

LLOYD SKILLS CENTRE

"Empowering Through Skills"



CENTER OF EXCELLENCE

LITHIUM BATTERIES
SMART ELECTRIC VEHICLES
DRONE DEVELOPMENT
AT
LLOYD INSTITUTE OF
ENGINEERING & TECHNOLOGY

EXECUTIVE SUMMARY

Technology Providers



System Integrator



LLOYD INSTITUTE OF ENGINEERING & TECHNOLOGY

Approved by AICTE, New Delhi | Affiliated to Dr. A.P.J. Abdul Kalam Technical University, Lucknow

Empowering Through Skills

Plot No. 3, Knowledge Park-2, Greater Noida-201306

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FOSTERING INNOVATION DRIVING PROGRESS IN LLOYD SKILLS CENTRE

LSC

Lloyd Skills Centre (LSC) is one of the initiatives by Lloyd Group of Institutions which operates in collaboration with eminent industry partners to offer skill based training and services to Industry and Academia. Lloyd is keen and committed to engage various Industries and skill development sectors to enhance the employment opportunities for the technocrats and youth in the emerging areas. LSC was set up to narrow the existing gap between the demand and supply of skills. It aims to promote skill development by catalyzing creation of large, quality and for-profit vocational institutions. Further, the organization provides funding to build scalable and profitable vocational training initiatives.

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The students in these established centers are guided by the eminent experts from Industries which continuously works to provide the technical solutions for the nearby rural and suburban areas problems and contributes towards the society through their ideas and innovations.



LSC IS FOR UNDERGRADUATES DIPLOMA HOLDER WORKING PROFESSIONAL MSME ENTREPRENEURS

THE CURRENT SKILL INFRASTRUCTURE ARE SO CALLED TRAINING CENTRES REBRANDED TO SKILL CENTRES IMPARTING ONLY KNOWLEDGE

WHY
LSC

CHALLENGES OF CURRENT SKILL AND ENTREPRENEURSHIP DEVELOPMENT PROGRAM INDIA

REQUIREMENT IS FOR EXPERIENCE CENTRES WHERE A COMPLETE INDUSTRIAL ECO SYSTEM CAN BE EXPOSED TO STUDENTS AND NOT TRAINING CENTRES

INDUSTRIES NEED EXPERIENCE WORKFORCE AS THEY SEE FRESHER AS LIABILITY RATHER THAN ASSETS



ABOUT LSC

LSC



With the above background to promote Institutional capacity building, LLOYD is keen and committed to engage various Industries, Engineering firms and skill development sector of India to undertake Skill Development Initiatives. As part of continued efforts towards this, LLOYD Skills Centre (LSC) established the common experimental facility supporting heterogeneity in E-Vehicle, Aerospace, Manufacturing, Smart Agriculture and Internet of Things (IoT) domain to help the community to experiment devices and applications by combining various technologies

Our COE is an "experience center" a functional industry inside a campus where students were exposed to the industrial eco system with project based training program. By the time they graduate out will have actual experience and will be preferred for hiring.



COE is not a training center, it's a facility to create industry ready engineers by experiencing them on industry size machineries, technology and processes



BENEFITS TO STUDENTS

- Industry Ready Engineer
- Domain Expertise
- Students with 2 to 3 years of Experience
- Assistance in quality placements
- Industrial Certification
- Students gain confidence with industrial experience by working on problem statements.
- Opportunities to attend seminars by Industry Experts.
- Provide platform to do Publications, Patents and Industry Sponsored Projects.
- Assistance to students who are interested in Entrepreneurship
- Assistance for Higher Education
- Learning from a superior qualified instructor community.
- Studying the finest practices and applications
- Discovering the latest technology build up
- Growing the skills required to enhance productivity and competitiveness.
- Hands-on training and overall, development of the individual's personality.
- Increasing the stock of 'codified' useful knowledge
- Publications
- Patents
- Prototypes
- Industry sponsored projects

BENEFITS TO THE ACADEMIC COMMUNITY

- A strong Industry-Institute linkage program
- Enhancing accreditations
- Empowering faculty members to become Industrial consultants.
- Recognition of Hosting Institute as premium domain Human Capital providers among Industries.
- Crating differentiator among nearby states, in turn assisting in brand enhancement.
- Invite Industry to use the facility for initial testing.
- Students can be a part of Industrial consultancy delivery

BENEFITS TO INDUSTRY

- A 'knowledgeable and Employable' workforce
- No On-Job training required
- Lateral Hiring at the cost of fresher
- Industry ready domain expert professional
- Reduce operation cost and focus on core business.
- Reduce cost of hiring
- Large skill pools at single location
- Globally Certified professional

BENEFITS TO STATE

- A strong Industry-Institute linkage program
- Enhancing employment opportunity.
- Empowering young youths to become entrepreneurs.
- Enhancing investment in the state.
- R&D and Test bed for nearby Industries.
- Empowering faculty members to become Industrial consultants.
- Fascinating growth of MSME and cottage industry.

Aerospace Lab



E Vehicle Fab Lab



Battery Fab Lab



Aerospace Training Content

LLOYD SKILLS CENTRE
"Empowering Through Skills"
Lloyd of Success

1st Time in India
Delhi NCR

Advance Drone Pilot and Maintenance Training

IN COLLABORATION WITH GARUDA AEROSPACE

DURATION : 15 Days
Pilot and Maintenance Training

Advance RC Simulation Training
Real Time Fixed Wing Flying
Real Time Mapping Training
Drone Calibration Training

Intended Outcomes for the course

- Safely Operate a Drone using an understanding of Drone components, Equipment, and Technology.
- Integrate factors impacting drone flight such as environment, weather, and geography into planning and operations.
- Plan drone flights using an understanding of FAA and National Airspace System regulations and drone operation ethics.
- Use effective Crew Resource Management during field data collection.
- Program and fly a drone equipped with GPS to capture video and/or still photography.
- Use post-processing techniques to achieve project goals.
- Will learn the maintenance of Drones and its components.

EV Training Content

LLOYD SKILLS CENTRE
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1st Time in India
Delhi NCR

Advance Electric Vehicle Design and Fabrication Training

IN COLLABORATION WITH MODULAR MACHINES

DURATION : 90 Days
DESIGN & FABRICATION TRAINING

Assembly and Dis-assembly of EV
Fundamentals of EV
3D modelling and Simulation Training
EV Calibration Training
Chassis Design Training
EV Repair, Maintenance and Fabrication Training

Intended Outcomes for the course

- Define and analyze Fundamental of EVs and understand the legal requirements of EVs in India.
- Understand the requirements and design the vehicle body structure.
- Estimate the size of a battery to meet a specific requirement.
- Create a cradle to frame, or cradle-to-use list of materials used in any type of EV.
- Describe the functions performed by a Battery Management System (BMS).
- Explain different approaches to estimating state of charge, state of health, power and energy.
- Define the torque speed curves for motors and the application to electric vehicles.
- Compare and contrast the various industry and regulatory standards for electric vehicle components, batteries, and charging systems.
- Describe the main electric vehicle development considerations and performance requirements for various vehicle system.
- Identify how to define key vehicle system requirements and select and size system components that best meet those requirements.

Battery Training Content

LLOYD SKILLS CENTRE
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1st Time in India
Delhi NCR

Advance Lj-ion Battery Pack Design and Fabrication Training

IN COLLABORATION WITH LOHUM CLEANTECH

DURATION : 30 Days
DESIGN & FABRICATION TRAINING

Assembly and Dis-assembly of Battery
Fundamentals of Li-ion Battery
Battery Management Training
Cell Sorting Training
Vibration Analysis of Battery Pack Training
Battery Recycle, Re-use and Refurbish Training

Intended Outcomes for the Course

- List the advantages and disadvantages of lithium technologies and the automotive lithium battery formats.
- Describe the discharging and charging process of a lithium battery cell.
- Describe the operation of a battery model-level temperature sensing circuit.
- Describe the purpose and operation of battery pack connectors, the battery pack Pre-Charge circuit, and the battery pack Current Sensor.
- Identify the components in an air and liquid cooling system for lithium battery packs.
- Identify and describe the components of a battery management system cell balancing system.
- Explain the difference between how vehicle instrumentation displays battery pack SOC% vs. actual battery pack SOC%.
- Relate to how SEI layer growth affects battery cell operation.
- Describe how failure modes on the positive and negative electrode evolve.
- Compare the difference between battery power vs. capacity.

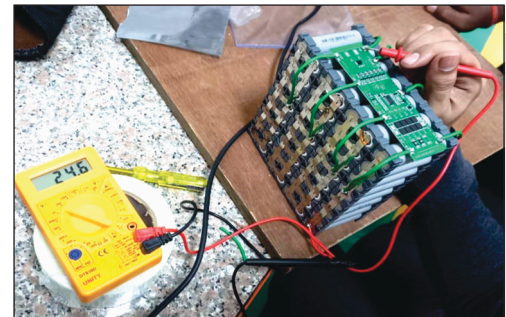
Aerospace Training Outcomes



EV Training Outcomes



Battery Training Outcomes



Aerospace Event- Drone Show

LLOYD INSTITUTE OF ENGINEERING & TECHNOLOGY
Greater Noida, U.P.

ELECTRATHON - 2023

ON GROUND EVENT

Theme: Sustainable and Economically Viable E-Cycle Development

KEY TAKE-AWAY
The Best Judged E-Cycle will get Cash Prizes

Provide the solution to problem
Industry Expert Training
Hands on Learning

72 HOURS CHALLENGE

Registration Fees: ₹ 5000 per team

Date of Event: 15th - 21st June 2023
STAY TUNED

Who Can Apply:
• Students from Engineering Domain.
• Industry Professionals, Innovators.

Additional Advantages:
• Institute will offer the incubation to the winner.
• Launch of the product.
• Industry Tie-ups.

BE A PART OF THE ELECTRATHON FOR A GOOD CAUSE

Industry Mentors:
NCE, Lohum, Nasscom, Kapcity, LLOYD SKILLS CENTRE, ARC GLOBAL

Contact for Details (Organizing Team): Mr. Ravi Kedia | Mr. Ashwini Kumar | Mr. Irfan Khan

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EV Event- Electrathon

LLOYD INSTITUTE OF ENGINEERING & TECHNOLOGY
Greater Noida, U.P.

For the first time in Delhi - NCR, Witness the Biggest

DRONE SHOW

19TH APRIL, WEDNESDAY 10:00 AM

At Lloyd Institute of Engineering & Technology Campus - 2

Drone 1: VTOL DRONE
Drone 2: AGRI DRONE
Drone 3: SIMPLE DRONE

For More Information, Call Us On: 888-790-7558

DEMONSTRATION FOR PICK & DROP SERVICE THROUGH DRONE

888-790-7558
Plot No. 3, Knowledge Park II, Greater Noida, 201306

Battery Event- Webinar

