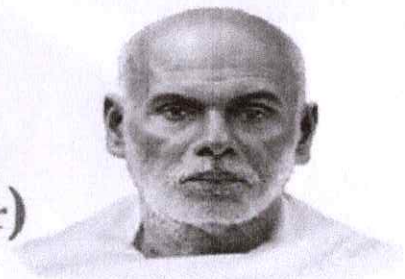




SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY, PAYYANUR

(Promoted by Sree Bhakthi Samvardhini Yogam, Kannur)
Chalakode-P.O., Payyanur, Kannur - 670307, Kerala



DEPARTMENT OF MECHANICAL ENGINEERING



Dr. Vineesh K P

Assistant Professor
Department of Mechanical Engineering
National Institute of Technology
Calicut, India

Organising Webinar On **Braking system in Indian Railways**



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For registration:

↓ SCAN ME ↓



Google Meet

Date & Time

22nd June 2021
10.30 AM - 11.30 AM

e- certificates will be
provided for active participation

Leena
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www.sngcet.org

For admissions contact: 09447033676, 0949500198, 09447008398, 07812911912

Offered Courses: B Tech - CE, CSE, ME, ECE,EEE, M Tech: CE

email: info@sngcet.org



SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

Webinar on BRAKING SYSTEM IN INDIAN RAILWAYS

SYLLABUS

Following are the syllabus for Braking System in Indian Railways:

1. Introduction to Railway Braking Systems

- Importance of braking systems in railway operations
- Overview of primary and secondary braking systems

2. Types of Braking Systems

- Air brake systems: principles and components
- Electro-pneumatic braking systems
- Regenerative braking in electric locomotives

3. Braking Technology in Locomotives

- Brake control systems in diesel and electric locomotives
- Role of dynamic braking in maintaining speed control

4. Braking Technology in Rolling Stock

- Brake systems for passenger coaches and freight wagons
- Modern innovations in freight car braking technology

5. Safety and Maintenance of Braking Systems

- Importance of regular inspection and maintenance
- Safety protocols and emergency braking procedures

6. Evolution of Braking Systems in Indian Railways

- Historical perspective on braking technology
- Impact of technological advancements on braking efficiency

7. Challenges and Future Trends

- Current challenges in improving braking performance
- Emerging technologies and future trends in railway braking systems

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WEBINAR ON BRAKING SYSTEM IN INDIAN RAILWAYS

STUDENT NAME LIST

S.NO	NAME	SEMESTER
1	AKSHAY SURENDRAN P	S8
2	AMAL SAJEENDRAN	S8
3	DEEPTH PURUSHOTHAMAN	S8
4	JITHIN R G	S8
5	MANAS P.K	S8
6	MOHAMMED SAIF ABDUL RAUF	S8
7	MUHAMMED RAIHAN	S8
8	SHAHAS ZAKKEER	S8
9	SREYAS KUMAR K	S8
10	SUFIYAN BIN ABDUL NASSAR	S8


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DEPARTMENT OF MECHANICAL ENGINEERING

WEBINAR ON BRAKING SYSTEM IN INDIAN RAILWAYS

ATTENDANCE LIST

S.NO	NAME	SEMESTER	DAY 1
1	AKSHAY SURENDRAN P	S8	P
2	AMAL SAJEENDRAN	S8	P
3	DEEPTH PURUSHOTHAMAN	S8	P
4	JITHIN R G	S8	P
5	MANAS P.K	S8	P
6	MOHAMMED SAIF ABDUL RAUF	S8	P
7	MUHAMMED RAIHAN	S8	P
8	SHAHAS ZAKKEER	S8	P
9	SREYAS KUMAR K	S8	P
10	SUFIYAN BIN ABDUL NASSAR	S8	P


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Braking System in Indian Railways

A railway brake is a type of brake used on the cars of railway trains to enable deceleration, control acceleration (downhill) or to keep them immobile when parked. An early development was the application of a steam brake to locomotives, where boiler pressure could be applied to brake blocks on the locomotive wheels. Clasp brakes are one type of brakes historically used on trains.

For long stopping distances of express trains without continuous brakes, which it became clear in adverse conditions could considerably exceed those assumed when positioning signals. Trials conducted showing that for an express train however, there was no clear technical solution to the problem earlier because of the necessity of achieving a reasonably uniform rate of braking effort throughout a train, and because of the necessity to add and remove vehicles from the train at frequent points on the journey. Train brakes are similar to that on road vehicle usage, operational features are more complex because of the need to control multiple linked carriages and to be effective on vehicles left without a prime mover.


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For long stopping distance with increased speed, it became essential to provide some more powerful braking system capable of instant application and release by the train operator, described as a continuous brake because it would be effective continuously along the length of the train.


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**WEBINAR ON BRAKING SYSTEM IN
INDIAN RAILWAYS**

FEEDBACK FORM

Submitted by the Department of Mechanical Engineering

	Excellent	Good	Fair	Poor
1. Overall how would you rate the training class?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. How would you rate the trainer's communication and presentation skills	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Were the interactive elements engaging and beneficial	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Did you receive enough opportunity for questions and clarification during the session	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Did this class meet your expectation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Were the hands-on activities beneficial in understanding concepts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Did the workshop offer practical strategies or tools that you can readily apply	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were the technical aspects during the workshop satisfactory	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Rate the level of interaction between the facilitator and participants	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Did the workshop covers emerging trend or advancements in the field	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>


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