



ACS College of Engineering
Approved by AICTE New Delhi, Affiliated to VTU, Belagavi
(A Unit of RajaRajeswari Group of Institutions)
CET Code : E186 COMED-K : E005 PG CET : T918



**Department of Electronics and Communication Engineering
&
Department of CSE-Cyber Security**
Jointly organized a
Technical Seminar

Topic: Introduction to Autonomous Navigation Systems (UAV): A Drone Perspective

Date: 17.10.2025 (Friday)

Time: 10.00 A.M. to 11.30 A.M.

Resource Person: Dr. Mahipathi Ashoka Charkravarthi

Assistant Professor, Department of ECE,

Christ University, Bengaluru.

Program Objective

The objective of this program is to provide participants with a comprehensive understanding of **autonomous navigation systems** used in **Unmanned Aerial Vehicles (UAVs)**. It aims to introduce the fundamental concepts, technologies, and methodologies that enable drones to **perceive their environment, make decisions, and navigate intelligently** without human intervention.

The objective of this program is to provide participants with a **comprehensive understanding of drone technology and operations**, focusing on both theoretical concepts and practical skills. The program aims to introduce the **applications, components, and working principles** of drones, while emphasizing **flight mechanics, stability, and control**. Participants will learn about **different types of drones based on wing and rotor configurations**, explore various **flight modes**, and gain awareness of **regulatory guidelines and safety measures** essential for responsible drone operation. By the end of the program, participants will be able to **understand, handle, and operate drones safely and effectively** for diverse real-world applications.

Program Outcome

By the end of the program, participants will be able to:

- ❖ **Conceptual Understanding** – Explain the fundamental principles and working of autonomous navigation systems in UAVs.
- ❖ **Technical Knowledge** – Identify and describe key hardware and software components involved in drone navigation and control.
- ❖ **Analytical Skills** – Analyze sensor data (GPS, IMU, LiDAR, camera) to understand environmental perception and positioning.
- ❖ **System Integration Skills** – Integrate sensors, control algorithms, and onboard processors for autonomous drone operation.
- ❖ **Problem-Solving Ability** – Apply path planning and obstacle avoidance techniques for efficient and safe navigation.
- ❖ **Regulatory Awareness** – Interpret UAV operation guidelines, airspace restrictions, and safety standards.
- ❖ **Operational Competence** – Demonstrate the ability to plan, configure, and operate drones in semi-autonomous and autonomous modes.
- ❖ **Application Insight** – Evaluate the role of autonomous UAVs in real-world applications such as surveillance, mapping, logistics, and environmental monitoring.

Participants: 3rd Semester students of Department of ECE

Event Co-Ordinator's:

Dr N Durga Indira, Associate Professor - ECE

Mrs. Aishwarya L K, Assistant Professor – ECE

Mrs. Sangeetha, Assistant Professor-CSE-CY

Event Poster



ACS COLLEGE OF ENGINEERING

Affiliated to VTU, Belagavi Approved by AICTE, New Delhi & GoK
No. 207 Kambipura, Mysore Road, Bangalore – 560 074



*Department of
Electronics and Communication Engineering
and CSE - Cybersecurity*

*Jointly Organizing a Technical Seminar on
'Introduction to Autonomous Navigation
Systems (UAV): A Drone Perspective*



Resource Person

Dr. Mahipathi Ashoka Charkravarthi
Assistant Professor, Dept. of ECE
Christ University, Bengaluru



17th Oct 2025

TIME - FROM 9:30 AM ONWARDS



Seminar Hall, 2nd Floor, ACSCE

Coordinators:

Dept. of ECE - Dr. N. Durga Indira Associate Professor
Ms. Aishwarya L K, Asst. Professor
Dept. of CSE-CY - Mrs. Sangeetha, Asst Professor

Convener:

Dr. S M Vijaya
Professor & HOD - ECE

Dr. M. Karuppasamy
HOD - CSE-CY

Dr. A. K. Mariappan, Rector, RRG
Dr. Meenakshi Sundaram, Registrar, RRG
Dr. Anandthirtha B Gudi, Principal, ACSCE

Contact Us



9008545678 & 9900500028



www.acsce.edu.in

Event Photos



Student Attendance

ACS College of Engineering
 (Approved by AICTE, New Delhi, Govt. of Karnataka, Affiliated to Visvesvaraya
 Technological University, Belagavi)
 Department of CSE--Cyber Security
 III Semester Event Attendance List



S No.	USN	Name	17-10-2025
			Signature
1	1AH24CY001	AKASH M	Akash
2	1AH24CY002	ANANYA R	Ananya
3	1AH24CY003	CHAITRA L	Chaitra L
4	1AH24CY004	CHANDAN KUMAR	Chandan Kumar
5	1AH24CY005	CHANDANA A P	Chandana
6	1AH24CY006	CHANDANA H	Chandana H
7	1AH24CY007	CHIRANTH D	Chiranth
8	1AH24CY008	DARSHAN M A	Darshan
9	1AH24CY009	DHANUSH B S	Dhanush
10	1AH24CY010	DHANYA SHREE C B	Dhanya
11	1AH24CY011	GAGANKUMAR M	Gagan
12	1AH24CY012	GRISHMA V	Grishma
13	1AH24CY013	HARSHA NANDAN S	Harsha
14	1AH24CY014	HARSHAVARDHAN REDDY Y	Harshavardhan Reddy
15	1AH24CY015	JAYANTH K U	Jayanth
16	1AH24CY016	K RAGHAVENDRA	Ragavan
17	1AH24CY017	KARTHIK B	Karthik
18	1AH24CY018	KAVANA S M	Kavana
19	1AH24CY019	MD MOSIN	Mosin
20	1AH24CY020	MOHAMED ZAMEER AHAMED M Z	Mohamed
21	1AH24CY021	MOHAMMED MUBASHIR AHMED	Mubashir
22	1AH24CY022	NAVEEN KUMAR	Naveen
23	1AH24CY023	NAVEEN M	Naveen
24	1AH24CY024	NILESH	Nilesh
25	1AH24CY025	PAVAN M	Pavan
26	1AH24CY026	PUNITH S	Punith
27	1AH24CY027	RAJU P S	Raju
28	1AH24CY028	RAKSHITHA	Rakshitha
29	1AH24CY029	RAKSHITHA A	Rakshitha
30	1AH24CY030	RASHMITHA B	Rashmitha
31	1AH24CY031	SANJANA B	Sanjana B
32	1AH24CY032	SATHWIK C	Sathwik
33	1AH24CY033	SHASHANK R	Shashank
34	1AH24CY034	SHASHANK S	Shashank
35	1AH24CY035	SHRAVANTHI S	Shravanthi

36	1AH24CY036	SOMASHEKAR	Somashekar
37	1AH24CY037	TANUSHREE N	Tanushree N
38	1AH24CY038	VIJAY KUMAR	Vijay Kumar
39	Lateral Entry	LIKITHA	Likitha V
40	Lateral Entry	SHREYA U	Shreya U
41	Lateral Entry	SAMMER KRISHAN	Sammer Krishna
42	Lateral Entry	NAVEEN B M	Naveen B M
43	Lateral Entry	MOHMMAD SUBHANI	Mohammad Subhani
44	Lateral Entry	IMARN	Imarn B
45	Lateral Entry	ABJEETH	Abjeeth

Sangath
Event coordinator

[Signature]
HOD

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
III SEM STUDENT ATTENDANCE LIST- ODD SEM - 2025-2026
A Technical Seminar on 'Introduction to Autonomous Navigation Systems (UAV): A Drone Perspective'

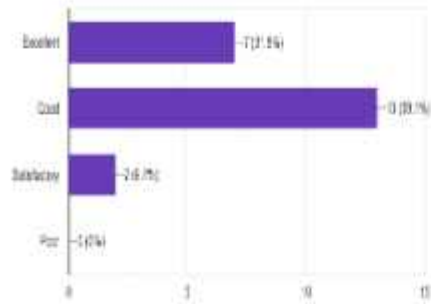
SL.NO	URN	NAME	STUDENT SIGNATURE
1	1AH22EC040	PUSHKAL R KIRAN	
2	1AH24EC001	ANASH S	<i>Anash</i>
3	1AH24EC002	ASHISH PANDEY A	<i>Ashish</i>
4	1AH24EC003	BHAVYA M	
5	1AH24EC004	BILLGATE LOUIS D	<i>Billgate</i>
6	1AH24EC005	DARSHAN MAHAVEER MURAGUNDI	<i>Darshan</i>
7	1AH24EC007	DURVESH SYED FARAZ KHABRI	<i>Durvesh</i>
8	1AH24EC008	HARITHARAN S	<i>Haritharan S</i>
9	1AH24EC010	HARSHITHA N S	<i>Harshitha .N.S.</i>
10	1AH24EC011	HEMANTH GOWDA T K	<i>Hemant</i>
11	1AH24EC012	JAYANTH M	<i>Jayanth M.</i>
12	1AH24EC013	K CHETHAN	<i>K Chethan</i>
13	1AH24EC014	K VASUNDHARA	<i>K Vasundhara</i>
14	1AH24EC015	KIRAN KUMAR M	<i>Kiran</i>
15	1AH24EC017	LOHITH R	<i>Lohith .R</i>
16	1AH24EC018	MANASA B	
17	1AH24EC019	PAVAN S	<i>Pavan</i>
18	1AH24EC020	PREETHUSHREE L	
19	1AH24EC021	RAJESH KRISHNAN N S	<i>Rajesh</i>
20	1AH24EC022	RAKSHITHA	<i>Rakshitha</i>
21	1AH24EC023	RASHIKA S	<i>Rashika S</i>
22	1AH24EC024	RAVIVARMA J	<i>Ravivarma .J</i>
23	1AH24EC025	RITHIKRAJ	<i>Rithikraj</i>
24	1AH24EC026	SAMARTH KAKHANDAKI	<i>Samarth</i>
25	1AH24EC027	SHREYACHANDRA	<i>Shreyachandra</i>
26	1AH24EC028	SHRUTHI C G	
27	1AH24EC029	SPOORTHI H BHAT	<i>Spoorthi .H .Bhat.</i>
28	1AH24EC030	SUBRAMANYA SRIDHARA	<i>Subra</i>
29	1AH24EC031	T V GAHANA LAKSHMI	<i>Tv Gahana</i>
30	1AH24EC032	TEJASWINI M	
31	1AH24EC033	VAISHNAVI	<i>Vaishnavi</i>
32	1AH24EC034	VAISHNAVY NARAYAN PASCHAEIR	<i>Vaishnavy</i>
33	1AH24EC035	VARSHINI M	
34	1AH24EC036	VARSHINI S	<i>Varshini S</i>
35	1AH24EC037	VEERESH	
36	1AH24EC038	VIMAL B	<i>Vimal B</i>
37	1AH24EC039	W S JOE RUNO	<i>Joe Runo</i>
38	LE	BALARAM M V	<i>Balaram .M.V</i>
39	LE	CHANDRASHEKAR S	<i>Chandrashekar S</i>
40	LE	DHYAN A	<i>Dhyana</i>

41	LE	GAGAN M	Gagan. M
42	LE	MANOJ D P	mano d p
43	LE	PAVANA K C	Pa
44	LE	FRANNAKUMAR RAJANAL	Fr
45	LE	PRIVANKA E	Privanka. E
46	LE	PRUTHVI CHANDRA K	Pruthvi Chandra. K
47	LE	RAKESH N	Rakesh N
48	LE	S A ANNAPOORNESHWARI	S A Anna

92

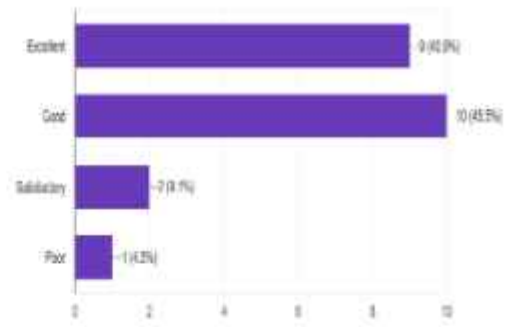
Presentation By Resource Person

22 responses



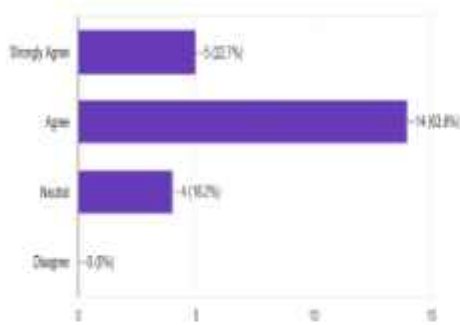
Contribution To Learning

22 responses



Was the content of the seminar informative and relevant to current drone technology trends?

22 responses



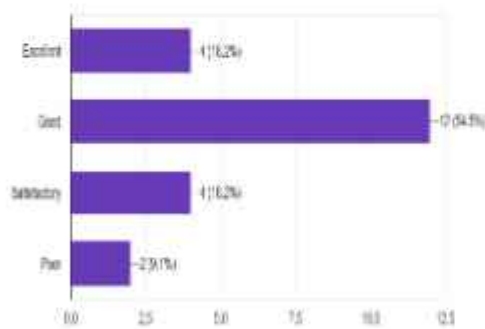
Lecture Content

22 responses



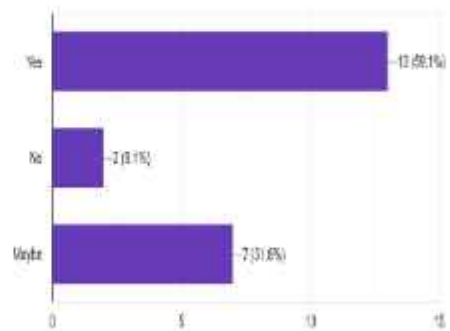
How would you rate your overall experience of the seminar on drone technology?

22 responses



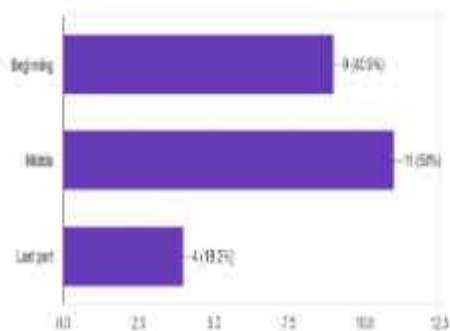
Did the seminar increase your interest in learning more about drones and their applications?

22 responses



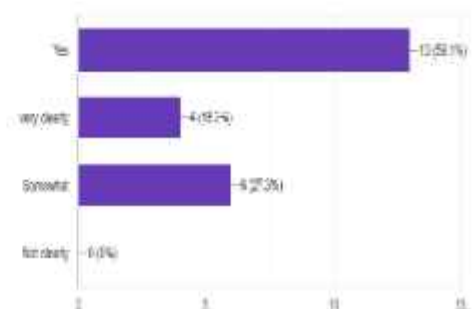
Which part of the seminar did you find most interesting or useful?

22 responses



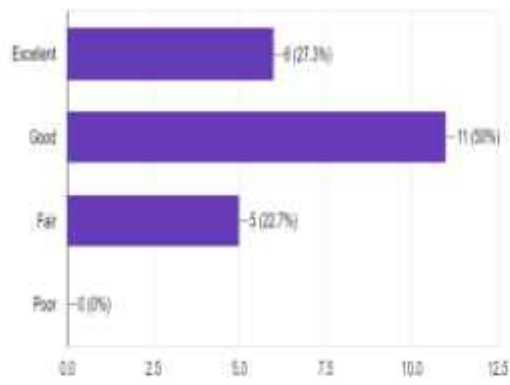
Did the speaker(s) explain the technical concepts (like sensors, flight control, and applications) clearly?

22 responses















How would you rate the organization and time management of the seminar?

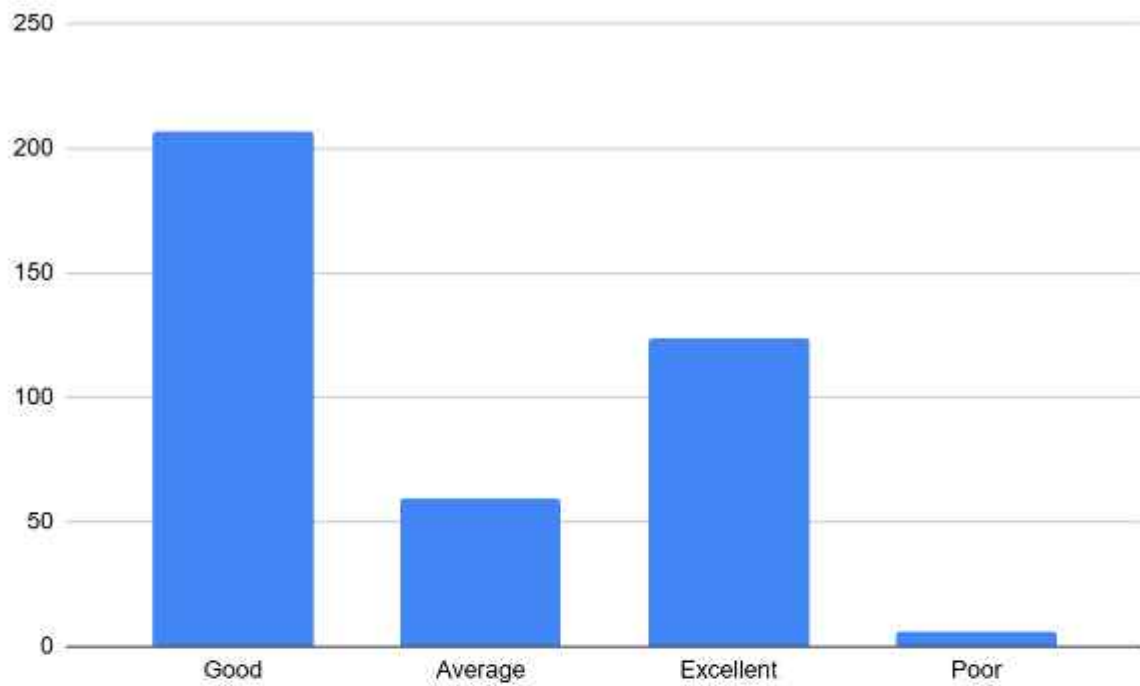
22 responses



Feedback:

<p>The program helped to apply the knowledge of mathematics, science, engineering fundamentals, and computer science and business systems to the solution of complex engineering and societal problems. 22 responses</p>  <table border="1"> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Excellent</td> <td>36.4%</td> </tr> <tr> <td>Good</td> <td>45.5%</td> </tr> <tr> <td>Average</td> <td>18.2%</td> </tr> <tr> <td>Poor</td> <td>9.9%</td> </tr> </tbody> </table>	Category	Percentage	Excellent	36.4%	Good	45.5%	Average	18.2%	Poor	9.9%	<p>The program helped to understand the impact of the professional engineering solutions on business, societal and environmental concerns and demonstrate skills of analysis for sustainable development. 22 responses</p>  <table border="1"> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Excellent</td> <td>36.4%</td> </tr> <tr> <td>Good</td> <td>45.5%</td> </tr> <tr> <td>Average</td> <td>18.2%</td> </tr> <tr> <td>Poor</td> <td>9.9%</td> </tr> </tbody> </table>	Category	Percentage	Excellent	36.4%	Good	45.5%	Average	18.2%	Poor	9.9%
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<p>The program helped to identify, formulate, review research literature, and analyze complex engineering and business problems involving mathematics, natural sciences, and engineering sciences. 22 responses</p>  <table border="1"> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Excellent</td> <td>36.4%</td> </tr> <tr> <td>Good</td> <td>45.5%</td> </tr> <tr> <td>Average</td> <td>18.2%</td> </tr> <tr> <td>Poor</td> <td>9.9%</td> </tr> </tbody> </table>	Category	Percentage	Excellent	36.4%	Good	45.5%	Average	18.2%	Poor	9.9%	<p>The program helped to apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering and business practices. 22 responses</p>  <table border="1"> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Excellent</td> <td>36.4%</td> </tr> <tr> <td>Good</td> <td>45.5%</td> </tr> <tr> <td>Average</td> <td>18.2%</td> </tr> <tr> <td>Poor</td> <td>9.9%</td> </tr> </tbody> </table>	Category	Percentage	Excellent	36.4%	Good	45.5%	Average	18.2%	Poor	9.9%
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<p>The program helped to design solutions for complex engineering problems and design system components or processes that meet the specified technical, social and environmental considerations. 22 responses</p>  <table border="1"> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Excellent</td> <td>36.4%</td> </tr> <tr> <td>Good</td> <td>45.5%</td> </tr> <tr> <td>Average</td> <td>18.2%</td> </tr> <tr> <td>Poor</td> <td>9.9%</td> </tr> </tbody> </table>	Category	Percentage	Excellent	36.4%	Good	45.5%	Average	18.2%	Poor	9.9%	<p>The program teaches to function effectively as an individual and as a member of teams in diverse teams, and in multidisciplinary settings. 22 responses</p>  <table border="1"> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Excellent</td> <td>36.4%</td> </tr> <tr> <td>Good</td> <td>45.5%</td> </tr> <tr> <td>Average</td> <td>18.2%</td> </tr> <tr> <td>Poor</td> <td>9.9%</td> </tr> </tbody> </table>	Category	Percentage	Excellent	36.4%	Good	45.5%	Average	18.2%	Poor	9.9%
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<p>The program helped to use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and analysis of the information to provide valid conclusions. 22 responses</p>  <table border="1"> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Excellent</td> <td>36.4%</td> </tr> <tr> <td>Good</td> <td>45.5%</td> </tr> <tr> <td>Average</td> <td>18.2%</td> </tr> <tr> <td>Poor</td> <td>9.9%</td> </tr> </tbody> </table>	Category	Percentage	Excellent	36.4%	Good	45.5%	Average	18.2%	Poor	9.9%	<p>The program helped to communicate effectively: conduct engineering activities with the engineering community and with society at large, as well as give and receive clear instructions. 22 responses</p>  <table border="1"> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Excellent</td> <td>36.4%</td> </tr> <tr> <td>Good</td> <td>45.5%</td> </tr> <tr> <td>Average</td> <td>18.2%</td> </tr> <tr> <td>Poor</td> <td>9.9%</td> </tr> </tbody> </table>	Category	Percentage	Excellent	36.4%	Good	45.5%	Average	18.2%	Poor	9.9%
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<p>The program helped to apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequences of engineering and business practices. 22 responses</p>  <table border="1"> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Excellent</td> <td>36.4%</td> </tr> <tr> <td>Good</td> <td>45.5%</td> </tr> <tr> <td>Average</td> <td>18.2%</td> </tr> <tr> <td>Poor</td> <td>9.9%</td> </tr> </tbody> </table>	Category	Percentage	Excellent	36.4%	Good	45.5%	Average	18.2%	Poor	9.9%	<p>The program helped to recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change. 22 responses</p>  <table border="1"> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Excellent</td> <td>36.4%</td> </tr> <tr> <td>Good</td> <td>45.5%</td> </tr> <tr> <td>Average</td> <td>18.2%</td> </tr> <tr> <td>Poor</td> <td>9.9%</td> </tr> </tbody> </table>	Category	Percentage	Excellent	36.4%	Good	45.5%	Average	18.2%	Poor	9.9%
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Overall Feedback



Event Co-ordinators

HoD

Principal