

TIME DURATION	DATE	PARTICIPANTS
2 DAYS (16 HOURS)	20 AND 21 NOVEMBER	15

I ORGANIZED

Leader

Varvara Toulkeridou
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Assistant

Juan Pablo Klempau
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I GOALS

Dynamo Studio software is a stand-alone programming environment that lets designers create visual logic to explore parametric conceptual designs and automate tasks. Workshop participants will learn to use Dynamo for Revit, Dynamo Studio, and the Dynamo Customizer on the web to enable architectural design and workflow automation. On Day 1, we will begin by developing a common understanding of the mechanics of Dynamo, then move on to build a set of scripts together that will include geometric and Revit applications. On Day 2, emphasis will be placed on extracting the most value from your Dynamo scripts including industry best practices, tips and examples for building robust scripts for sharing, and adapting scripts for optimization. We will conclude with a look forward to generative design and cloud technologies such as Autodesk's Project Fractal and Project Quantum.

I REQUIREMENTS OF PARTICIPANTS

Hardware: Participants could bring their own laptop, and they should have Revit 2017 or newer, and Dynamo Studio installed prior to the Workshop (trial version is ok, and students and educators can download Autodesk licenses for free). Please contact the instructor with questions.
- Software: To access Autodesk software for students and educators use the following link: <http://www.autodesk.com/education/free-software/all>
- Previous knowledge required: To get the most out of the workshop, participants should have a basic to intermediate understanding of visual scripting.
- Online tutorial: For participants who want to take a look upfront into Dynamo you can access Autodesk's Visual Programming Guide here: <http://dynamoprimer.com/en/>



DESIGN SPACE CONSTRUCTION:
MULTI-CRITERIA DESIGN AND EXPLORATION

WORK
SHOP
N ° 2

TIME DURATION	DATE	PARTICIPANTS
2 DAYS (16 HOURS)	20 AND 21 NOVEMBER	15

I ORGANIZED

Leaders

John Haymaker, Ph.D., Research Director
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Marcelo Bernal, Ph.D.,
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Assistant

Camilo Contreras, Universidad
Técnica Federico Santa María
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I GOALS

In this workshop, we will use the St. Goerges School case study from the Perkins+Will Vancouver Office to learn how to build and explore a design space constrained by Passive House Standard for Energy Use (Environmental), LEED Interior Lighting Quality (Experience), and Cost (Economic).

Learning Objectives

- Formulate a design space, including Objectives, Alternatives, Impacts, and Value.
- Create a generative model exploring building form and specifications.
- Define and implement experimental, environmental, and economic analyses.
- Explore a design space, understanding importance and sensitivity of design parameters.
- Define a value equation, and optimize the building design.
- Report the results into an online database capable of storing and comparing design spaces.

I REQUIREMENTS OF PARTICIPANTS

- Hardware: Laptop capable of running the below software with sufficient speed.
- Software: Rhinoceros, Grasshopper, and plugins that can be downloaded here
- Previous knowledge required: Intermediate Grasshopper preferred. Some experience with Performance analysis, and/or optimization is a plus.
- Online tutorial: Additional documentation can be found here

I LOGISTIC REQUIREMENTS

Logistic and technical requirements, in term of space, wiring, projectors, audio devices, digital recording, printers, etc. Projector (Please test before if the Projector is Strong enough to Project images during Day Time) Power Cords for Participants Laptop
Audio Devices (that Presenter can play Videos)



BIM AND WOOD

WORK
SHOP
N ° 3

TIME DURATION	DATE	PARTICIPANTS
1 DAY (8 HOURS)	20 NOVEMBER	15

I ORGANIZED

Danny Lobos and César Ascencio
BIM-Chile

Felipe Pino and Clara Codro

I GOALS

The workshop shows how to design wooden building designs within BIM environments, explains theoretical foundations and some cases countries. Then allows the student to practice with software Autodesk Revit + AGACAD Plugins various design options, parameterization and documentation of constructive solutions in wood.

I REQUIREMENTS OF PARTICIPANTS

- Tracer your laptops and mouse, Install before part workshop
- Revit 2017 (takes 3hrs download and 1 hrs install)
- AGACAD Plugin (<http://www.aga-cad.com/products/packages/wood-framing-solutions> download the trials of Wood Framing: Walls, Trust, Floor, and Rafter) Ideal to have previous knowledge Revit Architecture, but it is not required

I LOGISTIC REQUIREMENTS

- Projector (Please test before the Projector is Strong enough to Project images during Day Time)
- Power Cords for Participants Laptop
- Audio Devices)



BASIC BIM

WORK
SHOP
N ° 4

TIME DURATION	DATE	PARTICIPANTS
1 DAY (8 HOURS)	21 NOVEMBER	15

I ORGANIZED

Danny Lobos y César Ascencio
BIM-Chile

César Ascencio
Profesor

I GOALS

The workshop shows how to work within the BIM environment, explains theoretical fundament. Then allows the student to practice with software Autodesk Revit offers various design, parameterization, and documentation for a building

I REQUIREMENTS OF PARTICIPANTS

- Bring your laptops and mouse, Install before of the workshop
- Revit 2017 (takes 3hrs download and 1 hrs install) Does not require prior knowledge of Revit Architecture, just handle Autocad basic and know how to read architectural plans

I LOGISTIC REQUIREMENTS

- Projector (Please test before if the Projector is Strong enough to Project images during Day Time)
- Power Cords for Participants Laptop
- Audio Devices (that Presenter can play Videos)



PARAMETRIC TERRITORIES

WORK
SHOP
N ° 5

TIME DURATION	DATE	PARTICIPANTS
1 DAY (8 HOURS)	20 NOV (4 HORAS) AND 21 NOV (4 HORAS)	15

I ORGANIZED

DGNL STUDIO

I GOALS

The Rhinoceros + Grasshopper WORKSHOP is geared towards TERRITORIES PARAMETERS, specifically to the representation of data Urban and Territorial.

It seeks to incorporate new tools and methodologies for representation and evaluation of territorial, logistical, demographic or statistics in urban or geographical areas that inform the design architectural. Display the information most closely in your location and spatial relationship, to the Neo-cartographies to visualize the incidence of the data in the territory, thereby aligning it with a greater understanding and understanding of the dynamics and phenomena typical of contemporary urbanity and spatial everydayness.

I REQUIREMENTS OF PARTICIPANTS

- Conocimientos Básicos de CADs
- Aproximación Previa a Rhino
- Notebook Propio

