



## **FLIGHT 2024**

# **MADRAS INSTITUTE OF TECHNOLOGY DEPARTMENT OF AEROSPACE ENGINEERING ASSOCIATION OF AERONAUTICAL ENGINEERS**

### **JET HANDLING WORKSHOP**

**MARCH 16**

**09:00 AM- 04:00 PM**

#### **Description:**

Explore the fascinating world of jet engines in this hands-on workshop! Join us for an immersive experience where you'll learn about the principles of jet propulsion, assemble and disassemble a real jet engine, and gain insights into the cutting-edge technology that powers aviation. Whether you're a hobbyist, student, or aviation enthusiast, this workshop offers a unique opportunity to get up close and personal with the inner workings of these incredible machines.

No prior knowledge required – just bring your curiosity and enthusiasm for aviation!

## **Workshop overview:**

A jet engines hands-on workshop typically covers fundamental principles, components, and maintenance aspects of jet propulsion systems. Participants may engage in activities like disassembling and reassembling engine parts, learning about combustion processes, and understanding how various components contribute to overall engine functionality. Practical sessions often include safety protocols, troubleshooting exercises, and insights into the latest advancements in jet engine technology.

### **1.Assembling of Engines:**

In -focused jet engine hands-on workshop, participants usually get hands-on experience in putting together various components of a jet engine. This involves understanding the correct sequence of assembly, proper handling of parts, and ensuring precise connections. Workshops often include detailed instructions, guidance from experts, and practical demonstrations to help participants gain confidence in assembling different sections of a jet engine.

### **2.Combustion process:**

In a hands-on workshop about jet engine combustion processes, participants typically explore the components, learn about fuel-air mixing, ignition systems, and observe how combustion contributes to thrust generation. Practical exercises may include inspecting engine parts, simulating combustion scenarios, and understanding the role of fuel in powering the engine.

### **3. Fuel used:**

In this experiment we commonly use propane or butane as fuel in the ratio of 40/60%.

### **4. Disassembling:**

Disassembling a jet engine requires specialized knowledge and skills. Look for workshops conducted by aviation or engineering institutions with experienced instructors. Prioritize safety, use proper protective gear, and follow guidelines meticulously. Always remember that handling jet engines should be done by trained professionals in controlled environments.

### **Conclusion:**

The hands-on jet engine workshop provided valuable insights into the mechanics and operation of jet engines. Participants gained practical experience in assembly, disassembly, and troubleshooting. The workshop enhanced understanding of aerodynamics, combustion, and propulsion systems. Overall, it was a comprehensive and enriching experience for those seeking a deeper understanding of jet engine technology.

***CERTIFICATES WILL BE PROVIDED TO ALL THE PARTICIPANTS***

**REGISTRATION FEE: ₹200 per head**

**For any queries, contact:**

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