

Instructor's guide

For participants in the Bike Ed instructor course



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Acknowledgements

The Bike Ed content was updated under the Road Safety Partnership and led by the Department of Transport and Planning – Road Safety Victoria

For more information and resources visit – www.roadsafetyeducationvictoria.vic.gov.au or contact bikeed@transport.vic.gov.au

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About Bike Ed

Bike riding is for everyone and is an important life skill. It helps people get to school, work and local places, save money, stay active, become more independent and connect with their community.

The Bike Ed program teaches children and young people how to ride bikes safely and be responsible road users.

The program is for students of all ages and abilities. It builds bike riding and road safety skills from primary school through to secondary school age and aligns with the Victorian Curriculum 2.0.

We utilise a train the trainer approach as research has shown that when teachers include Bike Ed in their curriculum it leads to better learning and lasting behaviour change. We assist schools to promote a culture of active and safe travel by supporting teachers and other community members involved in school programs to deliver Bike Ed.

This popular program has been supporting teachers to deliver Bike Ed in their schools for over 45 years.

The Department of Transport and Planning, with support from the TAC, provides teachers with resources and support to deliver the Bike Ed program, including:

- **Curriculum aligned and differentiated units of work for primary and secondary aged students** that cover a sequential approach to teaching students from approximately age 8 through to 14 to be safe bike riders and responsible road users.
- **Bike Ed Instructor Training** – This practical, and accredited, training is designed by teachers, for teachers. It includes a brief online learning module followed by a one-day practical course that can be delivered at your school. This course is currently **free**.

Bike Ed instructor course

The Bike Ed instructor course is for teachers, and other helpers who want to become accredited as Bike Ed instructors and go on to teach students in schools.

The course gives participants the knowledge and skills to teach others to ride safely and be safer road users.

The course has two parts:

- an introductory on-line module (this must be completed before starting the in-person training)
- a practical in-person training session run over a full day or equivalent, according to the needs of the participant group.

Practical in-person training

This part of the training is delivered by an accredited Bike Ed master trainer. It is designed to give participants the practical skills and knowledge they need to deliver Bike Ed.

The practical training is generally completed in one day. The training will follow the approximate schedule shown in the table.

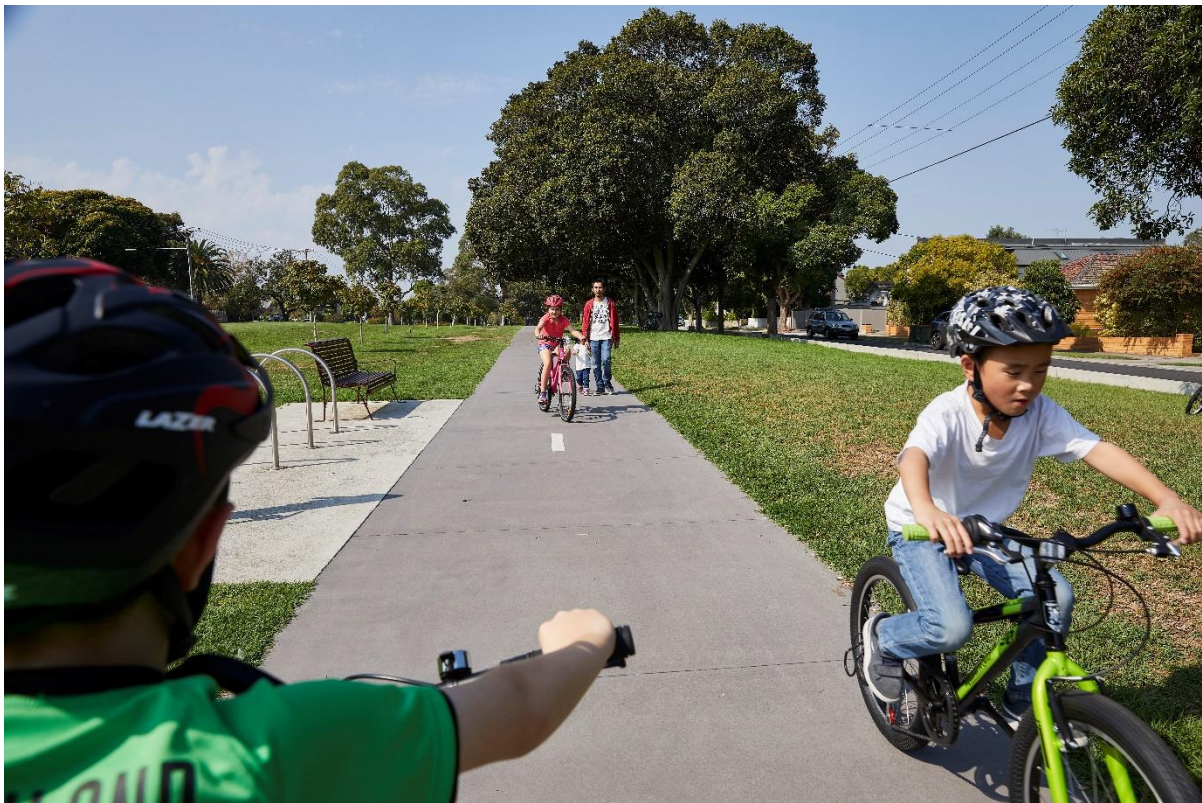
Introduction	35 minutes
Getting ready to ride	40 minutes
Practical activities	135 minutes
Group-riding skills	50 minutes
Group ride (on paths and roads)	Approx 90 minutes

About this guide

This instructor's guide supports participants in the practical part of the Bike Ed instructor course. It provides resources you can use while taking part in the practical activities. There is also information you can use as a reference when teaching Bike Ed. You may wish to go back to this resource as a refresher on the different topics covered in the course. All additional resources are available on the Road Safety Education Victoria website.

Note: The Bike Ed program has a range of practical activities for primary, secondary and specialist students. It is not possible to cover all the practical activities from the program in the training. The practical activities provided in this guide are just those covered in the training. You will need to spend time familiarising yourself with the unit plans and lessons in the curriculum materials.

Bikes are for everyone! Anyone can ride a bike! However, some students may require additional assistance in the form of modified equipment and differentiated teaching. Suggestions for activity differentiation are provided throughout the lesson plans. If you'd like more information on options for equipment modifications, adaptive bicycles and assistive technology and learning support aids to assist with delivery, please email bikeed@transport.vic.gov.au



Bike Ed units

Unit 1 (Years 1–2): Becoming a bike rider

This unit covers the basic skills of bike riding and road safety and how to apply these skills to simple scenarios within school grounds.

Unit 2 (Years 3–4): Getting ready to ride on paths

Students in Years 3 and 4 develop their riding and safety skills further and start to implement these to make decisions on bike paths and footpaths. There are also classes and resources dealing with hazards on paths and planning a journey. This culminates in a short class ride outside school using bike paths.

Unit 3 (Years 5–6): Getting ready to ride on roads

Students in Years 5 and 6 start working more independently to hone their riding skills, safety skills and making decisions on roads and intersections. There are also more advanced classes and resources dealing with hazards on roads and planning a journey. This culminates in a two class rides outside school using quiet roads.

Unit 4 (Years 7–8): Riding independently

Students in secondary school work more independently to hone their riding skills and on-road safety skills and behaviours. This culminates in two class rides outside the school.

Note: Age ranges/year levels are suggested, you may choose to use the lesson plans for a different age range, depending on the development, ability and maturity of the students.

Visit <https://www.roadsafetyeducation.vic.gov.au/educational-resources/programs/bike-ed>



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Getting ready to ride

A series of videos on the Bike Ed webpage show various aspects of getting ready to ride. These include how to fit a helmet correctly, the ABCD bike check, appropriate clothing and bike fit.

Helmet fit guide



Helmet fit guide

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Clothing

Appropriate clothing for riding should include:

Closed-toe shoes (not thongs or sandals), with good grip on the sole (not cros)



Clothes that are not too loose that they may catch in moving parts of the bike – eg. long pants, shoelaces, jumpers tied around waist



Bright-coloured or high-contrast clothing (to increase visibility)



Reflective gear such as vests and ankle cuffs (this is most important at night)



ABCD check guide

Do you know your bike ABC's and D?



Air

check that your tyres are pumped up



Brake

check that your brakes are working



Chain

check that your chain is clean and moving freely



Drop

a small 10cm drop of the back wheel to check that there's nothing loose on the bike

Do a quick ABCD check before you ride!

REMEMBER TO RIDE YOU NEED:

1. A safe bike
2. Safe and bright clothes
3. A safe helmet that is worn correctly
4. A safe attitude



Note: A suggested extension is '**E**' for **Handlebar Ends**.

Are the ends of the handlebars covered? They can be quite dangerous if exposed in a crash.

Parts of a bike

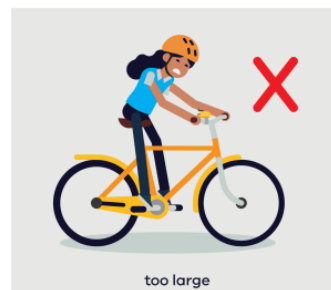
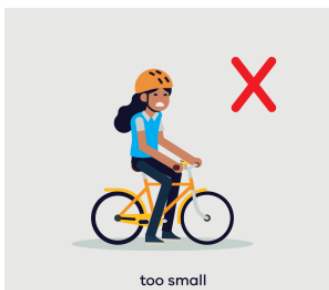
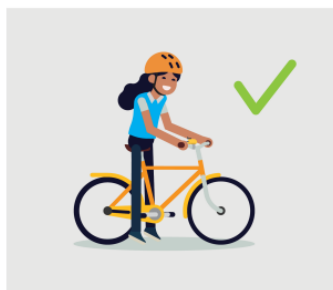
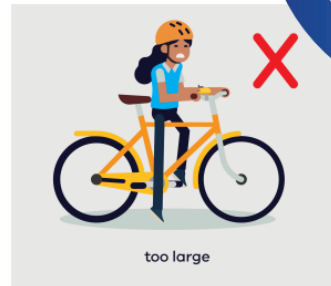
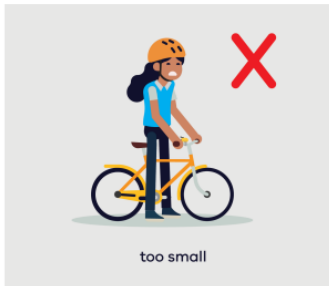
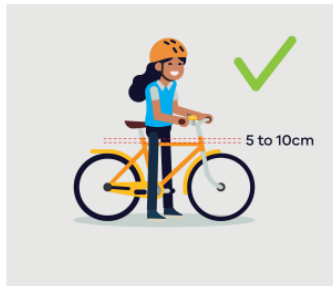


Bikes and trikes can be modified in several ways to suit different types of riders and abilities, including step-through frames, backrest seats, pelvic support, and self-levelling pedals.



Bike fit guide

Bike fit guide



Bike fit guide

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Gears

Easiest gear (smallest cog at the front and the largest cog at the back) – the chain is closest to the bike



Hardest gear (largest cog at front and smallest cog at back) – the chain is furthest away from the bike



Avoid cross-chaining (largest cogs at the front and back or the smallest cogs at the front and back).

The aim should be to keep the chain running reasonable straight, not running on an extreme angle.



Practical activities

Game – Hot Spot

Skills: spotting and avoiding hazards, turning, bike control

Equipment: cones, beanbags or other objects

Bike Ed curriculum: Unit 1, Years 1–2 (Lessons 6 & 7), Unit 2, Years 3–4 (Lesson 4)



Note: When setting up the activities consider the following:

- **Safety** – e.g. entry/exits points, adequate space, neighbouring activities
- **Instructions** – clear, concise, purpose, give a demonstration or use visuals
- **Differentiation** – modify the rules, the environment, the equipment (refer to lesson plans for more information)
- **Pre-ride** the activity to check the lay-out, safety and ensure it provides the challenge level intended

Riding stations

Bike Ed curriculum: Unit 3, Years 5–6 (Lessons 1 & 2)

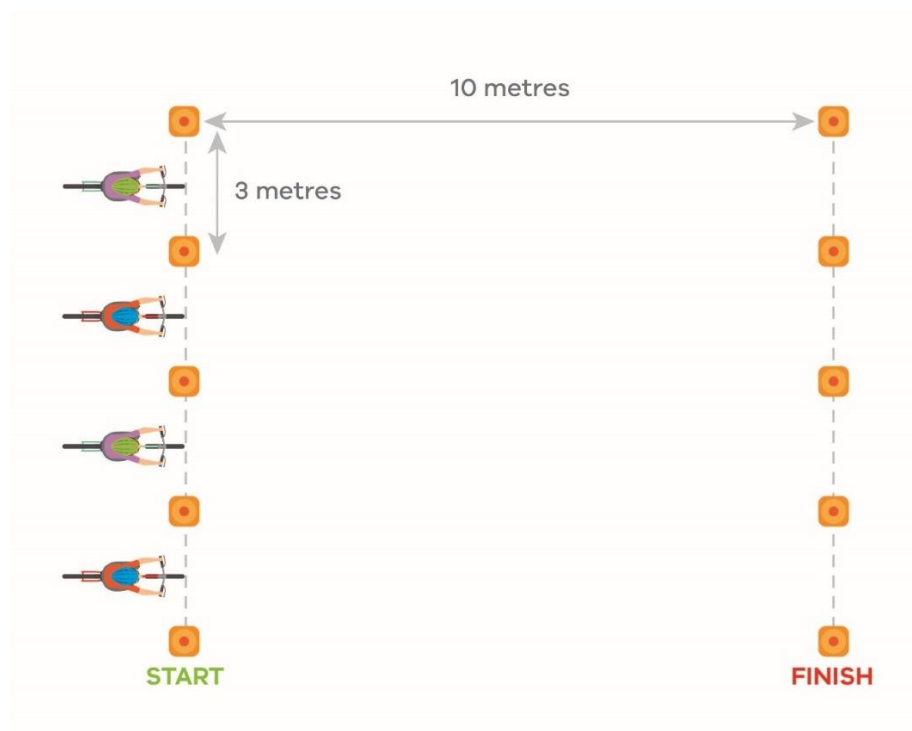
Slow ride

Equipment: cones, stopwatch

Skills: balance, bike control

The aim of this activity is to ride 10 metres in the *longest* time possible. This requires the rider to ride as slowly as possible.

- Set up cones 10 metres apart. The rider starts at one of the cones and their partner stands at the finish cone with a stopwatch.
- The rider must ride in a straight line between the cones.
- The partner will time the ride with a stopwatch.



Note: When setting up the activities consider the following:

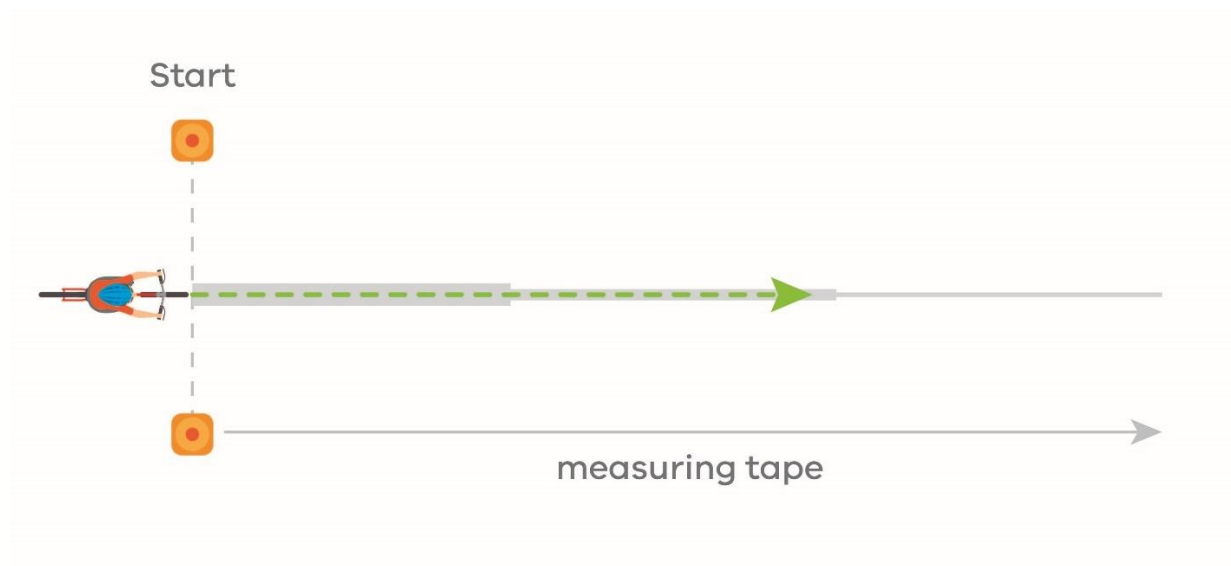
- **Safety** – e.g. entry/exits points, adequate space, neighbouring activities
- **Instructions** – clear, concise, purpose, give a demonstration or use visuals
- **Differentiation** – modify the rules, the environment, the equipment (refer to lesson plans for more information)
- **Pre-ride** the activity to check the lay-out, safety and ensure it provides the challenge level intended

Single push

Equipment: measuring tape, cone

Skills: balance, bike control

- The aim of this activity is to travel the furthest distance with only a single push of the pedal.
- Set up one cone with a long measuring tape running alongside.
- Stand stationary at the start line with a foot on the pedal. Push down on the pedal and then stop pedalling. Once you place a foot on the ground you must stop.
- The partner will then use the tape measure to measure the distance travelled from where the front wheel touches the ground.



Note: When setting up the activities consider the following:

- **Safety** – e.g. entry/exits points, adequate space, neighbouring activities
- **Instructions** – clear, concise, purpose, give a demonstration or use visuals
- **Differentiation** – modify the rules, the environment, the equipment (refer to lesson plans for more information)
- **Pre-ride** the activity to check the lay-out, safety and ensure it provides the challenge level intended

Slalom

Equipment: cones

Skills: balance, bike control

The aim of this activity is to turn between as many cones as possible in a set distance.

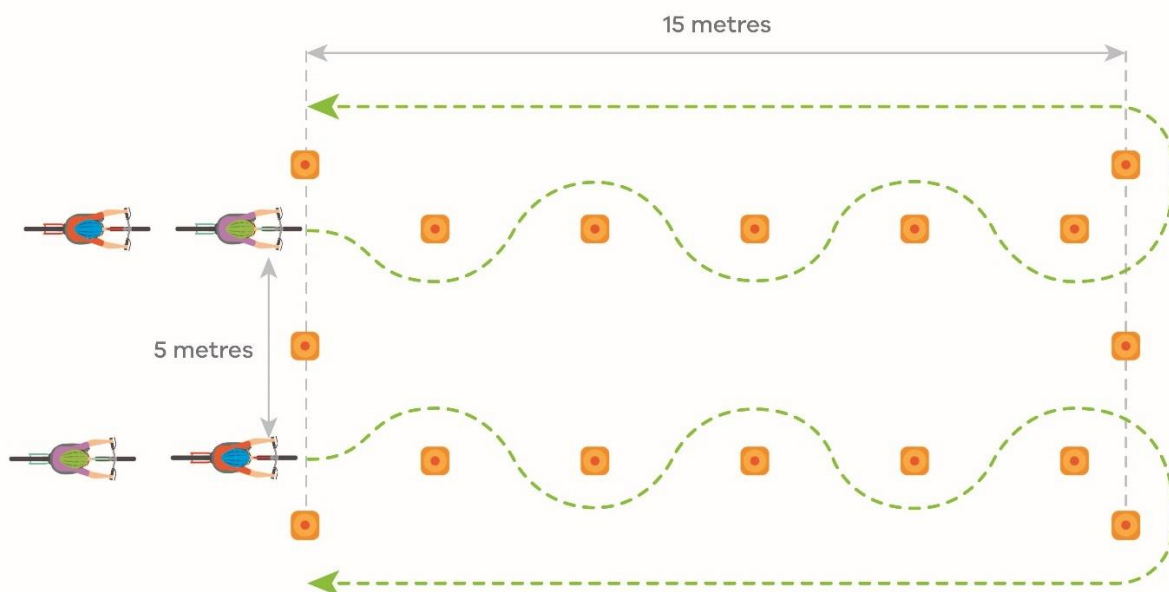
Place start and finish cones at least 15 metres apart (depending on space). Place 7 cones at even distances in a straight line between the start and finish lines.

Participants will ride from end to end, turning between the cones. They are successful if they complete the course without touching a cone or touching the ground with their foot.

If they complete the run successfully then the partner will add another cone, making sure to have all cones evenly spaced.

If they are unsuccessful, they will remove a cone.

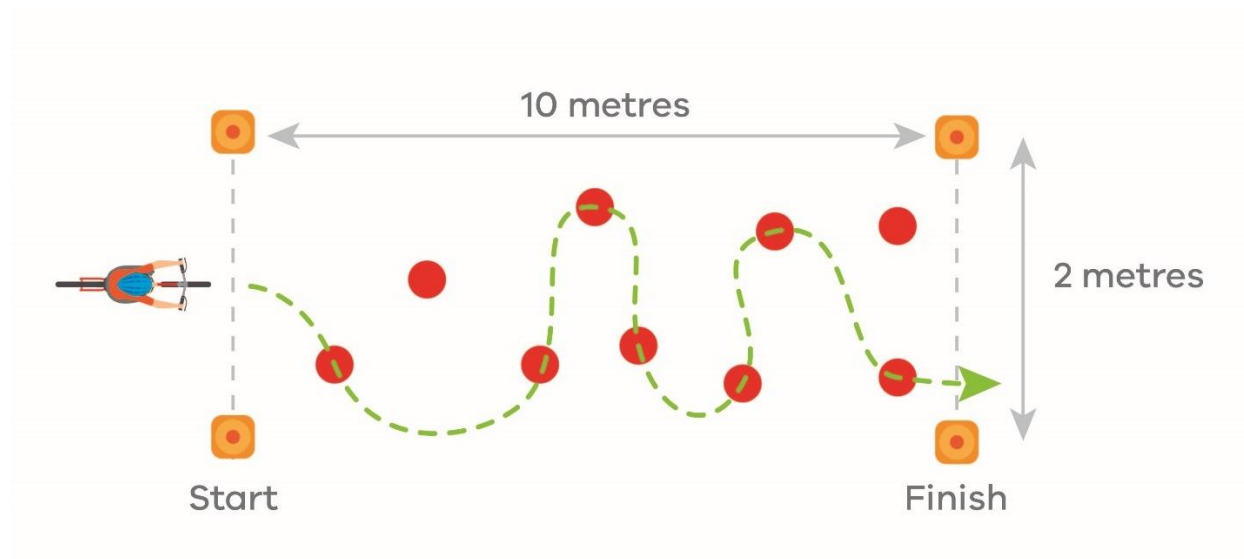
Write down the highest number of cones successfully completed.



Note: When setting up the activities consider the following:

- **Safety** – e.g. entry/exits points, adequate space, neighbouring activities
- **Instructions** – clear, concise, purpose, give a demonstration or use visuals
- **Differentiation** – modify the rules, the environment, the equipment (refer to lesson plans for more information)
- **Pre-ride** the activity to check the lay-out, safety and ensure it provides the challenge level intended

Hit the spot



Equipment: removable ground markings/chalk, cones

Skills: balance, bike control, braking

The aim of this game is for the rider to make contact with as many of the ground markings as they can within the area.

Set up the area (with cones or other markings) so it is approximately 10 metres long and only 2 metres wide. It should be narrow enough that riders will not be able to do U-turns in the area.

Within the designated area, place the ground markings randomly throughout. It is important that the markings are placed so it is difficult to ride over every one in a single ride. This may mean having some markings on opposite sides, which will encourage decision making for most riders, or high levels of bike control for the most adept.

Note that the markings do not need to be set up in the same formation as the diagram

Note: When setting up the activities consider the following:

- **Safety** – e.g. entry/exits points, adequate space, neighbouring activities
- **Instructions** – clear, concise, purpose, give a demonstration or use visuals
- **Differentiation** – modify the rules, the environment, the equipment (refer to lesson plans for more information)
- **Pre-ride** the activity to check the lay-out, safety and ensure it provides the challenge level intended

Setting up the intersection courses

Skills: turning, braking, giving way to other road users, scanning, picking breaks in traffic

Equipment: cones, stop/give-way signs (or chalk markings on the ground)

Bike Ed curriculum: Unit 2, Years 3–4 (Lessons 6 & 7), Unit 3, Years 5–6 (Lessons 3 & 4)

T-intersections

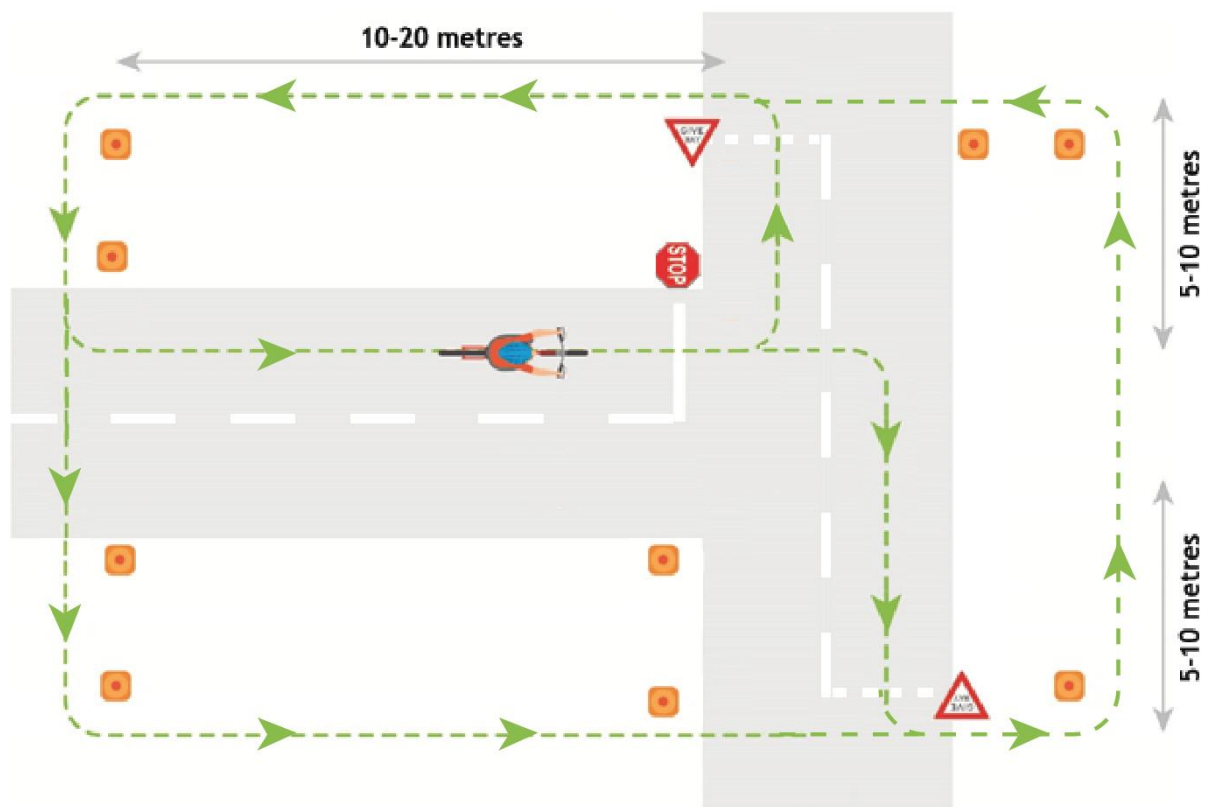
Outer square travels anti-clockwise only.

To start, get students riding the outer square.

Then more skilled riders can be encouraged to enter the T intersection, stop, and turn left.

They can then progress to choosing whether they turn left or right.

Riders re-entering the outer square must give way before entering.

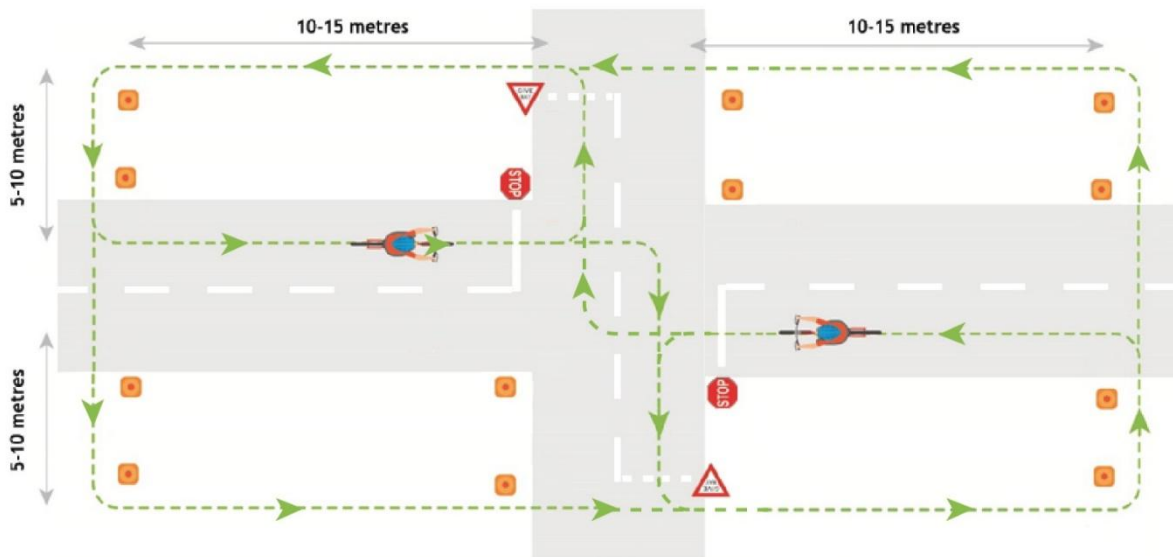


Cross intersections

Part 1 - A simple progression from the T-intersection exercise.

Outer square still travels anti-clockwise only.

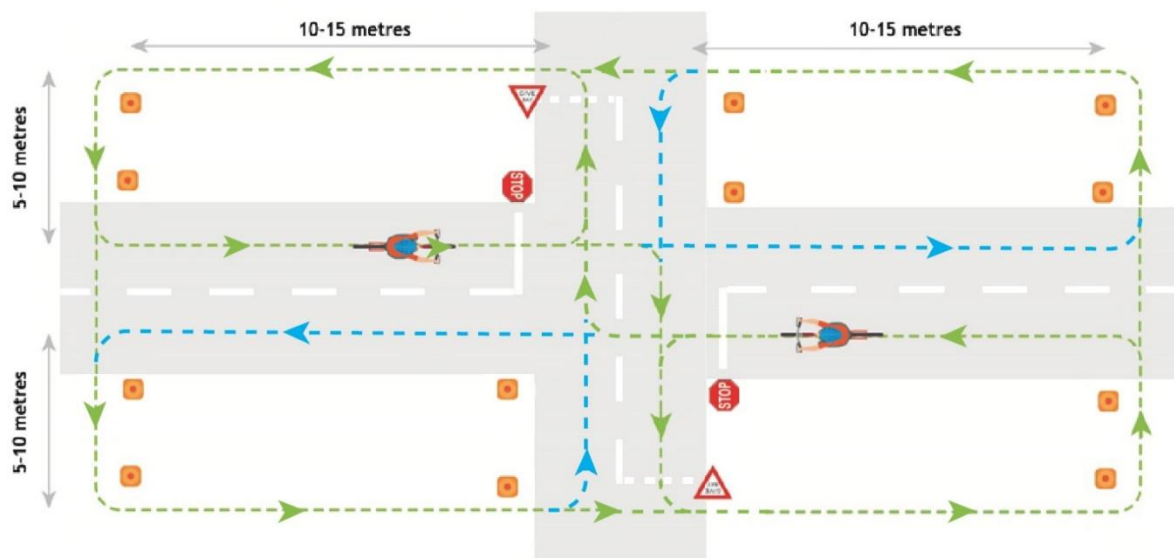
To start, get students riding the outer square. Then more skilled riders can be encouraged to enter the cross intersection from either left or right sides, stop, and turn left. They can then progress to choosing whether they turn left or right. Riders re-entering the outer square must give way before entering.



Part 2 - A progression from the Cross intersections Part 1 exercise.

As students become more familiar with the cross intersection, add in more options for entering and leaving the intersection (shown in blue). This will be dependent on how many riders you have on the course at any one time, and how large your area is, as it can get rather busy with traffic!

*Outer square still only ever travels anti-clockwise.



Note: You will find more information about intersections and how to safely cross them as a bike rider in the **Navigating Intersections** part at the end of this resource.

Risk Management and Risk Registers

Effective risk management is a critical part of planning and delivering any Bike Ed program. Teachers and schools hold the duty of care for students participating in cycling activities and are responsible for identifying, assessing, documenting and communicating risks to all staff, volunteers and helpers involved in the program.

A **sample Bike Ed Risk Register** is available on the Roads Safety Education Victoria website – under the resources and support tab. This sample is intended as a guide and should be adapted to reflect your school's specific context, including:

- School location and local traffic environment
- Student cohort and learning needs
- Route selection and riding environment
- Staging areas and meeting points
- Supervision arrangements
- Staff experience and qualifications
- Weather and seasonal conditions
- Equipment and bicycle suitability

Any risk register developed for a Bike Ed program must align with the current Department of Education policies and requirements (Excursions – camps and adventure activities (Cycling including Bicycle Education) which will outline ratios, supervision and qualifications. While some non-government schools may operate under different policies, the Department's requirements represent best practice and should be applied wherever possible.

Key Considerations

When reviewing or developing a risk register, consider:

- What risks are relevant to your school context?
- What control measures are already in place?
- What additional controls may be required?
- How will risks be communicated to staff, volunteers and students?
- How will the risk register be reviewed and approved?

Group-riding skills

Riding consistently

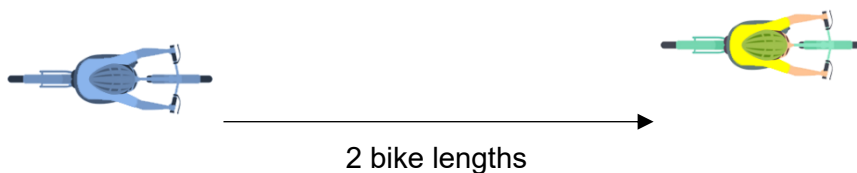
When in a group, bike riders should try to ride at a steady pace and avoid any jerky movements. Braking should be light, and acceleration should be gradual. Sudden and unexpected movements make it hard for other bike riders to avoid a crash. Communication between riders is essential to warn of and avoid hazards.

Keeping a safe distance

Safe distances between bike riders in a group will depend on the skill level of the group.

Beginner bike riders

Beginner riders should keep at least two bike lengths behind the rider in front (or more in wet weather). They should not follow in the wheel track of the rider in front but keep their wheel slightly to the one side of the rider in front. This will give riders time to react to and avoid clipping the rear wheel of the bike in front.



Advanced bike riders

More competent riders often ride closer to the person in front. This makes riding easier by reducing wind resistance.

It is important to avoid overlapping wheels with the person in front. If the rider changes position suddenly to avoid a road hazard, or if there is a gust of wind, the wheels may make contact and result in a crash.

In wet weather, or when riding downhill, riders should allow more space.



Communication

Communication is essential when riding around other road users and when riding in a group.

Bike riders must communicate their position to pedestrians or to other riders on a path. They can do this by ringing their bell or using their voice (e.g. calling out 'passing').

When riding in a group, bike riders should use verbal communication and hand signals to communicate any change in their position or speed and warn other riders about hazards.

Verbal communication (calls)

Calling out hazards or changes in the way you are riding can help the group to stay safe.

Everyone in the group is responsible for using calls. They should be passed up or down the line as necessary. Riders at the front should look out for hazards such as potholes or water, while riders at the back should look out for vehicles.

A direction is often given when calling out hazards such as left, right, up, back (e.g. 'car back', 'pedestrian up').

Common calls related to hazards	Meaning
'Car up' or 'Car back'	Watch out for cars at the front or back of the group
'Walker up' or 'Walker back'	Watch out for pedestrians at the front or back of the group
'Bike up' or 'Bike back'	Watch out for riders at the front or back of the group
'Door'	Watch out for someone opening a door from a parked car
'Pothole'	Watch out for a pothole on the road or path
'Water'	Watch out for water on the road or path
'Glass'	Watch out for glass on the road or path
'Gravel'	Watch out for gravel on the road or path

Common calls related position and movement	Meaning
Passing	Passing a bike rider in the group
Slowing	Slowing down
Stopping	Stopping

Double up	Move into riding in pairs from single file
Single file	Move into single file from riding in pairs
Right/left at next	Turning right or left at the next intersection or path

Hand signals



Note : in most cases it is advised to only use a loud voice call for "Slowing" and "Stopping" and keep both hands on the handlebars for correct braking and control of the bike, however the addition of hand signals for "Slow down" and "Stop" shown above are sometimes useful when riding in a group of bike riders.

Forming pairs and single file

When riding in a group, bike riders will need to safely form pairs and return to single file. Riding in pairs can boost bike riders' visibility and reduce their risk of being involved in a crash. This method of forming pairs and moving back into single file has been designed for Bike Ed programs so the instructor (labelled "Instructor") stays at the front at all times, and the tail rider (labelled "Tail Rider") stays at the rear of the group at all times. It also allows the Instructor to scan the road ahead and behind before making the calls to 'double up' or to move into 'single file' when required.

Forming pairs



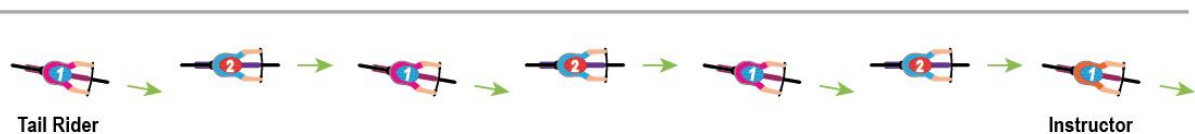
See next page for further instructions.

1. Instructor scans for approaching traffic and for traffic behind

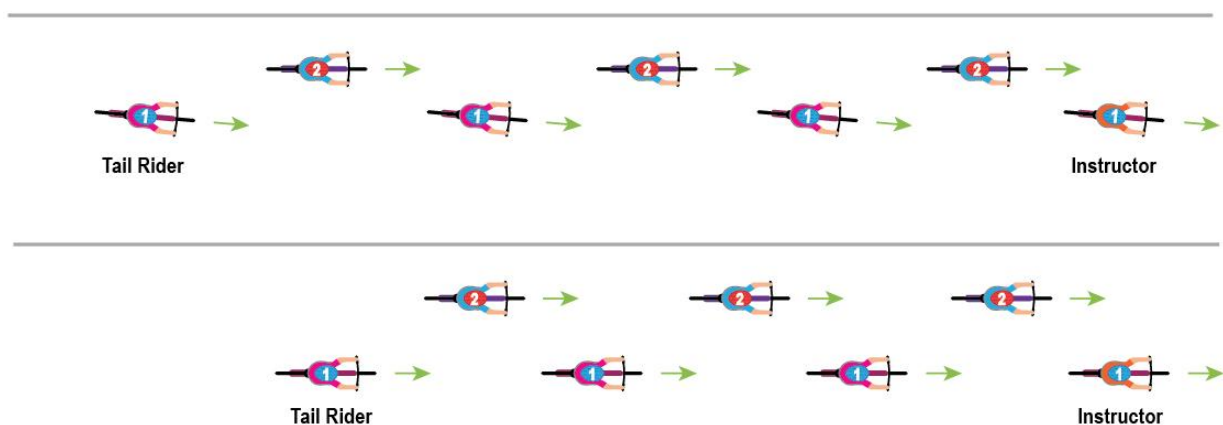
Instructor calls out 'double up' to move into pairs if it is safe to do so

Other riders communicate with each other that they are doubling up

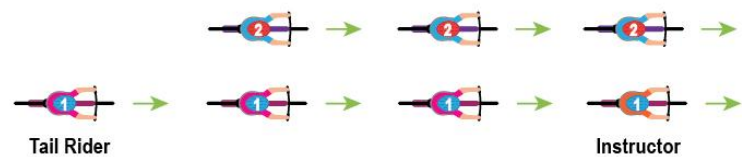
The Tail Rider also checks behind to ensure it is safe to move into pairs before moving out, and communicates the message forward if it is not safe



2. The Instructor and every second rider thereafter (each rider labelled "1" in the diagram) moves toward the right.



- The riders on the left move up to close the gap between them and to catch up with the rider on their right. The riders on the right allow the rider on their left to get alongside them so they can form a pair.

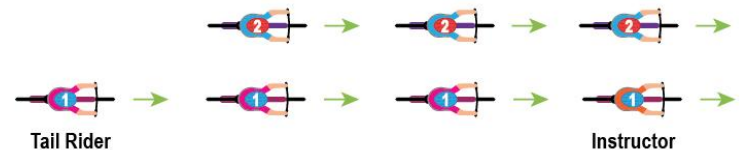


Pairs ride no more than 1.5 metres apart.

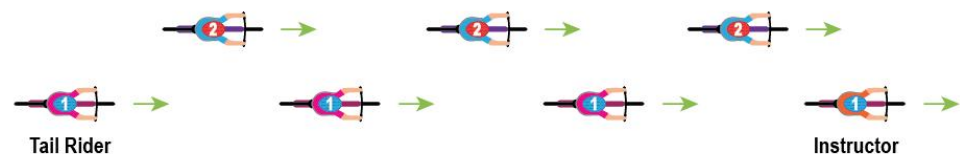
Returning to single file

- Tail Rider or Instructor calls out 'single file' for the group to move from pairs into single file. This could be for a range of reasons such as the road or path narrows, there is need to pass parked car, there is traffic coming from behind, the traffic conditions require it, there are others on the path ahead or there is some other form of a hazard ahead.

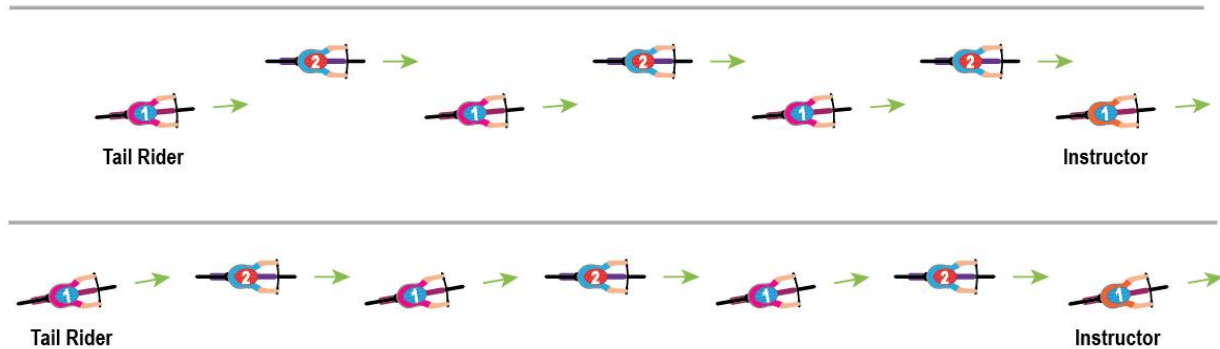
Other riders communicate with each other that they are moving into single file.



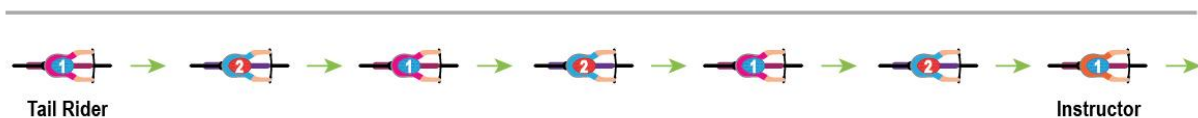
- Riders on the right accelerate as needed, ready to move in front of the rider they had been beside. At the same time, riders on the left continue straight and may need to slow down to spread out and create a gap for their pair to move in in front of them.



3. Riders on the right move into the gap created for them.
Note that the "Tail Rider" always stays at the rear of the group, or as the rear-right rider (even if this alters the formation pattern for the last pair), so that they always have clear vision and hearing in front and behind the group.



4. Riders form into single file.
The Instructor is still at the front, and the Tail Rider is still at the back.



Group ride

Types of hazards (footpaths, shared paths and on-road)

Hazards you may encounter on a group ride may include:

Vehicles oncoming and coming from behind, at intersections and parked



Pedestrians on paths and crossing roads



Other bike riders



Potholes, puddles, gaps and cracks in the pavement, uneven surfaces, tram/railway lines, and debris on the road



Strategies for avoiding hazards

Strategies for avoiding hazards may include:

Steering around or moving away



Slowing down and preparing to stop if needed



Warning other road users



Communicating hazards to other members of the riding group

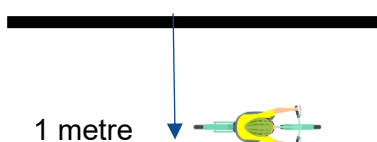


Road positioning

All skills for riding on road boil down to 2 key principles: being **visible** and being **predictable**. Your road positioning is a form of communication to other road users.

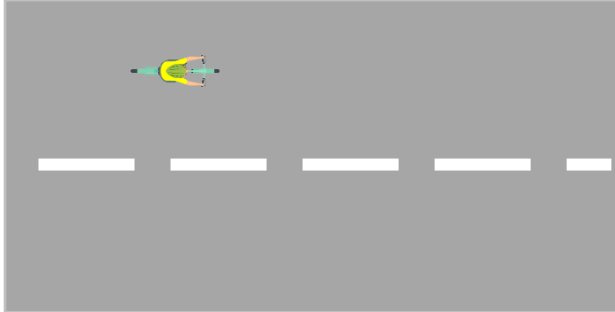
Preferred position on a good road

- On the left about 1 metre from the kerb. Reasoning: you are more visible to traffic as you are not getting visually lost amongst items at the edge of the road, you are less likely to run into the kerb or into debris at the end of the road, and you are more predictable as it is clear you are continuing along the road and not pulling over to stop or into a driveway.



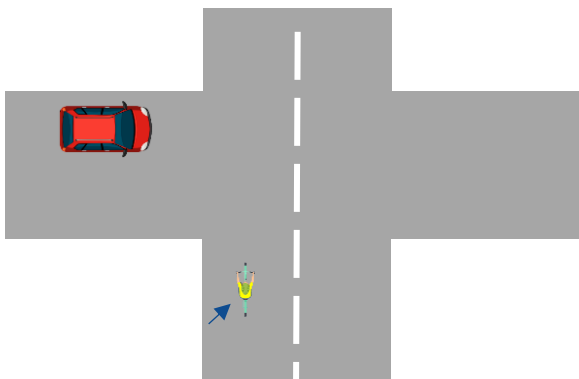
Narrow roads or squeeze points without enough room for a vehicle to pass

Ride in the centre of the road/lane. (Called "taking the lane")



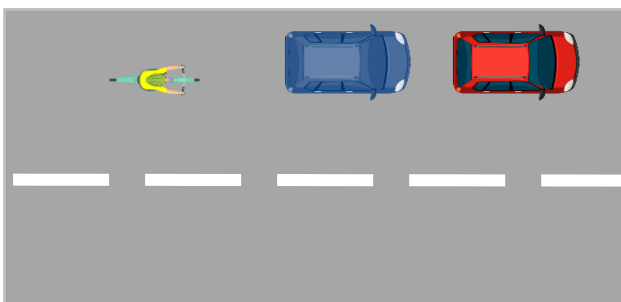
Cars entering on the left

- Move to the centre of your lane so they can see you earlier.



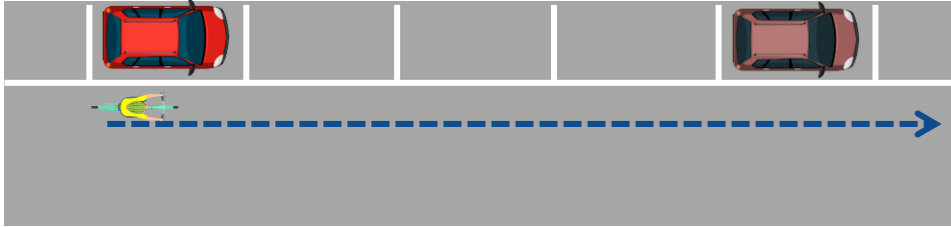
Slow and stationary traffic

- Move to the centre of the lane to increase your visibility.



Riding on roads with parked cars

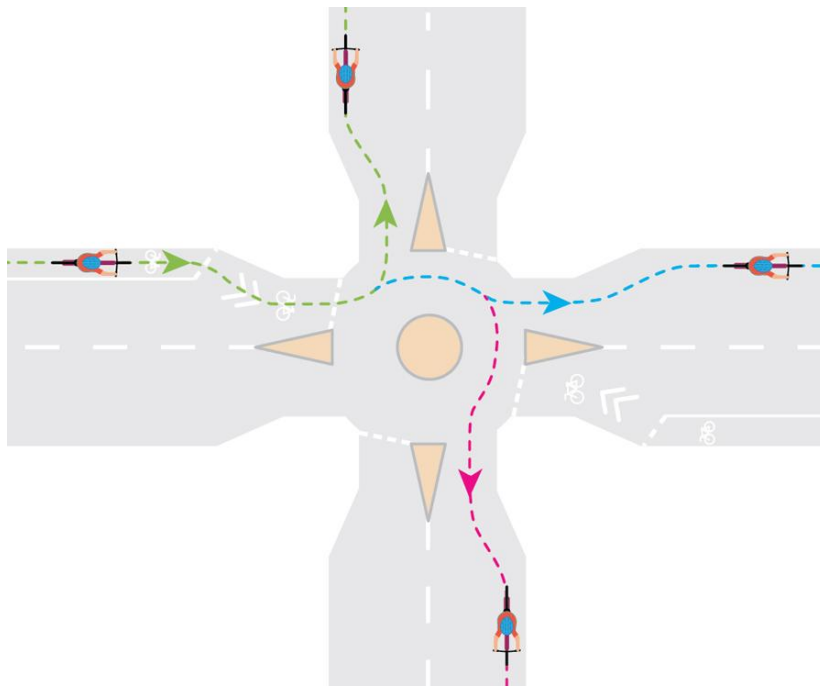
- Don't swing in and out around parked cars.
- Keep a straight line where you can be seen.



Navigating intersections

Roundabouts

- Scan behind for traffic on the approach to the intersection (30 metres).
- Give way to all vehicles already in the roundabout.
- Slow down or stop before entering the roundabout.
- Signal first before entering the roundabout, then keep two hands on the handlebar. Repeat the signal only if it is necessary to convey intentions to another road user.
- Ride in the centre of the lane so you won't be squeezed into the kerb.



Riding across an intersection

- Scan behind for traffic on the approach to the intersection (30 metres).
- Be wary of vehicles turning right. If possible, make eye contact with drivers to make sure they have seen you.

Turning left at an intersection

- Scan behind 30 metres before the intersection.
- Move to the left of the road.
- At the intersection, scan right and ahead.
- Use a left-hand turn signal.
- Be wary of vehicles that do not stop or give way.

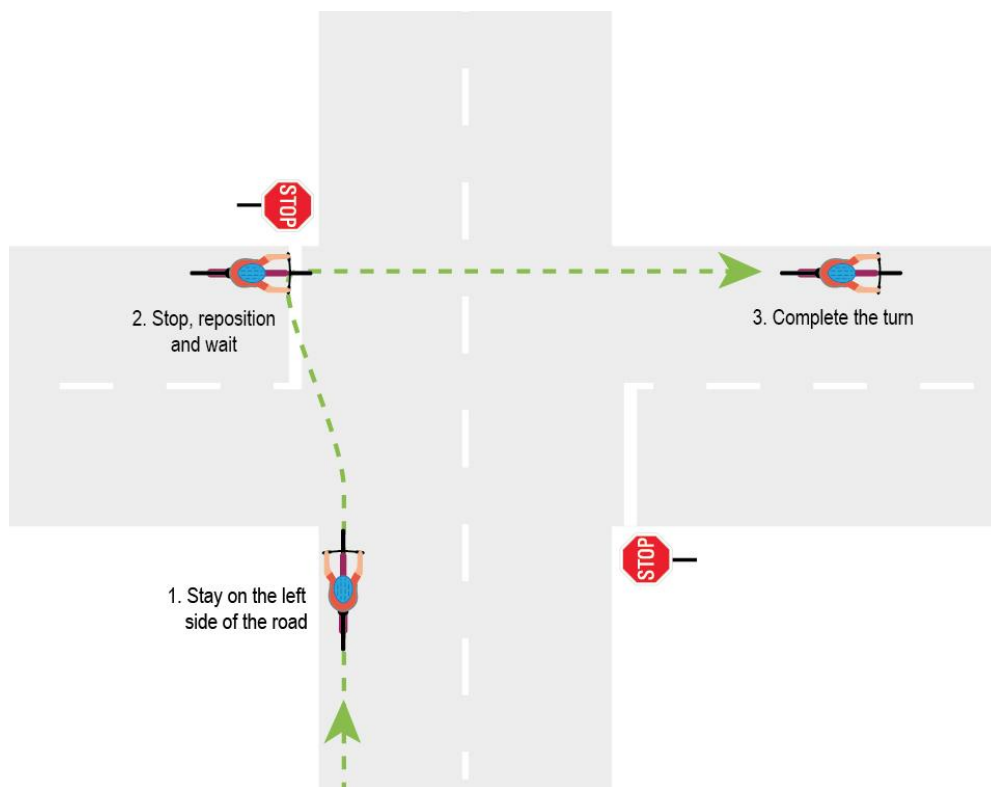
Turning right at an intersection

- Scan behind 30 metres before the intersection.

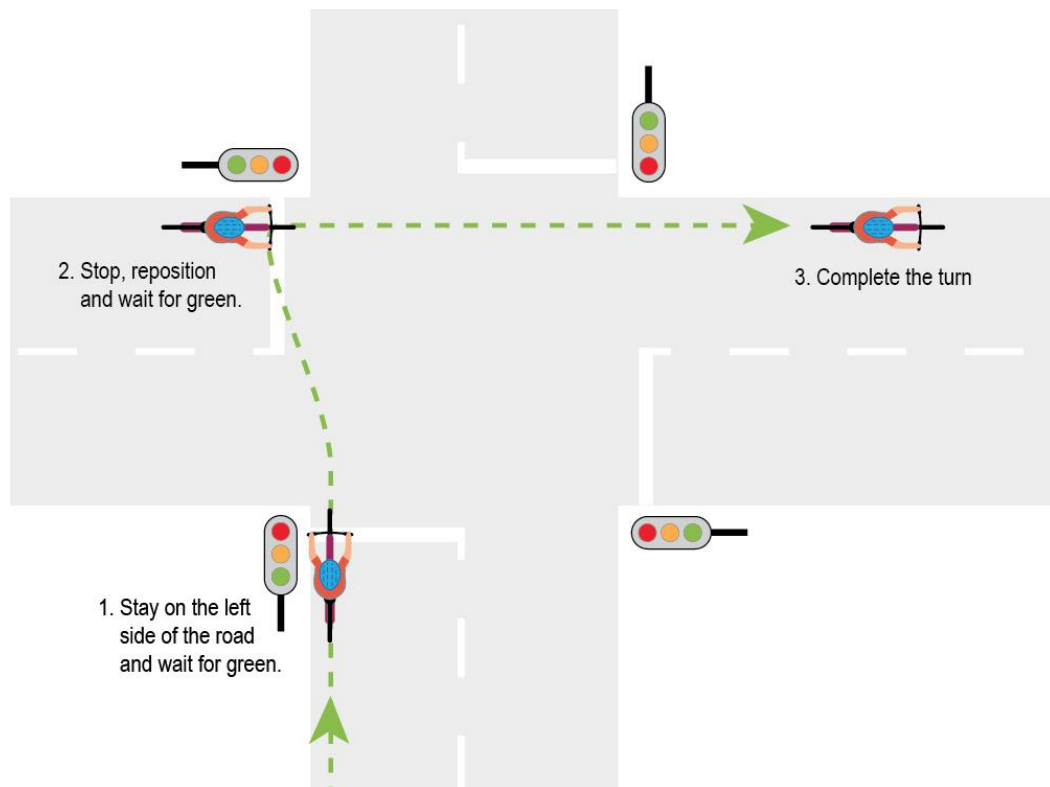
- Use a right-hand turn signal.
- Move to the right lane.
- Stop at the intersection.
- Approaching the intersection, scan left, right and ahead.
- If necessary, stop at the intersection.
- When the way is clear of traffic, complete the turn.
- Move to the left of the road after completing the turn.

Hook turns

- Approach the intersection on the left of the road.
- Scan behind, left and right for traffic.
- Stop at the left side of the road being entered.
- Reposition the bike to face the direction of travel.
- Scan left and right for traffic.
- Ride across the intersection when safe. (If the intersection has traffic lights, wait for the green light before proceeding.)



Hook Turn without Traffic Lights



Hook Turn with Traffic Lights

Navigating kerbs and driveways

Turning left from a driveway

- Stop at the edge of the kerb or driveway.
- If there are parked cars, wheel the bike out to the vehicle line.
- Scan right.
- Scan left to check that the road is clear and that no parked vehicles are pulling out and driveways are clear.
- Ride off to the left when the road is clear.

Turning right from a driveway

- Stop at the edge of the kerb or driveway.
- If there are parked cars, wheel the bike out to the vehicle line.
- Scan left and right.
- Give a right-hand turn signal.
- Scan left again.
- When the road is clear, ride off to the right.

After completing the Bike Ed instructor course

Thank you for taking part in the Bike Ed instructor course.

You should use this guide as a reference when teaching Bike Ed to check information or to revise the topics we covered during the training.

If you are looking for more resources and materials to support Bike Ed, go to the Road Safety Education Victoria website – www.roadsafetyeducation.vic.gov.au

For more information please contact bikeed@transport.vic.gov.au

We'd love to hear your feedback!

please use the QR code below to complete the online
feedback survey

Bike Ed Instructor Training Feedback



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