

As the lectures are combined with practical use of the Monte Carlo program EGSnrc, there is a need to bring your own laptop (or group with another student with a laptop) – and where EGSnrc is installed. The following document guides you through the installation:

Install EGSnrc on Windows10 (some additional comments to the web-instructions)

1. Go to the web-page <https://github.com/nrc-cnrc/EGSnrc/wiki/install-EGSnrc-on-windows>
2. Follow the instructions. If you are used to install compilers and programming software, the instructions will be sufficient. If not, I have some additional comments below.

EGSnrc is a free software package to perform Monte Carlo simulations of radiation transportation in different media. The program consists of different modules. To install the package on your computer, you need different compilers – and they need to be installed before you start the installation of EGSnrc. The instructions separate the process into 3 different steps. Some additional comments are following.

1. Installation of compilers.

Download and install MinGW-w64, e.g. at the default-path suggested – or wherever you want to place it. It might be a little bit tricky to set the environment variables, as described – but try and don't give up before you are certain it works.

Check that the commands 'gcc -v' etc. works, open "Command prompt", write 'c\' to get to C:\ - and then write the command 'gfortran --version' etc. as described in the instructions.

When I installed this for my own, I had to install "git" also. To do that – google "git download", find a web-page to download the software and install it on your computer (default configurations are ok). You need to restart your computer and check that "git" works, writing "git --version" in the command prompt after installation.

2. Download EGSnrc

Run the commands in the command prompt, as described in the installation instructions. I installed the program directly at D:\ (I went to D:\ writing "cd d:" – and ran all the commands from that directory). If you do it like this, all files are downloaded into a map at D:\ (but other places are totally ok).

3. Configure EGSnrc

Download the installation program for EGSnrc as described. Choose a windows-file if you are using Windows (as described). You need to set "HEN_HOUSE" and "egs_home" – and do that as described. If the next window in the installation process is a window where you have to set the different compilers – something is wrong in the process. Try to install the compilers (or "git") – and come back afterwards. If the installation proceeds (without the window with the compilers), the installation process will start. It takes a while... Let the computer complete the process – and the Monte Carlo program EGSnrc are ready for use!

(There are also online help for a to answer questions about installation, if these comments are not sufficient).