



CANADIAN TAEKWON-DO FEDERATION INTERNATIONAL

CTFI Black Belt Competition Seeded Draw Tree System

This document describes how competitors are placed in competition draw trees at CTFI sanctioned competitions (i.e. Easterns/Westerns/CanAms/Nationals).

This system only applies to Black Belts who age qualify for the Senior (age 18+) and Junior (age 14-17) categories under the rules of the International Taekwon-Do Federation.

All Junior and Senior Black Belt division draws at the CTFI Sanctioned competitions are generated using the rules of the seeded draw system. These rules are quite straightforward and are very similar to the rules used in other major sporting events such as the NCAA basketball tournaments and professional tennis competition.

Why use this system?

The goal of the CTFI using this system is to select the most skilled competitors for eventual participation in the Canadian National Team going to the ITF World Championships.

Using this system ensures that the most skilled competitors do not meet in the early stages of the competition. Under random draw or other systems, it is possible for the top 2 competitors to meet in the first round of competition, resulting in one of them being knocked out of the draw. This means the final results can see weaker competitors finishing in the top 4 and stronger ones not placing at all.

How Seeding Points are determined:

The CTFI seeding system uses an actual point structure. Seeding points are earned by competitors participating in CTFI competitions. Points are earned over the previous two year period and only applicable to the actual division being competed in.

If a competitor changes divisions (eg. moves from 1st Dan to 2nd Dan patterns) then their seeding points reset to zero for their new division. If they move from Middle to Heavy weight sparring, the same rule applies.

The current seeding points earned by any individual black belt (by division) over the past two years can be found on the CTFI website (www.ctfi.org) under the heading of tournament standings.



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How Seeding Points are used to populate the draw trees:

When athletes register to compete in an upcoming CTFI event, their current points standings are used to determine their placement in the draw trees for their division.

The order of competitive matching follows the rule of highest seed vs. lowest seed. For example, in a division containing 16 competitors the order of draw will be: #1 vs. #16, #2 vs. #15, and so on until #8 vs. #9.

Once competition begins, standard “single knockout” rules are followed. Match winners advance and losers drop out of the competition. In this situation, if a lower seed "upsets" a higher seed and wins the match, the higher seed drops out and the lower seed advances.

If the draw continues exactly as would be expected, that is all higher seeds advance, then the pairings for the second round would be #1 vs. #8, #2 vs. #7, #3 vs. #6, #4 vs. #5. and so on until the semi-final pairings (#1 vs #4, #2 vs. #3) and ending with (#1 vs. #2) in the finals.

The draws for Junior and Senior Black Belts competing in CTFI events are programmed with these rules and the competitors are simply placed into the trees in their seeded order to produce the final draw.

By following the rules of seeding, all possibility of bias or favouritism in the creation of the draws is eliminated and unlike "random draws" where the results are completely unverifiable, seeded draws will always produce the same final tree no matter how many times they are done.

Coloured Belt, Pre-Junior and Super Senior Draw seeding

For seeding draw trees in Coloured Belt, Pre-Junior and Super Senior competition, CTFI normally follows the rules of “delayed confrontation”. This is because it is normal and desirable to have students from the same school not meeting in early rounds in the draw. Normally we consider these items in order: same family / same club. So in the first round of competition, we would not match 2 brothers together nor 2 people from the same club together if it can be avoided. No consideration is given for the relative skill level of the individuals.

You might be surprised by what you see

Following precisely the rules of seeding can and does produce pairings that some may find unusual, particularly those used to using other rules of draw creation like “delayed confrontation”. Seeded draws give no consideration to degree of affiliation among competitors. They only consider demonstrated skill levels.



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For example, if two students from the same school, even siblings for that matter, were entered in the same black belt division with one seeded #1 and the other seeded #16, the programming would have them meeting in the first round. Although this is clearly not a pleasant outcome, its occurrence is fairly rare and allowing subjective interference in the completely objective process that is at play would open the entire structure to valid criticisms of tampering and bias.

How “Byes” are programmed

To work out properly, single knockout elimination trees must contain the exactly 2, 4, 8, 16 or 32 competitors (powers of 2 or 2^n).

As we cannot control the number of entrants in a division, we often face an uneven draw where the number of competitors does not work out exactly. To manage this, some competitors must have a “bye” to create a tree where we end up with the required draw numbers.

A “bye” means that the competitor faces an imaginary opponent in the first flight of matches. The imaginary bye opponent (1 or more) is inserted to make the competitor number in the division equal to 2, 4, 8, 16, 32, etc. Of course the competitor wins the “match” and is moved up automatically to the next flight in the tree.

The allocation of byes, if left to random chance, would make the seeded trees unworkable, so byes are always awarded in order of seeded position.

For example, if there is one bye position available to make up the even number required (competitor count = 3, 7, 15, 31) then only the top seed earns a bye. If two byes are required (competitor count = 6, 14, 30) then the top two seeds are given a bye, and so on until the draw is completed.

What is done in the case of a seeding point tie?

Competitors in a tied seeding point position (say 0) will have as their tiebreak formula those points won in the similar division they moved up from (eg. moving from Middle Weight sparring to Heavy Weight).

For example, a competitor has 10,000 in 1st dan pattern points. They were promoted to 2nd dan and have 0 points in that division. In that case, he/she would fall below any competitor in 2nd dan patterns who had earned even 100 points in that division. However, they will be above any other competitor who currently has 0 points in that division, but less than 10,000 points in another patterns division.



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If this does not result in a tiebreak decision then those competitors still tied and based on their overall position will be placed into the draw using the rules of delayed confrontation as described above.

Conclusion

This document was written to help everyone understand how Black Belt tournament draws are created. If you have any further questions, comments or suggestions the CTFI tournament committee would be pleased to hear from you.

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