



KLS GOGTE INSTITUTE OF TECHNOLOGY, BELAGAVI

SKILL LABS



Schedule of Skill labs offered at KLSGIT

Sl No	Department	Start date	End date	Title of Skill lab
1	Aeronautical Engineering	6-01-2025	11-01-2025	UAS Design, Simulation & Flight Training Lab

Skill lab (Detailed schedule)

Sl No	Department	Title of Skill lab	Semester & Division	Venue	Dates	Faculty name	Phone No	Email id
1	Aeronautical Engineering	UAS Design, Simulation & Flight Training Lab	V	Advanced Flight simulator and Control lab	6-01-2025To 11-01-2025	Prof. I V Patil	9037800468	ivpatil@git.edu



SKILL LAB

ON

UAS Design, Simulation & Flight Training Lab
For V Semester Students



KLS GOGTE INSTITUTE OF TECHNOLOGY, BELAGAVI Department of Aeronautical Engineering

Overview:

UAV design, simulation, and flight training cover the fundamentals of creating unmanned aerial vehicles, including airframe design, propulsion systems, and control algorithms. Simulations test flight dynamics, stability, and performance, while flight training involves hands-on piloting, navigation, and safety skills. In the aeronautical field, these skills are essential for developing advanced aerial systems and optimizing aircraft performance. UAV technology fosters innovation in aerospace, defense, and agriculture, offering job opportunities in aircraft design, flight dynamics, avionics, and control systems, meeting the demand for professionals skilled in robotics, AI integration, and aerial data analysis.



Mode of Conduction of each Module:

Theory : 12 Hours,
Demo : 6 Hours,
Lab Sessions : 18 Hours
Total duration : 36 Hour

Module 1: Flight Training and Operations

Fundamentals of flight
Manual piloting techniques
Basics of autonomous flight



Module 3: UAV Systems

Techniques for integrating various
Testing methodologies for UAV systems
Data Analysis and performance assessment

Module 2: UAV Regulations and Safety

Overview of national and international UAV regulations
Airspace management
UAV operation limits

Module 4: Emerging Technologies and Future Trends

Exploration of cutting-edge UAV
Future applications

Terms and Conditions

Students who have paid a skill lab fee to the institution are eligible for training.
The students must maintain 90% attendance for obtaining the skill lab certificate.
Students must attend training as per scheduled time.

Acceptance

In order to accept and start the training program, students are required to register with the respective department. Details to be provided by the student to the department include:

Name, USN, UID, Mobile No,
Email id

Coordinators:

Name I V Patil
Dept. of Aeronautical Engineering
Phone: 9037800468
E-mail: ivpatil@git.edu

Outcomes

Understand various applications and emerging trends in UAV technology.
Demonstrate an understanding of UAV stability, control, and flight dynamics.

Mention briefly about the job opportunities students have after completing the course..