GLOBALLY RECOGNISED CERTIFICATE

www.isnee.in

ME, Auto, Industrial Mechatronics, EEE, ECE

Register Now Hurry up! **Worried about** your Internship?

In full accordance to the AICTE Norms

Well, don't be!

Learn online and get the

Certificate.

Six Week **Four Week** Two Week



Certificate of Completion

Letter of Recommendation

Recorded Lectures

Organized by:







1. ABOUT THE INTERNSHIP

This program is organized by IRDO in association with ISNEE Motorsports Pvt Ltd and Garage 1 Utility Vehicles Pvt Ltd. IRDO is committed to doing its part by educating masses through various programs including webinars focusing on innovation in Motor Sports, E-mobility, Renewable Energy, and Digitalization to empower the youth and motivate them to strive to reach their full potential.

IRDO is regularly conducting a series of online sessions mentoring over 1000+ young graduates and professionals every month seeking entry into E-mobility and Digitalization space. These fully interactive sessions target skill development, research, and prototyping to nurture indigenous technology in line with the "MAKE IN INDIA" mission.

IRDO's commitment and involvement in conducting the online sessions bring in industry insights and provide much-needed guidance in fostering new ideas to contribute to sustainable technologies and career development for the participants.

2. OBJECTIVES

Internships are educational and career development opportunities, providing practical experience in a field or discipline. They are structured, short-term, supervised placements often focused around particular tasks or projects with defined timescales. An internship may be compensated, non-compensated or some time may be paid. The internship has to be meaningful and mutually beneficial to the intern and the organization. It is important that the objectives and the activities of the internship program are clearly defined and understood. Following are the intended objectives of internship training:

- Will expose Technical students to the industrial environment, which cannot be simulated in the classroom and hence creating competent professionals for the industry.
- Provide possible opportunities to learn, understand and sharpen the real time technical / managerial skills required at the job.
- Exposure to the current technological developments relevant to the subject area of training.
- Create conditions conducive to quest for knowledge and its applicability on the job.
- Learn to apply the Technical knowledge in real industrial situations.
- Gain experience in writing Technical reports/projects.
- Expose students to the engineer's responsibilities and ethics.

- Familiarize with various materials, processes, products and their applications along with relevant aspects of quality control.
- Promote academic, professional and/or personal development.
- Expose the students to future employers.
- Understand the psychology of the workers and their habits, attitudes and approach to problem solving.

Program Details								
Name of Program	Duration (Weeks)	Mode	Fee (₹)					
Electric Vehicles	2W/4W/6W	Recorded	2000/3000/4000					
Design & Development of Go-Kart	2W/4W/6W	Recorded	1500/2000/2500					
Design & Development of ATV	2W/4W/6W	Recorded	2000/2500/3000					
Design & Development of Automotive Components	2W/4W/6W	Recorded	2000/2500/3000					
Group Discount (for a group of 5 or more members)	15%							
Registration Start Date	May-15							
Fee Payment	Immediately After Registration							
Program Start Date	Immediately After Fee Payment							
Certificate Issue Date	After Completion of all Lessons							

3. **REGISTRATION LINK:** https://isnee.in/irdo/Registration/Long-Term-Reg.aspx

4. PAYMENT PROCEDURE

Method 1: Payment can be done through UPI to the following upi address which will reflect as **Indian Society of New Era Engineers**

"ISNEEPAY@AXL"

Once the payment is done, the payment reference can be shared with us on our WhatsApp Helpline: +91-1345297628. Out team remains active and the payment confirmation is usually done within 5-10 minutes after the payment reference is shared with us.

Method 2: Transfer through online payment gateway (PayUmoney)

You can choose to pay the fee through the payment gateway using your credit/debit card or net banking. Link can be requested from our WhatsApp helpline. Additional 2.46% convenience fee applicable on this method. Applicants get immediate payment confirmation through this mode.

Contact us: 9410430424/25 | irdo@isnee.in 3 | Page

5. Electric Vehicles

Lesson 1: Introduction to Electric Vehicles

Lesson 2: Various Types of EV's on Road

Lesson 3: Chassis & Body

Lesson 4: Vehicle Dynamics

Lesson 5: Motor - Definition & Principle

Lesson 6: Motor Construction

Lesson 7: Motor Parameters (Power, RPM,

& Torque

Lesson 8: AC & DC Motors for EVs

Lesson 9: Selection Procedure

Lesson 10: Motor Calculations

Lesson 11: Motor Performance Analysis

Lesson 12: Controller – Significance &

Selection Procedure

Lesson 13: Battery Management System

Lesson 14: Motor-Battery-Controller Wiring

Lesson 15: Latest in EVs

Lesson 16: Retrofitting

Lesson 17: Manufacturing Technology

Lesson 18: MATLAB Simulations for

Electrical System Layout

Lesson 19: Innovations in EV

Lesson 20: Testing of an EV

Lesson 21: Safety Measures

Lesson 22: Live Demonstration of EV

Assembly

6. Design & Development of Go Karts

Lesson 1: Introduction to Go Kart

Lesson 2: Go Kart Subsystems – Chassis & Rody

Lesson 3: Go Kart Subsystems – Powertrain

Lesson 4: Go Kart Subsystems – Brakes and

Wheel Assembly

Lesson 5: Go Kart Subsystems – Steering

Lesson 6: Vehicle Dynamics of Go Karts

Lesson 7: Electric Go Kart

Lesson 8: Battery Management System

Lesson 9: Design Optimization

Lesson 10: Autodesk Sketchbook

Day 11: SOLIDWORKS Basics and the User

Interface

Lesson 12: Basic Part Modeling

Lesson 13: Symmetry and Draft

Lesson 14: Patterning

Lesson 15: Revolved Features

Lesson 16: Shelling and Ribs

Lesson 17: Editing: Repairs

Lesson 18: Editing: Design Changes

Lesson 19: Using Drawings

Lesson 20: Using Assemblies

7. Design & Development of ATV

Lesson 1: Introduction to ATV

Lesson 2: Various Systems of ATV

Lesson 3: Vehicle Dynamics - Wheel Loads

Lesson 4: Vehicle Dynamics - Wheel

Assembly

Lesson 5: Vehicle Dynamics - Steering

System

Lesson 6: Vehicle Dynamics - Suspension

Sustam

Lesson 7: Vehicle Dynamics - Drivetrain

Lesson 8: Vehicle Dynamics - Wheel

Assembly & Brakes Lesson 9: Electric ATV Lesson 10: Lotus Shark – Introduction

Lesson 11: Lotus Shark – Simulation

Lesson 12: SOLIDWORKS Basics and the User

Interface

Lesson 13: Basic Part Modeling

Lesson 14: Symmetry, Draft & Pattern

Lesson 15: Revolved Features

Lesson 16: Design Repair & Edit

Lesson 17: Assembly

Lesson 18: Drawing

Lesson 19: Chassis Design

Lesson 20: Design Optimization

8. Design & Development of Automotive Components Using Cad Modeling

Contact us: 9410430424/25 | irdo@isnee.in 4 | P a g e

Lesson 1: Basics of Automobile - Chassis

and Body

Lesson 2: Basics of Automobile -

Suspension System

Lesson 3: Basics of Automobile - Powertrain

Lesson 4: Basics of Automobile - Brakes

Lesson 4: Basics of Automobile – Electric

Vehicles

Lesson 6: SOLIDWORKS Basics and the User

Interface

Lesson 7: Basic Part Modeling

Lesson 8: Symmetry and Draft

Lesson 9: Pattern

Lesson 10: Revolved Features

Lesson 11: Shelling and Ribs

Lesson 12: Editing: Repairs

Lesson 13: Editing: Design Changes

Lesson 14: Using Drawings

Lesson 15: Using Assemblies

Lesson 16: Lotus Suspension - Introduction

Lesson 17: Lotus Suspension – Simulation

Lesson 18: Lotus Suspension –Simulation

Lesson 19: Autodesk SketchBook -

Introduction

Lesson 20: Autodesk SketchBook -

Sketching

9. Benefits to the Industry

- Availability of ready to contribute candidates for employment.
- Year round source of highly motivated pre-professionals.
- Students bring new perspectives to problem solving.
- Visibility of the organization is increased on campus.
- Quality candidate's availability for temporary or seasonal positions and projects.
- Freedom for industrial staff to pursue more creative projects.
- Availability of flexible, cost-effective work force not requiring a long-term employer commitment.
- Proven, cost-effective way to recruit and evaluate potential employees.
- Enhancement of employer's image in the community by contributing to the educational enterprise.

10. Benefits to Students:

- An opportunity to get hired by the Industry/ organization.
- Practical experience in an organizational setting.
- Excellent opportunity to see how the theoretical aspects learned in classes are integrated into the practical world. On-floor experience provides much more professional experience which is often worth more than classroom teaching.
- Helps them decide if the industry and the profession is the best career option to pursue.
- Opportunity to learn new skills and supplement knowledge.

- Opportunity to practice communication and teamwork skills.
- Opportunity to learn strategies like time management, multi-tasking etc in an industrial setup.
- Opportunity to meet new people and learn networking skills.
- Makes a valuable addition to their resume.
- Enhances their candidacy for higher education.
- Creating network and social circle and developing relationships with industry people.
- Provides opportunity to evaluate the organization before committing to a full time position.

11. Benefits to the Institute:

- Build industrial relations.
- Makes the placement process easier.
- Improve institutional credibility & branding.
- Helps in retention of the students.
- Curriculum revision can be made based on feedback from Industry/ students.
- Improvement in teaching learning process.

12. Why Us?

- Global recognition of the certificate.
- Best Speakers from automobile industry.
- The abbreviation of IRDO is single line answer (ISNEE RESEARCH AND DEVELOPMENT ORGANISATION). IRDO is not just a training center. It is the platform where you realize your abilities.
- What are your immediate needs? What are your long-term goals? Do you want to gain experience in a certain field? Do you want to start making professional connections? Are you exploring whether or not you want to enter a certain line of work? If you want to know these answers, join us in this program.

13. INTERNSHIP DURATION AND ACADEMIC CREDENTIALS (AICTE PATTERN):

- The following framework is proposed to give academic credit for the internship undergone as part of the program.
- A minimum of 14-20 credits of Internship/ Entrepreneurial activities / Project work/ Seminar and Inter/ Intra Institutional Training may be counted toward B. Tech. degree program and 10-14 credits for three-year diploma program.

Contact us: 9410430424/25 | irdo@isnee.in 6 | Page

- Here, 1 credit is equivalent to minimum 40-45 hours of work.
 Therefore, a full-time intern is expected to spend 40 45 hours per week on Internship, Training, Project work, Seminar activities etc. This will result in about 600 to 700 hours of total internship duration for B.
 Tech and 450-500 hours for diploma.
- Internships may be full-time or part-time; they are full-time in the summer vacation and part-time during the academic session. AICTE curriculum is flexible to adjust internship duration. Therefore, opportunities must be provided for experiences that cannot be anticipated when planning the course. The institutes have the flexibility to schedule internship, Project work, Seminar etc. according to the availability of the opportunities. However, minimum requirement regarding Internship duration and credits is as follows:

S.N	Schedule		Duration		Activities	Credits	
1	(Degree)	(Diploma)	(Degree)	(Diploma)	Degree/ Diploma	(Degree) 14-20	(Diploma) 10-16
2	Summer vacation after 2nd Semester	Summer vacation after 2nd Semester	3-4 weeks	3-4 weeks	Inter/ Intra Institutional Activities	3-4	3-4
3	Summer vacation after 4th Semester	Summer vacation after 4th Semester	4-6 weeks	4-6 weeks	Industrial/Govt./ NGO/MSME/ Rural Internship/ Innovation / Entrepreneurship	4-6	4-6
4	Summer vacation after 6th Semester	6th Semester	4-6 weeks	3-4 weeks	Industrial/Govt./ NGO/MSME/ Rural Internship/ Innovation / Entrepreneurship	4-6	3-4
5	8th Semester	8th Semester	3-4 weeks		Project work, Seminar (excluding credits for Advanced Courses)	3-4	

Contact us: 9410430424/25 | irdo@isnee.in 7 | Page