



Advanced Bike Mechanics Course

Participants: Aspiring & Career Mechanics, Recreational Cyclists

Class size: Trainer to student ratio - 1:10

Duration: 24 Hours over 3 Days

Venue: 9005 Tampines Street 92, #01 - 254 Singapore 528839

This Advanced course builds on what was learnt in the Basic and Intermediate courses by going into advanced specialist topics. This course is perfect for career mechanics who wish to get up-to-date, aspiring mechanics seeking formal training and avid home mechanics who would like to learn the ins and outs of their bikes.

Lessons are delivered in a classroom setting through: Modelling (demonstrations), Cooperative and Experiential Learning and Inquiry-Guided Instruction, reinforced with Graphic Organizers and training props.

Students will be assessed through a combination of written and practical tests. Those who pass will be awarded SCF X BSA Advanced Bike Mechanics certification, endorsed by Singapore Cycling Federation and Bike School Asia, while those who complete the course without taking the tests, or are unable to meet the passing criteria will receive a Certificate of Completion.

Part 1: Wheel Components

1.1 Hubs, rims, spokes, hub servicing, spoke length calculations

Part 2: Wheel Building (Basic)

2.1 Building a 3X, symmetrically laced wheel on a Type B rim

Part 3: Hydraulic Brakes

3.1 Bleeding of Shimano Mineral Oil brakes

3.2 Bleeding of SRAM DOT brakes

Part 4: Suspension (Basic)

4.1 Setting SAG, progression and rebound damping

4.2 50 hour and 300 hour service of fork

4.3 50 hour service of shock

Part 5: Introduction to Bike Fitting

5.1 Overview of Bike Fitting using Shimano Pedaling Dynamics system

Part 6: Practical Assessment

6.1 Students will overhaul a road bike to the examiner's satisfaction