

	Rhinoceros	Grasshopper	Python	TOTAL	DESCRIPTION
03/12/2021	3			3	Intallation. Interface basics. Configuring the language. Tabs and panels. Navigation. Command line usage. Aliaes configuration. Snap options Layers and organization. Object properties. Saving, importing and exporting files.
10/12/2021	3			3	Curves creation and edition. line, cruve,circle, conics interpolate, offset, fillet, trim, move, copy, project curves.
17/12/2021	3			3	Basic 3D forms. Boolean Operations. From 2D to 3D. Extrude, Sweep, Loft. Oher commands. 3d Trim. Cplanes. Set views. display options named views.
23/12/2021			3	3	Basics aspects of a programming language. Python - brief history and applications in AEC related problems.Difference among python distributions and instalation. Basic operations on the Python interpreter. Basic datatypes. basic operations with datatypes. importing packages.
30/12/2021			3	3	The Script editor. continuation on the operations with the data types. Collections and iterable objects. Tuples, lists, dictionaries. Strings as an iterable method. append, del, pop. If, else, elif stataments. Baskara problem. the ploblme of inverting 3 digits numbers
14/01/2022			3	3	Loops: while, for. Guess the number Game. Fibonacci problem. More on importing packages. Python for scientific programming: the basic packages. Numpy, Scipy, Matplotlib. The jupyter notebook interface. Visual studio code. Instalation and python configuration.
21/01/2022			3	3	Python and grasshopper. Exercises. Trusses, muti-sorey buildings.
28/01/2022	3			3	Modeling exercises. Working with external references. Cliping planes make 2d and section tools.Food4rhino.
04/02/2022		3		3	Grasshopper interface. component input output. Rhinoceros input and output. Data flux and data transformation.Lists and dataTrees. Sliders and panels
11/02/2022		3		3	Exercises. Trusses, muti-sorey buildings. shader panel.
18/02/2022		3		3	Ladibugtools. Installing. Loading information. Analising and visualisng results.
25/02/2022		3		3	Ladybug exercises.

04/03/2022			3	3	hops plug-in and grasshopper. Hops Python server. Basics, Configuration, debugging.
11/03/2022	3			3	On this class I propose that we look in the subject that was less clear, or the one that you are more interested in: Rhino, Grasshopper or Python.
18/03/2022		3		3	Ladybur and galapagos. genetic algorithms basics and optimization.