



ZN903 Computer Room

*ZN903, Block Z,
Department of Civil and Environmental Engineering,
The Hong Kong Polytechnic University*



THE HONG KONG
POLYTECHNIC UNIVERSITY
香港理工大學



DEPARTMENT OF
CIVIL AND ENVIRONMENTAL ENGINEERING
土木及環境工程學系

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Introduction

The computer room caters to the needs of students from all study programs as well as academic staff. In addition to computers, printers and scanners, the room also provides a high-tech environment to support learning and teaching activities.

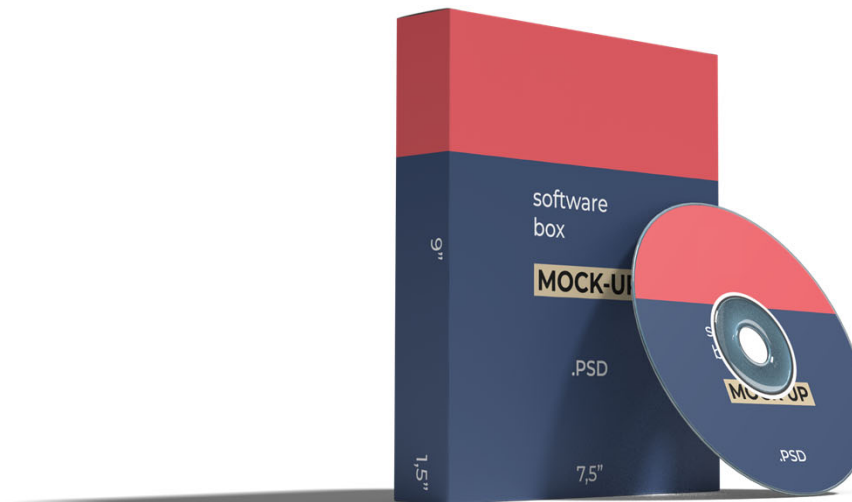
Various software packages are available for different aspects of Civil, Structural and Environmental Engineering. The following aspects are mainly covered:

- Mathematical modeling;
- Graphical applications;
- Structural engineering analysis and design applications;
- Geo-technical engineering analysis and design applications;
- Fluid dynamics analysis and design applications



List of Software

ABAQUS 2023
Ansys 10
AutoCad 2024
Autodesk Revit 2024
COMSOL
Drains Version 2013.11
ETABS Ver20
Foxit Reader
GeoStudio 2021
Junctions 8
KENPAVE
MATLAB R2023b
MS Office 2021
NI LabView 2021
Nida Ultimate(Education) V10 - 64bit
Nida RCD
Nida Wind
Plaxis 2D
PryoSim 2023
PTV Vissim 10
Safe V20
SAP 2000 V24
Saturn
TRANSYT 14
Windows 11 64bits



Main Equipment



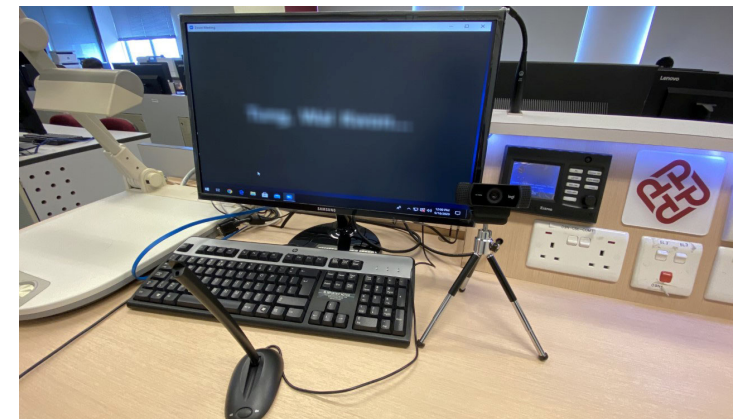
Over 56 desktop computers

Lenovo ThinkCentre M920t Tower, Q370 Chipset, Intel Core i9-10900, 16GB DDR4-2666 UDIMM (4 DIMMs), 480GB SSD Slim DVD-RW, Windows 10 Pro 64-bit, Lenovo Thinkvision LED monitor.



High Performance Server

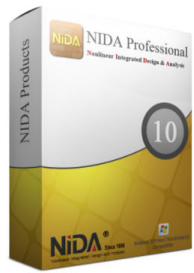
Huawei sever, Dell and Lenovo servers provide highly effective, reliable, flexible, and secure computing services for CEE Research Project.



Video conference equipment

Virtual Classroom equipment and software for live interactive online classes.

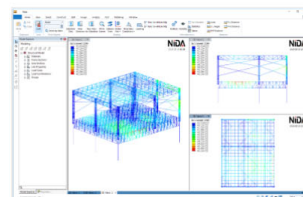
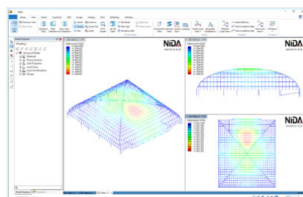
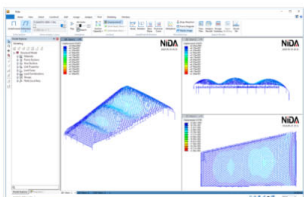
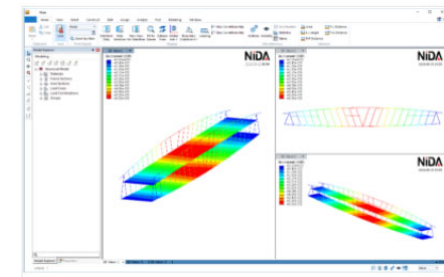
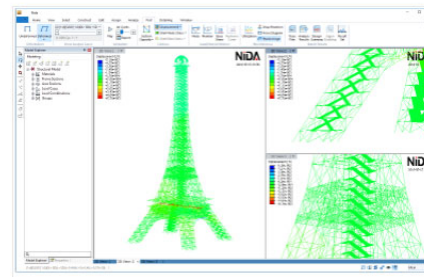
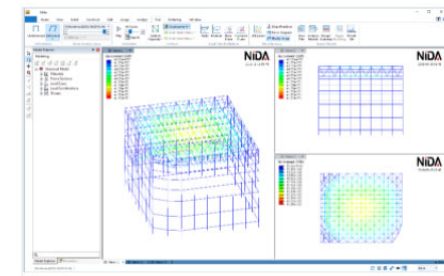
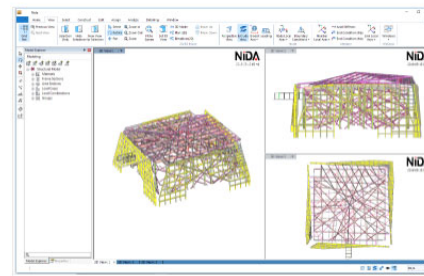
Professional Software Spotlight



NIDA 10 (Steel Structures Design)

This product is for analysis and design of long-span roof, frame structures, transmission tower, scaffolding, space truss, cable structures and shell structures, etc. The analysis methods include first-order linear analysis, second-order direct analysis, modal analysis, eigen-buckling analysis, pushover analysis, time history analysis, linear & nonlinear staged analysis. The main features of NIDA Professional are as follows :

- Comply with the requirements of second-order direct analysis (HKSC-2011, Eurocode3-2005, AISC360, GB50017-2017)
- Support Multi-CPU · High computational efficiency
- Support text input · import models from other software
- Provide 41 general sections
- Consider both frame and member imperfections (One element per member)
- Support static & dynamic second-order inelastic analysis of steel structures
- Support semi-rigid connection
- Support linear & nonlinear staged analysis



NIDA Ultimate Edu 10

Professional Software Spotlight

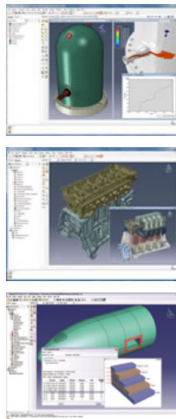
ABAQUS/CAE

COMPLETE SOLUTION FOR ABAQUS FINITE ELEMENT MODELING, VISUALIZATION, AND PROCESS AUTOMATION

With Abaqus/CAE you can quickly and efficiently create, edit, monitor, diagnose, and visualize advanced Abaqus analyses. The intuitive interface integrates modeling, analysis, job management, and results visualization in a consistent, easy-to-use environment that is simple to learn for new users, yet highly productive for experienced users. Abaqus/CAE supports familiar interactive computer-aided engineering concepts such as feature-based, parametric modeling, interactive and scripted operation, and GUI customization.

Users can create geometry, import CAD models for meshing, or integrate geometry-based meshes that do not have associated CAD geometry. Associative Interfaces for CATIA V5, SolidWorks, and Pro/ENGINEER enable synchronization of CAD and CAE assemblies and enable rapid model updates with no loss of user-defined analysis features.

The open customization toolset of Abaqus/CAE provides a powerful process automation solution, enabling specialists to deploy proven workflows across the engineering enterprise. Abaqus/CAE also offers comprehensive visualization options, which enable users to interpret and communicate the results of any Abaqus analysis.



ABAQUS 2020

 MathWorks®

MATLAB®

R2021a

Mablab R2021b

Lab-in-charge and Technical Staff

Lab-in-Charge



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Opening Hours

Monday to Saturday 8:30am – 10:30pm
(excluding Sunday & public holidays)

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