



#### **Triathlon Performance Solutions Presents:**

The Twelve-Week Race Plan

Race distance: Olympic

Athlete level: Intermediate level with at least two years of Olympic distance racing experience

Hours Per Week: Seven to eight

This training plan is to be used in conjunction with a Garmin multisport GPS device or devices. The plan is written so that each session is easy to understand and can be uploaded to your device via the Garmin Training Centre software so your device acts as your coach for each session, guiding you through every step.

The plan is intended to be used as a starting point and is meant to be flexible, so move sessions and days around to fit in with your lifestyle when you need to, but try to avoid cramming too many Hard sessions back to back. If you don't have enough time to complete a full session, just go out and do what you can. A 10-minute run is better than no run at all and it reminds the body what you are training for.

This plan assumes the athlete is starting from a good aerobic base of fitness and has at least two years of experience competing in Olympic distance triathlons. If you come from a single sports background, consider replacing one session in that sport with your weakest discipline once every 2-3 weeks.

Aim to be as consistent as possible. Consistency is the key to athletic improvement. Take the long view: you won't develop much in a week but you can progress a lot over 12 weeks.

Good luck and enjoy the journey.







#### **Technical Terms:**

Back: Backstroke swimming technique.

Breathing Pattern: The number of strokes you take between breaths. It's a good idea to have a regular breathing pattern as this will help you to find a rhythm and focus in open water especially.

Build: A repetition or session which increases in intensity and/or pace as you go through it.

Catch: After your hand has entered the water to begin your stroke you have the catch phase, where you need to grab as much water as possible with your palm and forearm so you can then pull your body over the water.

Dead Spot: When cycling you have two dead spots during the pedal stroke - one at the dead top and one at the dead bottom. Pedalling efficiently means you minimise the time spent in each dead spot.

Fartlek: A session where you mix your speed/intensity but never actually stop. Literally: to play with speed.

Free: Freestyle. Also known as Front Crawl swimming style.

OWS: Open Water Swimming, or swimming in the outdoors in a lake, river, the sea etc. Many races in the UK are open water but there are also a lot of pool-based triathlons, especially early and late season. If you're doing an open water race make sure you practise a few times before your event.

Recovery: Time within a session where you are static or moving very slowly to allow the body to recover before the next bout of exercise.

Reps: Repetition: repeated time or distance exercises within a training session.

RPM: Revolutions Per Minute. The number of full revolutions one leg makes in a minute of cycling or the number of contacts with the ground one foot makes in a minute of running. Also described as Cadence.

Tech: Technique session: a session where you are focusing on improvements to technique over speed or intensity.

Turbo: A piece of bike training equipment that locks your bike into a stationary position and applies resistance so you can cycle indoors. Usually a triangular frame.

TT: Time Trial: an effort against the clock where you are aiming to go as far or as fast as possible against a set time or distance target







#### **Intensity Guideline**

#### Easy or Zone 1:

Basic aerobic endurance training, 50-60% of your maximum heart rate. This zone is the basis of all endurance training and is vital to your ability to support training in the upper zones.

#### Steady or Zone 2:

Using the mid to upper levels of the Aerobic system at 60-70% of your maximum heart rate. You should still be able to talk to someone while training at this intensity, and it is at or just below race pace for many athletes.

#### Tempo or Zone 3:

This intensity is used mainly in repetitions and progressive sessions and is 70-80% of your maximum heart rate. This intensity corresponds to race pace/intensity for a well-trained athlete. Conversation in this zone is difficult and generally brief.

#### Hard or Zone 4:

This zone is 80-90% of your maximum heart rate. Training in this zone increases your ability to process oxygen and lactic acid and pushes your maximal aerobic capacities higher but this can only be sustained if you have a good base in the lower intensities.

#### Max or Zone 5:

Close to maximum pace and can only be maintained for short periods of time (1-8 minutes). This intensity corresponds to 90-100% of your maximum heart rate and is used sparingly in training compared to the other zones, but it can have big benefits to production of power/force and maximum oxygen uptake.







**Phase One – Establishing Base Fitness** – This phase is to establish your Base level endurance. This is a key stage that allows you to support the latter, higher intensity phases. This plan assumes that you already have a good level of Base endurance so this phase is relatively short.

Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	Set 1: 40min Z1 Do 5-10 min of light mobility work before commencing your run. Aim to hold a consistent HR and pace so don't go out too hard. You should finish feeling good. 5min stretching to finish.	Set 1: 300m Z1 swim with a little bit of backstroke. Set 2: 2x50m kick Z1 + 10sec. Set 3: 6x200m swim or pull Z2 + 20sec. Set 4: 200m Z1 swim. Don't worry about	Set 3: 55min Z1 Spinning at 90–95 RPM Set 4: 5min Very Easy Can do this on road or	Tech Swim 1.2: Set 1: 300m Z1 swim mix of free and back. Set 2: 5x(25m kick, 50m drill, 75m swim) All Z1+20sec. Set 3: 150m Pull or Swim Z1. Try doing 'catch up' as your drill and alternate your kicking with and without a board	discipline:  Easy Run 40 or Easy Bike 70 or Steady Swim 1.8.  Work on Technique. Don't worry about speed, just get some	Bike to Run brick: Easy Bike 70: Set 1: 5min Z1 @ 90 RPM Set 2: 5min Z1 @ 80 RPM. Set 3: 55min Z1 Set 4: 5min Very Easy Straight off the bike and into: Easy Run 30: Set 1: 30min Z1. Keep RPM up when running off bike. Aim for around 93-95 RPM. Remember to Hydrate during the session.	Moveable Day off: Take the day off to recover from your week. Ideally on this day but it can be moved if it works better to fit into your week. Do some light stretching or get a massage if you can.
	Set 1: 300m Z1 swim with a little bit of backstroke. Set 2: 2x50m kick Z1 + 10sec. Set 3: 6x200m swim or pull Z2 + 20sec. Set 4: 200m Z1 swim Count your strokes on every 3rd 50m of your 200's and aim to swim the same speed as last	Set 1: 60min running in Z1. Keep intensity even throughout the session. This will help to build your base endurance which will support your higher intensity work later on. Keep RPM high throughout and stand tall with good	here but you can move this day off to another day in the week if it fits your schedule better.	with a little bit of backstroke. Set 2: 4x50m + 15sec building each 50m Z1-Z2-Z3-Z4. Set 3: 50m Z1 Recovery.	Before the run do 10– 15min of core strength exercises. Build your pace throughout the session and maintain your form. Finish with 10min of stretching	Long Bike 150: Repeat the following 2x: Set 1: 55min Z1 Set 2: 20min Z2 Ride on undulating terrain. Don't worry too much if your HR goes into Z2 or even Z3 for short periods during the 45min Z1 over hills. Stay in seat over any hills and pedal smoothly. Easy Run 20: Set1: 20min Z1 Run off the bike. Aim for 30-50 grams of carb per hour.	Set 3: 8min Z2 @ 75 RPM Set 4: 2min Z1 @ 85 RPM Finish with: Set 5: 5min L1 Easy spinning. Do this session on the Turbo or a set of







**Phase Two – Progressing Specific Endurance** – This phase builds on your Base phase and introduces more race – specific sessions where you are working at or above race intensity.

Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Three	Tempo Swim 2.2: Set 1: 200m Z1 swim Free and Back Set 2: 2x50m Z1 Drill + 10sec Set 3: 4x50m + 15sec building each 50m Z1- Z2-Z3-Z4. Set 4: 5x300m Z3 swim + 30sec Set 5: 200m Z1 swim Free and Back Aim for your target race speed on the	Tech Run 36: Set 1: 10min Z1 Repeat the following 6x: Set 2: 2min Z3 Set 3: 1min Z1 Finish with: Set 4: 8min Z1 Work on your technique during the pace variation. Maintain a high RPM, stand tall and pick your knees up whether you are	Test Bike 60: Set 1: 5min Z1 @ 85 RPM Set 2: 5min Z2 @ 90 RPM Set 3: 5min Z3 @ 95 RPM Set 4: 5min Z1 Set 5: 16km TT best effort. Record Time and HR Set 5: 10min Z1	Tech Swim 1.2: Set 1: 300m Z1 swim mix of free and back. Set 2: 5x(25m kick, 50m drill, 75m swim) All Z1+20sec. Set 3: 150m Pull or Swim Z1. Work on your recovery and catch at front of stroke.	Moveable Day off: Take the day off to recover. Ideally on this day but it can be moved if it works better to fit into your week. Do some light stretching or get a massage if you can.	Build Run 50: Set 1: 20min Z1 Set 2: 15min Z2 Set 3: 10min Z3, Set 4: 5min Z1 Aiming to maintain the same pace as the build run the week before but for slightly longer. Finish with 10min of stretching	Long Bike 150: Repeat the following 2x: Set 1: 55min Z1 Set 2: 20min Z2 Long Easy to Steady ride on flat to undulating terrain.







Set 1: 200m Z1 Free and Back Mix Set 2: 5x200m Z1 Pull + 20sec working on an early catch Set 3: 200m Z1 mix of free and Kick Use this session to loosen the legs from the past couple of days. Relax in the water and work on your technique	Set 1: 5min Z1 @ 85 RPM Set 2: 5min Z2 @ 90 RPM Set 3: 5min Z3 @ 95 RPM Set 4: 5min Z1 Repeat the following 5x: Set 5: 5min L4 @ 95	Easy Run 40 or Easy Bike 70 or Steady Swim 1.8. Work on Technique. Don't worry about	Test Run 40: Set 1: 5min Z1 Set 2: 3min Z2 Set 3: 2min Z3 Set 4: 5min Z1 Set 5: 3km TT Best effort. Record Time and HR Set 5: 10min Z1 Run on a flat surface.Try to use the same location for subsequent tests. Don't go out too hard, aim to build through the effort	Set 1: 3x100m Z1 + 10sec. Mix of kick, pull and swim Set 2: 15x100m Z2 + 10sec. Do the first 5 pull and the last 10 swim Set 3: 300m Z1 mix free and back Work on your stroke during the pull and then maintain form when you introduce your kick.	Bike to Run Brick Tempo Bike 70: Set 1: 5min Z1 @ 85 RPM Set 2: 5min Z2 @ 90 RPM Set 3: 5min Z3 @ 95 RPM Set 4: 5min Z1 Set 5: 40min Z3 @ 95 RPM Set 6: 10min Z1 Run off bike Tempo Run 30: Set 1: 20min Z1 Work on form during your run.	Moveable Day off: Ideally take the day off here but you can move this day off to another day in the week if it fits your schedule better but try not to do back to back hard sessions if you can avoid it. Work on your nutrition, especially your recovery after a hard or long session where you need to take in both carbs and protein within 30min of finishing.
Set 1: 200m Z1 swim Free and Back Set 2: 2x50m Z1 Drill + 10sec Set 3: 4x50m + 15sec building each 50m Z1- Z2-Z3-Z4. Set 4: 6x300m Z3 swim	After 5-10 min of light mobility work run in Z1 Heart Rate for 40 min. Aim to hold a consistent HR and pace so don't go out too hard. You should finish feeling good. 5 min stretching to finish.	Set 1: 3x100m Z1 + 10sec. Mix of kick, pull and swim Set 2: 6x300m Z2 + 30sec. Do the first 2 pull and the last 2 swim Set 3: 300m Z1 mix free and back Aim to hold the same speeds relative to the Steady Swim2.1 session last week where you	How comfortable are you on the bike? Many people spend thousands on buying a bike but then never get it fitted properly. For £100-£200 it's a worthwhile investment. Not only will it help you to be more comfortable and efficient on the bike, it will also help	Set 1: 5min Z1 Set 2: 5min Z2 Set 3: 5min Z3 Set 4: 2min Recovery Repeat the following 3x: Set 5: 6min Z4 Set 6: 2min Recovery Then finish with:	Hilly Bike 150: Repeat the following 3x: Set 1: 30min Z1 @ 90 RPM Set 2: 20min Z2 @ 75 RPM Long Ride over hilly terrain. Pedal smoothly over hills. Remember to hydrate and fuel during the ride.	breathing bilaterally if







Six	Massage or light stretching session – focus on the big muscles: Glutes, Quads, and Hamstrings.	mix of free and back. Set 2: 5x(25m kick, 50m drill, 75m swim) All Z1+20sec. Set 3: 150m Pull or Swim Z1. See if you can get a swim coach to have a look at your stroke and	mobility work before commencing your run. Keep working on your technique, even when running slowly. Don't get sloppy. Pick up knees, stand tall and	Day Off: Enjoy a bit of a sleep in and do some light stretching or Yoga in the evening	Option Session: Work on your weakest discipline: Easy Run 40 or Easy Bike 70 or Steady Swim 1.8. Work on Technique. Don't worry about speed, just get some extra miles in on your weakest sport.	Bike to Run Brick Tempo Bike 80: Set 1: 5min Z1 @ 85 RPM Set 2: 5min Z2 @ 90 RPM Set 3: 5min Z3 @ 95 RPM Set 4: 5min Z1 Set 5: 50min Z3 @ 95 RPM Set 6: 10min Z1 Run off bike Tempo Run 30: Set 1: 20min Z1 Work on form during your run.	Long Run 80: Set 1: 80min running in Z1. Keep intensity even throughout the session. This will help to build your base endurance which will support your higher intensity work later on. Keep RPM high throughout and stand tall with good technique. 5–10min of light stretching to finish.  Congratulations! You're half way through your
						, can rain	preparation. Aim to continue being consistent with your training.
Seven	Set 1: 200m Z1 Free and Back Mix Set 2: 10x200m Z1 Pull + 20sec working on an early catch Set 3: 200m Z1 mix of free and Kick Use this session to loosen the legs from the past couple of days. Relax in the water and work on your technique	Set 4: 2min Recovery Repeat the following 6x: Set 5: 2min Z3 Set 6: 1min Z1 Set 7: 1min Z4 Set 8: 1min Z1	RPM Set 2: 5min Z1 @ 80 RPM. Set 3: 55min Z1 Spinning at 90–95 RPM. Set 4: 5min Very Easy Can do this on road or turbo. Focus on	Tempo Swim 2.5: Set 1: 200m Z1 swim Free and Back Set 2: 2x50m Z1 Drill + 10sec Set 3: 4x50m + 15sec building each 50m Z1- Z2-Z3-Z4. Set 4: 6x300m Z3 swim + 30sec Set 5: 200m Z1 swim Free and Back Aim for your target race speed on the 300's.	RPM Set 2: 20min Z2 @ 75 RPM Stay in the seat over	your technique. Take a couple of gels with you	recover from your week. Ideally on this day but it can be moved if it works







Eight	Steady swim 2.5:	Steady Bike 70:	Build Run 50:	Moveable Day off:	Tempo Bike 90:	Steady OW 45:	Steady Run 70:
	Set 1: 200m Z1 swim	Set 1: 5min Z1 95 RPM	Set 1: 20min Z1	Ideally take the day off	Set 1: 5min Z1 @ 85	Set 1: 5min Z1	Set 1: 70min running in
	with a little bit of	Repeat the following	Set 2: 15min Z2	here but you can move	RPM	Set 2: 1800m Z2	Z2. Slight increase in
	backstroke.	4x:	Set 3: 10min Z3,	this day off to another	Set 2: 5min Z2 @ 90	Finish with:	intensity, getting used
	Set 2: 2x50m kick Z1 +	Set 2: 3min Z1 single	Set 4: 5min Z1	day in the week if it fits	RPM	Set 4: 10min Z1 kicking	to pushing at a higher
	10sec.	leg @ 90 RPM swapping	Use the same course as	your schedule better.	Set 3: 5min Z3 @ 95	and swimming.	intensity for longer.
	Set 3: 2x1000m swim	legs every 30sec	you did in week 3 and	Have you thought	RPM	Use the goggles and	Keep RPM high
	Z2 + 50sec.	Set 3: 10min Z2 @ 75	compare. You should	about what equipment	Set 4: 5min Z1	wetsuit that you intend	throughout and stand
	Set 4: 200m Z1 swim.	RPM		you are going to use in	Repeat the following	to race in. Practice	tall with good
	Slightly longer reps to	Set 4: 2min Z1 @ 85	distance run for the	your race? Now is a	5x:	taking your wetsuit off	technique. 5-10min of
	improve endurance.	RPM	same effort.	good time to start	Set 5: 10min L3 @ 95	quickly at the end of	light stretching to
	Keep counting strokes			getting organised so	RPM	the session (make sure	finish.
	every 3rd 50m to check	Set 5: 5min L1 Easy			Set 6: 2min L1 @ 85	you've got something	
	you are holding your	spinning.		it in training.	RPM	on underneath)	
	form together	Do this session on the			Then finish with:		
		Turbo or a set of			Set 7: 10min Z1 @		
		rollers.			90RPM		
Nine	Moveable Day off:	Easy Run 40:	Test Swim 1.3:	Easy Bike 60:	Build Swim 2.4:	Option Session:	Test Bike 60:
	This week is a recovery			Set 1: 5min Z1 @ 90		Work on your weakest	Set 1: 5min Z1 @ 85
	and testing week so	Do 5-10 min of light		RPM	10sec. Mix of kick, pull		RPM
	take it easy and enjoy	mobility work before		Set 2: 5min Z1 @ 80		Easy Run 40 or Easy	Set 2: 5min Z2 @ 90
	some easier session.		Set 2: 4x50m + 15sec		Set 2: 800m Z2 swim +		RPM
		If legs are sore you	building each 50m Z1-	Repeat the following	60sec.	Swim 1.8.	Set 3: 5min Z3 @ 95
			_	8x:	Set 3: 600m Z3 swim +		RPM
		as an aqua jog at the	Set 3: 50m Z1	Set 3: 15sec Z5	40sec	Don't worry about	Set 4: 5min Z1
		pool.	Recovery.	Spinning at 100–105	Set 4: 400m Z4		Set 5: 16km TT best
			Set 4: 400m TT aiming		Set 5: 300m Z1 mix		effort. Record Time and
				Set 4: 4min 45sec Z1 @		weakest sport.	HR
			Compare with the test		Hold your technique		Set 5: 10min Z1
			in week 2. Control your		together as you		Use the same location
				Set 4: 10min Z1	increase your speed.		as your test in week 3.
			Set 5: 4x25m kick Z2 +				
			10sec, 150m Z1 swim.	wake your legs up.	your arm during the		
					recovery phase.		







**Phase Three** – **Race Specific** – Now you have done the bulk of the hard work and the sessions now become shorter but often with higher intensity. This is the time to practice pushing yourself hard like you will in you race and understand how to pace yourself properly.

Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Ten	Tech Swim 1.2:	Easy Bike 60:	Test Run 40:	Day Off:	Tempo Swim 2.2:	<b>Race Simulation Brick</b>	Option Session:
	Set 1: 300m Z1 swim	Set 1: 5min Z1 @ 90	Set 1: 5min Z1	Enjoy a bit of a sleep	Set 1: 200m Z1 swim	Tempo Bike 70:	If you are still feeling
	mix of free and back.	RPM	Set 2: 3min Z2	in and do some light	Free and Back	Set 1: 5min Z1 @ 85	tired take another day
	Set 2: 5x(25m kick,	Set 2: 5min Z1 @ 80	Set 3: 2min Z3	stretching or Yoga in	Set 2: 2x50m Z1 Drill +	-RPM	off here, otherwise
	50m drill, 75m swim)	RPM.	Set 4: 5min Z1	the evening. Book your	10sec	Set 2: 5min Z2 @ 90	work on your weakest
	All Z1+20sec.	Repeat the following	Set 5: 3km TT Best	bike in to be serviced	Set 3: 4x50m + 15sec		discipline:
	Set 3: 150m Pull or	8x:	effort. Record Time		building each 50m Z1-	Set 3: 5min Z3 @ 95	Easy Run 40 or Easy
			and HR	minute rush before you	Z2-Z3-Z4.	RPM	Bike 70 or Steady
	Work on your recovery	Spinning at 100–105	Set 5: 10min Z1	race.	Set 4: 1500m Z3 swim	Set 4: 5min Z1	Swim 1.8.
	and catch at front of	RPM.	Use the same location		+ 30sec	Set 5: 30km Z3 @ 95	Work on Technique.
	stroke.	Set 4: 4min 45sec Z1 @	as your run test in		Set 5: 200m Z1 swim		Don't worry about
			week 4. Don't go out		Free and Back	Run off bike	speed, just get some
		Finish with:	too hard, pace your		Use the 1500m rep to	Tempo Run 45:	extra miles in on your
		Set 4: 10min Z1	effort. Run in the same		practice your pacing	Set 1: 7km Z3	weakest sport.
		Can do this on road or			for your race. Visualise		
		turbo. The sprints will	and don't wear socks if		yourself swimming in	Use this session to	
		help to wake your legs	you won't race in them		the event.	practice pacing for the	
		up.				race. Use race kit.	







Eleven	Set 1: 5min Z1 Set 2: 4min Z2 Set 3: 3min Z3 Set 4: 2min Recovery Repeat the following 6x: Set 5: 2min Z3 Set 6: 1min Z1 Set 7: 1min Z4 Set 8: 1min Z1 Then finish with:	Set 1: 200m Z1 Free and Back Mix Set 2: 4x400m Z1 Pull + 20sec working on an early catch Set 3: 200m Z1 mix of	discipline: Easy Run 40 or Easy Bike 70 or Steady Swim 1.8. Work on Technique. Don't worry about speed, just get some extra miles in on your	RPM Set 3: 5min Z3 @ 95 RPM Set 4: 5min Z1	Set 1: 200m Z1 swim Free and Back Set 2: 2x50m Z1 Drill + 10sec Set 3: 4x50m + 15sec building each 50m Z1- Z2-Z3-Z4. Set 4: 1500m Z3 swim + 30sec Set 5: 200m Z1 swim Free and Back Use the 1500m rep to practice your pacing for your race. Visualise	Tempo Bike 50: Set 1: 5min Z1 @ 85 RPM Set 2: 5min Z2 @ 90 RPM Set 3: 5min Z3 @ 95 RPM Set 4: 5min Z1 Set 5: 30min Z3 @ 95 RPM Run off bike Tempo Run 30: Repeat the following	Day off: Congratulations - All the hard work is done now. Start to do some visualisation of your race to mentally prepare.
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Twelve	Max Swim 1.2:	Day off:	Hard Bike 30:	Day off:	Pick up Run 20:	Easy Swim .8:	Race!
	Set 1: 200m Z1 swim	Get a massage here,	Set 1: 3min Z1 @ 85	Start organising all	Set 1: 5min Z1	Set 1: 200m Z1 +	Get there with plenty of
	with a little bit of	but only if you have	RPM	your race kit and put it	Repeat the following	20sec	time to spare so you're
	backstroke.	been getting them	Set 2: 3min Z2 @ 90	in one place or in the	5x:	Set 2: 200m Z2 +	not rushed and
	Set 2: 2x50m kick Z1 +	regularly. Otherwise	RPM	bag you will take to the	Set 2: 30sec Z4	20sec	stressed. Use your
	10sec.	some light stretching.	Set 3: 5min Z3 @ 95	race. Take spares of	Set 3: 1.5min Z2	Set 3: 200m Z3 +	Garmin as a guide
	Set 3: 4x50m as 25m	Write out a timeline	RPM	essential kit like	Finish with:	20sec	through the event but
	Z5, 25m Z1 + 30sec	from the evening	Set 4: 3min Z1	goggles, shoe laces,	Set 4: 5min Z1	Set 4: 4x25m Z4 +	race on feel as well as
	Set 4: 100m Z1 swim	before the race up to	Repeat 2x:	inner tubes and a tyre.	Run on a soft surface	20sec	what it is telling you.
	and kick	race start so you are	Set 5: 2min L4 @ 95		in your race shoes if	Set 5: 100m Z1 Free	HR can often be higher
	Set 5: 400m Z3 swim	clear about what you	RPM		you can. Don't force	and Back	than normal due to
	Set 6: 200m Z1 swim.	are doing and where	Set 6: 1min L1 @ 85		the pace during your	Easy bike 20:	adrenaline. Aim to even
		you need to be. Refer	RPM		30sec pick ups. You		or negative split
		to the race website or	Set 7: 30sec L5 @ 100				through each leg, just
		info you have received.	RPM		feel pretty good so let	Use the bike ride to	like you have practiced
			Set 8: 2min L1 @ 85		the speed come	check gears and brakes	in training. Most of all
			RPM		naturally.	are working properly.	enjoy yourself!
			Finish with:			Do both sessions in the	
			Set 7: 5min Z1 @			am and relax in the	
			90RPM			pm.	

