



Summer Training cum Internship on Automobile Mechanics & Vehicle Design

**2 Weeks / 4 Weeks / 6 Weeks / 8 Weeks Training on
Automobile & Vehicle Design.**

*Venue: Delhi/NCR | Bangalore | Hyderabad |
Pune | Bhopal | Bhubaneswar | Lucknow*

www.innovianstechnologies.com



Company Details

We, **Innovians Technologies (ISO 9001:2015 Certified) (Unit of PRATS Technologies Pvt. Ltd.)**, are the India's fastest growing company in the field of Practical Educational Training, Professional Training, Corporate Training, Web & IT Services, with most advanced technologies & experience in hand. We majorly deal in Educational Workshop and Training, Corporate Training, Motivational Seminar, Software Development, Web Development, Consultancy & Out-sourcing, Placement Assistance .

Innovians Technologies delivers interactive training & workshops which equip its participants with better practical understanding and preparation for jobs in industry. The hands-on sessions and lectures are designed based on current industry trends and draw on the rich experience of instructors and organizers. We focus on Android, Ethical Hacking, Embedded Systems, Robotics, Automation, Web Development, Social Networking, 3D Animation, Automobile Mechanics, Aircraft Designing, Share Market, 2G & 3G Technology and many more.

The Corporate Training programs of Innovians Technologies encompass a wide range of skills that are integral & necessary part of everyday business, daylife or work environment. In our quest to address every organizational development need, Innovians Technologies offer a gamut of training programs, which ranges from Motivational Seminar, Faculty/Staff Development Training, 5S Training, Personality Development, Professional Skills Training & Foreign Languages.

Our Mission

Innovians Technologies mission is to offer world class, Professional Training & Development Solutions. We strive to offer excellence, professionalism, and a long-term commitment to remain among the premier Training & Development companies in India. Innovians Technologies and its staff are respected for their dedication and contribution to the industry.

Our Vision

Our values are embraced in the hearts and minds of every Innovians Technologies team member who then embodies these values and shares them throughout our company and with our clients. You will find three core values at work: Relation - We listen, learn, and help selflessly in our interactions with others. Humanity - Through business, we foster a strong sense of corporate social responsibility. Commitment - We honor our commitments and act with responsibility in all our relationships. These values are the building blocks of our work culture.

Our Team of Professional

Our team, as our imperative asset, works with great zeal to realize the mutual interests of our organization. Our team is made of professionals including professional trainers, managers, consultants, business development staff, quality auditor and other workforces.

Each member in our team is selected on the basis of their domain knowledge in respective fields. To upgrade the expertise of our team we also conduct regular training exercises. It helps us to be paralleled with new changes occurring time after time in the market. Our team members are highly efficient and understand the needs of clients as precisely as possible.



Structural & Foundation Analysis Training

This course helps you practically learn automobile engineering. You will be provided with the tools and our Engineers will give you the knowledge to develop your automobile prototype from scratch. You'll also spend a majority of time in exploring an IC Engine in addition to the hands-on experience on bike engine.

With this training program, you have the opportunity to develop practical automobile engineering skills. Here's what you'll learn by hands-on sessions:

- Mechanisms involved in today's automobile
- Working of internal IC Engine components
- How transmission, suspension and other car systems work
- How to configure and experiment with an automobile model

Topics to be Covered in Summer Training

Session 1 : Basic Automobile & Designing

- Introduction to Automobile Mechanics
- Locomotive Vehicle
- Chassis Design
- Brief Terminology
- Multipoint Strut Bar
- Fender Bar
- Anti Roll Bar
- Monocoque
- Tubular Space
- Longeron RH, LH
- Types of Chassis
- Ladder Frame Chassis
- Tubular Space Frame Chassis
- Monocoque Frame Chassis
- Ulsab Monocoque
- Back Bone Frame Chassis
- Aluminium Space Frame
- Carbon Fiber Monocoque
- **Software Designing Session**

Session 2: Suspensions

Brief terminology

- Weight Transfer (Sprung and Unsprung)
- Jacking Forces
- Camber And Caster Angel
- Anti Dive And Anti Squat
- Spring Rate
- Travel



Types of Suspensions

- Dependent Suspension
- Independent Suspension

Front Independent Suspensions

- McPherson Strut
- Double wishbone
- Coil Spring Type 1
- Coil Spring Type 2
- Multi Link Type
- Training Arm Suspension
- I beam Suspension

Rear suspension- Dependent Systems

- Solid- Axle , leaf- Spring
- Solid- Axle, Coil Spring
- Beam Axle

Hydragas Suspension

Hydropneumatic Suspension

Progressively wound Spring

Torsion bars

Software Designing Session

Session 3: Braking Unit

Disc Brakes

- Self adjusting nature
- Disc damage modes
- Servicing your disk

Drum Brakes

Anti- Lock braking systems

- Four channel, four -sensor ABS
- Three- Channel , Three- Sensor ABS
- One Channel , One - Sensor ABS

Brakes Actuators

- Cable- Operated
- Solid Bar Connection
- Single - Circuit Hydraulic
- Dual - Circuit Hydraulic
- Brakes- by Wire

Power Brakes and master Cylinder



Brakes Fluids

Session 4 : Transmission

Manual Transmission

- Gear Ratio
- Different types of gear
- Clutch & its Component s
- Reverse & Its Working

Automatic Transmission

- Planetry Gearsets
- DSG/ DCT Gear Boxes
- Torque Converter

Software Designing Session

Session 5 : Differential & Traction

- Differentials
- Open Differentials
- Locking Differentials
- 2WC,4 WD , AWD
- Tyres and Tractions Controls
- Tyre Size Notations
- Tyre Types for Passenger Cars
- Tyre Construction
- Cross- ply Construction
- Radial Construction
- Tyre tread
- Traction & its Controls

Session 6 : IC Engine Session

- IC Engines
- Types
- Compression Ignition
- Spark Ignition
- Layouts
- Engine Balancing
- Spark Plug
- Carburetor
- Fuel Injection
- Valves & Valve Timing
- Valve Trains
- Engine Cooling
- Turbochargers & Supercharges



- **Software Designing Session**

Session 7 : Bike Engine Dis- Assembly

Groups will be asked to dis-assemble or assemble the bike provided to them during internship

Practical Session

Software Designing Session

Session 8 : Final Software Session

- Practical Session
- Software Designing Session

Session 9: Car Module Identification

Group will be asked to identify various sub modules present in the car on opening the hood

Practical Session

Session 10: Technology Session

- PGMFi
- DTS-Fi
- MPFi
- CRDi
- RTR
- VVTI
- Vtec & TDI
- Airbag & Steering Systems

Course Duration

- 2 Weeks
- 4-8 Weeks (2 Weeks Classroom Training + 2-6 Week Work From Home Project Time). In 4-8 Weeks Training, 2 Weeks will be of Classroom Practical Technical Training same like two week training program & remaining 2-6 Weeks Time Participants will get for completion of a Project/Research Work from home.

Certificate Policy

- All courses under Summer Training Program (STP) are certified by Innovians Technologies & E-Cell, IIT Roorkee.
- All trainees will receive an Industrial Training Certificate with project completion letter from **E-Cell, IIT Roorkee & Innovians Technologies**.
- Letter of Recommendation cum Internship on company letter head of Innovians Technologies™.

Please Note: In-case of 4 -8 Week Training (2 Week Classroom Practical Training + 2 Week Project Work), participants will get 2 Week Classroom Training same like 2 Week Training Program and they will get 2-6 Week Time to complete one project/research work which they can do it from home. Project Work is for those

who want to get 4 Week Training Certificate as per their college/university Criteria of Training. Otherwise participants can apply for 2 Week Training Program. Classroom Training is same for 2 Weeks & 4 Weeks Duration Summer Training.

Eligibility

The pre-requisite for joining this training is zero. Anyone who is interested for this training can register it. Students/faculties from all engineering branches can participate in this training specially participants from **Civil Engineering Branches, M.Tech, Polytechnic, Diploma etc.**

Venue

Registered Center

1. Noida (Delhi/NCR)
2. Bangalore
3. Hyderabad
4. Pune
5. Bhopal
6. Lucknow
7. Bhubaneswar

Inside College Premises

If a college want to conduct the summer training in their college premises then we can organize it in their college campus itself but there should be minimum of 35 Participants. (For organizing the Summer Training in your college campus, please contact us separately)

How to Enroll?

- Register yourself at Innovians Technologies™ Internship Website (www.innovianstechnologies.com/internship), Register online for any desired course, duration & location of your training course. **Please make payment of Rs 1000 Registration Fee Online in our company bank account for registration through our Partner Gateway using your Debit / Credit Card or Net Banking Facility.** We will send you Confirmation mail regarding your registration. For Payment Options Please visit: tiny.cc/stppayment3
- Please deposit your Course fee to Our Online Bank Accounts before the last date and follow [Payment Methods/Options](#) for submitting fee in our account.
- After Direct deposit kindly keep the Bank Receipt with you in original and mail a Scan Copy of that receipt to stp@innovianstechnologies.com. While transferring funds through NEFT please mail us your details with your account number.
- Ask for Confirmation mail after completing above steps.

Training Fees & Discounts

- **Total Course Fees: Rs 6999/- (Inclusive of Registration Fees)**
Ist Installment: Registration Fee of Rs 1000 to be paid online for confirmation of your seat.
IInd Installment: Rs 5999 Remaining Course Fees to be paid before starting of training.

Remaining Course Fees

Rs 5999 /- Per Participant (Excluding Registration Fees)

Total Course Fees: Rs 7000/- (Rs 1000 Registration Fees + Rs 6000 Course Fees)



Discounted Fees for Groups

Rs 6650 Per Participant (3-5 Participant Per Group) Rs 6300 Per Participant (6-9 Participant Per Group) Rs 6125 Per Participant (10-19 Participant Per Group) Rs 5950 Per Participant (20+ Participants Per Group)

Already having Workshop Certification from Innovians Technologies ?

Get up to 15% discount instantly!!!

Referral Discount

Refer 10 of your Friends for the Summer Training & Get your Summer Training Course Fees Cost completely waived off .(Only applicable, if they Register for Summer Training).

Mode of Payment

1. You can make an online payment through our Payment Gateway Partner using your Debit/Credit Card or Net Banking Facility through this link: [Pay Online Now!](#)
2. You can direct deposit/online transfer to our ICICI Bank account. Details are as follows:
Account Name: Innovians Technologies
Current Account No: 158005001300
IFSC Code: ICIC0001580
ICICI Bank, Sector-62,
Noida, U.P.
3. GooglePay/ PhonePe / Paytm: **9250904129**
4. UPI ID: **innovians@icici**
5. Kindly make a DD (Demand Draft) of required fee in favour of "Innovians Technologies" payable at Noida. Send DD To:
Innovians Technologies,
C-56/11, Sector-62,
Noida, UP - 2010301 (India).
(Near Stellar IT Park)

Contact

We ensure that you will find our training programs extremely beneficial. If you have any queries kindly get back to us.

Regards
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