

Registrations to the
  **987 336 031**

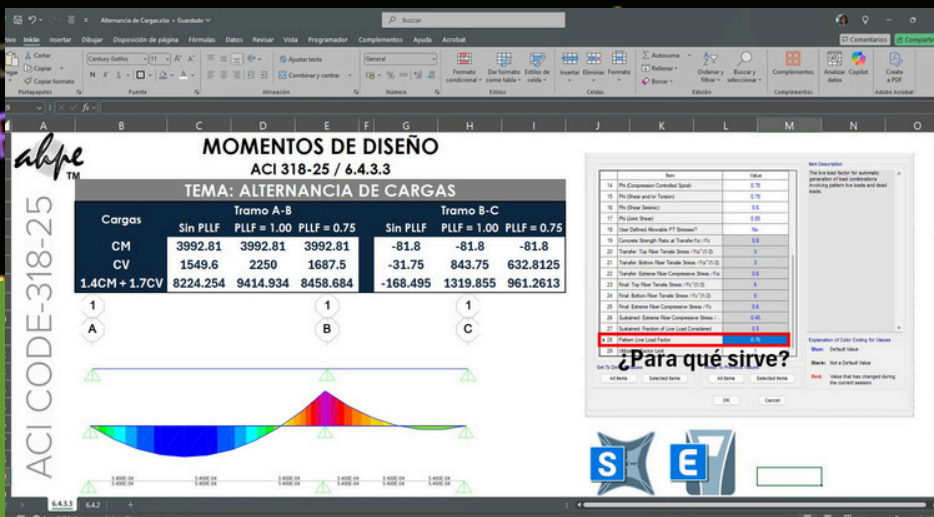


 Live workshop course

Automated Spreadsheet Creation



using



Teacher
Alex H. Palomino Encinas

ABOUT OUR COURSE

Master the automation of structural data extraction and **spreadsheet generation using ETABS, its API, and Python.**

In this course, you'll gain the skills to create custom scripts that interact with **ETABS to retrieve structural analysis** and design data automatically.

You'll learn how to generate organized Excel spreadsheets that summarize essential project information—such as loads, displacements, design results, and section properties—saving hours of manual work and reducing human error.

- Extract large volumes of model data efficiently.
- Format and export data into Excel with customizable layouts.
- Automate reports for real-world structural engineering tasks.

INVESTMENT

\$130 



Duration: **20 hours**



Schedule:

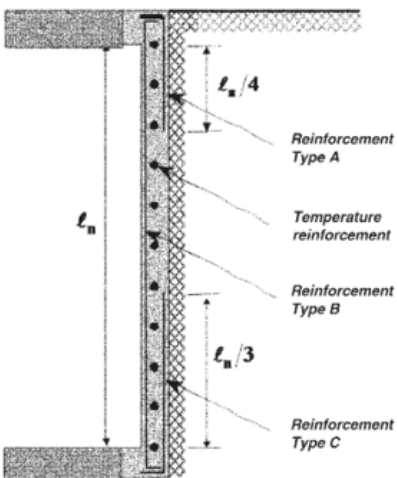
Monday and Thursday

 21:30 Hrs  20:30 Hrs  19:30 Hrs

 **SYLLABUS**

MODULE I

- Connecting Excel VBA with ETABS
- Multiple Creation of Grid and Story Systems
- Correct and Complete Definition of Materials
- Definition of Rectangular Frame Sections
- Definition of Irregular Column Sections Using Section Designer via Code
- Load Patterns and Load Cases
- Table Management and Manipulation via Interactive Database
- Automation of Design Spectra



	Diseño del Refuerzo			Vu	
	A	B	C		
Momentos	343.501 Kg-m	217.851 Kg-m	510.174 Kg-m		
Ru	5.673 Kg/cm ²	3.598 Kg/cm ²	8.426 Kg/cm ²		
ρ	0.001528481	0.000962833	0.002291129		
As	1.08 cm ²	1.08 cm ²	1.08 cm ²		
L	0.7125 m	-	0.950 m		
	H	Pw	Puw	Puwt	Vu
Reinforcement Type A	0	0	0	50	85.329
Temperature reinforcement	0.285	256.5	410.4	50	553.18
Reinforcement Type B	0.57	513	820.8	50	1021.0
	0.855	769.5	1231.2	50	1488.8
	1.14	1026	1641.6	50	1956.7
	1.425	1282.5	2052	50	2424.6
	1.71	1539	2462.4	50	2892.4
	1.995	1795.5	2872.8	50	3360.3
	2.28	2052	3283.2	50	3828.1
	2.565	2308.5	3693.6	50	4296.0
	2.85	2565	4104	50	4763.8

SYLLABUS

- Automation of Static and Dynamic Seismic Loads
- Automation of Multi-Tower Workflow
- Automation of Plastic Hinges
- Automation of Rigid Links and Releases
- Basic Parameterization of Structures
- Definition of Slabs and Walls

MODULE III

Seismic Analysis Automation

- Base Shear Coefficient, C_s (ZUCS/R)
- Deduction of the Structural System
- Programming of Modal Response Spectrum or Dynamic Analysis – ABS, SRSS, and CQC Methods
- Detection of Structural Irregularities
- Base Shears and Scaling of Forces for Design
- Automation of Load Combinations
- Extraction of Design Forces in Beams, Columns, and Walls

The professional must have **solid knowledge of structural calculation** and design, in addition to ensuring proper use and practice of the **ETABS software**.



Teacher

Alex H. Palomino Encinas

Recognized author of specialized bibliography in structural engineering.

Specialized Trainer in Structural Engineering in CSI Software

Developer of multiple applications for structural engineering



Previous Knowledge

- **Python:** Basic
- **ETABS:** Intermediate – Advanced
- **Structural Design:** Solid Knowledge.
- **Structural Calculation:** Solid Knowledge.



Classes are recorded for **later review on our virtual platform**.

Monitored live by



IMPORTANT CONSIDERATIONS

- The virtual certification is virtual only.
- Passing the assessments is required for gradual access to the modules. Passing is achieved with a score of 80% on a vigesimal scale (16/20 points).
- Restoration assessments have an additional cost.
- Class videos are only available on our platform. For a limited time, as indicated in the service policy.
- By enrolling in any of our courses, you accept our service policy (<https://ceintperu.com/servicios/politica-de-privacidad/>).
- All live classes are monitored through TEAMWIEVER.

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REGISTRATIONS



CEINTPERU SAC

Banco de Crédito del Perú

Cta cte SOLES

245-2580771-0-39



INTERBANK

Cta cte SOLES

702-3005621692

Pagos internacionales



938 177 282

CEINTPERU SAC

About the evaluations

- They consist of exercises that the instructor asks students to complete based on what has already been developed in the classes for each module.
- Students must develop their own source code for each question, then copy and paste it into a notepad, ensuring it is complete.
- It is the student's responsibility to ensure that their code is submitted correctly and that its subsequent execution is error-free.
- If they use any additional libraries or resources beyond those used in class, they must report this so that the instructor can properly evaluate their program's performance. Otherwise, if for any reason the instructor notes that their code cannot be executed, they will receive a grade of zero.
- Only those codes that are fully executed from start to finish will be graded with a grade other than zero. This means that students are not necessarily required to complete the entire question; the important thing is that their code executes correctly, as this is one of the course objectives.

