

Available Position: Department: Reports to: Full/Part-time: Date Posted: Start Date:

Engineering Faculty 2025-2026

Applied Science and Engineering Chair, Applied Science and Engineering Full-time December 12, 2024 Open Until Filled

About the Trinity Preparatory School of Florida:

Trinity Preparatory School is an independent, coeducational college-preparatory school that develops ethical, resilient leaders who thrive in the pursuit of excellence, embrace diversity in thought and perspective, and grow spiritually. In alignment with our mission, we affirm our commitment to our core values: Trinity Family; Educational Excellence, both Academic and Extracurricular; Leadership and Character Development; and Faith and Spirituality.

In 1968, a dedicated group of Orlando community leaders led by the late Reverend Canon A. Rees Hay wanted to provide a quality, independent secondary education for students in Central Florida. As a result, they established Trinity Preparatory School in grades 6 through 12. Affiliated with the Episcopal Church, the school welcomes families and students from all faith traditions, cultures, and backgrounds, knowing that we are all enhanced by diversity.

Our devoted and notable faculty and staff are leaders in their field who share their knowledge and expertise with others at various professional development opportunities worldwide. Their dedication is demonstrated to our students, families, and communities both in and out of the classroom with a balance of academic rigor and wellness. Trinity's student body and families reflect the world as they travel from the greater Orlando area and across the nation to take part in the Trinity experience.

A full-time faculty position at Trinity Prep consists of serving as an advisor, teaching 5 classes, and assuming additional duties as assigned. For example, all faculty are required to have a plus one responsibility.

Position Summary:

Trinity Prep is seeking a skilled and experienced architect/designer who can lead the development of an engineering program that will develop builder skill sets in our students. The ideal candidate will bring their industry experience to the classroom and teach students fundamental and advanced ideation, technical drawing, modeling, and prototyping through hands-on projects. The initial project for this position is to coach a during/after-school team to

build a solar car, with an eye towards competition and developing an understanding of the usability of solar power. Subsequent large-scale projects will be determined in consultation with the department chair and Head of School. This position will remain open until filled.

Trinity Prep has a one-to-one laptop program where students use technology as an integral part of every discipline. These include integrating electronic textbooks, using Google Docs and Forms for assignments, and using blended models to ignite teacher-student interaction. Using our learning management system Canvas and participating in the advisory program are required professional standards.

Trinity Preparatory faculty will exemplify Trinity Prep's four Core Competencies that apply to all employees of the organization:

- Demonstrates Self-Awareness
- Ensures Accountability
- Communicates Effectively
- Cultivates Innovation

In addition, the mechanical engineering faculty will exemplify Trinity Prep's three Core Leadership Competencies that apply to all faculty of the organization:

- Demonstrates Self-Development
- Develops Talent
- Directs, Optimizes, and Plans Work

Duties and Responsibilities:

- Nurture an advisory group of assigned students to advise them on academics, organizational skills, and day-to-day issues and act as the liaison between the parents and school.
- Serve as a member of a grade-level team and support all related activities (i.e., retreats, dances, activities, etc.) as a sponsor or a chaperone.
- Develop a cohesive applied sciences and engineering program that emphasizes innovation and design thinking, consists of a research-based curriculum, evaluates materials at age-appropriate levels, and furthers students' academic and information literacy.
- Research, organize, and manage instructional resources to implement a curriculum that develops students' passion and builds students' design and computational thinking skills in an applied and experiential learning environment.
- Instruct students on how programming concepts integrate into the basic science and mathematics behind their operation and the hardware and software built upon them.
- Instruct students on computational thinking and computer programming essentials to include experience across both algorithmic thinking and achieving fluency in multiple programming languages.
- Maximize the use of 3D printing, machining, and a variety of educational and industrial technology and platforms.

- Inspire and further develop a culture of exploration, critical thinking, problem-solving, and making to meet the ever-evolving needs of Trinity Prep.
- Establish clear objectives for all lessons, units, and projects, and communicate those objectives to students.
- Instruct students individually and in groups, using various teaching methods such as lectures, discussions, projects, and demonstrations to ensure accessibility.
- Prepare lesson materials, grade papers, manage the classroom, and evaluate and give feedback to students as deemed appropriate.
- Adapt teaching methods and instructional materials to meet students' needs.
- Plan and conduct activities for a balanced instruction, demonstration, and work time program that provides students with opportunities to observe, question, and investigate.
- Meet with parents and guardians to discuss their children's progress and to determine priorities when necessary.
- Collaborate with other faculty members to incorporate robotics and engineering concepts into interdisciplinary projects and school-wide installations, ensuring that designs are technically sound. Additionally, assist in developing, evaluating, and revising the school's applied science and engineering program to support professional and personal alignment.
- Attend professional meetings, educational conferences, and teacher training workshops to maintain and improve professional competence and best practices.
- Lead co-curricular activities for teams such as robotics, competitive programming, cybersecurity, or other curriculum-related activities as directed. Perform other duties as assigned by the supervising administrator.

Qualifications and Experience:

- Bachelor's degree from an accredited institution or the international equivalent in architecture, engineering, design, or a closely related field. Master's degree preferred.
- Minimum of 1-3 years of professional experience in an architecture or engineering related field. Preferred is classroom experience in public, independent, or vocational schools with a strong background in curriculum development.
- Proficiency in design systems, programming languages (e.g., Python, C++) and relevant software tools (e.g., EDA, CAD, simulation software).
- Strong communication and leadership skills, with the ability to motivate and engage students in both classroom and extracurricular settings.
- Promotes an inclusive environment that values, encourages, and supports differences, and articulates an authentic commitment to diversity in thought and perspective while holding others accountable for the same.
- Possess a high level of independence in order to manage multiple tasks, meet schedules and timelines, and maintain records.
- Excellent organizational and presentation skills.
- Must be able to pass a Jessica Lunsford Level II background check and drug test.

Certifications Required:

• CPR/AED/First Aid are able to be gained upon hiring.

Benefits:

• Comprehensive benefits package including medical, dental, vision, life and disability, 403(b) plans.

Employee Nondiscrimination Policy:

• Trinity Preparatory School is an Equal Opportunity Employer.

Safeguarding for Children and Youth:

 Trinity Preparatory School of Florida is committed to ensuring the safeguarding and well-being of its students and expects all faculty, staff, and volunteers to share this commitment. The recruitment process at TPSF is carried out in accordance with recommendations of the Episcopal Diocese of Central Florida on Protection for Children and Youth from Abuse and includes rigorous background checks prior to appointment and additional training after appointment.

Application Requirements:

 Interested candidates should complete an application through the below link: <u>APPLY NOW</u>