AJIET

**AJ INSTITUTE OF ENGINEERING & TECHNOLOGY**

A Unit of Laxmi Memorial Education Trust®

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## REQUEST LETTER

**Date: 21-03-2024**

From,

Mr. Prashantha D A
Assistant Professor
Department of Mechanical Engineering
AJIET, Mangalore

Through,

The HOD
Department of Mechanical Engineering
AJIET, Mangalore

To,

The Principal
AJIET, Mangalore

Subject: **Seeking permission to visit, Air Traffic Control Unit of Mangalore International Airport**

Respected sir,

This letter is to request your permission for visiting Air Traffic Control Unit of Mangalore international Airport, along with the students of Final Year, Mechanical Engineering as a part of industrial visit. The visit is well planned and details listed below.

Date: 22-03-2024/ Friday
Timings: 4:00 PM – 5:00PM
Place of Visit: **Air Traffic Control Unit of Mangalore International Airport**

In this regard, I request you to permit us for the visit.

Total No of students=21

Staffs =8

Names of Faculty Accompanying:

1. Dr. Rajesh Rai P
2. Dr. Vighnesha Nayak
3. Dr.Sreejith B K
4. Mr.Prashantha D A
5. Mr,Prasad B G
6. Mr.Harold J Dsouza
7. Dr.Nitesh K
8. Mr.Chandrakantha K

**Thanking you,**

**Yours Faithfully**

Note: List of students with undertaking enclosed.

Forwarded to Principal

21/3/24

H.O.D. - Mechanical Engineering
A.J.INSTITUTE OF ENGINEERING AND TECHNOLOGY
Mangaluru - 575 006, D.K., Karnataka

Principal
A.J. Institute of Engineering & Technology
Mangaluru - 575 006

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## Department of Mechanical Engineering

**Ref. No: AJIET/ME/IV/2023-2024/2** **Date: 21/03/2024**

## CIRCULAR

Dear students,

We are pleased to announce that Industrial visit for the final year students. This program offers you the opportunity to gain practical experience, industry exposure, and professional skills.

For more details contact Mr. Prashanth D A, Industrial visit coordinator.

Details of the visit are as follows:

- Date: 22-03-2024
- Venue: Air Traffic Control Unit of Mangalore International Airport

Event Coordinator

21/3/24

HOD

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Mangaluru - 575 006, D.K., Karnataka

Principal
A.J. Institute of Engineering & Technology
Mangaluru - 575 006

Date: **22-03-2024**

## Report on "Industrial visit to Air Traffic Controller Mangalore International Airport"

| | | | | | |
|---|---|---|---|---|---|
| Name of the Program: | Industrial visit to Air Traffic Controller Mangalore International Airport | Program Dates & Timings: | | 22-03-2024, 4.00PM-4.30PM | |
| Name & Details of the Resource Person: | | | | | |
| Organized by (Clubs/ Dept.) | Department of Mechanical Engineering | In Association with (clubs) | | ARMS | |
| Number of Participants | 27 | Students | 19 | Faculty | 8 |
| Program Outcome (PO) Mapping | PO1, PO6, PO7, PO9, PO12, PSO2. | | | | |
| Coordinators | Mr. Prashantha D A, Mr. Harold Dsouza | | | | |

### About the Program:

The Students of 8th Semester along with 8 faculty members of Department of mechanical engineering visited Air Traffic Controller Mangalore International Airport on 22-03-2024 at 4.00 PM. As an air traffic controller at Mangalore International Airport, primary responsibility is to ensure the safe and efficient movement of air traffic within designated airspace and on the airport's runways and taxiways. The primary objective of our visit was to gain a comprehensive understanding of the functioning of the Air Traffic Control Unit, which plays a pivotal role in ensuring the safe and efficient movement of aircraft within the airspace and at the airport.

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We were given a detailed introduction to the fundamental concepts and principles of air traffic control by Unnikrisnan K, Jt. General Manager Air Traffic Services, including airspace structure, communication protocols, and navigation procedures.

**Tour of the Control Tower**: One of the highlights of the visit was the tour of the Control Tower, where we witnessed first-hand the operations of air traffic controllers. From this vintage point, we observed the coordination between controllers as they monitored incoming and outgoing flights, managed runway operations, and ensured adherence to safety protocols.

We were briefed on the sophisticated technological systems employed in air traffic control, such as radar systems, communication equipment, and automated flight data processing systems. These technologies are instrumental in tracking aircraft movements, identifying potential conflicts, and providing real-time data to controllers for decision-making.

We gained insights into the critical role played by air traffic controllers in maintaining the safety and efficiency of air travel. From managing take-offs and landings to providing guidance during adverse weather conditions, controllers are responsible for making split-second decisions that impact the lives of thousands of passengers every day.

Our visit also covered the stringent safety protocols and emergency procedures followed by the ATC unit. We learned about contingency plans for various scenarios, including aircraft emergencies, communication failures, and inclement weather conditions. It was very informative and useful for the students to get more exposure about all aspects of Air traffic controlling systems.

**Objectives**: The program **Industrial visit Air Traffic Controller Mangalore International Airport** enable students/ faculty to

1. Understand the basics of fundamental concepts and principles of air traffic control, including airspace structure, communication protocols, and navigation procedures.
2. Explain the different steps operations of air traffic controllers and processes involved.
3. Design of sophisticated technological systems employed in air traffic control, such as radar systems, communication equipment, and automated flight data processing systems.
4. Develop knowledge of controllers in maintaining the safety and efficiency of air travel.

**Outcomes: On successful completion of program, the student should able to:**

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1. Understand the basics of fundamental concepts and principles of air traffic control, including airspace structure, communication protocols, and navigation procedures.
2. Explain the different steps operations of air traffic controllers and processes involved.
3. Design of sophisticated technological systems employed in air traffic control, such as radar systems, communication equipment, and automated flight data processing systems.
4. Develop knowledge of controllers in maintaining the safety and efficiency of air travel.

## Articulation Matrix:

| Course Outcomes | Program Outcomes POs | | | | | | | | | | | | PSOs | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | PSO 1 | PSO 2 |
| 1 | 1 | | | | | 1 | 1 | | 1 | | | 1 | | 1 |
| 2 | 1 | | | | | 1 | 1 | | 1 | | | 1 | | 1 |
| 3 | 1 | | | | | 1 | 1 | | 1 | | | 1 | | 1 |
| 4 | **1** | | | | | **1** | **1** | | **1** | | | **1** | | **1** |
| **Average** | **1** | | | | | **1** | **1** | | **1** | | | **1** | | **1** |

## Photos:


**Coordinator** **HOD** **Dean Academics** **Principal**

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## Department of Mechanical Engineering

**Date:22-03-2024**

Attendance of "**Industrial Visit to Air Traffic Controller Mangalore International Airport**"

| Sl.No | USN | Name of the Student | Signature |
|---|---|---|---|
| 1 | 4JK19ME025 | MOHAMMED MAQSHAF | |
| 2 | 4JK20ME001 | ABISHEK KUMAR PADAVU | |
| 3 | 4JK20ME003 | AKHIL SAJEEV | |
| 4 | 4JK20ME004 | ASHIK H S | |
| 5 | 4JK20ME005 | BHUVAN B SHETTY | |
| 6 | 4JK20ME006 | DEEPAK | |
| 7 | 4JK20ME007 | GAUTHAM J PUTHRAN | |
| 8 | 4JK20ME009 | JERIEL SEAN | |
| 9 | 4JK20ME010 | JIBEN JACOB | |
| 10 | 4JK20ME011 | JOEL SIBI | |
| 11 | 4JK20ME013 | MANISH | |
| 12 | 4JK20ME014 | MUHAMMED SHAZ T P | |
| 13 | 4JK20ME015 | NUHMAN | |
| 14 | 4JK20ME016 | ARUN P N | |
| 15 | 4JK20ME018 | PRASHANTH SANKAPPA K | ABSENT |
| 16 | 4JK20ME019 | VIKITH VISHWANATH SALIAN | |
| 17 | 4JK20ME020 | SANDEEP K UNNIKRISHNAN | |
| 18 | 4JK20ME021 | SANGEETH DINESH | ABSENT |
| 19 | 4JK20ME022 | SHIVANESH R | |
| 20 | 4JK20ME023 | U SAGAR | |
| 21 | 4JK21ME400 | PRATHIK | |

**Coordinator**

**HOD**

Principal
A.J. Institute of Engineering & Technology
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## Department of Mechanical Engineering

**Date: 22-03-2024**

Faculty Attendance of "**Industrial Visit to Air Traffic Controller Mangalore International Airport**"

| Sl.No | Name of the Faculty | Signature |
|---|---|---|
| 1 | Dr.Rajesh Rai P | |
| 2 | Dr.Vighnesha Nayak | |
| 3 | Dr.Sunil Kumar | |
| 4 | Mr.Prashantha D A | |
| 5 | Mr.Harold Joison Dsouza | |
| 6 | Mr.Prasadh B G | |
| 7 | Dr.Nitesh | |
| 8 | Mr.Chandrakanth | |

**Coordinator**

**HOD**

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