

Activity report – Staad.Pro Training for students of B.Tech and M.Tech Civil Engineering

(Under TEQIP III Twinning activity with REC REWA)

A training activity on design and analysis of structures using STAAD.PRO was arranged for the students of final year B.Tech Civil Engineering and M.Tech Civil Engineering (Structures) of SPCE and students from REC REWA under TEQIP III. The training was conducted in different sessions during March-April 2021. The software skills are highly beneficial to students for their final year projects as well as add to their skill set while seeking job. The training was provided by Mr. Manan Shah. A summary of training sessions conducted is given below :

| Session no. | Topics covered |
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| S1 | Introduction to software and various tools available in the software, unit system, SFD, BMD theory concepts, etc. |
| S2 | Calculation of SFD and BMD for simply supported beam (Manually as well as Staad Pro.) i.e. Validation problem and various shortcuts in software, Geometry commands and static loads in software |
| S3 | Application of floor loads and temperature loads in software |
| S4 | Understanding and application of wind load in software |
| S5 | Basics of earthquake engineering and application of seismic coefficient method in software |
| S6 | Application of response spectrum method in software |
| S7 | Application of moving load in software |
| S8 | How to use STAAD EDITOR in software, How to make auto and manual load combinations in software, truss validation problem |
| S9 | Understanding of G+3 Special moment resisting frame structure |
| S10 | Modelling of G+3 Special moment resisting frame structure |
| S11 | Application of loads and analysis of G+3 Special moment resisting frame structure |
| S12 | Understanding post processing commands in software |
| S13 | Design of G+3 Special moment resisting frame structure |

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| S14 | Modelling and analysis of rectangular and circular water tank in software |
| S15 | Modelling and analysis of transmission tower in software |
| S16 | Discussion on assignment problem |