ROADMAP OF THE LEARNING PATHWAY AT STORMING ROBOTS

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ROBOTICS ENGINEERING TRACK

LEVELS

Robotics Projects level B

- About 1 term to complete

Robotics Projects level I

- Require satisfactory completion of Level B
- About 1 term to complete

Robotics Projects level II

- Require satisfactory completion of Level I
- About 1-2 term to complete

Robotics Projects level III

- Require satisfactory completion of Level II
- About 1-2 term to complete

Robotics Projects level IV

- Require satisfactory completion of Level III
- About 2-3 term to complete

Robotics Projects level V

- Require satisfactory completion of Level IV
- Ongoing to the entry level of robotics competition

Robotics Projects level VI

- Require satisfactory completion of Level V
- Require proficiency in Algorithms in C/C++ - Level I
- Ongoing to the more advanced levels of robotics competition.
    - Some require proficiency in Algorithms in C/C++ - Level III+

COMPETITIONS OPPORTUNITIES

RoboCupJunior (precollege) Entry Level Competition

Rescue Line Entry Level Prerequisites:

- Proficiency in Level V completion

Rescue Maze Entry Level Prerequisites:

- Proficiency in Level V completion
- Proficiency in Algorithms in C/C++ - Level I

SOFTWARE ENGINEERING TRACK

LEVELS IN ALGORITHMS IN C/C++

Level B

- Require high proficiency in Introduction of Algebra
- About 1-2 term to complete

Level I

- Require satisfactory completion of Level B
- About 2 terms to complete

Level II

- Require satisfactory completion of Level I
- About 2-3 terms to complete

Level III

- Require satisfactory completion of Level II
- About 2-3 terms to complete

Level IV

- Require satisfactory completion of Level III
- About 2-3 terms to complete

COMPETITIONS OPPORTUNITIES

ROBOCUPJUNIOR (PRECOLLEGE) RESCUE SIMULATION COMPETITION

- Format
  - 2 to 4 members per team.
  - Storming Robots selects and registers teams.
  - From Fall to Spring.
  - Attend National competition in May.
  - Offsite venue.
- Prerequisites:
  - Level II+ Completion, prefer on track in Level III
- Levels
  - USA national level
  - Advance to International level

ZEROROBOTICS SATELLITE PROGRAMMING COMPETITION

- Format
  - Storming Robots selects and registers teams.
  - From November to May: 4 contests with one Final Contest in May
  - Team based throughout the 4 contests and individual base at the Final
  - Middle School: Two in-person group and one online group
  - Online Simulation competition
- Prerequisites for Middle School Division:
  - Half-way completion of Level I
  - Maximum 8th grade
- Prerequisites for High School Division:
  - Level I Completion with proficiency
- Limited to 16 seats. (maximum SR may accommodate)
  - Selection based on levels.
- Levels
  - USA national level only for Middle School Division
  - International level only for High School Division (only with USA NASA's partnering countries)

ACSL

- Format
  - Storming Robots selects and registers teams.

  - From November to May: 4 contests with one Final Contest in May
  - Team based throughout the 4 contests and individual base at the Final
  - Online Contests
- Prerequisites for Junior Division:
  - Level I Completion with proficiency
  - Maximum 9th grade
- Prerequisites for Intermediate Division:
  - Level II and ongoing progression
- Prerequisites for Senior Division:
  - Level III+ and ongoing progression
- Open volume of Seats.
- Levels
  - International level
  - NOT against others, but purely individual progression

HPE CodeWar

- Format:
  - 2-3 per team.
  - Storming Robots selects and registers teams.
  - Typical in late Winter
  - In person – one day of approximately 2-3 hours competition
- Prerequisites:
  - Level I Completion with high proficiency
  - Maximum 9th grade
- Very Limited seats (determined by the HPE CodeWar policy).
  - Selection based on levels.
  - Higher level and demonstrates high proficiency
- Levels
  - HPE CodeWar has several sites across the USA, and other countries.
  - Each Contest is confined within each local organization, such as NJ, or Texas, etc.

USACO

- Format:
  - Individual basis.
  - Students register on their own.
  - November to April : one exam per month

- Prerequisites:

    - Level I Completion with high proficiency-
- Levels
    - Participants from many countries.
    - Bronze to Platinum Levels.
    - NOT against others, but purely individual progression