# PROSES PRODUKSI

Rencana Perkuliahan Semester Prodi Desain Produk ISI Yogyakarta

## MANAJEMEN PRODUKSI

Perencanaan & manajemen project Kaitan dengan mata kuliah yang lain

# PROSES DESIGN DESIGN THINKING

Perencanaan & manajemen project Kaitan dengan mata kuliah yang lain

## PROSES DESIGN DESIGN THINKING











Proses desain 2D dan 3D design memanfaatkan aplikasi, software, online tools

#### 2D design

#### **Vector:**

- CorelDraw! CorelCAD (http://www.coreldraw.com/en/)
- Adobe Illustrator (<a href="http://www.adobe.com/products/illustrator/">http://www.adobe.com/products/illustrator/</a>)
- Inkscape (<a href="https://inkscape.org">https://inkscape.org</a>)
- LibreDraw (<a href="http://librecad.org/cms/home.html">http://librecad.org/cms/home.html</a>)
- QuarkXpress (http://www.quark.com/en/Products/QuarkXPress/)
- Scribus (<a href="https://www.scribus.net">https://www.scribus.net</a>)

#### Raster:

- Adobe Photoshop (<a href="http://www.adobe.com/products/photoshop/">http://www.adobe.com/products/photoshop/</a>)
- Gimp (<a href="https://www.gimp.org">https://www.gimp.org</a>)
- MyPaint (<a href="http://mypaint.org/about/">http://mypaint.org/about/</a>)
- Krita (https://krita.org/en/)

### 3D design

- Sketchup (<a href="http://www.sketchup.com">http://www.sketchup.com</a>)
- Autodesk Fusion 360 (<a href="http://www.autodesk.com/products/fusion-360/overview">http://www.autodesk.com/products/fusion-360/overview</a>)
- Autodesk 123D (http://www.123dapp.com)
- Rhinoceros (<a href="http://www.rhino3d.com">http://www.rhino3d.com</a>)
- FreeCAD (<u>http://www.freecadweb.org</u>)
- AutoCAD (http://www.autodesk.com/products/autocad/)
- OpenSCAD (<a href="http://www.openscad.org">http://www.openscad.org</a>)
- Blender (<a href="https://www.blender.org">https://www.blender.org</a>)
- Solidwork (<a href="http://www.solidworks.com">http://www.solidworks.com</a>)

#### **ONLINE TOOLS**

- ThinkerCAD (<a href="https://www.tinkercad.com">https://www.tinkercad.com</a>)
- MakerCase (<a href="http://www.makercase.com">http://www.makercase.com</a>)
- Gear Generator (<a href="http://geargenerator.com">http://geargenerator.com</a>)

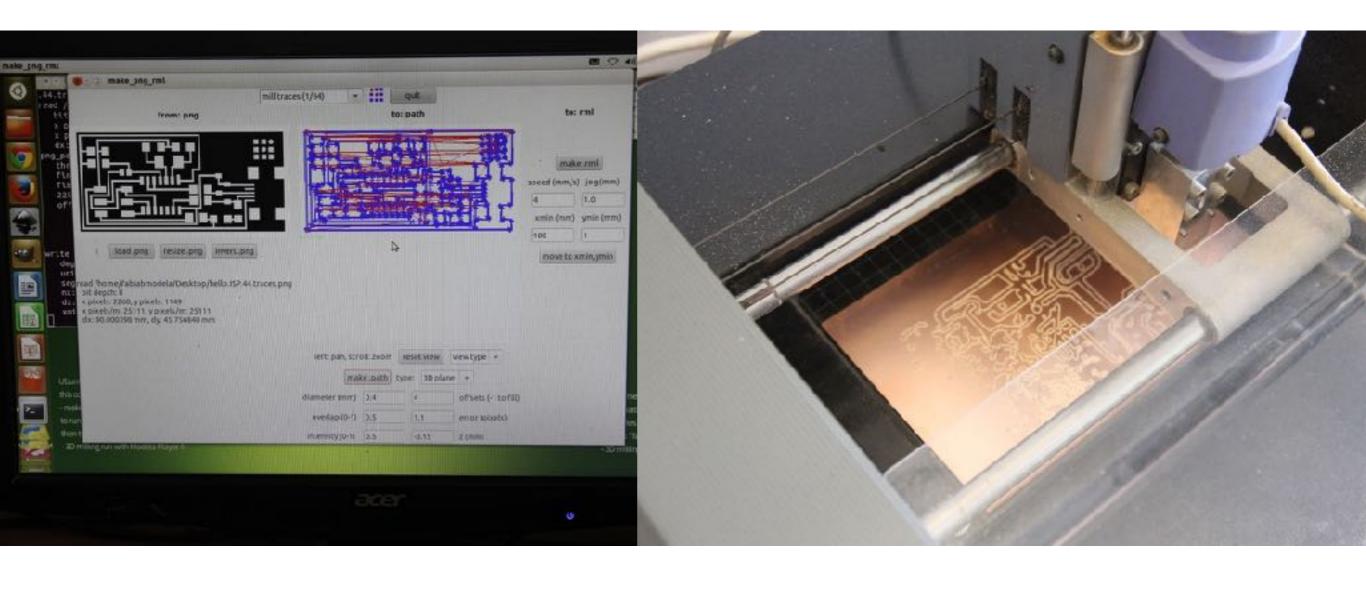
#### Simulasi:

- COMSOL (simulasi multifisika: <a href="http://comsol.com">http://comsol.com</a>)
- Simulation (Solidworks : <a href="http://www.solidworks.com/sw/products/simulation/solutions.htm">http://www.solidworks.com/sw/products/simulation/solutions.htm</a>)
- Elmer (<a href="https://www.csc.fi/web/elmer">https://www.csc.fi/web/elmer</a>)
- Ansys (http://www.ansys.com)

# COMPUTER AIDED MACHINE (CAM)

Memahami dasar-dasar proses manufaktur Dari CAD ke CAM

### COMPUTER AIDED MACHINE (CAM)



## DESKTOP MANUFACTURE

Pemahaman desktop manufacturing, rapid prototyping realisasi produksi desain

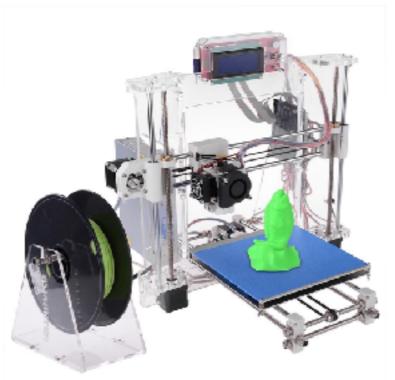
### DESKTOP MANUFACTURE

















## METROLOGI, PENGUKURAN & PENGAWASAN MUTU

Pengukuran desain dan produk, simulasi dan pra-tes karena berkaitan dengan penguasaan teknis

## SUSTAINABLE DESIGN

Pengantar wacana penciptaan desain dan material yang sustainable, ecology, dan ramah lingkungan

## SUSTAINABLE DESIGN



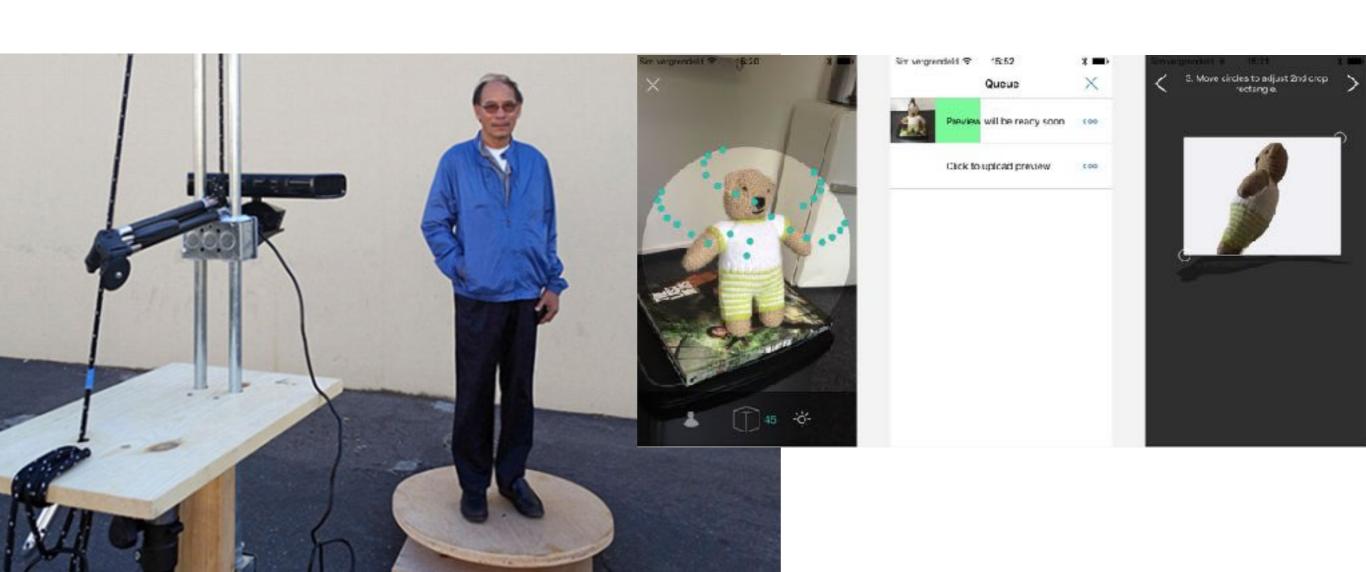
## COMPUTER CONTROLLED CUTTING

Teknologi proses pemotongan, milling, carving bahan & material dalam perancangan desain

# 3D SCANNING & PRINTING

Teknologi proses scanning obyek 3 dimensi dan peralatannya, hingga proses produksi cetak obyek 3 dimensi

# 3D SCANNING & PRINTING



# MOLD & CAST (CETAK & COR)

Proses dan metode cetakan dan pengecoran, polimer, proses coating dalam konteks produksi prototype produk

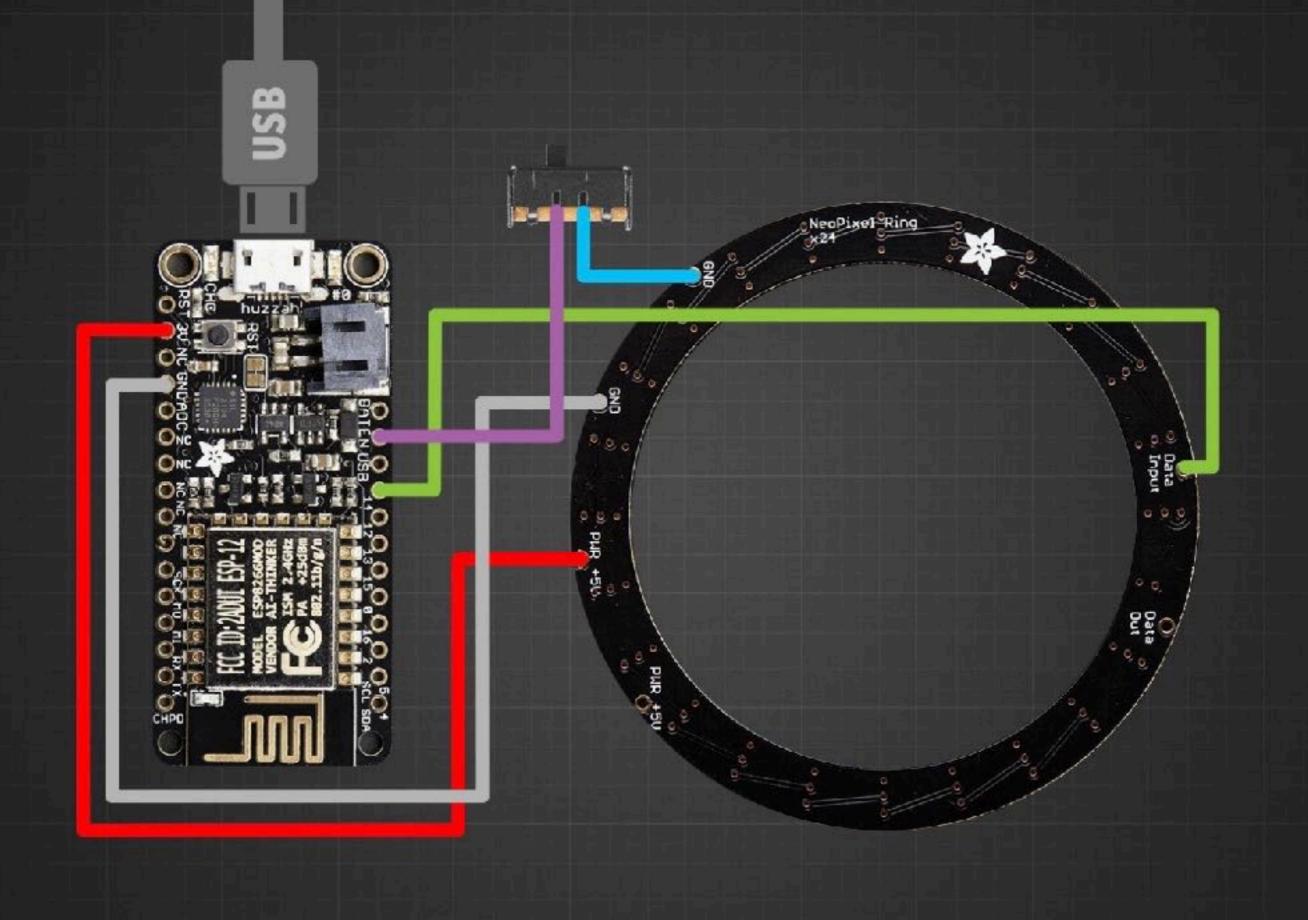
Diskusi, praktek dan kerja lab/studio

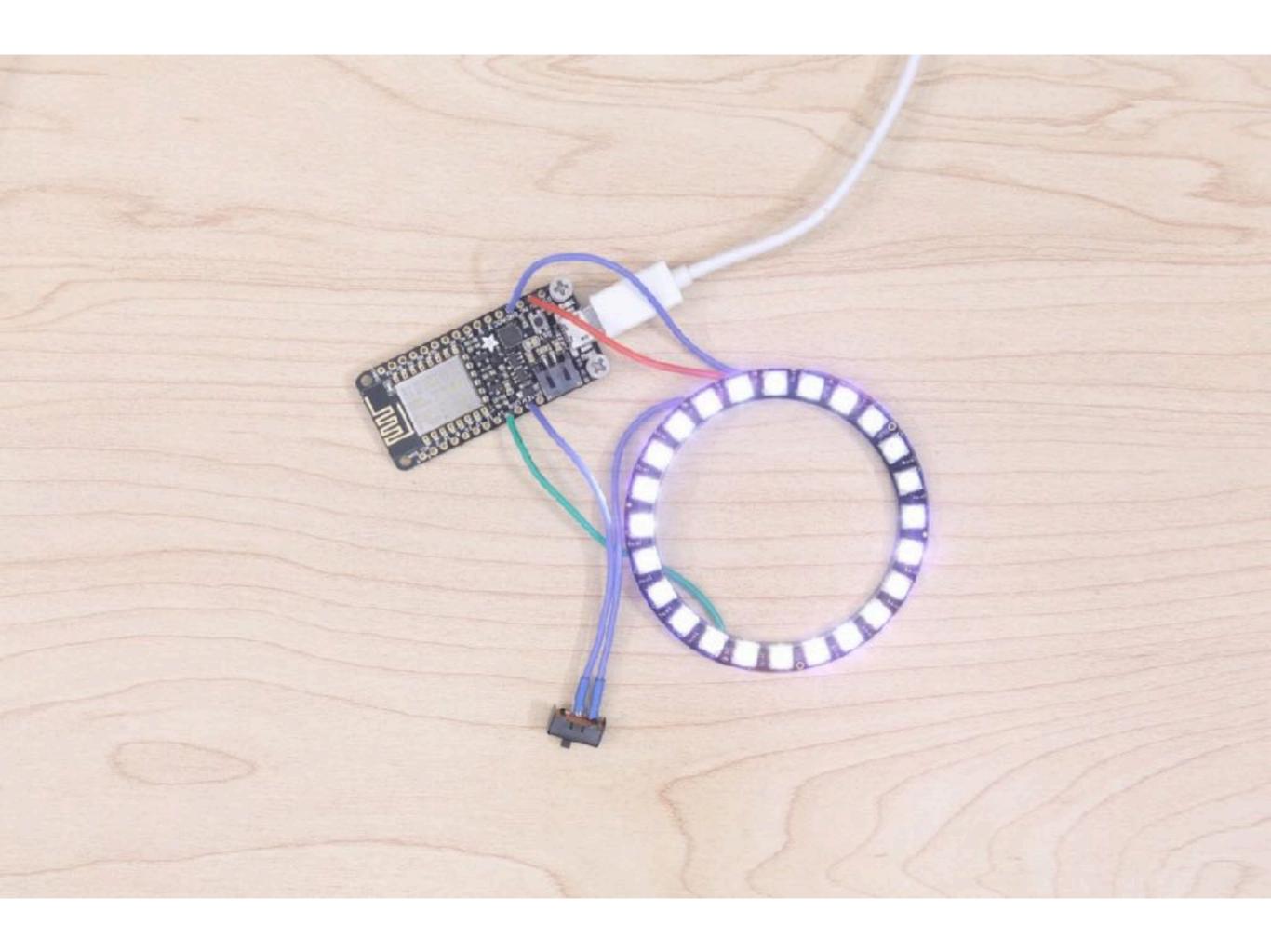
#### CASTING AND MOLDING ClampTogether & FROM PART DESIGN TO FINISHED PART Turn Pipe Upright 10.10.2012 Registration Points — (One side positive) Casting Pipe (Big enough tovers) C5\_REMOVE PART & TRIM Machinable Wax 04\_JOIN TWO FARTS & CAST WITH FINAL MATERIAL CS\_CAST PLEXIBLE MATERIAL U2\_MAICHINE WAX ROUGH CUT & FINISHING CUT (Haterdmill- purblingout) MATERIALS Dosign Digitally Machinable Wax 01\_SPLIT PART Flexible Material 00\_DESIGN PARI Final Material

## PRODUKSI ELEKTRONIKA

Pengenalan dasar-dasar elektronika dan produksinya juga sebagai pengantar ke mata kuliah system engineering

Diskusi, praktek dan kerja lab/studio







# download: mad.honfablab.org