In order to install ns3 in ubuntu machine, system need to have dependencies and libraries by which ns3 package will build up smoothly. But before that we need to update ubuntu system repository.

The next thing to do is download ns3 all-in-one package either via browser or via terminal wget command.

Now unzip the package.

Now cd into the ns3 all-in-one folder. Build.py file will use to enable the tools nessecary for network simulation.

./build.py --enable-examples –enable-test

this command will run build.py file. It will also enable examples and test files too.

You can run ./waf -d debug --enable-examples --enable-tests configure command to configure ./waf (used to build and run scripts)

To test everything allright

./test.py

There are some pre-resquisities packages need to be installed for complete installation of ns3 and

after install nessecary packages, one can now eligible to download

To install prerequisites-  
  
sudo apt-get install gcc g++ python python-dev mercurial bzr gdb valgrind gsl-bin libgsl0-dev libgsl0ldbl flex bison tcpdump sqlite sqlite3 libsqlite3-dev libxml2 libxml2-dev libgtk2.0-0 libgtk2.0-dev uncrustify doxygen graphviz imagemagick texlive texlive-latex-extra texlive-generic-extra texlive-generic-recommended texinfo dia texlive texlive-latex-extra texlive-extra-utils texlive-generic-recommended texi2html python-pygraphviz python-kiwi python-pygoocanvas libgoocanvas-dev python-pygccxml   
  
  
 (now make sure you have not run sudo su to be superuser)

**Downloading NS-3(ns-3 version 3.19 not 3.13)**

cd

mkdir ns3

cd ns3

wget [http://www.nsnam.org/release/ns-allinone-3.19.tar.bz2](http://www.nsnam.org/release/ns-allinone-3.13.tar.bz2)

  tar xjf ns-allinone-3.19.tar.bz2

cd ns-allinone-3.19/

  ls

Then you can find build.py along with other files.

Then to build the examples in ns-3 run

./build.py --enable-examples --enable-tests

If the build is successful then it will give output

 "Build finished successfully".(clap for yourself)

Now run the following command to configure with waf(build tool)

./waf -d debug --enable-examples --enable-tests configure

To build with waf(optional)

./waf

To test everything allright

./test.py