

## Orientation Program for the Engineering students from across India

Date – 13 & 22/6/2018

Venue – Seminar Hall – 6, Centurion University, Jatni Bhubaneswar

Total students – 35 & 41 respectively

Time - 5.30 - 9.30 pm

### Purpose of the session

To orient and sensitize the engineering students from across India on disaster and its risk reduction process and make hands on practice on First Aid.

### Background

There are many engineering colleges in every state, India where in students pursue Mechanical engineering, Electrical and Civil engineering courses. Most of these colleges have no varied exposure for the students on learning by doing as a result of which the domain remains only in the theoretical aspect of acquiring knowledge.

Centurion University of Technology and Management, Bhubaneswar has been widely known across India and by most of the engineering colleges in particular for the enormous facilities and exposure it provides for the engineering students to learning by doing with machines and engines which are very core to the Mechanical and Electrical Engineering.

Having known the inevitability of the Mechanical Engineering students to get access and do exercise with the machines and engines, the team of Sky Rider, CUTM approached many of the engineering colleges of different states sharing the ample opportunities for the students to do internship with CUTM the knowledge building and strengthening hub.

This kind of initiative of inviting the engineering students for summer internship program was first in its kind. When the communication process was initiated by the Sky Rider team, hundreds of students from many engineering colleges across India responded positively for hands on practice on what they learn in theories. There are about 800 hundred engineering students enrolled their names for summer internship and those students in different phases are already in the workshops learning by doing.



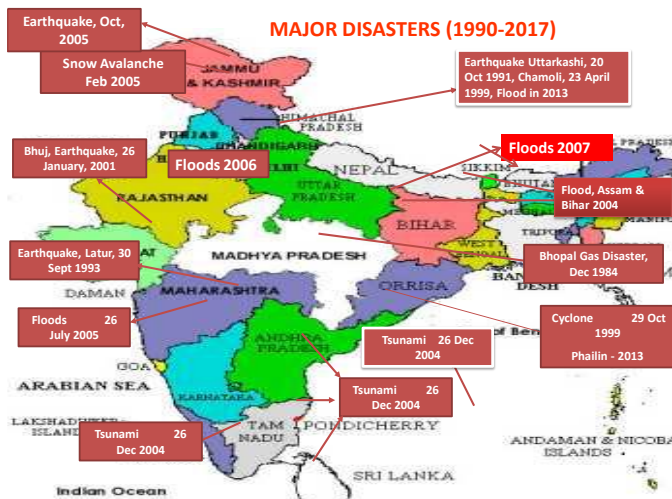
The director, School of Disaster Management having realized the importance of Disaster Management in the field of Mechanical engineering convinced the senior management and the team of Sky Rider reiterating that the students must get basic orientation and sensitization on Disaster Management and its risk reduction process and First Aid.

### Disaster Management and risk reduction process

The facilitator exerted on how vulnerabilities India is with regards to various natural hazards sharing latest data and information pertaining to the nature and magnitude of disasters in India

- About 50-60% of total area of the country is prone to seismic activities of varying intensities.
- 16% of total area is drought prone and approximately 50 million people are annually affected by drought.
- India has a long coastline of 8041km., which is exposed to the tropical cyclones arising from the Bay of Bengal and Arabian Sea.
- Good number of rivers and tributaries create flood and make people, properties and environment havoc.

The facilitator while placing data and information on the vulnerabilities to various disasters also shared the Indian map where in the data showed the different disasters occurred in different state in India.



The facilitator then presented the process of managing disaster and its risk reduction process.

## Disaster Management Cycle



### Disaster management activities in Pre disaster situation

#### Prevention & Mitigation

Includes any activities that prevent a disaster, reduce the chance of a disaster happening, or reduce the damaging effects of unavoidable disasters. Structural and non structural measures

#### Preparedness

Includes plans or preparations made to save lives or property, and to help the response and res- cue service operations

#### Early warning

Sharing of pertinent information to the people on alertness to response to a possible hazards.

### Disaster management activities in during disaster situation

#### Search and Rescue

Victims in debris, cut off areas, marooned in the water are rescued by the skilled volunteers/professional

#### Relief and Response

Victims of affected areas are provided with emergency relief measures both food and non – food items.



## Disaster management activities after disaster situation

### Damage Assessment

The skilled volunteers/ community members make rapid need assessment so as to address the essential needs and requirement and save lives

### Relief measures

Victims of an affected area are provided with both food and non – food items so as to save lives of human and livestock.

### Rehabilitation

Includes actions that assist a community to return to a sense of normalcy after a disaster.

### Reconstruction (Permanent settlement of the victims)

### Development (Holistic approach to total well being)

## First Aid – Support to life

First Aid' as a support to life has become one of the most pivotal aid for temporary relieve and sustains life of any human being meets an accident of any types causing health injuries. Generally speaking, when a person is not exposed to any types of bleeding/ cut/ accident, may feel frightened to extend to any causality. But if a person is acquired with skills and techniques on First Aid may be prompt enough to respond to any causality with a first aid to save life. The engineering students with deep interest took part in the first aid session which was purely on hands on practice.

### Definition of First Aid

- First Aid – Is an immediate treatment given to a victim of accident or sudden illness before medical help is obtained.
- In a medical context, a first aid is the kind of emergency care given to an injured or ill person with the help of a first aid kit before treatment by specifically trained medical personnel becomes available.
- First Aid is nothing but applying common sense to save life.

The facilitator began the practical session with a respiration method, process and its importance.

Whether a victim is breathing or his/her pulse is going on or not, one need to take the help of CPR.

- C - Cardio
- P – Pulmonary (Lungs)
- R – Resuscitation

### Practical Session

- In case a victim is not breathing A First Aider needs to give rescue breathing.
- First Aider needs to breath for that person that is called rescue breathing.

Types:

- Mouth to mouth
- Mouth to mouth and nose
- Mouth to nose

### NORMAL HEART RATE:

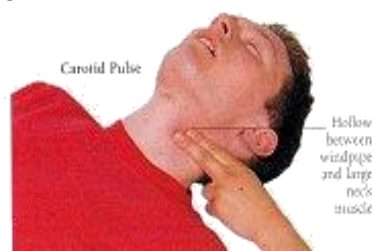
Average adult - 60 to 90 beats per minute.

### PULSE:

RADIAL PULSE - FELT AT WRIST.

CAROTID PULSE - FELT AT NECK

BRACHIAL PULSE - FELT AT UPPER ARM



**RATE: -**

**Adults**

- above 60 per minute.

**Children (2 to 10 years)** - about 80 to 90 [but with one hand]

**children (< 2 years)**

- 100 per minute [only with finger].

Respiratory means breathing in and breathing out of air, it helps in supply of oxygen of the air to all parts of the body.

Average respiratory rate for per adult is 16 to 18 times per minute

- Average respiratory rate for per child 20 to 30 time per minute
- Air passage consist of nose, mouth and throat
- Normal pulse rate of an average adult is 72/ minute
- Blood volume 5 to 6 litres
- Normal heart rate is 60 to 90 per minute

The facilitator demonstrated on how to make bandages for different injuries in different parts of the body

- Bandage in case of figure injury
- Bandage in case of colour bone fracture
- Bandage in case head injury
- Bandage in case of jaw fracture
- Bandage in case burn in chest, hands and legs
- Various transportation procedures to shift causality to hospital





### **Students' feedback**

It was very important session about disaster management and First Aid. By this time we must have the knowledge about disaster management and first aid. So this session was very important for us. I think you should and we all young generation should spread awareness about disaster management whomever we meet

First of all thank you Sir for such a great seminar on Disaster Management. Seriously Sir this a very important topic, everyone should know about Disaster Management to protect to self and help to other human being in such situation. So again thanks Sir from my bottom of heart.

Very useful for me in Disaster Management. Very useful information shared during First Aid topic.

Great learning session. Really useful and helpful. Hope to attend some more seminar like this, great job Sir

Honestly speaking the lecture is very helpful for how to manage in disaster. A lot of knowledge we got from this lecture and learnt a lot. In this lecture we have knowledge about how to manage disaster condition.

Good explanation and eye opening session on Disaster Management. The practical session on First Aid was really useful.

We youth will save the world firstly not using Plastic.

It was good and very useful especially First Aid skill.

**Jaya Krishna Behera**  
**Assistant Professor – DM**  
**Centurion University**

***Bhubaneswar***