

INTRODUCTION

We've teamed up with Cyclesurgery, and worked with sports scientist Elliot Lipski from Trainsharp, to put together a six-week training plan to cover training basics. It's not specifically designed for any goal event, but whether you're eyeing up a 100-mile sportive or even a local 4th Cat crit race you can make some meaningful gains by following this plan which includes a balance of strength and endurance workouts.

Everyone's busy these days, so we've limited this plan to two sessions and about three to four hours a week with an optional workout for those with a bit more time. You can start the plan any time you want, and you can do the work indoors or outdoors. We'll be outlining the programme below and focusing in week by week.

TRAINING ZONES

	Perceived effort	HR (% of max)	Power (% of FTP)	Description
Zone 1	<2	60-65%	< 55%	This is a modern take on the old fashioned fat burning ride. The idea of riding in this zone is to encourage your body to become more efficient at using fat as a fuel source.
Zone 2	3-4	65-75%	56-75%	The pace is now getting a little harder (although you should still be able to hold a conversation). Your body starts to use more carbohydrates and becomes less reliant on fats.
Zone 3	5-6	75-82%	76-90%	This zone is often referred to as tempo - You can still talk, but in short sentences rather than a full conversation. Riding in this zone really helps develop fitness.
Zone 4	7-8	83-89%	91-105%	Things are getting serious now. Zone 4 riding is often referred to as Threshold. This is the maximum pace that you can sustain for 1 hour.
Zone 5	8-9	90-94%	106-120%	This is where the hammer really goes down. Riding in this zone is very hard on the mind and body. The benefits are that it causes big improvements in the amount of oxygen your body can effectively use during exercise
Zone 6	9-10	95-100%	121-150%	Full concentration is required. This zone is all about maximum efforts of up to 2 minutes in duration. The efforts are short and very hard with recovery time in between.
Above Zone 6	10	N/A	>150%	Anything above Zone 6 is a flat-out effort - if you're still thinking about riding in a zone you're not going hard enough!

MAX HEART RATE TEST

This test is useful if you have a heart rate strap and you want to do the sessions in this plan based on percentage of your maximum heart rate. It's a tough test; you should always consult a medical professional before embarking on any training programme.

You might have heard before that your theoretical maximum can be found by using the formula of 220 minus your age. That works for some people but it's a broad brush approach. You're better off using a more personal approach, and finding it out the hard way. It's easy to do. In the sense of straightforward, anyway.

- Find a reasonably short hill near you, say 500m long.
- Scope out a landmark 100m from the top that you can easily recognise.
- After a proper warmup of at least 15 minutes, ride the hill as fast as you can, then sprint for the top when you reach the 100m to go marker.
- Recover, and then do it again twice more, with a 5-minute recovery between each attempt.
- The maximum heart rate you register during those efforts will be a good indicator of where your maximum is.

FTP (THRESHOLD) TEST

This test is useful if you own a power meter and do not already know your training Zones, or if they are out of date. It is best suited to a turbo or indoor trainer but can be carried out on the open road: please ensure you choose a relatively flat traffic free road, as you'll be working hard and not keen to stop. Feel free to give this a go if you do not have a power meter; if you do the test on the same indoor trainer (at the same resistance) or the same stretch of road every time, you can compare distance you covered in the 20-minute testing section to track your fitness. It's a tough test; you should always consult a medical professional before embarking on any training programme.

1h30m	Zone	Cadence	Notes
35 min	1-3	Self selected	Warm up
5 min	high 3	Self selected	Warm up effort
5 min	1	Self selected	Recovery
20 min	5	Self selected	Main test
25 min	1	Self selected	Warm down

- Carry out a progressive 40 minute warm up moving from Zone 1 to a high Zone 3, 5-minute effort.
- Ride easy for 5 minutes, go to the loo, stretch the legs and then prepare yourself for the 20 minute effort.
- Ride for 20 minutes as hard as you can!
- Finish off with 15-30 minutes as Zone 1.

Ride the effort like a time trial – don't explode into the effort! Try to keep it consistent.

We recommend removing your head unit if you have one and just having a stop-clock to see during the effort, sometimes seeing your power/Heart rate can psych you out!

If you have a power meter, to find your FTP **take 95% of your average power for the 20-minute testing section.**

WEEK 1: STRENGTH

SESSION 1 SPLIT ZONE 2/3

1h20m	Zone	Cadence	Notes
15 min	1-2	Self selected	Warm up
30 min	2	95-100	High cadence
5 min	1	Self selected	Recovery
20 min	3	70	Low cadence leg strength
10 min	1	Self selected	Warm down

This session is designed to target improving both your cardiovascular system and your leg strength. It will get you used to delivering power at a range of cadences. The low cadence efforts put the onus on your leg strength (through the high torque effort), the higher cadence efforts work your cardiopulmonary (heart & lungs) system. By training the extremities of the cadence ranges, you will be better adapted at riding to your self-selected range.

Try and maintain the power as smoothly as possible on the Zone 3 block. This is a split session and each element is of equal importance: don't neglect the Zone 2 part.

SESSION 2 SEATED HILL REPS

2h20m	Zone	Cadence	Notes
40 min	1-2	Self selected	Warm up
4x sets of			
5 min	3-4	65-75	Seated hill rep
5 min	1-2	Self selected	Recovery
60 min	1-2	Self selected	Warm down

This session is best completed on the road, but can be shortened and completed on the turbo to simulate a hill effort. This is a high torque effort and will be tough.

After a good warm up (40 mins or so), find a climb of your choice, roughly 5 minutes in duration. Remain seated whilst climbing. The idea for today is to not raise your heart rate too high, but to concentrate on pressing down hard from the tops of your thighs, keeping a strict style working the core. Keep the burning sensations going throughout the efforts. Strengthening your ankles, knees and hips. Kind of a gym session on the bike. 1 hour cool down.

WEEK 2: STRENGTH ENDURANCE

SESSION 1 SPLIT ZONE 2/3

1h20m	Zone	Cadence	Notes
15 min	1-2	Self selected	Warm up
30 min	2	95-100	High cadence
5 min	1	Self selected	Recovery
10 min	3	70	Strength endurance
10 min	3	90-95	Strength endurance
10 min	1	Self selected	Warm down

This session is designed to get you used to delivering power at a range of cadences. The low cadence efforts put the onus on your leg strength (through the high torque effort), the higher cadence efforts work your cardiopulmonary (heart & lungs) system. By training the extremities of the cadence ranges, you will be better adapted at riding to your self-selected range.

Begin the session with a thorough warm up of 10-20 minutes. Proceed onto the Zone 2 block at high cadence (95-100 rpm), followed by recovery. Then perform the Zone 3 strength endurance effort consisting of 10 minutes at 70 rpm, followed by 10 minutes at 90-95 rpm. Do this by lowering the gear but maintaining the power.

Try and maintain the power as smoothly as possible on the Zone 3 block, especially when it comes to the cadence changes. This is a split session and each element is of equal importance: don't neglect the Zone 2 part.

SESSION 2 PROGRESSIVE RAMP

1h45m	Zone	Cadence	Notes
15 min	1-3	Self selected	Warm up
5 min	1	Self selected	Easy spin
30 min	1	Self selected	Zone 1 interval
25 min	2	Self selected	Zone 2 interval
20 min	3	Self selected	Zone 3 interval
10 min	1	Self selected	Warm down

This will feel progressively harder as the session goes on. Ensure you are hydrated throughout and have good air circulation if you're indoors. If you're pressed for time you can go straight to the 30 min Zone 1 block as a warmup.

Warm up for 15 minutes, progressing from Zone 1 into Zone 3, followed by 5 minutes easy spinning. Then jump off, stretch the legs, relieve the saddle pressure and begin the main intervals: 30 minutes at Zone 1, then straight into 25 minutes at Zone 2 and finally 20 minutes at Zone 3. There is no recovery between each block.

This type of session will work on your endurance capacity and ability to lift the power even when fatigued, building both your lower level threshold and working on your FTP

Start steady. Whilst this session looks easy enough, it will likely be tough during the Zone 3 effort. Try to avoid any periods of freewheeling during the effort, maintain pressure on the pedals for the full duration.

OPTIONAL HILL REPS

2h40m	Zone	Cadence	Notes
40 min	1-2	Self selected	Warm up
3x sets of			
5 min	3-4	65-75	Seated hill rep
5 min	3-4	90	Seated hill rep high cadence
10 min	1-2	Self selected	Recovery
60 min	1-2	Self selected	Warm down

Similar to Week 1 Hill Reps, but halfway through the effort, reduce the gear and increase the cadence to 90rpm – whilst maintaining the same power. Find a climb of your choice, roughly 10 minutes in duration. Remain seated whilst climbing. The idea for today is to not raise your heart rate too high, but to concentrate on pressing down hard from the tops of your thighs, keeping a strict style working the core. Keep the burning sensations going throughout the efforts. Strengthening your ankles, knees and hips. The change in cadence will shunt your cardiovascular system working your strength endurance over time.

Remain seated and try and keep the power as smooth as possible regardless of the cadence change. If you live in an area without a ten minute climb, try to complete on a draggy section of road or into a head wind.

WEEK 3: THRESHOLD

SESSION 1 PUSHING THRESHOLD

1h09m	Zone	Cadence	Notes
15 min	1-3	Self selected	Warm up 5 min each zone
2x sets of			
12 min	4-5	Self selected	Threshold
10 min	1	Self selected	Recovery
10 min	1	Self selected	Warm down

Today's session is designed to increase your FTP, by working at sustainable powers from below. Starting with 2 x 12 minute efforts this week, at Zone 4-5.

Start with a good warm up: 10 minutes Zone 1, followed by 5min Zone 2, then 5 min Zone 3 and finish with 5 min easy before the first effort. There is 10 min recovery between efforts.

This should be a manageable session, but tough mentally as much as physically. Ensure you have enough bottles for rehydrating and a good air supply, ideally you will complete this session straight through without needing to get off the bike.

SESSION 2 TEMPO/THRESHOLD

2h30m	Zone	Cadence	Notes
45 min	1-2	Self selected	Road warm up
3x sets of			
15 min	4-5	Self selected	Threshold
10 min	1-2	Self selected	Active recovery
30 min	1-2	Self selected	Road warm down

Head out for a steady road ride today, aiming for Zone 1-2 and pushing Zone 3 on the climbs (try and remain seated where possible).

Within the ride, include 3 x 15 minute threshold pushing efforts; this can be done on a drag, climb or within a group ride. Try and hold a steady, consistent power, keeping a smooth style on the bike without going too far into the red – the efforts should be completed at just below your threshold.

Finish with Zone 1 – 2 back to home for the remainder of the time required.

OPTIONAL CAPACITY EFFORTS

1h23m	Zone	Cadence	Notes
15 min	1-3	Self selected	Warm up 5 min each zone
5 min	1	Self selected	Easy
15 min	3	Self selected	Endurance
5 min	1	Self selected	Easy
5 min	5-3	Self selected	1 min Z5 4m Z3
3 min	1	Self selected	Recovery
5 min	5-3	Self selected	2 min Z5 3m Z3
3 min	1	Self selected	
5 min	5-3	Self selected	3 min Z5 2m Z3
3 min	1	Self selected	
5 min	5-3	Self selected	4 min Z5 1m Z3
10 min	1	Self selected	Warm down

This session is best done on the trainer, but you can do it on the road if you wish.

The session starts with a Zone 3 block for 15 minutes. Followed by 5 minutes easy. The main intervals are 4 x 5 minutes with 3 minutes recovery between efforts. Each 5 minutes starts at threshold, then drops to high Zone 3 effort, with the threshold efforts getting longer each time.

If you have a power meter then keep an eye on cadence and power; if not, ride this to feel rather than HR.

WEEK 4: MORE THRESHOLD

SESSION 1 HILL REPS

2h50m	Zone	Cadence	Notes
40 min	1-2	Self selected	Warm up
4x sets of			
5 min	3-4	50-60	Seated hill rep
5 min	3-4	90-95	Seated hill rep high cadence
10 min	1-2	Self selected	Recovery
60 min	1-2	Self selected	Warm down

Similar to previous Hill Reps. Halfway through the effort, reduce the gear and increase the cadence to 90rpm whilst maintaining the same power.

Find a climb of your choice, roughly 10 minutes in duration. Remain seated whilst climbing. The idea for today is to not raise your heart rate too high, but to concentrate on pressing down hard from the tops of your thighs, keeping a strict style working the core. Keep the burning sensations going throughout the efforts. Strengthening your ankles, knees and hips. The change in cadence will shunt your cardiovascular system working your strength endurance over time. 4 x 10 minute reps.

SESSION 2 TEMPO/THRESHOLD

1h14m	Zone	Cadence	Notes
15 min	1-3	Self selected	Warm up 5 min each zone
5 min	1	Self selected	Easy
2x sets of			
12 min	4-5	Self selected	2 mins steady-hard 30s hard
10 min	1	Self selected	Recovery
10 min	1	Self selected	Warm down

This session is designed to 'push' and 'pull' your threshold by working below it and then above it. The pushing element should feel manageable. The first few 30 seconds of pulling in each effort will feel comfortable, by the end of each interval you should be struggling!

Start with a good warm up: 15 minutes progressing from Zone 1 into Zone 3, followed by 5 minutes easy spinning. The main session is 2 x 12 minutes, to be ridden as described below:

Settle into a threshold pushing effort (Just below threshold: the same power from Week 3 Session 1), but after every 2 minutes ramp it up it for 30 seconds to a threshold pulling effort (Just above threshold in Zone 5). Then back into pushing again. So, 2 mins steady-hard, then 30 seconds hard. Take 10 minutes easy spinning between the two sets. Maintain good form on the bike with the power changes, try and maintain a steady cadence regardless of the power changes.

WEEK 5: FINAL LEG STRENGTH

SESSION 1 LOW CADENCE STEPS

1h28m	Zone	Cadence	Notes
10 min	1-2	Self selected	Warm up
8 min	3	50-70	Low cadence step
4 min	1	90	Recovery
10 min	3	50-70	Low cadence step
4 min	1	90	Recovery
12 min	3	50-70	Low cadence step
4 min	1	90	Recovery
10 min	3	50-70	Low cadence step
4 min	1	90	Recovery
8 min	3	50-70	Low cadence step
4 min	1	90	Recovery
10 min	1	Self selected	Warm down

This session is designed to work on your ability to generate power through torque – low cadence, high power efforts are something that every rider will benefit from.

Warm up for 10 minutes in Zone 1, progressing into mid Zone 2. Then it's Zone 3 blocks at 8/10/12/10/8 minutes with 4 minutes easy spinning in between efforts. Keep a low cadence for the efforts, whilst focusing on smooth delivery of power.

Keep your upper body as solid as possible, engaging your core and bracing with your wrists and arms, letting your legs and butt do the work! Finish with 10 minutes easy Zone 1.

SESSION 2 ROAD SESSION

2h32m	Zone	Cadence	Notes
20 min	1-2	90-95	Warm up
6x sets of			
10s	6+	Self selected	Max effort sprint
50s	1	Self selected	Recovery
10 min	1	90-95	Recovery
6x sets of			
20s	6+	Self selected	Max effort sprint
40s	1	Self selected	Recovery
60 min	1-2	90-95	Spin
5x sets of			
4 min	3	50-70	Low cadence
4 min	1	90-95	Recovery
10 min	1	90-95	Warm down

Try and pick a hilly(ish) route where possible, riding the climbs seated. The first set of sprints are 6 x 10s max effort sprints with 50s recovery. Have 10 minutes' recovery, then the second set of sprints: 6 x 20s max effort sprints with 40s recovery. scout your route before completing the sprint efforts to make sure there are no lights or dangerous junctions. Spin for 1 hour in Zone 1 and 2 on your chosen route. Then begin 5 x 4-minute Zone 3 efforts at a low cadence (50-70rpm), ideally on a hill or drag. 4 minutes' recovery.

SESSION 1 SPLIT ZONE 2/3

1h20m	Zone	Cadence	Notes
15 min	1-2	Self selected	Warm up
30 min	2	95-100	High cadence
5 min	1	Self selected	Recovery
10 min	3	70	Strength endurance
10 min	3	90-95	Strength endurance
10 min	1	Self selected	Warm down

This session is designed to get you used to delivering power at a range of cadences. The low cadence efforts put the onus on your leg strength (through the high torque effort), the higher cadence efforts work your cardiopulmonary (heart & lungs) system. By training the extremities of the cadence ranges, you will be better adapted at riding to your self-selected range.

Begin the session with a thorough warm up of 15 minutes. Proceed onto the Zone 2 block at high cadence (95-100 rpm), followed by recovery. Then perform the Zone 3 strength endurance effort consisting of 10 minutes at 70 rpm, followed by 10 minutes at 90-95 rpm. Do this by lowering the gear but maintaining the power.

Try and maintain the power as smoothly as possible on the Zone 3 block, especially when it comes to the cadence changes. This is a split session and each element is of equal importance: don't neglect the Zone 2 part.

WEEK 6: FINAL PREP

SESSION 1 LOW CADENCE STEPS

1h20m	Zone	Cadence	Notes
10 min	1-2	Self selected	Warm up
3x sets of			
10 min	3	65-75	Low cadence step
10 min	1	Self selected	Recovery
10 min	1	Self selected	Warm down

This session is designed to build on your leg strength – like a gym workout but on the bike. High torque efforts at sustainable powers will increase your ability to generate force in races when at your self-selected cadence.

After a 10 minute warm up in Zone 1-2, begin with the first effort. 10 minutes at Zone 3 with a low cadence. Have 5 minutes recovery and repeat twice more; 3 x 15min efforts.

Remain seated throughout the effort. Don't go all-out, this isn't meant to be as tough as some other sessions that you have been doing. It should be comfortably hard, but hardly comfortable!

SESSION 2 ROAD SESSION

1h23m	Zone	Cadence	Notes
30 min	1-2	90-95	Warm up
2x sets of			
5 min	high 3	Self selected	High zone 3 effort
5 min	1	Self selected	Recovery
3x sets of			
10s	6+	Self selected	90% effort
50s	1	Self selected	Recovery
30 min	1-2	90-95	Spin

This session is best done the day before your (optional) threshold test, or your goal event. To get the best out of yourself, it is important that you ride the day before. You need to give the body some stimulus without depleting your glycogen stores. The best way to do this is to carry out an easy, Zone 1 ride and include some 'openers'...

Warm up and then include 2 x 5 minutes at the high end of your Zone 3 powers, followed by 3 x 10 second sprint efforts at 90% of your maximal sprint power. The total ride time should be around 90 minutes, but you can shorten or extend as you wish.

OPTIONAL THRESHOLD TEST

1h30m	Zone	Cadence	Notes
35 min	1-3	Self selected	Warm up
5 min	high 3	Self selected	Warm up effort
5 min	1	Self selected	Recovery
20 min	5	Self selected	Main test
25 min	1	Self selected	Warm down

If you completed an FTP test at the start of the six-week block you can test again at the end to track your fitness. If you don't have a power meter you can compare the distance you covered in the 20-minute testing section.

- Carry out a progressive 40 minute warm up moving from Zone 1 to a high Zone 3, 5-minute effort.
- Ride easy for 5 minutes, go to the loo, stretch the legs and then prepare yourself for the 20 minute effort.
- Ride for 20 minutes as hard as you can!
- Finish off with 15-30 minutes as Zone 1.

Ride the effort like a time trial – don't explode into the effort! Try to keep it consistent. We recommend removing your head unit if you have one and just having a stop-clock to see during the effort, sometimes seeing your power/heart rate can psych you out!

If you have a power meter, to find your FTP **take 95% of your average power for the 20-minute testing section.**