



## POSITION DESCRIPTION

**JOB TITLE:** Teacher of Robotics and Engineering    **DATE:** 2021-2022

**DEPARTMENT:** Science, working in conjunction with Career and Technical Education (CTE) and Science Departments

**REPORTS TO:** Science Department Chair and Dean of Academics

### **JOB SUMMARY:**

St. Johnsbury Academy seeks an energetic, organized, and enthusiastic teacher of robotics and pre-university engineering. Responsibilities include teaching introductory courses in Robotics, leading a competitive FIRST Robotics extracurricular team, and additional course load in the STEM disciplines according to applicant's expertise and school needs. As a teacher of robotics and pre-university engineering, you will be passionate about mentoring high school students via hands-on training, class demonstrations, and lecture in the skills needed to successfully design and implement technology solutions to authentic problems. Well-equipped digital and manual fabrication labs/spaces are available, and the successful candidate will have the opportunity to shape the direction and upkeep of these resources.

### **PRIMARY RESPONSIBILITIES AND DUTIES:**

#### Teaching

- Teach 3 to 4 classes each semester. Class assignments are based on disciplinary expertise, interest, and the needs of the involved departments each semester; all faculty are expected to be able to teach at the Basic, Standard, and Accelerated levels. In addition to Robotics, possible course assignments include engineering design, physics, computer science, digital electronics, civil engineering and architecture, or career and technical education.
- Prepare syllabi and daily lesson plans for above.
- Assess and provide evaluation information back to students in a timely manner according to the school calendar.
- Communicate with case managers for students in the special services program as mandated by IEPs and 504 plans, and as needed for the best outcomes for students in the program.
- Be available daily during the conference period time at the end of the school day and require students to attend who need to make up work or who need extra assistance.
- Maintain communication with parents as needed throughout the school year, including up to four parents' afternoons/nights during the

school year, and for one resident parents' weekend in the fall semester.

- Maintain classroom decorum to Academy standards, including recognizing dress code violations, with the support of department chairs and deans.

#### Other

- Serve as the lead coach for the competitive FIRST Robotics team during the competition season and working with interested students on enrichment activities in robotics outside of the FIRST competition season.
- Serve as an advisor to a group of 10 -12 students during their four-year tenure at the Academy, including morning attendance and weekly advisory periods.
- Participate in the resident life program as assigned. Resident Life duties may include additional compensation or benefits, depending on the position. Specific assignments take into account faculty interest and lifestyle constraints as well as current school needs, and may include a position on regular dorm staff, after-school supervision of academic, athletic, or recreational activities, and serving as chaperones for student trips or events approximately three times per academic year.

- Attend assigned monthly meetings for all faculty, department, advisory class, and ad hoc committees. Time for department, advisory class, and ad hoc committees is generally allocated during the regular school day.
- Perform other duties as assigned.

**REQUIRED SKILLS AND ABILITIES:**

- Excellent organizational, communication, and collaboration skills
- High degree of competence with contemporary educational technologies such as video conferencing, electronic gradebooks, digital whiteboards, and the google education suite
- Flexibility to work occasional evenings and weekends for robotics events
- Demonstrated character and ability to serve as a mentor and role model for young people

**EDUCATION/EXPERIENCE:**

- Bachelor's Degree required; STEM fields preferred
- Vermont Teaching License preferred, or willingness to pursue and obtain licensure after one year.
- Strong familiarity with at least one programming language (Java, JavaScript, Python, C++, or ROBOTC)
- Preferred: familiarity with digital design software such as Autodesk Inventor, Revit, or Fusion 360
- Preferred: experience with VEX robotics

**PHYSICAL REQUIREMENTS:**

*The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodation may be made to enable individuals with disabilities to perform essential functions.*

Must have the ability to sit and stand for extended periods of time; exhibit manual dexterity to use classroom, shop and lab tools, telephone, computer, tablet or other learning device; to see and read a computer screen and printed material with or without vision aids; hear and understand speech at normal classroom or office levels, and on the telephone; speak in audible tones so that others may understand clearly in normal classrooms, and on the telephone; physical agility to lift up to 25 pounds to shoulder height and 50 pounds to waist height; and to bend, stoop, sit on the floor, climb stairs, walk and reach overhead.

**WORKING ENVIRONMENT:**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Duties are normally performed in a school classroom, lab or CTE shop or classroom. The instructor may occasionally work in outside weather conditions and be exposed to wet and/or humid conditions, temperature fluctuations, fumes or airborne particles, chemicals commonly used in instruction and /or cleaning. It may be expected that the individual could be exposed to blood or other potentially infectious materials during the course of their duties. The teacher may be exposed to infectious disease as carried by students.

The noise level in the work environment is usually moderate to loud on occasion.

**BACKGROUND CHECK AND FINGERPRINTING**

The Academy conducts criminal record checks on all candidates. We reserve the right to investigate fully any criminal or motor vehicle offense prior to consideration for employment. Job offer is contingent upon satisfactory maintenance or completion of our background and Child Abuse Registry reporting, and acceptance of our Sexual Harassment Policy.

**I acknowledge that I have read and understand the above position description in its entirety, and I am capable of performing all of the stated requirements and essential functions as outlined. If I have any questions about the duties and responsibilities that I am asked to perform, I should discuss them with my immediate Manager, Department Chair or Human Resources Director.**

**I have discussed any questions that I may have had about this position description prior to signing this form.**

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**Employee Signature**

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**Date**