



Jr Tech 0-60 Hour Program

Bow Cycle & Sports 2019

Volunteer program is a 2 year/120 hour program that will help to train and educate individuals on Bicycle maintenance, build and provide valuable life skills training.

The Program will run over 12 weeks throughout the spring/summer, with 5 hour shifts once a week.

If you are unable to attend one of the classes you must contact the instructor and confirm. Program minimum age is 14 years.

0-60 Program outline

Day 1 (5 hours)

- *Orientation*
 - *Walk through*
 - *Parts of a bicycle*
 - *Frame parts (Down tube, Top tube, Seat tube, Chainstay, Seatstay)*
 - *Derailleur's*
 - *Brakes*
 - *Accessories*
- *Fasteners training*
 - *Loctite*
 - *Bolt types*
 - *Turning bolts the correct direction*
 - *Reverse thread*
- *Safety*
 - *Personal Protective Equipment (PPE)*
 - *Workplace WHMIS*
- *Torque*
 - *What is torque*
 - *How do we measure torque*
- *Shop Clean at end of everyday*

Day 2 (10 hours)

- *Introduction to wheel truing*
 - *Parts of a wheel*
 - *Types of true (Round, Lateral, Dish)*
 - *Spoke Tension*
- *Practice*
- *Shop Clean at end of everyday*

Day 3 (15 hours)

- *Brakes*
 - *Types of brakes*
 - *(V-Brake, Canti, Hydro Disc, Mechanical Disc)*
 - *Maintenance on different brakes*
 - *Set up for V-Brake/Canti*
 - *Pad alignment*
 - *Cable tension*
 - *Set up for Mechanical Disc Brakes*
 - *Caliper alignment*
 - *Types of pads*
 - *Cable tension*
 - *Set up for Hydraulic Disc Brakes*
 - *Caliper alignment*
 - *Types of pads*
 - *Types of brake fluid*
 - *Bleed procedure*
- *Brake practice*
- *Shop Clean at end of everyday*

Day 4 (20 hours)

- *Gear intro*
- *Chains*
 - *Speeds, why it matters*
 - *Chain pin replacement*
 - *Quick link installation*
 - *Measuring chains*
- *Shifters*
 - *Cable replacement*
 - *Shifter lubrication*
 - *Barrel adjusters*
- *Derailleur's*
 - *Derailleur parts intro*
 - *Speeds matching derailleur to shifter*
 - *Hanger alignment*
 - *Limit screws what they do/how to set up*
 - *B tension screw what it does/how to set up*
 - *Cable tension*
 - *Barrel adjusters*
- *Practice Derailleur's*
- *Shop Clean at end of everyday*

Day 5 (25 hours)

- *Basic un-boxing*
 - *Pulling bikes*
 - *Removal of packaging*
 - *Using label maker to write serial number*
 - *Where tags go on cables*
 - *Installation of bars*
 - *Control angles/set up*
- *Day of un- boxing bikes*
- *Shop Clean at end of everyday*



Day 6 (30 hours)

- *Basic bike knowledge*
 - *Headsets*
 - *Tightening*
 - *Installation*
 - *Bottom brackets*
 - *Installation*
 - *Cranks*
 - *Installation and removal*
- *Accessory/part installation*
 - *Saddles*
 - *Reflectors*
 - *Fenders*
 - *Kickstands*
- *Shop Clean at end of everyday*

Day 7 (35 hours)

- *Basic bike build*
 - *Code 4 or 5 bike*
 - *Basic build set up*
- *Wheel true*
 - *Checking knowledge from wheel truing class*
 - *Installation of wheels into bike*
- *Brake set up*
 - *Checking knowledge from brake set up class*
 - *Installation of brakes onto bike*
 - *Setting up pull and alignment of brakes*
- *Gear set up*
 - *Checking knowledge from gear set up class*
 - *Alignment of hanger*
 - *Installation of derailleur's*
 - *Set up of derailleur's*
- *Check through of bike*
 - *Going over bike and ensure everything appears to be in working order*
 - *Torquing all bolts on bike to the appropriate torque spec with a calibrated torque wrench*
 - *Ground check of control operations and angles, including saddle*
- *Final check over by instructor*
- *Repeat if there is time for another bike*
- *Shop Clean at end of everyday*

Day 7- 12 (40-60 hours)

- *Bike building*
 - *Repeat of day 6*
- *Shop Clean at end of everyday*

End of Course

At the end of Bow Cycle's Jr Tech program, we will be awarding those who successfully complete the course with a professional reference letter. Students who excel may be invited back to complete the second 60 hour program. After 120 hours of Jr Tech, applicants may be considered for employment within Bow Cycle & Sports.