

Job Profile 4594

Technician Supervisor, Physics

The Mellon College of Science (MCS) is home to four departments and many programs and research centers that cross disciplines. We approach scientific problems from fresh angles using creative interdisciplinary approaches while drawing on our departmental strengths in the core sciences. MCS faculty members are nationally and internationally recognized for their research in a variety of fields, including polymer science, cosmology, mathematical finance, and neuroscience.

The Compact Muon Solenoid (CMS) group in the Physics Department at CMU is seeking a technician to play a key role in detector development for high-energy physics experiments. Learn more about this exciting department at <https://www.cmu.edu/physics/research/nuclear-particle.html>. This is an excellent opportunity for someone who thrives in an interesting, challenging, and creative work environment.

We are looking for a team member who can effectively interact with a diverse range of internal and external partners while maintaining a high level of integrity.

Core responsibilities will include:

- Designing, developing, and testing hardware/software systems for the CMS High-Granularity Calorimeter upgrade.
- Providing support for the systems after initial development.
- Engaging in system-level engineering and providing team direction.
- Participating in group efforts for problem analysis, preliminary and detailed design discussions, reviews, and integrations.
- Training students in the safe use of equipment and processes, as needed (e.g., machine shop).
- Collaborating with project teams to understand their needs and providing machining services.
- Responsible for monitoring the stock of materials necessary for the repair and construction of equipment and reorder materials as necessary.

You should demonstrate:

- The ability to meet deadlines, work under pressure, and handle frequent interruptions.
- Strong attention to detail, with the ability to keep and maintain accurate and detailed reports and records.
- The ability to prioritize work and handle multiple tasks simultaneously.
- Excellent communication skills, both written and verbal.
- Strong interpersonal skills to facilitate close collaboration with project personnel and students at CMU, as well as other U.S. and/or international institutions.
- Self-motivation and a positive, professional approach.

You should have or be willing to gain:

- Proficiency in using various fabrication equipment.
- Experience in designing and fabricating fixtures/jigs for unique small batch parts.
- Familiarity with CAD software and CAM software.
- Experience in designing components for fabrication and/or manufacturing.
- Skill in using hand tools and measuring instruments.
- Experience with general machine shop equipment and practices.

- A strong interest in and a learning orientation towards advanced manufacturing technologies and processes.
- Experience in programming, operating, and maintaining CNC equipment.

Qualifications:

A high school diploma or equivalent is required. An Associate Degree is preferred.

3-5 years of laboratory/technical work experience.

Occasional domestic and international travel may be required.