

JADAVPUR UNIVERSITY
COMPUTER AIDED DESIGN CENTRE
Faculty Council of Engineering and Technology
Kolkata - 700 032

**Certificate Course on
Structural Analysis And Design (STAAD)**

STAAD.Pro is one of the most widely used structural analysis and design software products worldwide. This is a generalised application software for almost all types of Civil Engineering structure. R.C.C. Framed structures of moderate height or any types of steel frames can be modelled very efficiently by its graphical user interface or in editor. The specialty of STADD.pro software is it has a very simple STAAD editor language to input the structure.

Civil, Construction, and Structural Engineers will highly appreciate this course.

Course Duration: 62 hrs

Eligibility: BE/BTech/AMIE passed in Civil/Construction engineering (final year students are also eligible).

Course Content

Class No.	Theory/ Lab	TOPIC	Duration of Class
Class –01	Theory	Introduction & General Idea of STAAD	2 hrs
Class – 02	Theory	Input Instructions for Geometry Generation For Plane Frames	2 hrs
Class –03	Theory	Input Instructions for Geometry Generation for space frames	2 hrs
Class – 04	Theory	Input Instructions for Geometry Generation of Tutorial Problems set-1	2 hrs
Class – 05	Lab	Practice for Tutorial Problems set-1	2 hrs
Class – 06	Theory	Input Instructions for Local axis , section, support & member specification etc	2 hrs
Class –07	Theory	Input Instructions for member Load, Floor Load , Joints Loads etc	2 hrs
Class – 08	Theory	Input Instructions for Seismic Load Generation	2 hrs
Class –09	Theory	Input Instructions for Loads of Tutorial Problems set-2	2 hrs
Class –10	Lab	Practice for Tutorial Problems set-2	2 hrs
Class –11	Theory	Input Instructions for Wind and Moving Load Generation	2 hrs
Class –12	Theory	Input Instructions for Concrete and steel design	2 hrs

Class –13	Theory	Input Instructions for Loads of Tutorial Problems set-3	2 hrs
Class –14	Lab	Practice for Tutorial Problems set-3	2 hrs
Class –15	Theory	Input Instructions for Projects No-1 (Building day-1)	2 hrs
Class –16	Lab	Practice for Projects No-1 (Building day-1)	2 hrs
Class –17	Theory	Input Instructions for Projects No-1 (Building day-2)	2 hrs
Class –18	Lab	Practice for Projects No-1 (Building day-2)	2 hrs
Class –19	Theory	Input Instructions for Projects No-1 (Building day-3)	2 hrs
Class –20	Lab	Practice for Projects No-1 (Building day-3)	2 hrs
Class –21	Theory	Input Instructions for Seismic Load Generation in advance	2 hrs
Class –22	Theory	Input Instructions for Projects No-2 (moving load)	2 hrs
Class –23	Lab	Practice for Projects No-2 (moving load)	2 hrs
Class –24	Lab	Practice for Projects No-2 (moving load)	2 hrs
Class –25	Theory	Input Instructions for Projects No-3 (Plain truss)	2 hrs
Class –26	Lab	Practice for Projects No-3 (Plain truss)	2 hrs
Class –27	Lab	Practice for Projects No-3 (Plain truss)	2 hrs
Class –28	Theory	Input Instructions for Projects No-4 (Over Head Water Tank)	2 hrs
Class –29	Lab	Practice for Projects No-4 (Over Head Water Tank)	2 hrs
Class –30	Lab	Practice for Projects No-4 (Over Head Water Tank)	2 hrs
Class –31	Lab	Practice for Projects No-4 (Over Head Water Tank)	2 hrs
Exam	Theory	Theory Examination Test Part-01	
Exam	Theory	Theory Examination Test Part -02	
Exam	Lab	Lab Examination	

Certificate: Completion certificate (in printed form) will be provided at the end of the course.