

Best Practices implemented by the University

The two best practices successfully implemented by the University are as under:

Centre of Excellence (CoE) for Fire & EHS

The Centre of Excellence (CoE) for Fire & EHS at GSFC University is dedicated to delivering advanced, hands-on training in fire prevention, protection, and firefighting through practical demonstrations and real-time simulations. It aims to develop highly skilled and competent professionals in the field of Fire and Environment, Health, and Safety (EHS). The CoE actively bridges the gap between academic learning and industry requirements by aligning training with current practices. By focusing on experiential learning, it enhances students' technical capabilities, industry readiness, and overall employability, preparing them to meet the evolving demands of the Fire and EHS sector effectively.

The Context:

The establishment of the Centre of Excellence (CoE) in Fire & EHS at GSFC University is driven by the growing demand for skilled professionals in Fire and Environment, Health, and Safety (EHS), along with the limited availability of comprehensive practical training facilities in Gujarat. It addresses the critical need to align academic programs with industry expectations while fostering a strong practical learning environment.

The CoE provides industry-oriented training through advanced facilities such as fire drill grounds, a fire drill tower, fire pump houses, smoke chambers, fire alarm systems, clean agent systems, sprinkler systems, medium and high velocity water spray systems, and foam spray rooms. These facilities enable students to gain hands-on experience and real-world exposure.

Students trained at the CoE demonstrate strong technical competence, practical skills, and industry readiness in Fire and EHS. The continued support and patronage of GSFC Ltd. further reflect the CoE's effectiveness and its success in meeting evolving industry requirements.

The Practice:

The Centre of Excellence (CoE) in Fire & EHS at GSFC University is spread across an expansive area of 2875 sq. mt., offering a comprehensive range of state-of-the-art facilities designed to support advanced training and skill development. The infrastructure includes a Fire Drill Ground, Fire Drill Tower, Fire Pump House, Sprinkler Room, Foam Spray Room, Smoke Chamber, Hydrant System, and Fire

Alarm and Detection System. These facilities collectively create a realistic environment for training in fire prevention, protection, and firefighting practices.

The CoE plays a pivotal role in imparting hands-on training and practical exposure to students. By actively engaging with these facilities, students gain in-depth knowledge and develop critical technical skills essential for managing fire and safety challenges. The well-equipped Fire and EHS laboratories further enhance the learning experience by enabling students to participate in detailed practical exercises, experiments, and simulations, thereby strengthening their conceptual understanding and operational competence.

A distinctive feature of the CoE is its strong collaboration between GSFC University and GSFC Ltd. This partnership ensures that the centre remains aligned with current industry standards and emerging safety practices. The synergy between academic expertise and industrial experience facilitates continuous upgradation of infrastructure, curriculum, and training methodologies. Consequently, students are exposed to industry-relevant training that equips them to handle real-world scenarios effectively and confidently.

The CoE is committed to delivering industry-driven education with a strong emphasis on experiential learning. This approach not only enhances students' employability but also prepares them to contribute meaningfully to safety management and risk mitigation in diverse sectors. Graduates emerging from the CoE are well-trained, competent, and capable of addressing complex fire and EHS challenges in professional environments.

The beneficiaries of the CoE extend beyond students to various sectors and organizations. These include chemical, petrochemical, pharmaceutical, and steel industries within and outside Vadodara, including members of OIECR. Additionally, city fire brigades across Gujarat benefit from the training and facilities. The CoE also serves hospitals, hotels, airports, railways, and educational institutions, as well as commercial establishments such as malls and high-rise residential and commercial buildings, thereby contributing significantly to broader community safety and preparedness.

Evidence of Success:

The success of the Centre of Excellence (CoE) in Fire & EHS at GSFC University is clearly reflected in the achievements and performance of its students. Through rigorous assessments, internships, and industry placements, the effectiveness of the CoE's training has been consistently demonstrated. Students trained at the CoE exhibit strong technical knowledge, practical skills, and hands-on expertise in fire prevention, protection, and EHS practices. Their ability to apply theoretical learning to real-world situations has been widely appreciated by industry professionals and employers.

A key factor contributing to this success is the strategic collaboration with GSFC Ltd., a leading industry partner. The continued support and patronage from GSFC Ltd. validate the quality and relevance of the CoE's training programs. This association also creates valuable opportunities for students in terms of internships, industrial exposure, and placements with reputed organizations, thereby significantly enhancing their career prospects.

Beyond the university, the CoE serves a broader purpose by supporting various sectors, including chemical, petrochemical, pharmaceutical, and steel industries, as well as city fire brigades, hospitals, educational institutions, and commercial and residential establishments. By producing skilled and competent professionals, the CoE plays a vital role in promoting safety, regulatory compliance, and emergency preparedness across these sectors.

Problems Encountered and Resources Required:

The implementation of the Centre of Excellence (CoE) in Fire & EHS at GSFC University encountered several challenges, including the development of specialized infrastructure, procurement of advanced equipment, and ensuring their regular maintenance. Additionally, training faculty members and staff to deliver high-quality, industry-relevant instruction in fire and EHS practices required significant investment in capacity building and resources.

Despite these challenges, the CoE has been successfully established as a benchmark initiative. It provides cutting-edge practical training, fosters competent professionals, bridges the gap between academia and industry, and enhances students' technical and employability skills. The presence of state-of-the-art facilities, along with strong collaboration with GSFC Ltd., ensures alignment with industry standards and evolving practices.

The CoE's continued success highlights the importance of strategic planning, institutional support, and effective resource allocation. By overcoming initial constraints, GSFC University has developed a sustainable and impactful model that contributes significantly to skill development and safety practices in the Fire and EHS domain.

USPs of COE

1. Advanced, state-of-the-art training facilities for Fire Prevention, Firefighting, and Rescue operations.
2. Pioneering, first-of-its-kind infrastructure in Gujarat dedicated to practical training in Firefighting and EHS.
3. Integrated ecosystem comprising modern CoE infrastructure and well-equipped Fire & EHS laboratories at a single location.

4. Emphasis on experiential, hands-on, and collaborative learning for in-house students.
5. Strong industry support and patronage from GSFC Ltd., ensuring relevance and quality.
6. A centralized, industry-aligned platform for practical assessment and evaluation of Fire & EHS candidates, including opportunities for international recruitment.

➤➤ **FirePlex – Glimpses**

