

Essential Gear

Bike Types		Safety Gear		Other Essentials	
Road Bike	Designed for speed and efficiency on paved roads. Lightweight with drop handlebars.	Helmet	Essential for protecting your head in case of a fall.	Water Bottle & Cage	Staying hydrated is essential.
Mountain Bike	Built for off-road trails. Features suspension, knobby tires, and a sturdy frame.	Cycling Gloves	Provide grip, padding, and protection in case of a crash.	Bike Pump or CO2 Inflator	For inflating tires on the go.
Hybrid Bike	Versatile for both roads and light trails. Combines features of road and mountain bikes.	Cycling Glasses	Protect your eyes from sun, wind, and debris.	Multi-tool	For basic repairs and adjustments.
Gravel Bike	Designed for gravel roads and mixed terrain. Sturdier than a road bike, more efficient than a mountain bike.	Cycling Shoes	Enhance pedaling efficiency, especially with clipless pedals.	Spare Tube	In case of a flat tire.
Electric Bike (E-bike)	Assisted by an electric motor. Useful for commuting and climbing hills.	Lights	Front and rear lights are crucial for visibility, especially at night or in low-light conditions.	Tire Levers	To remove tires from rims.
Touring Bike	Built for long-distance riding and carrying gear. Durable with comfortable geometry.	Reflective Clothing	Increases visibility to motorists.	Saddle Bag	To carry essential tools and spares.

Cycling Techniques

Pedaling		Body Position		Group Riding	
Cadence	Maintain a consistent cadence (pedal revolutions per minute) for efficiency. Aim for 80-100 RPM.	Neutral Spine	Maintain a neutral spine to avoid back pain.	Holding Your Line	Ride in a straight line and avoid sudden movements.
Smooth Pedal Stroke	Focus on a smooth, circular pedal stroke, engaging all leg muscles.	Bent Elbows	Keep your elbows slightly bent to absorb shocks.	Signaling	Use hand signals to indicate turns, stops, and hazards.
Gear Selection	Shift gears to maintain a comfortable cadence and effort level. Anticipate changes in terrain.	Relaxed Shoulders	Avoid tensing your shoulders and neck.	Pace Line	Rotate riders at the front to share the workload.
Climbing	Shift to lower gears, maintain a steady cadence, and lean forward slightly.	Proper Saddle Height	Your leg should be almost fully extended at the bottom of the pedal stroke.	Following Wheel	Maintain a safe distance from the rider in front of you.
Descending	Stay relaxed, use brakes judiciously, and keep your weight balanced.	Handlebar Grip	Vary your hand position on the handlebars to avoid numbness.	Communication	Call out road hazards and changes in pace.
Sprinting	Shift to a higher gear, stand up, and pedal powerfully.	Core Engagement	Engage your core muscles for stability and power.	Etiquette	Be courteous to other riders and road users.

## Bike Maintenance

### Regular Checks

<b>Tire Pressure</b>	Check and inflate tires before each ride to the recommended pressure.
<b>Brakes</b>	Ensure brakes are functioning properly and brake pads have sufficient material.
<b>Chain</b>	Check for wear and lubrication.
<b>Gears</b>	Ensure smooth shifting.
<b>Bolts</b>	Check that all bolts are tightened to the correct torque.
<b>Quick Releases</b>	Ensure quick releases are properly secured.

### Cleaning & Lubrication

<b>Cleaning</b>	Wash your bike regularly with soap and water to remove dirt and grime.
<b>Chain Lubrication</b>	Apply chain lubricant after cleaning and after riding in wet conditions.
<b>Cable Lubrication</b>	Lubricate brake and gear cables for smooth operation.
<b>Greasing</b>	Grease bearings and threads to prevent corrosion and ensure smooth movement.
<b>Avoid Over-Lubrication</b>	Excessive lubricant can attract dirt.
<b>Wipe Excess Lubricant</b>	After lubricating, wipe off any excess to prevent dirt buildup.

### Basic Repairs

<b>Changing a Tire</b>	Carry tire levers, a spare tube, and a pump or CO2 inflator.
<b>Adjusting Brakes</b>	Learn how to adjust brake cable tension and brake pad alignment.
<b>Adjusting Derailleurs</b>	Learn how to adjust derailleur limit screws and cable tension for smooth shifting.
<b>Tightening Bolts</b>	Use a torque wrench to tighten bolts to the correct specification.
<b>Chain Repair</b>	Carry a chain tool and spare quick links to repair a broken chain.
<b>Seeking Professional Help</b>	For complex repairs, consult a professional bike mechanic.

## Safety & Regulations

### Road Safety

<b>Obey Traffic Laws</b>	Follow all traffic laws, signals, and signs.
<b>Ride with Traffic</b>	Ride on the right side of the road in the same direction as traffic.
<b>Use Hand Signals</b>	Signal your intentions to turn or stop.
<b>Be Visible</b>	Wear bright or reflective clothing, especially at night.
<b>Use Lights</b>	Use front and rear lights at night and in low-light conditions.
<b>Be Aware of Your Surroundings</b>	Pay attention to traffic, pedestrians, and road hazards.

### Common Hazards

<b>Potholes</b>	Avoid potholes by steering around them or bunny-hopping over them.
<b>Gravel</b>	Be cautious on gravel or loose surfaces.
<b>Drain Grates</b>	Avoid riding over drain grates, which can trap your wheel.
<b>Car Doors</b>	Be aware of parked cars and opening doors.
<b>Pedestrians</b>	Yield to pedestrians and give them plenty of space.
<b>Animals</b>	Be aware of animals crossing the road.

### Legal Aspects

<b>Local Laws</b>	Know and comply with local cycling laws and regulations.
<b>Helmet Laws</b>	Some jurisdictions require cyclists to wear helmets.
<b>Bike Registration</b>	Some cities require bike registration.
<b>Insurance</b>	Consider cycling insurance for liability and theft.
<b>Rights and Responsibilities</b>	Understand your rights and responsibilities as a cyclist.
<b>Reporting Accidents</b>	Know how to report cycling accidents to the authorities.