

# Yoga for Stress Management in Environmental Health Engineering Students

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**Abstract:** Being an Environmental Health Engineering (EHE) student in the age of social media and hyper connectivity can be stressful and emotionally draining. The mental and emotional well being of an EHE student is directly connected to their physical health, and yoga provides different ways to support the subtle aspects of the mind, ego, and intellect. Yoga is a mind and body practice that teaches the methods of coping with stress, finding presence, and becoming self-aware.

**Keywords:** Yoga; Environmental Health Engineering Student; Stress

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## 1. Introduction

While time spent at college is a fond memory and a happy experience for most, an Environmental Health Engineering (EHE) college for students is not without its rough patches. Everyone's situation is unique, but there are a few problems that almost all EHE students deal with at least once during their time at EHE College. The common problems faced by EHE students are: time management, homesickness, depression/suicidal tendency, sickness/health conditions, financial problems, social problems and relationships<sup>[1]</sup>. Compared to other fad workouts, yoga rewards the mind, body, and spirit<sup>[2]</sup>.

All EHE students are probably already aware that an engineering college can be scary or overwhelming at times, which is why it can be very helpful to have a solid foundation of ethical ideals to fall back on when things get tough. The Yamas and Niyamas<sup>[3]</sup>, the first and second limbs of yoga, contain some are familiar virtues like honesty and refraining from stealing, while others are just good habits like cleanliness and not taking more than the need. So when EHE students are faced with tough decisions, they can rely on the guidance they learn from yoga to help them make the right choice. An EHE student can practice yoga and take control of their body, mind, and spirit<sup>[2]</sup>. Similarly they can be free themselves from the habitual tendencies of youth and make their own decisions so they can flex on those EHE classes with grace and ease. Almost anyone can benefit from yoga, but an EHE student may gain more from it than others.

Here are just seven of the many reasons why the EHE students should give yoga a try.

## 2. Relaxation

Better relaxation has been reported by regular yoga practice. The actual mechanism is that yoga helps in lowering blood pressure and regulates good hormones, making the body relaxed and healthier<sup>[4,5]</sup>. Similarly, when practiced

regularly yoga increases serotonin levels and activates the pleasure centres of the brain, making the practitioner feel as good emotionally as one do physically<sup>[6-8]</sup>.

### **3. Focus**

Yoga brings together the mind, body and spirit<sup>[2]</sup>. The state of deep meditation that comes with practicing yoga doesn't just relax the body; it also focuses the mind. Research has shown that regular practice of yoga helps boost memory retention and reaction time<sup>[9]</sup> perfect for getting through final exams. If the students are having trouble staying on track with studying, they may break up their study day by practicing few minutes' yoga routine to refresh the mind and put the focus back to where it needs to be.

### **4. Workout**

Yoga gets into a popular position. Once a spiritual journey for the few, yoga is now emerging as a good workout for the many.<sup>[10]</sup> In fact, yoga is much more than breathing or holding a light stretch. In fact, some practices are an extreme physical challenge. In addition, almost all yoga courses use bodyweight exercises that mimic strength training with gym machines.

### **5. Stretch**

Backaches, sore shoulders, and creaks in the neck are all common complaints from engineering students. Yoga has its role in chest expansion, maximizing range of movements: flexion of large muscles, maximum stretch of skin<sup>[11]</sup> and thus it can help alleviate the regular pain by improving flexibility while working out kinks in the muscles. In particular, regular practice of yoga may better the posture, which will help body withstand strain, and tension and fight against stress related pains.

### **6. Self-Love**

Focusing on the body with any healthy habit may be an act of self-love and yoga is beneficial in boosting one's self-esteem and releasing the anger and fear<sup>[12]</sup>. Yoga, while not religiously based, is spiritual. It is meant to help practice gratitude towards oneself, one's body, and one's mind. It will teach the practitioner how to appreciate what his body can do today and what it may be capable tomorrow. It will also show one how to focus on the little things in life that can lead to greater accomplishments<sup>[13]</sup>.

### **7. Immunity**

While yoga cannot act as a shield from germs and viruses, it can help the body fight back against regular illnesses. Yoga improves a practitioner's immune and nervous system through establishing psycho-physical health in reversing the psycho-immunology of emotions. Furthermore, yoga focuses on two major pathways of information processing involving cortical and hypothalamus-pituitary-adrenal axis (HPA) interactions with a deep reach molecular action on cellular, neuron humeral and immune system in reversing stress mediated diseases<sup>[14-16]</sup>.

### **8. Sleep**

The most beloved pose practiced in every yoga class is Shavasana, or resting/corpse pose. It teaches the body to cool down after a workout and it focuses the mind back to the body and the breath. According to Hathapradipika, one of the important Hatha Yoga Texts: [Figure 1][17] experiencing Shavasana and other relaxation poses in Yoga is said to help train the body to do the same thing when it returns to the bedroom, especially when the body is physically tired and the mind is elsewhere<sup>[18-21]</sup>.

Based on the previous studies and our clinical practice, the suggested yoga module for students of engineering college for coping with stress, finding presence, and becoming self-aware may include following Yoga practices:<sup>[22-27]</sup>

- Kapalabhati (frontal brain cleansing)
- Jogging, forward and backward bending, side bending, twisting
- Suryanamaskara (salutations to the sun practice)

- Sarvangasana (shoulder stand pose), Matsyasana (fish pose)
- Yoganidra (Deep relaxation technique)
- Nadishuddhi Pranayama (alternate nostril breathing technique)
- Aatar Mouna Dhyana (inner silence meditation)

## 9. Conclusion

The present review study suggests that yoga provides different ways to support the subtle aspects of the mind, ego, and intellect. Yoga is a mind and body practice that teaches the methods of coping with stress, finding presence and becoming self-aware which leads to mental and emotional well being of an EHE student.

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