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

ICT TOOLS & SUPPORT

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TEACHERS USE ICT- ENABLED TOOLS INCLUDING ONLINE RESOURCES

ICT IS A PROFESSIONAL LEARNING SERVICE FOR

EXCELLENCE TEACHING

COACHING · TEACHING · KNOWLEDGE · DEVELOPMENT · LEARN · EXPERIENCE · SKILLS

ICT Smart Class room is an innovative teaching learning tools which brings explanatory content into visually attractive content by integrating learning technology such as computers with Internet connectivity, learning management system (LMS), audio & video systems, and LCD projector with whiteboard. Collaborative learning environment, simple, friendly and non-intimidating classroom technology inspires the presenters who rely on improvisation, spontaneity and audience participation.

This helps the faculty members to effectively deliver the subjects with graphical components (charts, graphs, etc), animations and simulations etc. This tool can make the faculty members to easily implement the method of pedagogy. Students can have a learning environment which supports collaborative learning through simulation and live interaction. This facility increases the learning interest of the students in studies. All the computer systems have internet connection and Wi-Fi connection facilities.

Benefits of Smart Class Rooms

- Access Internet & Intranet Resources at anytime, anywhere in college premises
- Ease of understanding by slow learners
- Makes learning enjoyable with friendly environment to students
- Improves the academic performance

Innovative Teaching Learning Methods

- Lecture Capturing System (LCS)
- Digital Smart Interactive board based Lecture
- Anna University EDUSAT Live Programme
- IIT-Bombay Spoken Tutorial
- NPTEL Local Chapter
- SWAYAM
- Webinar organized by Infosys Campus Connect Programme
- Activity based Learning

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Mahendra College of Engineering,
Mahendra Salem Campus,
Minnampalli, SALEM-636 106.

IT Department: Faculties Sample Video Lectures on Technical Topics

1. Name of the faculty: Mrs. M.SANTHY
Department and designation of the faculty: IT & Assistant Professor
Subject:CS3271
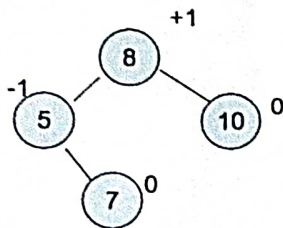Subject Name : Data Structures and Algorithms
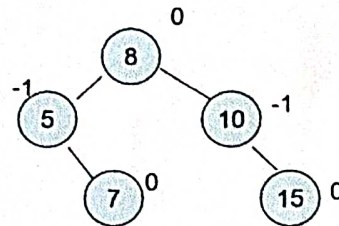Topic of the video: AVL Tree
Regulation : 2021
Length of the video: 13 minutes
Link of the video: https://youtu.be/7vKYwAeH_8w

AVL TREES

Original AVL Tree

After inserting value 15

**Height remains unchanged but the balance factor of the [ ]
changed**

Sample NPTEL VIDEO CLASSES

Pseudo-Code

A mixture of natural language and high-level programming concepts that describes the main ideas behind a generic implementation of a data structure or algorithm.

Eg: **Algorithm** arrayMax(A, n):

Input: An array A storing n integers.
Output: The maximum element in A.
currentMax ← A[0]
for i ← 1 to n-1 do
if currentMax < A[i] then currentMax ← A[i]

then when the loop terminates we would just return current max.

10:14 / 53:30

Lecture - 1 Introduction to Data Structures and Algorithms

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Lecture - 12 Indexing Techniques Multi-Level

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53K views 16 years ago Computer Sc - Database Management System

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ICT CLASSES USED BY FACULTIES

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Salem -Chennai Highway, Minnampalli, Salem – 636106

DEPARTMENT OF INFORMATION TECHNOLOGY
&
Institution Innovation Council(IIC)

National Digital Library of India

Seminar on Front-End and Back-End Developers Roadmap in IT Sector

Date: 08.02.2024

GPS Map Camera

Tamil Nadu, India
Mahendra College of Engineering salem,Minnampalli
chinnagoundapuram po, karipatti via, Tamil Nadu 636106, India
Lat 11.664776°
Long 78.263455°
10/04/23 09:48 AM GMT +05:30

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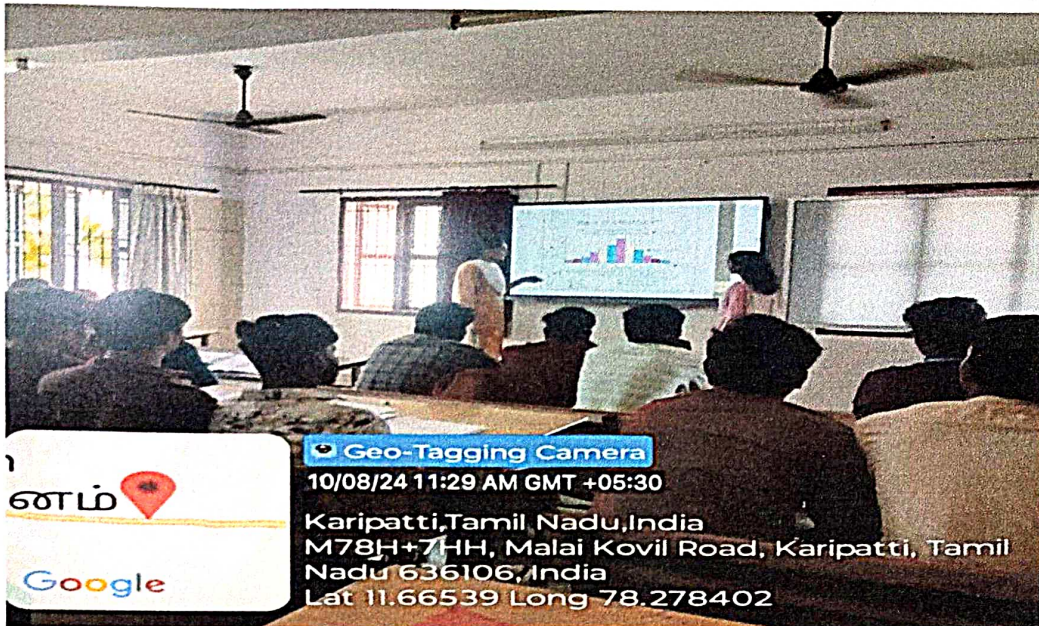
ICT CLASSES USED BY STUDENTS

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Sample Certificates of Additional Courses Attended By The Faculties and Students

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Congratulations

Awarded SWAYAM – NPTEL

Faculty Domain - Advanced Certification

Dr.S.BALAMURUGAN

Professor and Head

Department of Mechanical Engineering

Local Chapter ID: 1032   **Exam Session: Jan – Apr 2024**

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swayam

Students Achievements
July- Oct 2023

NPTEL LOCAL CHAPTER

ELITE

Mr.A.Vignesh
IT Department
Cloud Computing

ELITE

Ms.S.Charulatha
ECE Department
Introduction to Industry 4.0
and Industrial Internet of
Things

ELITE

Ms.S.Soundarya
ECE Department
Introduction to Industry 4.0
and Industrial Internet of
Things

ELITE

Ms.Hareni
ECE Department
Digital Image Processing

ELITE

Mr.V.Kannan
ECE Department
Digital Image Processing

Successfully Completed

Ms.G.Madhumitha
ECE Department
Digital Image Processing

Successfully Completed

Ms.N.Pavithra
ECE Department
Digital Image Processing
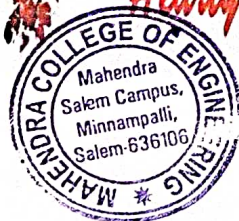
Successfully Completed

Mr.K.Vaitheesh
ECE Department
Digital Image Processing

Successfully Completed

Mr.M.Pradeesh Kumar
ECE Department
Digital Image Processing

Hearty Congratulations to all

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Teaching – Learning Process (Sample E-resources)

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:	https:--www.youtube.com-watch?v=m6SC7hOnAEI
		2. Principles of Computed tomography:	https:--www.youtube.com-watch?v=mBhaNXOj9WQ
		3. Image processing in CT:	https:--www.youtube.com-watch?v=BmkdAqd5ReY
		4. Generations of CT:	https:--www.youtube.com-watch?v=9SUHgtREWQc
		5. Principles of MRI:	https:--www.youtube.com-watch?v=SwH2OEB0DKU
		6. Working of FMRI:	https:--www.youtube.com-watch?v=Rb_mdzgw-Jc
		7. Gamma Camera:	https:--www.youtube.com-watch?v=I0re3ncCKvM
		8. PET and SPECT:	https:--www.youtube.com-watch?v=wx2zyfgYZrE&t=51s
		9. Radiation safety principles:	https:--www.youtube.com-watch?v=3975kVgVaJk
			https:--www.youtube.com-watch?v=5b7nnb6spvo
		10. Cyberknife:	https:--www.youtube.com-watch?v=ikHqxQGRdfc
		11. Dosimeters:	https:--www.youtube.com-watch?v=5XIUWqOPEEc

2	FIBER OPTICS AND LASER IN MEDICINE(SEM VIII YEAR IV)	Fiber optics and its application	https:--www.youtube.com-watch?v=3bgaOvd2ZTQ
		Fiber optics and laser in medicine	https:--www.youtube.com-watch?v=Xz6ERWeSvs8
		Laser applications in medicine:	https:--www.youtube.com-watch?v=kn7JXDGpEfI
		Optical holography	https:--www.youtube.com-watch?v=WoMLI1bVSck&t=41s
		Microscopes	https:--www.youtube.com-watch?v=GG3CK7copdA
3	SENSORS & MEASUREMENTS(SEM III YEAR II)	Science of measurement:	https:--www.youtube.com-watch?v=oAtDAoqdExw
		Types of transducers:	https:--www.youtube.com-watch?v=FYggY7LLDrw
		Standards in india	https:--www.youtube.com-watch?v=G6W-aHme3Ns
		LVDT	https:--www.youtube.com-watch?v=1dx-Dyk2L18
		Strain Gauge:	https:--www.youtube.com-watch?v=9lWpPOGI42Y
		Temperature sensor:	https:--www.youtube.com-watch?v=99IsI-eP0hE
		Photoelectric sensors:	https:--www.youtube.com-watch?v=7lU_GsgXRo0
		Piezoelectric transducers:	https:--www.youtube.com-watch?v=pbp1uoTJkF8
		Ultrasound in medicine:	https:--www.youtube.com-watch?v=sTcqtljxLOk
		AC and DC Bridges:	https:--www.youtube.com-watch?v=S89ixehZRb8

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		Digital Voltmeter:	https:--www.youtube.com-watch?v=4nD4JqikrNM
		CRO	https:--www.youtube.com-watch?v=xugZ3oM1bPg
		XY Recorder	https:--www.youtube.com-watch?v=BSJu9jdbOM0
		Strip Chart recorder	https:--www.youtube.com-watch?v=RCa4nE6Z-SE&pbjreload=10
		Photographic film recorder	https:--www.youtube.com-watch?v=RCa4nE6Z-SE&pbjreload=10
4	`BIOMEDICAL INTSRUMENTATION(SEM V -YEAR III)	Action potential:	https:--www.youtube.com-watch?v=OZG8M_ldA1M
		Electrode electrolyte interface:	https:--www.youtube.com-watch?v=49CWbXNJ3WE
		Basics of ECG:	https:--www.youtube.com-watch?v=HDyqXNHLjug
		Basics of EEG:	https:--www.youtube.com-watch?v=XMizSSOejg0&list=PLxaiR6teSdjoEZWaDWm28A9QjFN7eguAp
		Blood flow measurement:	https:--www.youtube.com-watch?v=psiUv9z6RVg
		Blood pressure measurements:	https:--www.youtube.com-watch?v=C4wo18LoNEE
5	BIOCHEMISTRY(SEM III-II YEAR II-I)	Biochemistry	https:--freevideolectures.com-course-2524-biochemistry
		Carbohydrates- classification and metabolic pathways	http:--www.sparknotes.com-health-carbohydrates-section3-
		Enzymes clinical significance	http:--www.biologydiscussion.com-enzymes-importance-importance-of-enzymes-in-the-diagnosis-of- diseases-11184
		Structure of protein	https:--www.youtube.com-watch?v=zg9wErje4E4
6	PATHOLOGY AND MICROBIOLOGY (SEM IV YEAR II)	Isolation of Bacteria	http:--www.nios.ac.in-media-documents-dmlt-microbiology-lesson- 10.pdf
		Immunochemical techniques	http:--www.nios.ac.in-media-documents-dmlt-Biochemistry-Lesson-24.pdf
		Immunology	https:--www.youtube.com-watch?v=LjddsUi78sg
		Microbial cell structure and function	https:--nptel.ac.in-courses-10210301 5-pdf-mod2.pdf
		Staining techniques	http:--www.nios.ac.in-media-documents-dmlt-Microbiology-Lesson-02.pdf

		Preparation and staining of specimen	https:--nptel.ac.in-courses-102103015-8
7	DIAGNOSTIC AND THERAPEUTIC EQUIPMENT 1(SEM V YEAR III)	12 LEAD SYSTEM	https:--www.youtube.com-watch?v=kwLbSx9BNbU&feature=youtu. be
		EEG electrode placements	https:--www.sciencedirect.com-topics-biochemistry-genetics-and-molecular-biology-10-20-system-eeg
		TENS	https:--www.physio- pedia.com-Transcutaneous_Electri cal_Nerve_Stimulation_%28TENS%29
		PMS	https:--link.springer.com-chapter-10.1007-0-387-36278-9_17
		HLM	https:--www.youtube.com-watch?v=RmwMzw_YTNU
			https:--www.youtube.com-watch?v=Cx7uPuRqNME
		Artificial kidney	https:--www.youtube.com-watch?v=sT5SmIM60zo
8	MICROPROCESSOR AND MICROCONTROLLER(SEM V - YEAR III)	Working of digital clock using 8051 with 7 segment display	https:--www.youtube.com-watch?v=7z2yLCq9Qk4
		Interfacing Seven Segment Display With 8051 Microcontroller	https:--www.youtube.com-watch?v=VEdeR1i6oaE
		Working of Traffic light controller	https:--www.youtube.com-watch?v=z1yZ7kWkA7U
		Working of stepper motor	https:--www.youtube.com-watch?v=TWMai3oirnM&feature=youtu.b e
		Alarm controller	https:--www.youtube.com-watch?v=QxIc0QcFLyw&feature=youtu.b e
9	BIOMETRIC SYSTEMS (SEM VI - YEAR III)	Types of biometric identification	https:--www.youtube.com-watch?v=eZTfgNIiNUA&feature=youtu.b e
		Biometric Fingerprint Attendance System Demo Training	https:--www.youtube.com-watch?v=kfEtHoN_8Ms
		Mobile payment using biometric authentication	https:--www.youtube.com-watch?v=C2zLrQSRMWg&feature=youtu. be
		Face ID	https:--www.youtube.com-watch?v=Nws1Xitjl5M&feature=youtu.be
		Biometrics for automatic access control system	https:--www.youtube.com-watch?v=9zCBFnIJaQw&feature=youtu.be
10	ANALOG AND DGITAL COMMUNICATION (SEM IV - IIYEAR)	Need for modulation	https:--www.youtube.com-watch?v=00ZbuhPruJw&feature=youtu.be
		Pwm	https:--www.youtube.com-watch?v=B_Ysdv1xRbA&feature=youtu.b e

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		Network topology	https:--www.youtube.com-watch?v=F35sSPTahS8&feature=youtu.be
		Mobile communication	https:--www.youtube.com-watch?v=tt1-Ohe9QQU&feature=youtu.be
		Multiple access scheme	https:--www.youtube.com-watch?v=oYRMYSIVj1o&feature=youtu.b e

B.E Civil Engineering

S. NO	SUBJECT NAME	TOPIC	LINK
1	Engineering Mechanics	Internal Forces In Beams	http:--nptel.ac.in-courses-11210 3108-7
		Stresses And Strength - Application In Structural Mechanics	https:--ocw.mit.edu-courses-civi l-and-environmental- engineering-1-050-engineering- mechanics-i-fall-2007-lecture- notes-lec8.pdf
2	Environmental Science and Engineering	Municipal Solid Waste Management	http:--nptel.ac.in-courses-12010 8005-3

| 3	Engineering Geology	Origin And Types Of Rocks	https:--nptel.ac.in-courses-1201 08005-3
4	Mechanics Of Solids	Composite Beam	https:--nptel.ac.in-courses-1201 08005-3
5	Fluid Mechanics And Machinery	Kinematics Of Fluid	https:--nptel.ac.in-courses-1051 02090-16
6	Mechanics Of Fluids	Compressibility Of Fluids	https:--ocw.mit.edu-courses-civi l-and-environmental- engineering-1-060-engineering- mechanics-ii-spring- 2006- lecture-notes-lecture2.pdf
7	Surveying I	Classifications of Surveying	https:--nptel.ac.in-courses-1051 07122-
8	Construction Materials	Concrete: Material	http:--nptel.ac.in-courses-10510 2088-3
9	Strength Of Materials	Torsion- Real Life Application	http:--nptel.ac.in-courses-11210 6141-5
		Mohr stress plane and strength criteria	https:--ocw.mit.edu-courses-civi l-and-environmental- engineering-1-050-engineering- mechanics-i-fall-2007-lecture- notes-lec11.pdf
10	Applied Hydraulic Engineering	Uniform Flow	http:--nptel.ac.in-courses-10510 3021-10

		Turbines	http:--nptel.ac.in-courses-10510 3021-42
11	Surveying II	Remote sensing system	http:--nptel.ac.in-courses-10510 4100-23

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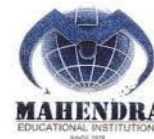
B.E – ECE

S. NO	SUBJECT NAME	TOPIC	LINK
1	Digital Image Processing	Image enhancement and restoration	http:--nptel.ac.in-courses-117105079-
2	Wireless Networks	Routing, topologies, sonnet, switches	http:--nptel.ac.in-courses-106105081-
3	Control System	Nonlinear system, Matrix theory	http:--nptel.ac.in-courses-101108047-
4	Signals and System	Linear signal models, Z transform	http:--nptel.ac.in-courses-108105059-
5	Mircoprocessor and Microcontroller	Intel 8051. Architectures, PIC	http:--nptel.ac.in-courses-117104072-
6	Digital Communication	Signal and Sampling Theory	http:--nptel.ac.in-courses-117105077-

7	Antenna and Wave Propagation	Radiation, pointing vector	http:--nptel.ac.in-courses-117107035-
8	Digital Electronics	Numbering system, K-Map,Combinational circuits	http:--nptel.ac.in-courses-117103064-
9	VLSI Design	Low power design priinciples	http:--nptel.ac.in-courses-117101004-
10	Electromagnetic Fields	Time varying field, Maxwell, stokes theorem	http:--nptel.ac.in-courses-117103065-
11	Microwave Engineering	Measurement of unknown impedance, smith chart calculation	http:--nptel.ac.in-courses-117105122-
12	Electronic Circuits	Waveform generator, PLL, FLL	http:--nptel.ac.in-courses-117108107-
13	Computer Architecture	Pipeline processor, memory hierarchy	http:--nptel.ac.in-courses-106102062-
14	Computer Networks	Routing, topologies, sonnet, switches	http:--nptel.ac.in-courses-106105081-
15	PLC and Microcontroller	Intel 8051. Architectures, PIC	http:--nptel.ac.in-courses-117104072-
16	Transmission and Line Wave	Uniform planes, Maxwell ,	http:--nptel.ac.in-courses-11710

B.E MECH

S.No	SUBJECT NAME	TOPIC	LINK
1	Engineering Mechanics	Internal forces in Beams	http:--nptel.ac.in-courses-11210310 8-7
		Stresses and Strength - Application in Structural Mechanics	https:--ocw.mit.edu-courses-civil-and-environmental-engineering-1-050- engineering-mechanics-i-fall-2007-lecture-notes-lec8.pdf
2	Strength of Materials	Torsion- Real Life Application	http:--nptel.ac.in-courses-11210614 1-5
		Mohr stress plane and strength criteria	https:--ocw.mit.edu-courses-civil-and-environmental-engineering-1-050- engineering-mechanics-i-fall-2007-lecture-notes-lec11.pdf
3	Engineering Thermodynamics	Application of First Law of Thermodynamics to Open System	http:--nptel.ac.in-courses-11210301 6-7
		Steady-state and equilibrium approximations	https:--ocw.mit.edu-courses-chemistry-5-60-thermodynamics-kinetics-spring-2008-lecture-notes-5_60_lecture32.pdf
		Kinematics of Fluid	https:--nptel.ac.in-courses-1121041 18-6
		Compressibility of fluids	https:--ocw.mit.edu-courses-civil-and-environmental-engineering-1-060- engineering-mechanics-ii-spring- 2006-lecture- notes-lecture2.pdf
		Advanced Metal Casting Processes	https:--nptel.ac.in-courses-1121070 77-5
		Metal casting	https:--ocw.mit.edu-courses-mechanical-engineering-2-008-design- and-manufacturing-ii-spring- 2004-lecture-notes-19casting.pdf
		Kutzbach and Grubler's criterion	https:--nptel.ac.in-courses-1121041 21-4

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		Topic	Link
		Mechanisms - 2D kinematic analysis	https:--ocw.mit.edu-courses-mechanical-engineering-2-007-design- and-manufacturing-i-spring- 2009-lecture-notes-MIT2_007s09_lec06.pdf
		advanced material removal processes	https:--nptel.ac.in-courses-112107077-15
		Metal Cutting	https:--ocw.mit.edu-courses-mechanical-engineering-2-008-design- and-manufacturing-ii-spring-2004-lecture-notes-08cutting_2_6_f.pdf
		Phase Diagrams	https:--nptel.ac.in-courses-1121081 50-7
		Non-crystalline Materials	https:--ocw.mit.edu-courses-materi als-science-and-engineering-3- 012-fundamentals-of-materials- science-fall-2005-lecture- notes-lec21b.pdf
		Municipal Solid Waste Management	https:--nptel.ac.in-courses-1201080 05-3
		Ecology - Engineering for Sustainability	https:--ocw.mit.edu-courses-civil- and-environmental-engineering-1-020- ecology-ii-engineering-for-sustainability-spring-2008-lecture-notes-lec21_22.pdf
		Air Standard Otto Cycle	https:--nptel.ac.in-courses-1121061 33-5
		Power cycles	https:--ocw.mit.edu-courses-aeronautics-and-astronautics-16-050- thermal-energy-fall-2002-lecture-notes-07_part2a.pdf
		3D transformations and projections	https:--nptel.ac.in-courses-1121021 01-9
		Mechanical Design Process	https:--ocw.mit.edu-courses-mechanical-engineering-2-007-design-and- manufacturing-i-spring- 2009-lecture- notes-MIT2_007s09_lec02.pdf

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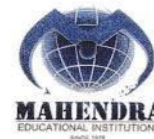A UNIT OF MAHENDRA EDUCATIONAL TRUST

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

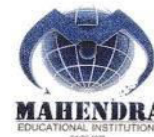|			
		Stresses in machine elements	https:--nptel.ac.in-courses-1121051 25-4
		Bolted joints	https:--ocw.mit.edu-courses-mechanical-engineering-2-72-elements-of-mechanical-design-spring- 2009-lecture-notes-MIT2_72s09_lec10.pdf
		Error estimation	https:--nptel.ac.in-courses-1121061 39-4
		Dynamics of Rigid Bodies in Plane Motion; Dynamic Force Analysis of Machines	https:--nptel.ac.in-courses-1121010 96-2
		Single Particle Dynamics: Linear and Angular Momentum Principles, Work- energy Principle	https:--ocw.mit.edu-courses-mechanical-engineering-2-032-dynamics-fall-2004-lecture- notes-session_1.pdf
		Hydrodynamic Lubrication Of Journal Bearings	https:--nptel.ac.in-courses-112106137-39
		Gears and springs	https:--ocw.mit.edu-courses-mechanical-engineering-2-007-design- and-manufacturing-i-spring- 2009-lecture-notes-MIT2_007s09_lec13.pdf
		Engine Emissions and Air Pollution	https:--nptel.ac.in-courses-1121040 33-2
		Hydrogen, Biofuels; design process, importance metrics	https:--ocw.mit.edu-courses-nuclea r-engineering-22-033-nuclear- systems-design-project-fall- 2011-videos-class-notes-lecture-3- hydrogen-and-biofuel-production- design-process-

5			Ritz Method	https:--nptel.ac.in-courses-1121041 16-3
			Analysis of solids-structures andfluids	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
			Speed of Sound and Mach Number	https:--nptel.ac.in-courses-1121030 21-5
			Flow with Heat Addition, Rayleigh Line; Shock Waves:	https:--ocw.mit.edu-courses-mechanical-engineering-2-26- compressible-fluid-dynamics-

B.E – CSE

S.NO	Subject Name	Topic name	Link
1	Microprocessor and Micro Controller	Architectures of microprocessor	https:--nptel.ac.in-courses-1061 08100-1
2	Artificial Intelligence	Introduction	http:--nptel.ac.in-courses-10610 5077-
		Heuristics	http:--nptel.ac.in-courses-10610 6126-
3	Compiler Design	Compilers Principle, Techniques and tools	http:--nptel.ac.in-courses-10610 4123-
		Introduction to various phases of compilers	https:--www.youtube.com-watch?v=DFMf9oPbuRI&rel=1&color1=0xcbba9f&color2=0xcbba9 f&border=0&fs=1
4	Computer Networks	IP Routing Protocols	http:--nptel.ac.in-courses-10610 6091-
		Application of protocols for e-Mails	http:--nptel.ac.in-courses-10610 5080-
5	Graphics and Multimedia	Display Devices- CRT	https:--www.youtube.com-watch?v=fwzYuhduME4&rel=1&color1=0xcbba9f&color2=0xcbba9f&border=0&fs=1

		2D Transformation	https:--nptel.ac.in-courses-1061 06090-
		3D Viewing	https:--nptel.ac.in-courses-1061 06090-
		Clipping and Open GL	https:--www.youtube.com-watch?v=fwzYuhduME4&rel=1&color1=0xcbba9f&color2=0xcbba 9f&border=0&fs=1
		Digital Image Processing	https:--nptel.ac.in-courses-1061 06090-
		Raster Graphics	https:--nptel.ac.in-courses-1061 02063-
	Cryptography and Network Security	Factoring Algorithm	https:--nptel.ac.in-courses-1061 05031-30
		The RSA Cryptosystem	https:--nptel.ac.in-courses-1061 05031-28
		Stream Ciphers	https:--nptel.ac.in-courses-1061 05031-19
6		Firewall and Intrusion detection system	https:--nptel.ac.in-courses-106105031-40

		Introduction	https:--www.youtube.com-watch?v=Eg4AAGCE7X4&list=PL2UlrhJ_JwyA5IlOCdEWlNArF ke4jgtlg
	Grid and Cloud Computing	Security inside Cloud	https:--www.youtube.com-watch?v=g4jbDuJ7_IQ&list=PL2Ul rhJ_JwyA5IlOCdEWlNArFke4j gtlg&index=2
7		Virtual Reality	https:--www.youtube.com-watch?v=aNC5YMUTcQ4&list=PL bMVogVj5nJSyt80VRXYC- YrAvQuUb6dh
8	Problem Solving and Python Programming	Introduction to Python Programming	https:--www.youtube.com-watch?v=eoPsX7MKfe8&list=PLId gECt554OVFKXRpo_kuI0XpU QKk0ycO
	Web Programming	WWW,HTML	http:--nptel.ac.in-courses-10610 5084-11
9		XML	http:--nptel.ac.in-courses-10610 5084-16

S.No.	Subject Name	Topic Name	Link
1	Professional Ethics	Ethical rules	http:--nptel.ac.in-courses-109104032-9
		Situation ethics	http:--nptel.ac.in-courses-109104032-10
2	Circuit theory	Network theorems and network functions	http:--nptel.ac.in-courses-108102042-9
3	Measurement and Instrumentation	Opto electric sensors	http:--nptel.ac.in-courses-108105064-28
		Theromocouple	http:--nptel.ac.in-courses-108105064-8
		Errors in measurements	http:--nptel.ac.in-courses-112106138-2
4.	Electrical energy generation and utilization conversation	Electric traction	https:--www.youtube.com-watch?v=fakGLu03jYg
5.	Power system transients	Torsional Transients	http:--nptel.ac.in-courses-108101004-41
6.	Solid State AC Drives	DC motor drives	https:--www.youtube.com-watch?v=9h2lEIpo74A
		Three phase full converter drives	https:--www.youtube.com-watch?v=a02GvEGSpBs
7.	Flexible AC Transmission Systems	FACTS devices	https:--www.youtube.com-watch?v=-RMTEQw0kH0
		Static synchronous compensator	https:--www.youtube.com-watch?v=usaJHpdsBRY
8.	Solid state drives	Advanced electric drives	http:--nptel.ac.in-courses-108104011-2
		Speed control of electric drives	https:--www.youtube.com-watch?v=UejGsuDSA-I
9.	Basic of electrical electronics and instrumentation engineering	Transient response of RL circuit	http:--nptel.ac.in-courses-122104013-6
10.	Embedded system	FPGA & Applications	http:--nptel.ac.in-courses-108105057-20
11.	Basic of electrical electronics and instrumentation engineering	DC circuit analysis	http:--nptel.ac.in-courses-122104013-4
12.	Energy Management and Auditing	Audit of energy	https:--www.youtube.com-watch?v=FTpMWXMBSyM
13.	Solid State Drives	Induction motor drive	https:--www.youtube.com-watch?v=96hvtQ8Qlvo

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

29.	Electrical machines-2	Armature reaction	http:--nptel.ac.in-courses-1081 05017-24
30.	High voltage Engineering	Resonance transformer	http:--nptel.ac.in-courses-1081 04048-25
31.		Impulse voltage generator	http:--nptel.ac.in-courses-1081 04048-28
32.	Power Electronics	IGBT	http:--nptel.ac.in-courses-1081 01038-9
		Three phase half controlled rectifier	http:--nptel.ac.in-courses-1081 01038-18
33.	Special Electrical Machines	Synchronous Machine	https:--www.youtube.com-watch?v=b24jORRoxEc
34.	Electrical machines and drives	Electrical drives and application	https:--www.youtube.com-watch?v=SUCwqwBUOKM
35.	Electrical drives and control	DC motor drives	https:--www.youtube.com-watch?v=BnciFNlIRMQ
36.	Electrical engineering circuits	Power & energy in circuits	http:--nptel.ac.in-courses-1171 06108-1
37.	Microprocessor and microcontroller	Interfacing with 8051	http:--nptel.ac.in-courses-1061 08100-1
38.	Electrical engineering circuits	Mesh analysis	http:--nptel.ac.in-courses-1171 06108-59
39.	Micro controlled based system design	Architecture of microcontrollers	http:--nptel.ac.in-courses-1061 08100-5