610-6126-</a>
3	Compiler Design	Compilers Principle, Techniques and tools	<a href="http://nptel.ac.in/courses-10610-4123-">http://nptel.ac.in/courses-10610-4123-</a>
		Introduction to various phases of compilers	<a href="https://www.youtube.com/watch?v=DFMf9oPbuRI&amp;rel=1&amp;color1=0xcbb9f&amp;color2=0xcbb9f&amp;border=0&amp;fs=1">https://www.youtube.com/watch?v=DFMf9oPbuRI&amp;rel=1&amp;color1=0xcbb9f&amp;color2=0xcbb9f&amp;border=0&amp;fs=1</a>
4	Computer Networks	IP Routing Protocols	<a href="http://nptel.ac.in/courses-10610-6091-">http://nptel.ac.in/courses-10610-6091-</a>
		Application of protocols for e-Mails	<a href="http://nptel.ac.in/courses-10610-5080-">http://nptel.ac.in/courses-10610-5080-</a>
5	Graphics and Multimedia	Display Devices- CRT	<a href="https://www.youtube.com/watch?v=fwzYuhduME4&amp;rel=1&amp;color1=0xcbb9f&amp;color2=0xcbb9f&amp;border=0&amp;fs=1">https://www.youtube.com/watch?v=fwzYuhduME4&amp;rel=1&amp;color1=0xcbb9f&amp;color2=0xcbb9f&amp;border=0&amp;fs=1</a>

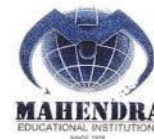


		2D Transformation	<a href="https://nptel.ac.in/courses-1061_06090-">https://nptel.ac.in/courses-1061_06090-</a>
		3D Viewing	<a href="https://nptel.ac.in/courses-1061_06090-">https://nptel.ac.in/courses-1061_06090-</a>
		Clipping and Open GL	<a href="https://www.youtube.com/watch?v=fwzYuhduME4&amp;rel=1&amp;color1=0xcbba9f&amp;color2=0xcbba9f&amp;border=0&amp;fs=1">https://www.youtube.com/watch?v=fwzYuhduME4&amp;rel=1&amp;color1=0xcbba9f&amp;color2=0xcbba9f&amp;border=0&amp;fs=1</a>
		Digital Image Processing	<a href="https://nptel.ac.in/courses-1061_06090-">https://nptel.ac.in/courses-1061_06090-</a>
		Raster Graphics	<a href="https://nptel.ac.in/courses-1061_02063-">https://nptel.ac.in/courses-1061_02063-</a>
6	Cryptography and Network Security	Factoring Algorithm	<a href="https://nptel.ac.in/courses-1061_05031-30">https://nptel.ac.in/courses-1061_05031-30</a>
		The RSA Cryptosystem	<a href="https://nptel.ac.in/courses-1061_05031-28">https://nptel.ac.in/courses-1061_05031-28</a>
		Stream Ciphers	<a href="https://nptel.ac.in/courses-1061_05031-19">https://nptel.ac.in/courses-1061_05031-19</a>
		Firewall and Intrusion detection system	<a href="https://nptel.ac.in/courses-106105031-40">https://nptel.ac.in/courses-106105031-40</a>
7	Grid and Cloud Computing	Introduction	<a href="https://www.youtube.com/watch?v=Eg4AAGCE7X4&amp;list=PL2UlrhJ_JwyA5IIOCdEWINArFke4jgtlg">https://www.youtube.com/watch?v=Eg4AAGCE7X4&amp;list=PL2UlrhJ_JwyA5IIOCdEWINArFke4jgtlg</a>
		Security inside Cloud	<a href="https://www.youtube.com/watch?v=g4jbDuJ7_IQ&amp;list=PL2UlrhJ_JwyA5IIOCdEWINArFke4jgtlg&amp;index=2">https://www.youtube.com/watch?v=g4jbDuJ7_IQ&amp;list=PL2UlrhJ_JwyA5IIOCdEWINArFke4jgtlg&amp;index=2</a>
		Virtual Reality	<a href="https://www.youtube.com/watch?v=aNC5YMUTcQ4&amp;list=PLbMVogVj5nJSyt80VRXYC-YrAvQuUb6dh">https://www.youtube.com/watch?v=aNC5YMUTcQ4&amp;list=PLbMVogVj5nJSyt80VRXYC-YrAvQuUb6dh</a>
8	Problem Solving and Python Programming	Introduction to Python Programming	<a href="https://www.youtube.com/watch?v=eoPsX7MKfe8&amp;list=PLIdgECt554OVFKXRpo_kuI0XpU_QKk0ycO">https://www.youtube.com/watch?v=eoPsX7MKfe8&amp;list=PLIdgECt554OVFKXRpo_kuI0XpU_QKk0ycO</a>
9	Web Programming	WWW,HTML	<a href="http://nptel.ac.in/courses-10610_5084-11">http://nptel.ac.in/courses-10610_5084-11</a>
		XML	<a href="http://nptel.ac.in/courses-10610_5084-16">http://nptel.ac.in/courses-10610_5084-16</a>



## BE – EEE

S.No.	Subject Name	Topic Name	Link
1	Professional Ethics	Ethical rules	<a href="http://nptel.ac.in/courses-109104032-9">http://nptel.ac.in/courses-109104032-9</a>
		Situation ethics	<a href="http://nptel.ac.in/courses-109104032-10">http://nptel.ac.in/courses-109104032-10</a>
2	Circuit theory	Network theorems and network functions	<a href="http://nptel.ac.in/courses-108102042-9">http://nptel.ac.in/courses-108102042-9</a>
3	Measurement and Instrumentation	Opto electric sensors	<a href="http://nptel.ac.in/courses-108105064-28">http://nptel.ac.in/courses-108105064-28</a>
		Thermocouple	<a href="http://nptel.ac.in/courses-108105064-8">http://nptel.ac.in/courses-108105064-8</a>
		Errors in measurements	<a href="http://nptel.ac.in/courses-112106138-2">http://nptel.ac.in/courses-112106138-2</a>
4.	Electrical energy generation and utilization conversation	Electric traction	<a href="https://www.youtube.com/watch?v=fakGLu03jYg">https://www.youtube.com/watch?v=fakGLu03jYg</a>
5.	Power system transients	Torsional Transients	<a href="http://nptel.ac.in/courses-108101004-41">http://nptel.ac.in/courses-108101004-41</a>
6.	Solid State AC Drives	DC motor drives	<a href="https://www.youtube.com/watch?v=9h2IEIpo74A">https://www.youtube.com/watch?v=9h2IEIpo74A</a>
		Three phase full converter drives	<a href="https://www.youtube.com/watch?v=a02GvEGSpBs">https://www.youtube.com/watch?v=a02GvEGSpBs</a>
7.	Flexible AC Transmission Systems	FACTS devices	<a href="https://www.youtube.com/watch?v=-RMTEQw0kH0">https://www.youtube.com/watch?v=-RMTEQw0kH0</a>
		Static synchronous compensator	<a href="https://www.youtube.com/watch?v=usaJHpdsBRY">https://www.youtube.com/watch?v=usaJHpdsBRY</a>
8.	Solid state drives	Advanced electric drives	<a href="http://nptel.ac.in/courses-108104011-2">http://nptel.ac.in/courses-108104011-2</a>
		Speed control of electric drives	<a href="https://www.youtube.com/watch?v=UejGsuDSA-I">https://www.youtube.com/watch?v=UejGsuDSA-I</a>
9.	Basic of electrical electronics and instrumentation engineering	Transient response of RL circuit	<a href="http://nptel.ac.in/courses-122104013-6">http://nptel.ac.in/courses-122104013-6</a>
10.	Embedded system	FPGA & Applications	<a href="http://nptel.ac.in/courses-108105057-20">http://nptel.ac.in/courses-108105057-20</a>
11.	Basic of electrical electronics and instrumentation engineering	DC circuit analysis	<a href="http://nptel.ac.in/courses-122104013-4">http://nptel.ac.in/courses-122104013-4</a>
12.	Energy Management and Auditing	Audit of energy	<a href="https://www.youtube.com/watch?v=FTpMWXMBsYM">https://www.youtube.com/watch?v=FTpMWXMBsYM</a>
13.	Solid State Drives	Induction motor drive	<a href="https://www.youtube.com/watch?v=96hvtQ8Qlvo">https://www.youtube.com/watch?v=96hvtQ8Qlvo</a>



14.	Power Electronics	AC-DC converter	<a href="http://nptel.ac.in/courses-1081/08077-11">http://nptel.ac.in/courses-1081/08077-11</a>
15.	Wind Energy Conversion Systems	Wind turbine terminology and Components	<a href="https://www.youtube.com/watch?v=P9SyZvHrJvc">https://www.youtube.com/watch?v=P9SyZvHrJvc</a>
16.	High Voltage Direct Current Transmission	DC link	<a href="http://nptel.ac.in/courses-1081/04013-30">http://nptel.ac.in/courses-1081/04013-30</a>
		Single machine infinite Bus	<a href="http://nptel.ac.in/courses-1081/04013-34">http://nptel.ac.in/courses-1081/04013-34</a>
17.	Power Semiconductor Devices	Thyristor	<a href="https://www.youtube.com/watch?v=p601Owt_1Q0">https://www.youtube.com/watch?v=p601Owt_1Q0</a>
18.	System Theory	Linear system	<a href="https://www.youtube.com/watch?v=jViqKtxvZ9E">https://www.youtube.com/watch?v=jViqKtxvZ9E</a>
19.	Control System	Feedback controller	<a href="https://www.youtube.com/watch?v=Hv_Dr0X8ZiI">https://www.youtube.com/watch?v=Hv_Dr0X8ZiI</a>
20.	Design for Power		<a href="https://www.youtube.com/watch?v=Hv_Dr0X8ZiI">https://www.youtube.com/watch?v=Hv_Dr0X8ZiI</a>
21.	Electronics		<a href="https://www.youtube.com/watch?v=nRMZ3K2pzcE&amp;list=PLF49C0A9898F00447">https://www.youtube.com/watch?v=nRMZ3K2pzcE&amp;list=PLF49C0A9898F00447</a>
22.	Electrical Machines - II	AC machines	<a href="https://www.youtube.com/watch?v=nRMZ3K2pzcE&amp;list=PLF49C0A9898F00447">https://www.youtube.com/watch?v=nRMZ3K2pzcE&amp;list=PLF49C0A9898F00447</a>
23.	HVDC	HVDC Transmission	<a href="https://www.youtube.com/watch?v=pSXsiIwesKI">https://www.youtube.com/watch?v=pSXsiIwesKI</a>
24.	Design of electrical machines	Design of electrical machines	<a href="https://www.youtube.com/watch?v=ju3qH37MfPk">https://www.youtube.com/watch?v=ju3qH37MfPk</a>
	SMPS and UPS	Regulated power supply	<a href="https://www.youtube.com/watch?v=x2wqwqUhMdE">https://www.youtube.com/watch?v=x2wqwqUhMdE</a>
		Voltage regulators	<a href="https://www.youtube.com/watch?v=hLHNufw5kMg">https://www.youtube.com/watch?v=hLHNufw5kMg</a>
25.	Digital Logic Circuits	Basic logic gates	<a href="https://www.youtube.com/watch?v=La9Nk6iwHvU">https://www.youtube.com/watch?v=La9Nk6iwHvU</a>
		Flip flops	<a href="https://www.youtube.com/watch?v=qs8SDqq74Z4">https://www.youtube.com/watch?v=qs8SDqq74Z4</a>
26.	Electromagnetic theory	Elements of vector calculus	<a href="http://nptel.ac.in/courses-1151/01005-">http://nptel.ac.in/courses-1151/01005-</a>
		Maxwells equation	<a href="http://nptel.ac.in/courses-1151/01005-30">http://nptel.ac.in/courses-1151/01005-30</a>
27.	Control system	Signal flow graph	<a href="http://nptel.ac.in/courses-1081/01037-14">http://nptel.ac.in/courses-1081/01037-14</a>
		Frequency response	<a href="http://nptel.ac.in/courses-1081/01037-21">http://nptel.ac.in/courses-1081/01037-21</a>
28.	Protection and switch gear	Switch-gear & Protection	<a href="https://www.youtube.com/watch?v=id72r7QuGaM">https://www.youtube.com/watch?v=id72r7QuGaM</a>
		Protective Relay In Power System	<a href="https://www.youtube.com/watch?v=F4iICDV2Z74">https://www.youtube.com/watch?v=F4iICDV2Z74</a>



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29.	Electrical machines-2	Armature reaction	<a href="http://nptel.ac.in/courses-108105017-24">http://nptel.ac.in/courses-108105017-24</a>
30.	High voltage Engineering	Resonance transformer	<a href="http://nptel.ac.in/courses-108104048-25">http://nptel.ac.in/courses-108104048-25</a>
31.		Impulse voltage generator	<a href="http://nptel.ac.in/courses-108104048-28">http://nptel.ac.in/courses-108104048-28</a>
32.	Power Electronics	IGBT	<a href="http://nptel.ac.in/courses-108101038-9">http://nptel.ac.in/courses-108101038-9</a>
		Three phase half controlled rectifier	<a href="http://nptel.ac.in/courses-108101038-18">http://nptel.ac.in/courses-108101038-18</a>
33.	Special Electrical Machines	Synchronous Machine	<a href="https://www.youtube.com/watch?v=b24jORRoxEc">https://www.youtube.com/watch?v=b24jORRoxEc</a>
34.	Electrical machines and drives	Electrical drives and application	<a href="https://www.youtube.com/watch?v=SUCwqwBUOKM">https://www.youtube.com/watch?v=SUCwqwBUOKM</a>
35.	Electrical drives and control	DC motor drives	<a href="https://www.youtube.com/watch?v=BnciFNIIRMQ">https://www.youtube.com/watch?v=BnciFNIIRMQ</a>
36.	Electrical engineering circuits	Power & energy in circuits	<a href="http://nptel.ac.in/courses-117106108-1">http://nptel.ac.in/courses-117106108-1</a>
37.	Microprocessor and microcontroller	Interfacing with 8051	<a href="http://nptel.ac.in/courses-106108100-1">http://nptel.ac.in/courses-106108100-1</a>
38.	Electrical engineering circuits	Mesh analysis	<a href="http://nptel.ac.in/courses-117106108-59">http://nptel.ac.in/courses-117106108-59</a>
39.	Micro controlled based system design	Architecture of microcontrollers	<a href="http://nptel.ac.in/courses-106108100-5">http://nptel.ac.in/courses-106108100-5</a>

