



"Empowerment through quality technical education"
Dr D Y Patil Educational Enterprises Charitable Trust's

Ajeenkya D Y Patil Group of Institution's Technical Campus
Dr D Y PATIL SCHOOL OF ENGINEERING

(Approved by AICTE, New Delhi Recognized by Govt. of Maharashtra, Affiliated to Savitribai Phule Pune University)
AISHE Code: C-46648 DTE Code: EN6732 SPPU PUN Code: CEGP015720
(Accredited by NAAC)

A.Y. 2020-21

Use of ICT Enabled Tools

(Criteria 2.3.2)

The teachers use following ICT enabled tools for effective teaching-learning process.

1) Microsoft Teams

Link: https://teams.microsoft.com/?culture=en-in&country=IN&lm=deeplink&lmsrc=homePageWeb&cmpid=WebSignIn#/conversations/19:meeting_OTM1OWUzODgtYzNmMi00YjdjLTI1YTgtZWE5ZTc1NjBkZGYw@thread.v2?ctx=chat

2) LMS

Link: <https://dypic.adypgonline.in/login/index.php>

Following activities are carried out using LMS

- Conduction of online lectures/Practical, seminars, presentations of students, meetings and various events.
- To upload assignments, study material, PPTs, NPTEL videos
- Record own lectures and supply to students for study assistance.
- To monitor the attendance
- To conduct various internal examinations

And activities related to teaching learning process.


Dr. F. B. Sayyad

Principal



Enclosed: Screen Shots of LMS & MS Teams



Criteria: 2.3.2: Use of ICT enabled tools for effective teaching learning process.

- Screen shots of Microsoft Teams, LMS or online platform showing subject allotted.

A.Y.2020-21 Semester I

The screenshot shows the DYPIC LMS interface. The browser address bar displays `dypic.dypgonline.in/user/index.php?id=218`. The page title is "SOE Environmental Engineering-I". The breadcrumb trail is: Dashboard / Courses / A.Y. 2020-2021 / SEM I DATA (SOE & SOET) / SOE CIVIL / SOECVILEE-1 / Participants. The main content area is titled "Participants" and includes an "Enrol Users" button. Below this is a search filter with "Match Any" and "Select" dropdowns, and an "Add condition" button. A table of participants is displayed, showing 1 participant found. The table has columns for First name / Surname, ID number, Email address, Department, Institution, Roles, Groups, Last access to course, and Status. The participant listed is Rajesh Katdare, with email `rajeshkatdare@dypisp.onmicrosoft.com`, role of Teacher, no groups, and last access 96 days 23 hours ago. The status is Active.

First name / Surname	ID number	Email address	Department	Institution	Roles	Groups	Last access to course	Status
Rajesh Katdare		rajeshkatdare@dypisp.onmicrosoft.com			Teacher	No groups	96 days 23 hours	Active



“Empowerment through quality technical education”
Dr. D. Y. Patil School of Engineering
Civil Engineering Department
Dr. Ajeenkya DY Patil Knowledge City, Charholi Bk., Via. Lohegaon, Pune – 412 105

A.Y.2020-21 Semester II

← → ↻ dypic.adypgonline.in/user/index.php?id=212

DYPIC Sanjay Karodpati

SOE Project management

Dashboard / Courses / A.Y. 2020-2021 / SEM I DATA (SOE & SOET) / SOE CIVIL / SOECVILPM / Participants

Participants

Enrol users

Match Any Select

+ Add condition Clear filters Apply filters

2 participants found

Reset table preferences

First name All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Surname All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

First name / Surname	ID number	Email address	Department	Institution	Roles	Groups	Last access to course	Status
<input type="checkbox"/> Aniket Neharkar	67	aniketneharkar42@dypiso.onmicrosoft.com	SOE CIVIL	DYPSOE	Student	SOECVIL SE	160 days 21 hours	Active
<input type="checkbox"/> Aniket Nemade	2484	nemadeaniket@dypic.in	CIVIL ENGINEERING	DR D Y PATIL SCHOOL OF ENGINEERING	Teacher	No groups	98 days 1 hour	Active

With selected users.. Choose..

Computer Department

A.Y. 2020-2021

(Sem-I)

SOECOMPDM-B

Participants

Badges

Competencies

Grades

General

DSE Online Lecture

Unit Test 3

DM Task to students

DM Question Papers

DM Study Material

Unit 1

Unit Test 3

Unit 2

Unit 3

Discrete Mathematics-B

Dashboard / Courses / A.Y.2020-2021 / SEM1 DATA (SOE & SOET) / SOE COMPUTER / SOECOMPDM-B / Participants

Participants

Enrol users

Match: Any Roles: Type or select... **Teacher x**

+ Add condition

Clear filters Apply filters

1 participants found

First name: All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Surname: All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

<input type="checkbox"/>	First name / Surname	ID number	Email address	Department	Institution	Roles	Groups	Last access to course	Status
<input type="checkbox"/>	PS Pooja Shinde		poja@dypitp.onmicrosoft.com			Teacher	SOECOMP	48 days 3 hours	Active

SOECOMPDOC

Participants

Badges

Competencies

Grades

General

TOC Teaching Plan

Academic Calendar 2020_21

TE Comp Syllabus & eBooks

SPPU Question Papers

SPPU Question Paper Solution

Unit 1 -> Formal Language Theory and Finite Automata

Unit 2 -> Regular Expressions

Unit 3 -> Context Free

Theory of Computation

Dashboard / Courses / A.Y.2020-2021 / SEM1 DATA (SOE & SOET) / SOE COMPUTER / SOECOMPDOC / Participants

Participants

Enrol users

Match: Any Roles: Type or select... **Teacher x**

+ Add condition

Clear filters Apply filters

1 participants found

First name: All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Surname: All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

<input type="checkbox"/>	First name / Surname	ID number	Email address	Department	Institution	Roles	Groups	Last access to course	Status
<input type="checkbox"/>	chaitanya bhosale		chaitanyab@dypitp.onmicrosoft.com			Teacher	SOECOMP	11 days 4 hours	Active

With selected users: Choose... 1

Enrol users

SOECOMP-PCA

High Performance Computing

Dashboard / Courses / A.Y. 2020-2021 / SEM I DATA (SOE & SOET) / SOE COMPUTER / SOECOMP-PCA / Participants

Participants

Enrol users

Match: Any Roles Type or select... **Teacher x**

+ Add condition Clear filters Apply filters

2 participants found

First name: All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Surname: All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

	First name / Surname	ID number	Email address	Department	Institution	Roles	Groups	Last access to course	Status
<input type="checkbox"/>	pankaj agarkar		pankajagarkar@dyjpsp.onmicrosoft.com			Teacher, Course creator	SOECOMP	262 days 2 hours	Active
<input type="checkbox"/>	yogesh mail		yogeshmail@dyjpsp.onmicrosoft.com			Teacher	SOECOMP	56 days 5 hours	Active

With selected users... Choose...

(Sem-II)

SOE_COMP_SE_DSA

Data Structures and Algorithms

Dashboard / My courses / SOE_COMP_SE_DSA / Participants

Participants

Enrol users

Match: Any Roles Type or select... **Teacher x**

+ Add condition Clear filters Apply filters

2 participants found

First name: All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Surname: All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

	First name / Surname	ID number	Email address	Department	Institution	Roles	Groups	Last access to course	Status
<input type="checkbox"/>	Nitesh D Mail Mali		niteshdmail@dyjpsp.onmicrosoft.com			Teacher, Manager, Course creator	No groups	11 secs	Active
<input type="checkbox"/>	Prashant Laxman Rao Mandale		Prashantmandale@dyjpsp.onmicrosoft.com			Teacher	SOECOMP	101 days 4 hours	Active

With selected users... Choose...

Enrol users

SOE_COMP_TE_SPOS_B

Participants

- Badges
- Competencies
- Grades
- General
- UNIT 1-SPOS Lecture Online
- UNIT II
- UNIT III
- UNIT 4
- Unit 5 Memory Management
- INSEM EXAM SEM II 2021
- Dashboard
- Site home

System Prog. & Operating System Div B

Dashboard / Courses / A.Y.2020-2021 / SEM-II School Of Engineering / Computer Engineering / TE / SEM II / SOE_COMP_TE_SPOS_B / Participants

Participants

Enrol users

Match: Any Roles: Type or select... **Teacher x**

+ Add condition Clear filters Apply filters

2 participants found

First name: All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Surname: All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

First name / Surname	ID number	Email address	Department	Institution	Roles	Groups	Last access to course	Status
Komal Jakotiya		koma@jakotiya@dypisp.onmicrosoft.com			Teacher	No groups	Never	Active
Niyamat Ujoomwale		niyamatu@ujoomwale@dypisp.onmicrosoft.com			Teacher	SOECOMP	197 days 7 hours	Active

With selected users... Choose...

SOE_COMP_BE_ML_B

Participants

- Badges
- Competencies
- Grades
- General
- ML DIV B Online lectures
- Unit 1 material
- Unit 2 material
- Unit Test
- ML INSEM EXAMINATION
- LP-3 material
- ML Unit Test II
- ML Unit Test III
- Topic 9

Machine Learning Div B

Dashboard / Courses / A.Y.2020-2021 / SEM-II School Of Engineering / Computer Engineering / BE / SEM II / SOE_COMP_BE_ML_B / Participants

Participants

Enrol users

Match: Any Roles: Type or select... **Teacher x**

+ Add condition Clear filters Apply filters

1 participants found

First name: All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Surname: All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

First name / Surname	ID number	Email address	Department	Institution	Roles	Groups	Last access to course	Status
jayashree chaudhari		jayashreec@dypisp.onmicrosoft.com			Teacher	SOECOMP	54 days	Active

With selected users... Choose...

- SOE E&TC EM-III
- Participants**
- Badges
- Competencies
- Grades
- 207005: Engineering Mathematics - III
- LMS Teaching Plan
- Unit I: Linear Differential Equations (LDE) and Applications
- Unit II: Transforms
- Unit III: Numerical Methods
- Unit IV: Vector Differential Calculus
- Unit V: Vector Integral Calculus & Applications
- Unit VI: Complex

SE 207005: Engineering Mathematics - III

Dashboard / Courses / A.Y. 2020-2021 / SEM I DATA (SOE & SOET) / SOE E & TC / SOE E&TC EM-III / Participants

Participants

Enrol users

Match Any Roles Type or select.. **Teacher x**

+ Add condition Clear filters Apply filters

2 participants found

First name All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Surname All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

	First name / Surname	ID number	Email address	Department	Institution	Roles	Groups	Last access to course	Status
<input type="checkbox"/>	Dr Rahulkumar Katkade		rahulkumarkatkade@dypisp.onmicrosoft.com			Teacher	DYPSOEETCSE	108 days 2 hours	Active
<input type="checkbox"/>	Sanjay Koli		sanjaykoli@dypisp.onmicrosoft.com	E&TC	DYPSOE	Teacher, Course creator	No groups	19 secs	Active

- SOEE&TCMECH
- Participants**
- Badges
- Competencies
- Grades
- General
- UNIT I: Introduction to Mechatronics
- Unit II :Overview of Sensors, Transducers and their Characteristics Specifications
- Unit III :Hydraulic Systems
- Unit IV: Pneumatic System
- Dashboard
- Site home

TE_Mechatronics

Dashboard / Courses / A.Y. 2020-2021 / SEM I DATA (SOE & SOET) / SOE E & TC / SOEE&TCMECH / Participants

Participants

Enrol users

Match Roles Type or select...

+ Add condition Clear filters Apply filters

2 participants found

First name A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Surname A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

	First name / Surname	ID number	Email address	Department	Institution	Roles	Groups	Last access to course	Status
<input type="checkbox"/>	Saniya Ansari		saniyaansari@dypisp.onmicrosoft.com	ETC	DYPSOE	Teacher	DYPSOEETCTE	33 days 2 hours	Active
<input type="checkbox"/>	Sanjay Koli		sanjaykoli@dypisp.onmicrosoft.com	E&TC	DYPSOE	Teacher, Course creator	No groups	16 secs	Active

- SOEE&TCCNS
- Participants**
- Badges
- Competencies
- Grades
- General
- Unit1: Introduction to Local Area Network
- Unit2: Network Layer Part 1
- Unit 3: Network Layet Part 2
- Unit 4: Transport Layer
- Unit 5: Application Layer
- Unit 6: Network Security
- CNS INSEM Exam

BE_Computer Networks & Security

Dashboard / Courses / A.Y. 2020-2021 / SEM I DATA (SOE & SOET) / SOE E & TC / SOEE&TCCNS / Participants

Participants

Enrol users

Match Roles Type or select...

+ Add condition Clear filters Apply filters

2 participants found

First name A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Surname A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

	First name / Surname	ID number	Email address	Department	Institution	Roles	Groups	Last access to course	Status
<input type="checkbox"/>	Ashwini Bagde		ashwinibagde@dypisp.onmicrosoft.com			Teacher	No groups	2 days 22 hours	Active
<input type="checkbox"/>	Sanjay Koli		sanjaykoli@dypisp.onmicrosoft.com	E&TC	DYPSOE	Teacher, Course creator	No groups	41 secs	Active

- SOE_ENTC_SS
- Participants**
- Badges
- Competencies
- Grades
- General
- Unit-I
- Unit-II
- Unit-III
- Unit-IV
- Unit-V
- Unit-VI
- SPPU_EXAM_SEM-II
- Dashboard
- Site home

SE_Singnal & System

Dashboard / Courses / A.Y. 2020-2021 / SEM-II School Of Engineering / Electronics and Tele Com / SE / SEM II / SOE_ENTC_SS / Participants

Participants

Enrol users

Match Any Roles Type or select... **Teacher x**

+ Add condition Clear filters Apply filters

2 participants found

First name All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Surname All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

	First name / Surname	ID number	Email address	Department	Institution	Roles	Groups	Last access to course	Status
<input type="checkbox"/>	Sanjay Koli		sanjaykoli@dypisp.onmicrosoft.com	E&TC	DYPSOE	Teacher, Course creator	No groups	15 secs	Active
<input type="checkbox"/>	Gaurav Tiwari		gauravtiwari@dypisp.onmicrosoft.com	ETC	DYPSOE	Teacher	DYPSOEETCSE	192 days 5 hours	Active

SOE_ENTC_SPOS

Participants

Badges

Competencies

Grades

General

SPOS Lab (Practicals)

SPOS Online Lectures

INSEM | SPPU SPOS |
06/06/2021 | 12:30 PM

UNIT TEST - 1 |
11/03/2021 | 3 pm to 4 pm

UNIT I : Introduction to
Systems Programming

UNIT II : Compilers,
Loaders & Linkers

UNIT III : Introduction

TE_System Programming and Operating Systems

Dashboard / Courses / A.Y. 2020-2021 / SEM-II School Of Engineering / Electronics and Tele Com / TE / SEM II / SOE_ENTC_SPOS / Participants

Participants

Enrol users

Match Any Roles Type or select... **Teacher x**

+ Add condition

Clear filters

Apply filters

2 participants found

First name All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Surname All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

First name / Surname	ID number	Email address	Department	Institution	Roles	Groups	Last access to course	Status
<input type="checkbox"/>  Faraz Bagwan Bagwan	2290	farazbagwan@dypisp.onmicrosoft.com	Computer Engineering	Dr. D. Y. Patil School of Engineering	Teacher 	DYPSOEECTE 	97 days 16 hours	Active   
<input type="checkbox"/>  Sanjay Koli		sanjaykoli@dypisp.onmicrosoft.com	E&TC	DYPSOE	Teacher, Course creator 	No groups 	15 secs	Active   

- SOE_ENTC_WSN
- Participants**
- Badges
- Competencies
- Grades
- General
- UNIT-I : Introduction
- Unit-II : Radio Communication And Link Management
- Unit -III : Wireless Standards And Protocol Stack
- Unit -IV : Localization And Routing
- Unit -V : Data Aggregation And Security
- Unit-VI : Designing And

BE_Elective IV_Wireless Sensor Networks

Dashboard / Courses / A.Y. 2020-2021 / SEM-II School Of Engineering / Electronics and Tele Com / BE / SEM II / SOE_ENTC_WSN / Participants

Participants

Enrol users

Match Roles Type or select...

+ Add condition Clear filters Apply filters

2 participants found

First name A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Surname A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

<input type="checkbox"/>	First name / Surname	ID number	Email address	Department	Institution	Roles	Groups	Last access to course	Status
<input type="checkbox"/>	Riyaj Kazi		riyajkazi@dypisp.onmicrosoft.com			Teacher	DYPSOEETCBE	104 days 2 hours	Active
<input type="checkbox"/>	Sanjay Koli		sanjaykoli@dypisp.onmicrosoft.com	E&TC	DYPSOE	Teacher, Course creator	No groups	16 secs	Active

Microsoft Teams

Search

Join or create team

Your teams

- FE21-A
- FE21-B
- DYPSOE-FE
- IQAC- Engg. Sciences

Hidden teams

Stay in the know. Turn on desktop notifications.

Turn on Dismiss

Search the web and Windows

12:22 14-12-2021

Microsoft Teams

Search

All teams

DYPSOE-FE

General

DYPSOE-FE ...

Note: Once your registration is complete, we will reach you via Mail. Dear all Greetings of the day!! We are happy to ...

Members Channels Settings Analytics Apps Tags

Search for members

Add member

Owners (9)

Name	Title	Location	Tags	Role
Faraz Bagwan				Owner
sachin suryawanshi				Owner
Rohini Gadgil				Owner
VINOD TIRPUDE				Owner
Dr Rahul Kumar Katk...				Owner

Members and guests (1)

Search the web and Windows

12:24 14-12-2021

Microsoft Teams

teams.microsoft.com/_/teamDashboard/DYPSOE-FE/19:ylePPB6OxOkX9Hb1Y6tmHlUuSC-gy7ccXUuaxbof0E1@thread.tacv2/td.members

Microsoft Teams

Search

All teams

DYPSOE-FE

General

Note: Once your registration is complete, we will reach you via Mail. Dear all Greetings of the day!! We are happy to ...

Members Channels Settings Analytics Apps Tags

Search for members

Add member

Owners (9)

VT	VINOD TIRPUDE	Owner
	Dr Rahulkumar Katk...	Owner
SK	Shamkant Khairnar FE HOD	Owner
	shobha rupnar	Owner
BG	BHAGWAT GIDHAD	Owner
AA	AWES ANSARI	Owner

Members and guests (1)

Search the web and Windows

12:54 14-12-2021

- SM
- Participants**
- Badges
- Competencies
- Grades
- General
- Unit 1 Simple stresses and strains
- Unit 2 Shear Force and Bending moment
- Unit 3 Stresses in beams
- Unit 4 Torsion of circular shafts
- Unit 5 Principal stresses and theories of failure
- Unit 6 Combined loading and stresses
- SE C Div Solid mechanics online lect

SE_Solid Mechanics

Dashboard / Courses / A.Y.2020-2021 / SEM I DATA (SOE & SOET) / SOE MECHANICAL / SM / Participants

Participants

Enrol users

Match: Any Roles Type or select... **Teacher x**

+ Add condition Clear filters Apply filters

3 participants found

First name: All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Surname: All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

First name / Surname	ID number	Email address	Department	Institution	Roles	Groups	Last access to course	Status
<input type="checkbox"/> Rohit Garad		rohitgarad@dypisp.onmicrosoft.com			Teacher, Course creator	No groups	45 secs	Active
<input type="checkbox"/> Vikram Ghule		vikramghule@dypisp.onmicrosoft.com	SOEMECH	DYPSOE	Teacher	SOE_Mechanical_SE_B, SOE_Mechanical_SE_C	21 days 20 hours	Active
<input type="checkbox"/> Santosh Jadhav		santoshjadhav@dypisp.onmicrosoft.com	SOEMECH	DYPSOE	Teacher	SOE_Mechanical_SE_A	32 days 4 hours	Active

- TMC
- Participants**
- Badges
- Competencies
- Grades
- General
- unit 1
- Unit 2
- Unit 3
- Unit 4
- Unit 5
- Unit 6
- TMC Termwork submission Sem I 2020-21
- Dashboard
- Site home

TE_Turbo Machines

Dashboard / Courses / A.Y. 2020-2021 / SEM I DATA (SOE & SOET) / SOE MECHANICAL / TMC / Participants

Participants

Enrol users

Match: Any | Roles: | Type or select... | **Teacher x**

+ Add condition | Clear filters | **Apply filters**

3 participants found

First name: **A** | A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Surname: **A** | A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

	First name / Surname	ID number	Email address	Department	Institution	Roles	Groups	Last access to course	Status
<input type="checkbox"/>	Anil L Bavche		anilbavche@dypisp.onmicrosoft.com	SOEMECH	DYPSOE	Teacher	SOE_Mechanical_TE D	145 days 2 hours	Active
<input type="checkbox"/>	Rohit Garad		rohitgarad@dypisp.onmicrosoft.com			Teacher, Course creator	No groups	13 secs	Active
<input type="checkbox"/>	Himani Kadam		himanikadam@dypisp.onmicrosoft.com	SOEMECH	DYPSOE	Teacher	No groups	352 days 23 hours	Active

DYPIC

- DOM
- Participants**
- Badges
- Competencies
- Grades
- General
- Unit 1
- Unit 2
- Unit 3
- Unit 4
- Unit 5
- Unit 6
- Dashboard
- Site home
- Calendar
- Private files

BE_Dynamics of Machinery

Dashboard / Courses / A.Y. 2020-2021 / SEM I DATA (SOE & SOET) / SOE MECHANICAL / DOM / Participants

Participants

Enrol users

Match: Any Roles: Type or select... **Teacher x**

+ Add condition

Clear filters Apply filters

3 participants found

First name: [All] A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Surname: [All] A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

First name / Surname	ID number	Email address	Department	Institution	Roles	Groups	Last access to course	Status
Rohit Garad		rohitgarad@dypisp.onmicrosoft.com			Teacher, Course creator	No groups	14 secs	Active
Umaji Kolekar		umajikolekar@dypisp.onmicrosoft.com	SOEMECH	DYPSOE	Teacher	No groups	35 days 1 hour	Active
Farook Sayyad		farooksayyad@dypisp.onmicrosoft.com	SOEMECH	DYPSOE	Teacher	SOE_MECHANICAL_BE G	98 days 1 hour	Active

SOE_SYME_DESIGN_Mechanical Measurements and Controls

Dashboard / Courses / AY. 2020-2021 / SEM I DATA (SOE & SOET) / SOE MECHANICAL / MMC / Participants

Participants

Enrol users

Match Roles **Teacher x**

+ Add condition Clear filters **Apply filters**

3 participants found

First name A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Surname A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

<input type="checkbox"/>	First name / Surname	ID number	Email address	Department	Institution	Roles	Groups	Last access to course	Status
<input type="checkbox"/>	Rohit Garad		rohitgarad@dypisp.onmicrosoft.com			Teacher, Course creator	No groups	10 secs	Active
<input type="checkbox"/>	Parag Marathe		paragmarathe@dypisp.onmicrosoft.com	SOEMECH	DYPSOE	Teacher	No groups	17 days 5 hours	Active
<input type="checkbox"/>	Amol Patil		amolpatil@dypisp.onmicrosoft.com	SOEMECH	DYPSOE	Teacher	No groups	104 days 4 hours	Active

- KOM
- Participants**
- Badges
- Competencies
- Grades
- General
- Unit-1: Fundamentals of Mechanism
- Unit-2: Kinematic Analysis of Mechanisms: Analytical Method
- MCQ Unit1 and Unit 2
- Unit-3: Kinematic Analysis of Mechanisms: Graphical Method
- Unit-4: Synthesis of Mechanisms
- Unit-5: Kinematics of Gears
- Unit-6: Mechanisms in

Kinematics of Machinery_SE_Mech

Dashboard / Courses / A.Y. 2020-2021 / SEM-II School Of Engineering / Mechanical Engineering / SE / Sem II / KOM / Participants

Participants

Enrol users

Match: Any Roles: Type or select... **Teacher x**

+ Add condition

Clear filters Apply filters

4 participants found

First name: [A-Z]

Surname: [A-Z]

First name / Surname	ID number	Email address	Department	Institution	Roles	Groups	Last access to course	Status
<input type="checkbox"/> Rohit Garad		rohitgarad@dypisp.onmicrosoft.com			Teacher, Course creator	No groups	12 secs	Action
<input type="checkbox"/> Santosh Jadhav		santoshjadhav@dypisp.onmicrosoft.com	SOEMECH	DYPSOE	Teacher	SE_Mech_DIV C	316 days 23 hours	Action
<input type="checkbox"/> Prashant Karajagi		prashantkarajagi@dypisp.onmicrosoft.com	SOEMECH	DYPSOE	Teacher	No groups	26 secs	Action
<input type="checkbox"/> Farook Sayyad		farooksayyad@dypisp.onmicrosoft.com	SOEMECH	DYPSOE	Teacher	SE_Mech_DIV A	96 days 1 hour	Action

- RAC
- Participants**
- Badges
- Competencies
- Grades
- General
- UNIT I: Applications of Refrigeration and Air Conditioning and Refrigerants
- UNIT II: Vapour Refrigeration Systems
- Unit III: Multiple pressure Refrigeration Systems
- Unit IV: Psychrometry and Air conditioning load estimation
- Unit V: Air Conditioning Systems
- Unit VI: Air Distribution Systems

Refrigeration and Air Conditioning_TE_Mech

Dashboard / Courses / A.Y. 2020-2021 / SEM-II School Of Engineering / Mechanical Engineering / TE / SEM II / RAC / Participants

Participants

Enrol users

Match: Any Roles Type or select.. **Teacher x**

+ Add condition Clear filters Apply filters

4 participants found

First name: All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Surname: All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

First name / Surname	ID number	Email address	Department	Institution	Roles	Groups	Last access to course	Status
<input type="checkbox"/> Rohit Garad		rohitgarad@dypisp.onmicrosoft.com			Teacher, Course creator	No groups	10 secs	Active
<input type="checkbox"/> Kundan Kolambe		kundankolambe@dypisp.onmicrosoft.com	SOEMECH	DYPSOE	Teacher	No groups	103 days 2 hours	Active
<input type="checkbox"/> Pooja Nawathe		poojanawathe@dypisp.onmicrosoft.com	SOEMECH	DYPSOE	Teacher	TE_Mech_DIV E, TE_Mech_DIV F	133 days 6 hours	Active
<input type="checkbox"/> Dipak Shelke		dipakshelke@dypisp.onmicrosoft.com	SOEMECH	DYPSOE	Teacher	TE_Mech_DIV F	103 days 2 hours	Active

Navigation sidebar for MSD:

- MSD
- Participants**
- Badges
- Competencies
- Grades
- General
- Unit I
- Unit II
- Unit III
- Unit IV
- Unit V
- Dashboard
- Site home
- Calendar
- Private files
- Content bank
- My courses

Mechanical System Design_BE_Mech

Dashboard / Courses / A.Y. 2020-2021 / SEM-II School Of Engineering / Mechanical Engineering / BE / SEM II / MSD / Participants

Participants

Enrol users

Match: Any Roles: Type or select.. **Teacher x**

+ Add condition Clear filters Apply filters

4 participants found

First name: [All | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z]

Surname: [All | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z]

<input type="checkbox"/>	First name / Surname	ID number	Email address	Department	Institution	Roles	Groups	Last access to course	Status
<input type="checkbox"/>	Rohit Garad		rohitgarad@dypisp.onmicrosoft.com			Teacher, Course creator	No groups	9 secs	Active
<input type="checkbox"/>	Vikram Ghule		vikramghule@dypisp.onmicrosoft.com	SOEMECH	DYPSOE	Teacher	BE_Mech_DIV G	83 days 5 hours	Active
<input type="checkbox"/>	Paresh Khairnar		pareshkhairnar@dypisp.onmicrosoft.com	SOEMECH	DYPSOE	Teacher	BE_Mech_DIV H	87 days 4 hours	Active
<input type="checkbox"/>	Umaji Kolekar		umajikolekar@dypisp.onmicrosoft.com	SOEMECH	DYPSOE	Teacher	BE_Mech_DIV I	97 days 5 hours	Active

DYPIC

- MSMBM
- Participants**
- Badges
- Competencies
- Grades
- General
- Topic 1
- Topic 2
- Topic 3
- Topic 4
- Dashboard
- Site home
- Calendar
- Private files
- Content bank
- My courses

ME_Design Engg_Material Science and Mechanical Behavior of Materials

Dashboard / Courses / A.Y. 2020-2021 / SEM-II School Of Engineering / Mechanical Engineering / Master Of Engineering / FIRST YEAR / MSMBM / Participants

Participants

Enrol users

Match: Any Roles Type or select.. **Teacher x**

+ Add condition Clear filters Apply filters

2 participants found

First name: All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Surname: All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

	First name / Surname	ID number	Email address	Department	Institution	Roles	Groups	Last access to course	Status
<input type="checkbox"/>	Rohit Garad		rohitgarad@dypisp.onmicrosoft.com			Teacher, Course creator	No groups	10 secs	Active
<input type="checkbox"/>	Amol Patil		amolpatil@dypisp.onmicrosoft.com	SOEMECH	DYPSCE	Teacher	No groups	218 days	Active

With selected users... Choose..



"Empowerment through quality technical education"

Dr D Y Patil Educational Enterprises Charitable Trust's

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Dr D Y PATIL SCHOOL OF ENGINEERING

(Approved by AICTE, New Delhi Recognized by Govt. of Maharashtra, Affiliated to Savitribai Phule Pune University)

AISHE Code: C-46648

DTE Code: EN6732

SPPU PUN Code: CEGP015720

(Accredited by NAAC)

A.Y. 2020-21

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

(Criteria 2.3.1)

Attached samples of documents which shows

- a) LMS teaching plan indicating supply of NPTEL video links

Dr. F. B. Sayyad

Principal

Enclosed: Records of activity done.

Name of Staff: Prof. Dipak Shelke
Sub : Engineering Thermodynamics

Div: SE-C

SEM - 5

Sr No.	Unit wise Syllabus as Per SPPU	Topic	Source(Public domain-NPTEL videos/You tube/Papers etc)	URL	Duration	Description about the URL
1	Unit 1- Fundamentals of Thermodynamics	Introduction, Review of basic definitions, Zeroth law of Thermodynamics	NPTEL	https://www.youtube.com/watch?v=jkdMtrmXo664&list=PL3zvA_WajfGAwLuULH-L0AG9fKDgplYne	33	Basic concept of thermodynamics
		Heat & work	NPTEL	https://www.youtube.com/watch?v=V2MnEJ3GMJk&list=PL3zvA_WajfGAwLuULH-L0AG9fKDgplYne&index=10	36	Explain with example Heat & Work
		, Macro and Microscopic Approach, State Postulate, State, Path, Process and Cycles, Point function and Path function, quasi static process, Equilibrium	NPTEL	https://in.video.search.yahoo.com/video/play; ylt=AwrPh tupvENfbWUAoxEM9oIQ; ylu=X3oDMTBzZWQ1aGROBHN lYwNzcgRzbGsDdmkLkH70aWQDBGdwb3MDMTI-?p=npTEL+lecture+on+first+law+of+thermodynamics&vid=38b864f2f653d08d440178eca97bd404&turl=https%3A%2F%2Ftse3.mm.bing.net%2Fth%3Fid%3DOVP.cYYAfeZMBLOn5EV7N7LakAEsDh%26pid%3DApi%26h%3D225%26w%3D300%26c%3D7%26rs%3D1&rurl=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3DjkdMtrmXo664&tit=%3Cb%3Electure%3C%2Fb%3E+01+%3A+Introductory+Concepts&c=11&h=225&w=300&l=2005&sigr=ZeANDQPoa05e&sig=Jsnibwo1BLIP&sigi=KJg5Q7PPVQI8&age=1547199346&fr2=p%3As%2Cv%3Av&fr=yhs-trp-001&hsimp=yhs-001&hspart=trp&tt=b	33 min	Gives in details introductory basics concepts about thermodynamics like zeroth law, Macro and Microscopic Approach, , quasi static process, Equilibrium
		First law of thermodynamics	NPTEL	https://www.youtube.com/watch?v=YJKJh1qXYI&list=PL3zvA_WajfGAwLuULH-L0AG9fKDgplYne&index=14	30	Explain First law
		Application of first law to flow and non-flow Processes and Cycles. Steady flow energy equation (SFEE), Applications of SFEE to various devices such as Nozzle, Turbine, Compressors, Boilers	NPTEL	https://in.video.search.yahoo.com/yhs/search?fr=yhs-trp-001&hsimp=yhs-001&hspart=trp&p=npTEL+lecture+on+first+law+of+thermodynamics#id=1&vid=852fe314f06dc44aecc0f68dbbd3ade&f&action=click	54 min	Explains in simple way about First law of Thermodynamics & SFEE
		Different form of Energy & First law	NPTEL	https://in.video.search.yahoo.com/yhs/search?fr=yhs-trp-001&hsimp=yhs-001&hspart=trp&p=npTEL+lecture+on+first+law+of+thermodynamics#id=6&vid=2a6170dec4b43ee2ce2f27e2a86b6cf&action=view	60 min	Explain nicely about energy & first law
		Ideal Gas definition, Gas Laws: Boyle's law, Charles law, Avagadro's Law, Equation of State, Ideal Gas constant and Universal Gas constant, Ideal gas Processes on P-v and T-s diagrams, Constant Pressure, Constant Volume, Isothermal, Adiabatic, Polytropic, Throttling Processes (Open and Closed systems), Calculations of Heat transfer, Work done, Internal Energy.	NPTEL	https://www.youtube.com/watch?v=o9ueYSKj9og	59 min	Gives in details about ideal gas



2	Unit-2 Ideal Gas and Second law of Thermodynamics	Limitations of first law of thermodynamics, ; Second law of Thermodynamics	NPTEL	https://in.video.search.yahoo.com/video/play; vlt=AwRPhx520kNfXWAAviUM9oIQ; vlu=X3oDMTBzcTEzcHZxBHNIYwNzcgRzbGsDdmkKBHZ0aWQDBGdwb3MDMJM-?p=npTEL+lecture+on+first+law+of+thermodynamics&vid=96c01a760cf5313f3cfbc7c1665268c&turl=https%3A%2F%2Ftse4.mm.bing.net%2Fth%3Fid%3DOVP.ZvCqTJH4rLlbcSB6Z3deqAEsDh%26pid%3DApi%26h%3D225%26w%3D300%26c%3D7%26rs%3D1&rurl=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3DF_fIGosPY8o&tit=%3Cb%3ELeecture%3C%2Fb%3E+33%3A+Introduction+to+Second+%3Cb%3ELaw%3C%2Fb%3E+%3Cb%3Eof%3C%2Fb%3E+%3Cb%3EThermodynamics%3C%2Fb%3E&c=22&h=225&w=300&l=2011&sjgr=fWDL6eSyCzx5&sig=NIKYzEqZZMuQ&sigi=wHBuKVrpkhJ7&age=1557145417&fr2=p%3As%2Cv%3Av&fr=yhs-trp-001&hsimp=yhs-001&hspart=trp&it=b	33	Introduction of Second law of Thermodynamics
		PMM-II kind, Equivalence of the two statements; Clausius Inequality, Concept of Reversibility and Irreversibility, Carnot Theorem/Principles, Carnot Cycle.	NPTEL	https://www.youtube.com/watch?v=dvCggUOAMMU&list=PL3zvA_WajfGAWLuULH-LOAG9fKDgplYne&index=37	29	Carnot Theorem/Principles, Carnot Cycle.
		Concept of Reversibility and Irreversibility	NPTEL	https://www.youtube.com/watch?v=jmIFbJSdFgQ&list=PL3zvA_WajfGAWLuULH-LOAG9fKDgplYne&index=36	31	Factors for Irreversibility and Introduction to Reversible Cycles
		Thermal reservoir, Heat Engine, Refrigerator and Heat pump: Schematic representation, Efficiency and Coefficient of Performance (COP), Kelvin-Planck & Clausius Statement of the Second law of Thermodynamics	NPTEL	https://www.youtube.com/watch?v=dkm2NO97IMk&list=PL3zvA_WajfGAWLuULH-LOAG9fKDgplYne&index=34	27	Second law statements -Kelvin-Planck & Clausius Statement of the Second law of Thermodynamics
3	Entropy and Availability	Entropy as a property, Clausius Inequality,	NPTEL	https://www.youtube.com/watch?v=AyJbCutoWg4&list=PL2_EyjPqHc10CTN7cHiM5xB2qD7BHUr7&index=16&t=0s	37	Explain Entropy & Clausius Inequality
		Principle of increase of Entropy Principle, Entropy changes for an Open and Closed System, Change of Entropy for an ideal gas and Pure Substance, Concept of Entropy generation. Entropy - a measure of Disorder.	NPTEL	https://www.youtube.com/watch?v=ArAkOivqL4Q&list=PL2_EyjPqHc10CTN7cHiM5xB2qD7BHUr7&index=16	31	Explain entropy change of closed system & some problems
		Entropy as a property, Clausius Inequality,	NPTEL	https://www.youtube.com/watch?v=c5v1b5pCL40	33	Explain Entropy & Clausius Inequality
		Available and Unavailable Energy, Concept of Availability, Availability of heat source at constant temperature and variable temperature, Availability of non-flow and steady-flow Systems.	NPTEL	https://www.youtube.com/watch?v=XnCJo8318sQ&list=PL3zvA_WajfGAWLuULH-LOAG9fKDgplYne&index=53	29	Detailed Concept of Availability & Unavailability
		Availability of heat source at constant temperature and variable temperature	NPTEL	https://www.youtube.com/watch?v=QKP5JzselwE&list=PL3zvA_WajfGAWLuULH-LOAG9fKDgplYne&index=54	31	Detailed Concept of Availability & Unavailability



4	Properties of Pure substances & Thermodynamics of Vapour Cycle	Properties of steam	NPTTEL Video	https://nptel.ac.in/courses/112/105/112105266/	34 min	with example different property of steam is discuss
		Use of Steam Tables.	NPTTEL Video	https://nptel.ac.in/courses/112/105/112105266/	37 min	discuss about how to use of steam table with some numerical
		Formation of steam, Phase changes, Properties of steam	NPTTEL Video	https://nptel.ac.in/courses/112/102/112102255/	32 min	explain process of formation of steam, phase change process of steam
		Study of P-v, T-s and h-s plots (Mollier Chart) for steam,	NPTTEL Video	https://nptel.ac.in/courses/112/102/112102255/	31 min	explain how to plot p-v, T-s and h-s graph and explain how to use Mollier chart to solve the numerical.
		Carnot cycle	NPTTEL Video	https://nptel.ac.in/courses/112/103/112103277/	18 min	explain carnot cycle with example
		Rankine Cycle, Efficiency of Rankine Cycle, Relative Efficiency	NPTTEL Video	https://nptel.ac.in/courses/112/103/112103277/	35 Min	Detail explanation of Rankine cycle
5	Fuels and Combustion	Rankine Cycle with superheat	NPTTEL Video	https://nptel.ac.in/courses/112/103/112103277/	28 min	Rankine Cycle with superheat
		Numericals on Rankine cycle	NPTTEL Video	https://nptel.ac.in/courses/112/107/112107216/	29 Min	sove the problem on rankine cycle
		Comparison of Carnot cycle and Rankine cycle	youtube video	https://www.youtube.com/watch?v=TE95-CCh5Ds	40 min	Detail explanation of both the cycle
		Types of fuels	NPTTEL PDF	https://nptel.ac.in/courses/103/105/103105110/		Explain solid, liquid and gases fuel in detail
		Proximate and ultimate analysis of fuel, Combustion theory, Combustion Equations, Theoretical and Excess air requirements, Equivalence ratio, Analysis of products of combustion, Calorific value - HCV & LCV. Bomb and Boys gas Calorimeters.	NPTTEL Video	https://nptel.ac.in/courses/112/107/112107216/	28 min	Explain in simple way about fuel analysis, combustion theory and related terms and working of Bomb, gas calorimeter to find the CV.
		Numericals on Fuel gas analysis	NPTTEL Video	https://nptel.ac.in/courses/112/107/112107216/	24 min	solve numerical on gas analysis and calorimeter
6	Steam Generators & Boiler Draught	Enthalpy of formation, Adiabatic flame temperature	NPTTEL Video	https://www.youtube.com/watch?v=xSTGLew4A4s	28 min	explain formation of enthalpy and adiabatic flame temp with example
		Classification, Constructional details of low pressure boilers,	NPTTEL Video	https://nptel.ac.in/courses/112/103/112103277/	28 min	Explain types of boiler in details
		Boiler mountings and Boiler accessories	NPTTEL Video	https://www.youtube.com/watch?v=2zpjqv6RAX4	33 Min	explain in detail Boiler accessories
		Instrumentations required for safe and efficient operation	NPTTEL Video	https://nptel.ac.in/courses/112/107/112107216/	28 min	Gives detail explanation of boiler mounting and accessories like
		Boiler performance Calculations- Equivalent Evaporation, Boiler efficiency, Heat balance Sheet.	NPTTEL Video	https://nptel.ac.in/courses/112/107/112107216/	28 min	Explain boiler performance term and numerical on it.
		Boiler Draught: Classification, Necessity of Draught, Natural draught, Determination of Height of chimney, Diameter of chimney,	NPTTEL Video	https://nptel.ac.in/courses/112/107/112107216/	25 min	Explain draught its type and expression for chimney height

Subject Teacher
Prof. Dipak D. Shelke



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HOD
Prof. R.N. Garad

Dr. D. Y. Patil School of Engineering, Pune

Department of Electronics and Telecommunication Engineering

Class: TE (E&TC)

A.Y. 2020-21

Sem: I

Subject: Mechatronics

Name of Teacher: Dr. Saniya Ansari

LMS Teaching Plan

Number & Name of Unit	Topic/Content	Domain)	URL	Duration	Description
Unit I :Introduction to Mechatronics	Basics of Mechtronics Systems : Definition of Mechtronics. Key	NPTEL	https://nptel.ac.in/content/storage2/courses/112103174/module1/lec1/1.html https://nptel.ac.in/content/storage2/courses/112103174/pdf/mod1.pdf	Page 1 to 8	Information about the elements of Mechatronics and
	Measurement Characteristics	NPTEL	https://nptel.ac.in/courses/108/105/108105062/ https://nptel.ac.in/content/storage2/courses/112103174/pdf/mod2.pdf	Page no 1 to 7	Measurement characteristics
	Examples of Mechtronics systems in daily life as Digital Cameras	YouTube	https://www.youtube.com/watch?v=kP6TmDUiRc	39	Working of Digital camera
	Mechtronics design process	YouTube	https://www.youtube.com/watch?v=pn0d1gjl7Vs	10 Min	Gives flow of Mechtronics design process
	phases of Mechtronics design process, integrated design approach.	YouTube	https://www.youtube.com/watch?v=B7S_StbcaYc&t=325s	14 Min	Integrayed desogn approach of mechatronics system
	Mechanical Components and Servo mechanism :	www.slideshare.net	https://www.slideshare.net/meenasundar/lecture-2-servomotors-basics-working	PPT	Concept of Servomechanism
	Mechanical System and Motion, Mass Inertia and Dashpot, Gears,	NPTEL	https://nptel.ac.in/content/storage2/courses/112105127/pdf/LM-32.pdf	9 min	Types of Gears
Unit II :Overview of Sensors, Transducers and their Characteristics Specifications	Classification and selection of transducers:	NPTEL	https://nptel.ac.in/courses/108/108/108108147/ https://nptel.ac.in/courses/108/108	03 to 15 Min	selection criterion for transducers
	Force: Load Cell, Cantilever Beam	NPTEL	https://nptel.ac.in/courses/108/108/108108147/	18 to 28 Min	Details and types of load cell
	Pressure: Strain Gauge, Piezoelectric	NPTEL	https://nptel.ac.in/content/storage2/courses/108105063/pdf/L-05(SS)(IA&C)%20(EE)NPTEL).pdf	Page No 2-15	Application and types of pressure guage
	Proximity sensors Inductive, Capacitive and Magnetic,	NPTEL	http://www.nptelvideos.in/2012/11/industrial-automation-and-control.html?m=1	08 to 21 Min	Proximity sensors, use and types
	sources detectors in optical proximity sensors	NPTEL	https://nptel.ac.in/content/storage2/courses/112103174/pdf/mod2.pdf	Page No. 08-10	optical sensor for maesurment of temperature
	Comparison of Various proximity sensors	NPTEL	https://nptel.ac.in/content/storage2/courses/112103174/pdf/mod2.pdf	Page No. 03-14	Comparision
	Optical Fibre and its use in temperature measurement, Fibre	NPTEL	http://www.nptelvideos.in/2012/11/industrial-automation-and-control.html?m=1	06 to 25 Min	Description of optical temp sensor
	Optic Temperature sensors, Ultrasonic Transducersfor applications as position, level, flow	NPTEL	https://nptel.ac.in/content/storage2/courses/108105063/pdf/L-07(SS)(IA&C)%20(EE)NPTEL).pdf	Page No. 02-15	Application of US transducers for level, flow and level
	Gas sensors, Wind sensors	NPTEL	https://nptel.ac.in/courses/108/108/108108147/	5:00 to 12:00 Min	Types
	Gyroscope, Accelerometer, Magnetometer	NPTEL	https://nptel.ac.in/courses/108/108/108108147/	15:00 to 42:00 Min	Smart sensors in Mobile
	Smart Sensors - Film sensor	NPTEL	http://www.nptelvideos.in/2012/11/industrial-automation-and-control.html?m=1	6:00 to 25:00 Min	Use and application
IR- temperature sensors	NPTEL	https://nptel.ac.in/courses/108/108/108108147/	04 to 12 Min	IR temp Sensor block diagram	



	Rotary Optical Encoder	NPTEL	http://www.nptelvideos.in/2012/11/industrial-automation-and-control.html?m=1	06 to 14 Min	Smart sensors
	Introduction to MEMS& Nano Sensors	NPTEL	http://www.nptelvideos.in/2012/12/mems-microsystems.html?m=1	08 to 21 Min	Types of Nano Sensors
Unit III : Hydraulic Systems	Introduction to Hydraulic Actuators	NPTEL	https://youtu.be/8xd7cWvMrvE https://nptel.ac.in/courses/112/103/112103174/	7:00 to 32:00 Min	Block diagram and components study
	Fluid Power systems:Concept of Actuators, Classification of Actuators: Pneumatic, Hydraulic and Electrical Actuators	YouTube	https://youtu.be/8xd7cWvMrvE	7:00 to 32:00 Min	BD of Fluid power system
	Hydraulic Systems: Physical Components of a Hydraulic systems	NPTEL	https://nptel.ac.in/content/storage2/courses/112106175/Module%201/Lecture%201.pdf	Point No. 1.7 to 1.10	Components of Hydraulic system
	Hydraulic Pumps (e.g. Gear Pumps, Vane Pumps, Piston Pumps and Axial Piston Pumps) ,	NPTEL	https://nptel.ac.in/content/storage2/courses/108105063/pdf/L-27(SM)%20(IA&C)%20(EE)NPTEL).pdf https://www.iitism.ac.in/~shibayan/MMC%2016101%20Fluid%20Machines/MMC%2016101_Positive%20Displacement%20Pump_01.pdf https://nptel.ac.in/courses/112/103/112103174/	Page No. 8 to 11 Lecture - 02 Lecture - 03	Hydraulic pumps & types
	Filters and Pressure Regulation	NPTEL	https://nptel.ac.in/content/storage2/courses/108105063/pdf/L-27(SM)%20(IA&C)%20(EE)NPTEL).pdf		Pressure regulation method
	Relief Valve,	NPTEL	https://nptel.ac.in/content/storage2/courses/103103027/module9/lec3/3.html https://nptel.ac.in/courses/112/103/112103174/	Page No. 03 Lecture - 6 - Pressure Relief Valve	Study of relief valve
	Accumulator	YouTube	https://youtu.be/uMFVUukXfQA https://www.hydraulicspneumatics.com/technologies/other-technologies/article/21884186/chapter-16-accumulators	00:00 to 2:43 Min	Classification with example
Unit IV : Pneumatic Systems	Introduction to Pneumatic a Actuators Physical Components of a Pneumatic Systems	NPTEL	https://youtu.be/AUxnieYVcCk https://nptel.ac.in/content/storage2/courses/112103174/pdf/mod6.pdf https://youtu.be/i9A0HpfWFOs https://nptel.ac.in/courses/112/103/112103174/	Page No. 1 - 4 1 to 21 Min Module - 6 - Lect-01	Physical Components of a Pneumatic System
	Pneumatic Cylinders	NPTEL	https://nptel.ac.in/content/storage2/courses/112106175/downloads/Module%204/FAQ/FAQ-Lecture%2037.pdf	Page No. 1	Types : Single and double stage
	Pneumatic Actuators	NPTEL	https://nptel.ac.in/content/storage2/courses/112103174/pdf/mod6.pdf	Page No. 21 - 26	Spring Actuator and Spring Actuator with positioner
	Air compressor	NPTEL	https://nptel.ac.in/content/storage2/courses/112103174/pdf/mod6.pdf https://youtu.be/i9A0HpfWFOs https://youtu.be/i9A0HpfWFOs https://nptel.ac.in/courses/112/103/112103174/	Page No. 3 - 9 21 to 53 Min Module - 6 - Lect 01 & 02	Working and types Air and rotary
	Air Receiver	NPTEL	https://nptel.ac.in/courses/112/103/112103174/	Module - 6 - Lect 03	Working and types
	Air Dryer	NPTEL	https://www.hydraulicspneumatics.com/fluid-power-basics/pneumatics/article/21883028/compressed-air-dryers https://nptel.ac.in/courses/112/103/112103174/	Module - 6 - Lect 03	Working and types
	Air Service Treatment	NPTEL	https://nptel.ac.in/content/storage2/courses/112103174/pdf/mod6.pdf	Page No. 16	air regulator and Gauge, Air Lubricator and Pressure regulation
	Intake and Air Filter	NPTEL	https://nptel.ac.in/content/storage2/courses/112103174/pdf/mod6.pdf	Page No. 11 - 12	BD of Air Filter with types



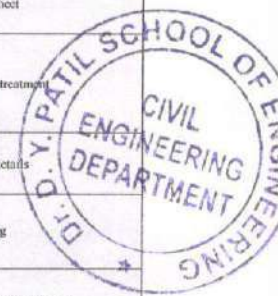
	Case study of Robotic Pick and Place robot	NPTEL	https://nptel.ac.in/content/storage2/courses/112101098/download/lecture-39.pdf	Page No. 01 - 09	Case study
Unit V : Electrical Actuators, Electron-Mechanical Actuators	Selection criteria and specifications of stepper motors	NPTEL	https://nptel.ac.in/content/storage2/courses/108105063/pdf/L-32(SS)(IAC)%20((EE)NPTEL).pdf	Page No. 01 - 14	Selection criteria and specification
	solenoid valves, relays	NPTEL	https://nptel.ac.in/content/storage2/courses/108101039/download/Lecture-1.pdf	Page No. 03 - 06	Solid State relays and Electromechanical relay
	Selection Criterion of control valve	NPTEL	https://nptel.ac.in/content/storage2/courses/108105063/pdf/L-25(SS)(IAC)%20((EE)NPTEL).pdf	Page No. 03 - 11	Selection Criterion of control valve
	Single acting and Double acting Cylinders.	NPTEL	https://youtu.be/O_2BZs3WiQY https://nptel.ac.in/courses/112/103/112103174/	00 : 2.50 Min Module - 6 - Lect-04	Types of cylinder
	Valves: Electro Hydraulic	NPTEL	https://youtu.be/7J_xxspZYZY https://www.hydraulicspneumatics.com/technologies/other-technologies/article/21884325/book-2-chapter-8-directional-control-valves https://nptel.ac.in/courses/112/103/112103174/	00 : 1.28 Min Lecture - 4 - Control Valves-1	3/2 Valves, 4/2 Valves, 5/3 Valves
	Electro-Pneumatic Cables.	NPTEL	https://nptel.ac.in/content/storage2/courses/106105080/pdf/M2L2.pdf	Page No. 03 - 15	Power cable and Signal cables
Unit VI :Mechatronics Systems in Automobile	Boat Autopilot	Wiki	https://marinegyaan.com/what-is-autopilot-its-principle-and-details/	Web Doc	case Study
	High Speed tilting trains				
	Automatic car parking systems	IEEE	https://ieeexplore.ieee.org/document/6921729	Page 1to 3	case Study
	Engine Management Systems	Researchgate	https://www.researchgate.net/publication/222531260_Mechatronic_design_approach_for_engine_management_systems https://youtu.be/3hx_jKpuxRc	Article	case Study
	Antilock Brake systems (ABS)	IEEE	https://aermech.com/anti-lock-braking-system-abs-working/	Web Doc	case Study
	CNC Machines(Only Block Diagram and explanation)	NPTEL	https://nptel.ac.in/content/storage2/courses/112103174/pdf/mod1.pdf	Page No. 10 - 11	case Study

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Dr. D. Y. Patil School of Engineering, Pune					
Department of Civil Engineering					
Class: TE (Civil)			A.Y. 2020-21		Sem:II
Subject: Hydrology and Water Resources Engineering			Name of Teacher: Mr. Rajesh Kaidare		
LMS Teaching Plan					
Topic/Content	Source (From Public Domain)	URL	Duration	Description	
Unit I Introduction to Air Noise pollution	1) Introduction to Air and Noise pollution Sources and effects of Noise Pollution.	NPTel IIT Roorkee-Transcript NPTel IIT Roorkee-Video YouTube	https://nptel.ac.in/courses/105/107/105107207/ https://nptel.ac.in/courses/105/107/105107207/ https://www.youtube.com/watch?v=7TmTDGCGAB8	Page [1-17] 0.01-12.17	Importance of Air and noise pollution Importance of Air and noise pollution 1. Basics of Air pollution 2. Basics of noise pollution
	2) Sound measurements – Sound pressure, Intensity, Sound pressure level, Loudness etc.	NPTel IIT Roorkee-Video YouTube	https://www.youtube.com/watch?v=1wUJKK5_1Ew https://www.youtube.com/watch?v=1wUJKK5_1Ew	0.01-5.17 0.01-5.01	Sound measurement methods Sound measurements and noise control
	3) Measurement of equivalent noise level and Cumulative noise level	Telegram	https://t.me/Civil_Engineering_Mcq_Group	0-3 hrs	
	4) Learning Noise control techniques.	NPTel IIT Roorkee-Video YouTube	https://www.youtube.com/watch?v=1wUJKK5_1Ew https://www.youtube.com/watch?v=1wUJKK5_1Ew	0.01-5.17 0.01-5.01	Sound measurement methods Learning techniques of noise pollution
	5) Classification of air pollutants. Primary and Secondary air pollutants and their importance	NPTel web content YouTube	https://nptel.ac.in/courses/105/102/105102089/ https://www.youtube.com/watch?v=4AwG2G_EBU&list=PLF845738AE71816DCE	chapter 1-3 0.1-48.0	Primary and secondary pollutants
	6) Principle and working of Settling chamber, Cyclone precipitator, Fabric filter, ESP, Settling chamber etc	NPTel IIT Delhi	https://nptel.ac.in/courses/105/102/105102089/	chapter 4-6	Air pollution preventing equipments
	7) Principle and working of Gaseous contaminants control by adsorption and absorption technique	NPTel IIT Delhi	https://nptel.ac.in/courses/105/102/105102089/	chapter 7-8	Use of Adsorption techniques to reduce gaseous pollutants
	8) Revision and class test	Telegram MCQs on Air pollution	https://t.me/Civil_Engineering_Mcq_Group	0-3 hrs	Test
Unit II: Introduction to water supply scheme	9) Introduction to water supply scheme its Type Rural, Urban and Regional Rural etc.	NPTel IIT Kanpur Web content	https://nptel.ac.in/courses/105/104/105104102/	Section 1	Types of wayer supply schemes
	10) Data collection for water supply scheme, components and layout, Design period, factors affecting design period.	NPTel IIT Kanpur Web content	https://nptel.ac.in/courses/105/104/105104102/	Section-1	Norms od design of water supply schemes
	11) Study of water Intake Structures, General design considerations and its types	NPTel IIT Kanpur Web content	https://nptel.ac.in/courses/105/104/105104102/	Section-2	Type of River intake, infiltration and well works
	12) Principle and design of River intake, Canal Intake and Reservoir Intake.	NPTel IIT Kanpur Web content	https://nptel.ac.in/courses/105/104/105104102/	Section-2	Design of River intake, infiltration and well works
	13) Designing of rising main (design expected), hydraulic design of pumping station	NPTel IIT Kanpur Web content	https://nptel.ac.in/courses/105/104/105104102/	Section-3	Rising main pipeline design
	14) Methods to calculate quantity of water, Rate of water consumption for various purposes like domestic, industrial, institutional, commercial, fire demand and water system losses. Factors affecting rate of demand	NPTel IIT Kanpur Web content U Tube	https://nptel.ac.in/courses/105/104/105104102/ https://www.youtube.com/watch?v=H8MUb1_w-D-E	Section-4 0.1-12.27	Calculate requirment of water for design of water supply scheme
	15) Population forecasting using different methods like arithmetic mean, Geometric mean, Incremental increase etc.	NPTel IIT Kanpur Web content	https://nptel.ac.in/courses/105/104/105104102/	Section 2-3	Methods of population forecast
	16) Revision and class test	Telegram MCQs on water requirement	https://t.me/Civil_Engineering_Mcq_Group	294 videos,300000 photos	MCQ type tests
Unit III: Quality of water	17) Quality of water : study of Physical, Chemical, Radioactivity and Bacteriological Characteristics of water	NPTel IIT Kanpur Web content	https://nptel.ac.in/courses/105/104/105104102/	Section 4-5	Study of Pollution of water
	18) Standards as per IS: 10500 (2012) And necessity to maintain Standards	Open source on Google, PDF	https://www.resource.org/bw/infhw/S001s_10500_1991.pdf	Page [1-17]	Study of standards for water supply and treatment
	19) Water treatment: Principles of water treatment processes	NPTel IIT Kanpur Web content	https://nptel.ac.in/courses/105/104/105104102/	Section 6	Water treatment processes
	20) Introduction to different types of water treatment flow sheets.	NPTel IIT Kanpur Web content	https://nptel.ac.in/courses/105/104/105104102/	Section 7	water treatment flowsheet
	21) Aeration: Principle and Concept, Necessity, Methods, Removal of taste and odour. Design of aeration fountain.	NPTel IIT Kanpur Web content	https://nptel.ac.in/courses/105/104/105104102/	Section 7	Details of Aeration in water treatment
	22) Sedimentation: Plain and chemical assisted Using flocculants etc.	NPTel IIT Kanpur Web content	https://nptel.ac.in/courses/105/104/105104102/	Section 8	Sedimentation process details
Unit III: Quality of water	23) Principle, efficiency of an ideal settling basin, settling velocity, types of sedimentation tanks	NPTel IIT Kanpur Web content YouTube video	https://nptel.ac.in/courses/105/104/105104102/ https://www.youtube.com/watch?v=H8MUb1_w-D-E	Lecture 8 0.1-19.1	Four types of settling
	24) Design of Sedimentation tank, Introduction & design of tube settlers.	NPTel IIT Kanpur Web content YouTube video	https://nptel.ac.in/courses/105/104/105104102/ https://www.youtube.com/watch?v=H8MUb1_w-D-E	Section 9 0.1-19.1	Design of Tube settlers and sedimentation tank



Unit IV: treatment of water	25) Theory of Coagulation and Flocculation	NPTEL IIT Kanpur Web content	https://nptel.ac.in/courses/109/104/105104102/	Section 9	Process of coagulation and flocculation
	26) Types of common coagulants alum & ferric salts, introduction to other coagulant aids like betonites clay, lime stone, silicates and polyelectrolyte's, Moringa oleifera etc.	NPTEL IIT Kanpur Web content	https://nptel.ac.in/courses/109/104/105104102/	Section 10	Types of coagulants and polyelectrolytes for coagulation flocculation
	27) Importance of mean velocity gradient "G" and power consumption, Type and design of flocculation chamber	NPTEL IIT Kanpur Web content	https://nptel.ac.in/courses/109/104/105104102/	Section 10	Study of design parameters of Flocculator
		YouTube Video	https://www.youtube.com/watch?v=9G925H9G	0:12-10:55	
	28) Design of clariflocculator	YouTube Video	https://www.youtube.com/watch?v=Wu3H4E-SP_g	0:01-32:2	Study of design parameters of clar flocculator Flocculator
	29) Filtration: Theory of filtration, mechanism of filtration, filter materials etc	NPTEL IIT Kanpur Web content	https://nptel.ac.in/courses/105/104/105104102/	Section 11	Theory of filtration
	30) Types of filters- Rapid gravity filter, slow sand filter and pressure filter, multimedia and dual media filters.	NPTEL IIT Kanpur Web content	https://nptel.ac.in/courses/105/104/105104102/	Section 12	Types of filters
		31) Components and under drain system of filters working and cleaning of filters, operational troubles, Design of rapid sand gravity filters etc.			
	32) working and cleaning of filters, operational troubles, Design of rapid sand gravity filters etc.	NPTEL IIT Kanpur Web content	https://nptel.ac.in/courses/105/104/105104102/	Section 12	Details of filters and its working.
	Unit V: Disinfection	33) Disinfection: Theory, factors affecting disinfection, types of disinfectants	NPTEL IIT Roorkee Web content	https://nptel.ac.in/courses/105/104/105104102/	Section-13
U Tube Video			https://www.youtube.com/watch?v=amfrw8F_uOg	0:1-11:25	
34) Methods of chlorination, break point chlorination, bleaching powder estimation		NPTEL IIT Roorkee Web content	https://nptel.ac.in/courses/105/104/105104102/	Section-13	Chlorine as disinfectant
		U Tube Video (IIT Roorkee)	https://www.youtube.com/watch?v=A1R-yhTGwLM	0:0-38:47	
35) Introduction, Principles, Advantages and Disadvantages of Water softening methods: (lime-soda, zeolite)		NPTEL IIT Roorkee Video	https://nptel.ac.in/courses/105/104/105104102/	Lecture 46-50	Advance water treatment techniques and water softening process
		U Tube Video	https://www.youtube.com/watch?v=Tr0f0d0G	0:1-01:00:02	
36) Demineralization: Methods like Reverse Osmosis .		NPTEL IIT Roorkee Video	https://nptel.ac.in/courses/105/107/105107102/	Lecture 53	Oversos osmosis process for water treatment
37) Methods of electro dialysis		NPTEL IIT Roorkee Video	https://nptel.ac.in/courses/105/107/105107102/	Lecture 46-51	Electro dialysis process for water treatment
38) Methods of ion exchange		NPTEL IIT Roorkee Video	https://nptel.ac.in/courses/105/107/105107102/	Lecture 54	Ion exchange process for water treatment
39) Adsorption: odour and colour removal using activated carbon		NPTEL IIT Roorkee Video	https://nptel.ac.in/courses/105/107/105107102/	Lecture 51	Adsorption process for water treatment
40) Revision and class test	Telegram	https://t.me/wsvbc	0-3 hrs	Question Answer sessions and MCQ type	
Unit V: Advance water treatment methodologies	41) Study of Water distribution system, System of water supply- Continuous and intermittent system	NPTEL IIT Kanpur Web content	https://nptel.ac.in/courses/105/104/105104102/	Section 5(1)	Water distribution system design
	42) Different distribution systems and their components, ESR- Design of ESR capacity, Wastage of Water- Detection and Prevention.	NPTEL IIT Kanpur Web content	https://nptel.ac.in/courses/105/104/105104102/	Section -5(2)	Storage of water and wastage prevention due to leakage in pipe and containers
	43) Introduction to rainwater harvesting, need and importance of rain water harvesting system	YouTube Video	https://www.youtube.com/watch?v=cdHwvXKU	0:1-9:20	Rain water harvesting
	44) Introduction to Packaged WTP in townships and big commercial plants	YouTube Video	https://www.youtube.com/watch?v=0M7i0cY4tE	0:01-1:40	Onsite treatment of water necessity and packaged water treatment plants
	45) Necessity of On-site water treatment	YouTube	https://www.youtube.com/watch?v=HYK2GKubM	0:17-4:47	
	46) Introduction to process description of Reverse Osmosis and treatment units	NPTEL IIT Roorkee Video	https://nptel.ac.in/courses/105/107/105107102/	Lecture 52	Use of reverse osmosis for treatment of water
	47) Introduction to process description of Pressure Filters and its treatment units	YouTube	https://www.youtube.com/watch?v=m2nj0vs2xE	0:01-58:59	Pressure filter and its use for water treatment
	48) Revision and Numerical solving	Telegram	https://t.me/wsvbc	0-3 hrs	MCQs and Question Answer sessions

Note: The subject has 8 Units as against conventional 6 units

Att
(R.C.Katkar)
Subject Teacher



Dr. D. Y. Patil
H.O.D.

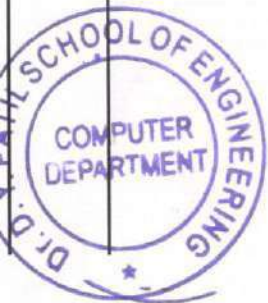
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 Dr. D. Y. Patil School of Engineering
 Dr. D. Y. Patil Knowledge City, Charoli Bk., Via. Lohegaon, Pune - 412 105
Department of Computer Engineering
Subject: Data Structures and Algorithms (2020-2021) SEM-II

Class : SE Div : A

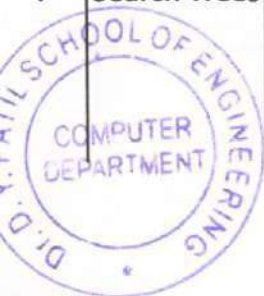
Sr. No.	Unit wise Syllabus as Per SPPU	Topic	Source	URL	Duration	Description about the URL
1	Hashing	Concepts-hash table, hash function, basic operations, bucket, collision, probe, synonym, overflow	YouTube	https://youtu.be/2BldESGZKB8	02:36	Introduction to advance data structure starting with Hasing
				https://youtu.be/KyUTuwz_b7Q	13:53	
		Open hashing, closed hashing, perfect hash function, load density		https://youtu.be/F-eFJb7x584	17:33	Types of hasing
				https://youtu.be/clejnmwXH18	07:42	
		full table, load factor, rehashing, issues in hashing		https://youtu.be/49ieZ5D3814	01:58	issues faces with hasing technique
		hash functions- properties of good hash function, division, multiplication, extraction, mid-square, folding and universal		https://youtu.be/4UrPTAsVo88	16:14	properties of good hash function
				https://youtu.be/xo9Vsfzg8g	15:56	Methods of hashing
		Collision resolution strategies- open addressing and chaining		https://youtu.be/o7hb03n3pw4	10:19	Collision resolution strategies
Hash table overflow- open addressing and chaining	https://youtu.be/zeMa9sg-VJM	25:50				



		extendible hashing, closed addressing and separate chaining		https://youtu.be/j612Fj-mgCY	<u>05:32</u>	
2	Trees	basic terminology, General tree and its representation, representation using sequential and linked organization	YouTube	https://youtu.be/vvey2QCs98o	<u>24:10</u>	Introduction to trees
				https://youtu.be/zDITxrEwxvg	<u>17:50</u>	Sequential representation of tree
				https://youtu.be/l7P4ESrSaqc	<u>03:45</u>	Linked representation of tree
		Binary tree- properties, converting tree to binary tree,		https://youtu.be/Q3HH6bE2bwA	<u>16:16</u>	Properties of binary tree
				https://youtu.be/_0a8Qfm24oc	<u>05:27</u>	CONVERT GENERAL TREE INTO BINARY TREE
		binary tree traversals(recursive and non-recursive)- inorder, preorder, post order, depth first and breadth first, Operations on binary tree		https://youtu.be/e_Wv_pH4Se8	<u>20:12</u>	Recursive Traversal
				https://youtu.be/VsxLHGUqAKs	<u>08:11</u>	Inorder Non-recursive Traversal
				https://youtu.be/K2ybl-GEHSY	<u>04:48</u>	Preorder Traversal without recursion
				https://youtu.be/k21VKEM8OFY	<u>05:15</u>	Postorder traversal without recursion
		Huffman Tree (Concept and Use),		https://youtu.be/uDS8AkTAcIU	<u>12:29</u>	Huffman Coding Algorithm
		Binary Search Tree (BST), BST operations		https://youtu.be/ovWqEgYYAEQ	<u>05:34</u>	BST
				https://youtu.be/xuzVfXJ2cFA	<u>04:41</u>	BST operations
		Threaded binary search tree- concepts, threading, insertion		https://youtu.be/ffgg_zmbaxw	<u>19:16</u>	Threaded binary search



		deletion of nodes in in-order threaded binary search tree		https://youtu.be/pK9sT5Utl04	<u>11:23</u>	Deletion in Threaded Binary Search Tree
		in order traversal of in-order threaded binary search tree		https://youtu.be/tS4h05qTBjU	<u>09:11</u>	Inorder traversal of threaded binary tree
3	Graphs	Basic Concepts, Storage representation, Adjacency matrix, adjacency list, adjacency multi list, inverse adjacency list	YouTube	https://youtu.be/5hPfm_uqXmw	<u>12:11</u>	Introduction to Graphs and its representation
				https://youtu.be/f2z1n6atBsc	<u>04:54</u>	
		Traversals-depth first and breadth first		https://youtu.be/pcKY4hiDrxk	<u>18:29</u>	Graph Traversal Techniques
				https://youtu.be/vf-cxgUXcMk	<u>20:26</u>	
		Minimum spanning Tree		https://youtu.be/h6cUkkaKNHw	<u>07:11</u>	Minimum spanning Tree
		Greedy algorithms for computing minimum spanning tree- Prims and Kruskal Algorithms		https://youtu.be/4ZIRH0eK-qQ	<u>20:11</u>	Prims and Kruskal Algorithms
		Dijkstra's Single source shortest path		https://youtu.be/XB4MlxiyvY0	<u>17:34</u>	Dijkstra Algorithm - Single Source Shortest Path - Greedy Method
		All pairs shortest paths- Flyod-Warshall Algorithm		https://youtu.be/oNI0rf2P9gE	<u>14:13</u>	All Pairs Shortest Path (Floyd-Warshall) - Dynamic Programming
Topological ordering	https://youtu.be/DDSRt4yEhy4	<u>05:16</u>	Topological ordering of Graph			
4	Search Trees	Representation of Symbol Tables- Static tree table and Dynamic tree table	YouTube	https://youtu.be/UDEB4p5PIWw	<u>04:40</u>	Introduction to Symbol Table
				https://youtu.be/m70X8JRc8ok	<u>04:55</u>	Introduction to Static
				https://youtu.be/lvUkhdrSJMm	<u>04:51</u>	Introduction to Dynamic tree table



	Weight balanced tree - Optimal Binary Search Tree (OBST)	https://youtu.be/zMIRplrnt90	20:03	Introduction to OBST
	OBST as an example of Dynamic Programming	https://youtu.be/wAy6nDMPYAE	56:59	OBST Dynamic Programming Approach
	Height Balanced Tree- AVL tree	https://youtu.be/YWqla0UX-38	24:29	AVL Tree
	Red-Black Tree	https://youtu.be/3RQqt7PDHog	32:59	Red Black Tree
		https://youtu.be/qA02XWRTBdw	27:40	Insertion in Red Black Tree
		https://youtu.be/CTvfzU_uNKE	34:28	Deletion in Red Black Tree
	AA tree	https://youtu.be/0u10iNMeZBs	16:49	AA tree.
	K-dimensional Tree	https://youtu.be/XG4zpiJAKD4	08:46	K-dimensional Tree
	Splay Tree	https://youtu.be/qMmqOHR75b8	28:31	Splay Tree Introduction
5	Indexing and Multiway Trees	YouTube		
	Indexing and Multiway Trees- Indexing	https://youtu.be/meE1QWd3v-A	05:53	Introduction to Indexing and Multiway Trees
	Indexing techniques-primary, secondary	https://youtu.be/Rwum4Qung0Q	16:03	Indexing techniques
	Dense, sparse, Multiway search trees	https://youtu.be/RRkUp8-wZfw	04:18	Dense and sparse Trees
		https://youtu.be/QsuRpCiL_Gw	14:37	Multiway search trees
	B-Tree- insertion, deletion	https://youtu.be/yO4eSuJLKrU	10:06	B Tree
	B+Tree - insertion, deletion	https://youtu.be/yKo5lQEWTVk	20:27	B+ Tree



		Use of B+ tree in Indexing		https://youtu.be/aZjYr87r1b8	39:40	Use of B+ tree in Indexing
		Trie Tree		https://youtu.be/zljfhVPRZCg	04:54	Trie Tree
6	File Organization	Files: concept, need, primitive operations	YouTube	https://youtu.be/WN3er-3nkhc	23:07	Introduction to Files
		Sequential file organization- concept and primitive operations		https://youtu.be/bvoJI7WKBbc	05:36	Sequential file organization
		Direct Access File- Concepts and Primitive operations		https://youtu.be/XPq9yWBMJkA	05:50	Direct Access File
		Indexed sequential file organization- concept, types of indices		https://youtu.be/LYLXKdD6n2Y	05:08	Indexed sequential file
		Structure of index sequential file		https://youtu.be/R0ZouJg_jdc	07:50	Indexed sequential file
		Linked Organization- multi list files, coral rings		https://youtu.be/EFGLkiMexRw	12:58	Linked Organization
		Inverted files and cellular partitions		https://youtu.be/srIZTslpR_Y	28:46	Inverted files


Prof. Nifesh Mali

Prepared by Subject Teacher


Dr. Pankaj Agarkar

HOD

