REPORT ON MOU WITH ACCE (I)

Memorandum of understanding (MoU) was made on 15th November 2017 between Association of Consulting Civil Engineers (India) and Sai Vidya Institute of Technology.

The main objective of signing MOU with ACCE(I) is,

To provide an opportunity of conducting internship under renowned industrial professionals and also subjecting students to field exposure. This program covered various aspects of civil engineering such as structural engineering, environmental engineering, construction management, rehabilitation and retrofitting, BIM etc. and non-civil engineering aspects such as group discussion personality development etc.

Student Mentoring Program [SMP] by ACCE(I) provides students of Civil Engineering, knowledge to become productive and employable by using application of subjects in areas of conceptualism, planning, design, documentation, execution of Civil Engineering projects. Hence SMP sessions are formulated for students to understand application of knowledge imparted in colleges in the beginning of their career. There are 30 sessions were there per year for students comprising of 2nd, 3rd, and 4th year students. Each session was 3 to 4 hours.

The program schedule is divided in 6 domains. They are:
1--- General
2--- Professional in Practice
3--- Building Materials
4--- Construction
5--- Project Management
6--- Designing & Detailing
Total 30 sessions are further divided into 3 groups. viz. Domain specific, Group Training and Group task. Of the total 30 sessions 16 sessions are for Group activities including task and training. Balance 14 sessions are domain specific. They are as follows:

1. **General**
   - Overview of Civil Engineering. This is domain specific presentation for one session.
   - Scope of Civil Engineering. This is domain specific presentation for one session.
   - Sustainability and Green building. This is domain specific presentation for one session.

2. **Professional in Practice**
   - Attributes of good Civil Engineer and Professional Ethics. This is domain specific presentation for one session.
   - Roles and responsibilities of Civil Engineer. This is domain specific presentation for one session.
   - Creativity, Innovation, Leadership, team work. This is partly domain specific presentation and partly group task. Total is for one session.

3. **Building Materials**
   - Various materials used in building construction. This is a domain specific presentation for one session.
   - Structural and Non structural Concrete used in building construction. This is a domain specific presentation for one session.
   - Durability of structure and NDT testing. This is partly domain specific session and partly group task.
   - Geotechnical investigations, explorations and interpretations. This is a domain specific presentation for one session.

4. **Construction**
   - Construction Methodologies covering excavation, formwork and production of concrete. This is a domain specific presentation for one session.
   - Construction Technologies, Tools, Plants, Machinaries for various works. This is a domain specific presentation for one session.
   - Basic building water supply and plumbing Services. Site Visits. This is a domain specific presentation for one session.
   - Site Visits. This is a Group task and for four sessions.
   - Surveying. This is mostly domain specific presentation for one session.

5. **Project Management**
   - Introduction to Construction Project Management - Planning & Execution. This is a domain specific presentation for one session.
   - Data sheets, Specifications, Tendering and Contract Documents. This is a domain specific presentation for one session.
   - Good Practices in Civil Engineering and Safety Requirements. This is a domain specific presentation for one session.

6. **Reading of Drawings, Designing & Detailing**
- Designing Masonry Load bearing structures. This is a domain specific presentation for one session.
- Relevance of codes and relevance of structural properties. This is a domain specific presentation for one session.
- Reading including importance of drawings and calculating quantities from drawings. This is a Group Task and is for three sessions.
- Types of building occupancies, its effects on loading. Different types of loads and its impact on structural elements. This is a domain specific presentation for one session.
- Analysis, Design and detailing of simple building using computer. This is a Group Task and is for three sessions.
Title: Construction Methodology - Part I Basics: (Formwork & Scaffolding, reinforcement fabrication, excavation, Dewatering, shoring principles, pumping of concrete placement of tower crane, hosting, transportation logistics)

Title: Basics of Plumbing, Electrical and Sanitation for residential buildings
Title: Practical Applications of Surveying   (Setting out on /site , classical methods using tape , 3-4-5 rule, theodlie. Using total sations, using data acquired, data added and transferred to the ground) including calculations, including reading of relevant drawings.

Title: Desirable concreting practices (Field problems, Manufacturing and transportation, compatibility issues, post hardening problems, attributes for deficiencies in performance.)

Title: Quantity Assurance And Quality Control In Civil Engineering
Title: Restoration, Rehabilitation& Repair of structures  (Including testing of NDT & Semi destructive test)

Title: Environmental Impact Assessment

Title: Application of ILD (Cranes, Gantry girder, bracket design, Bridge design)
Title: Specification, costing & Billing of Quantity

Field visit to construction site through ACCE