

## iMAL digital fabrication workshop



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**FabLab.iMAL** presents its next workshop on **laser-cutting, 3D printing & CNC milling**, being held at 34 Quai des Charbonnages - Koolmijnenkaai, 1080 Brussels on **26 May 2015**, from 10.00 to 13.00.

In 3 hours, you will get introduced to the basics and the safety instructions that will make you able to use the laser-cutter, 3D printers and CNC milling machine.

The workshop is held in French language, but you can always ask questions in English. Price: 40? (or 30? for members).



### workshop at iMAL

During this workshop, you will discover:

**Laser-cutting** - thanks to a powerful yet precise laser, the laser-cutter cuts and engraves quickly materials like wood, plexiglas, cardboard, ? The laser cutter only works in 2D and can either follow vector paths (as you can draw in Illustrator, etc.) or engrave black&white bitmap pictures.

This workshop is an introduction to the software driving the machine, the different file formats and conversions; it will moreover explore software allowing to create 3D objects by assembling cut parts.

**3D printing** - a 3D printer, unlike the laser-cutter, adds material instead of removing it. The process is very simple, somewhere in between the working of an inkjet printer and that of a pastry bag. The 3D model to be printed gets converted into a series of very thin layers that the printer will lay one by one, on top of each other. The ?ink? in this case is a very thin thread of fused plastic that comes out of the printer head.

This workshop will introduce the participants to the various 3D printers of the iMAL FabLab, their related software and file formats and will quickly explore a few 3D modeling software.



CNC milling] - The CNC (computer numerical control) milling machine allows to machine solid materials. The main difference from the laser cutter is that it allows to work in 3D, for example to sculpt wood from a 3D model. The milling machine also excels in 2D and allows for example to engrave your own circuit boards.

This workshop will introduce the participants to the principles of machining, the tools and software to drive the machine and generate 2D and 3D toolpaths.

For registration and further information visit [www.imal.org](http://www.imal.org)