

VEX Robotics Competition Starstruck – Appendix C

Appendix C – The Programming Skills Challenge



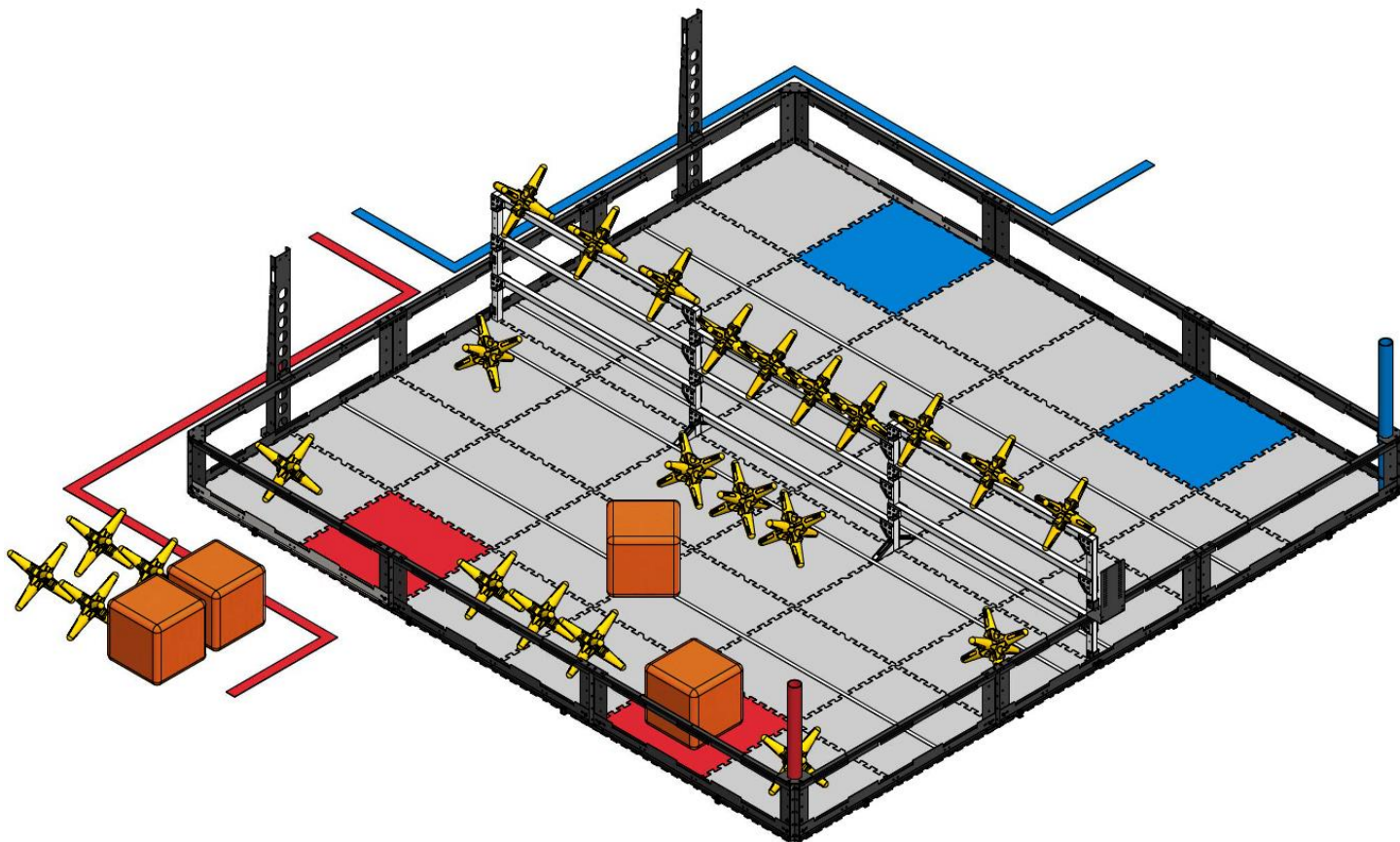
Overview

This section describes the Programming Skills Challenge of VEX Robotics Competition Starstruck.

Please note that the Programming Skills Challenge may not be offered at all tournaments. Please check with your local event organizer, or www.robotevents.com for more information.

Programming Skills Challenge Description

In this challenge teams will compete in sixty (60) second long matches in an effort to score as many points as possible. These matches will be autonomous, with limited human interaction. The playing field will be set up similarly to that of a normal VEX Robotics Competition Starstruck tournament match, with the difference being that all Scoring Objects start on the same side of the field.



Note: The Robot Skills Challenge and the Programming Skills Challenge use the same field setup!



VEX Robotics Competition Starstruck – Appendix C

Programming Skills Challenge Definitions

Please note that all definitions from “The Game” section of the manual apply to the Programming Skills Challenge, unless otherwise specified.

Programming Skills Match – A *Programming Skills Match* consists of a sixty (60) second *Autonomous Period*. There is no *Driver Controlled Period*. Teams can elect to end their run early, however this will count as an official run.

Programming Skills Loads – The three (3) Stars and two (2) Cubes that *Student Drive Team Members* may load onto the *Alliance Station Alliance Starting Tile* or into their *Robot* at any point during a *Robot Skills Match*.

Programming Skills Preload – The one (1) Star each team may place on the field such they are touching its *Robot*, not touching any grey foam tiles, and fully within the field perimeter prior to each *Robot Skills Match*.

Programming Skills Challenge Rules

Please note that all rules from “The Game” section of the manual apply to the Programming Skills Challenge, unless otherwise specified.

<**PSC1**> At the beginning of each *Programming Skills Match*, the *Robot* must be placed such that it is touching the *Alliance Station Alliance Starting Tile*, not touching any *Scoring Objects* other than those permitted by <**RSC2**>, and not touching any other foam field tiles.

<**PSC2**> Prior to the start of each *Programming Skills Match*, each *Robot* must use its one (1) Star available as a *Programming Skills Preload*. A Star is considered to be legally preloaded if it is touching the *Robot*, not touching any other grey foam tiles, and is fully within the field perimeter.

<**PSC3**> *Programming Skills Loads* may be loaded at any point during a *Programming Skills Match*.

Programming Skills Challenge Scoring

All scoring is the same as in a regular *VEX Robotics Competition Starstruck* match.

- A Star Scored in the opposing *Near Zone* is worth one (1) point.
- A Star Scored in the opposing *Far Zone* is worth two (2) points.
- A Cube Scored in the opposing *Near Zone* is worth two (2) points.
- A Cube Scored in the opposing *Far Zone* is worth four (4) points.
- A Robot that is *Low Hanging* is worth four (4) points.
- A Robot that is *High Hanging* is worth twelve (12) points.

VEX Robotics Competition Starstruck – Appendix C

Programming Skills Challenge Format

- The Programming Skills Challenge is an optional event. Teams who do not compete will not be penalized in either the main tournament, or the Robot Skills Challenge.
- Teams will play *Programming Skills Matches* on a “first come, first serve” basis, or by a method determined by the event.
- Teams will be guaranteed a minimum number of *Programming Skills Matches*, to be determined by the event organizers.
- Teams may also be limited to a maximum number of *Programming Skills Matches*, to be determined by the event organizers.

Programming Skills Challenge Rankings

- For each *Programming Skills Match* teams are awarded a score based on the above scoring rules.
- Full details on Skills Challenge Rankings will be provided in the August 17th manual update.

Programming Skills Challenge Heads-Up Match

The following method may be used to determine the Programming Skills Challenge Winner at certain events.

- The top two teams from the *Programming Skills Challenge Rankings* will advance to a final heads-up match.
- Each team will perform one (1) *Programming Skills Match*, with the 2nd place team performing first or with both teams performing simultaneously on separate fields.
- This *Programming Skills Match* will be a final opportunity for both teams to beat the high score posted in earlier rounds, if neither team beats or matches the previous high score, the holder of the previous high score will be declared the Programming Skills Challenge Winner.
- If one or both teams beat the previous high score, the team with the highest score in the “Heads-Up Match” will be declared the Programming Skills Challenge Winner.
- In the case of a tie for highest overall score, the tie will be broken by looking at the second highest score for both teams. (This process of looking at the next highest score will continue until the tie is broken, or all matches have been exhausted)
- If the tie cannot be broken, two winners may be declared, or a new match may be played.