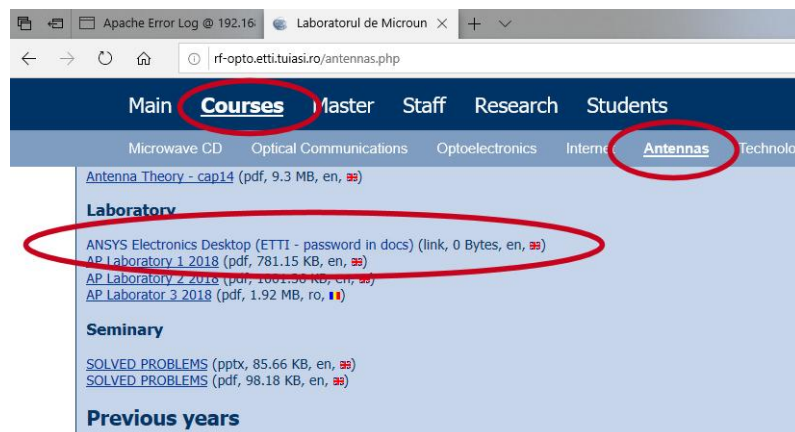


Laboratory 1

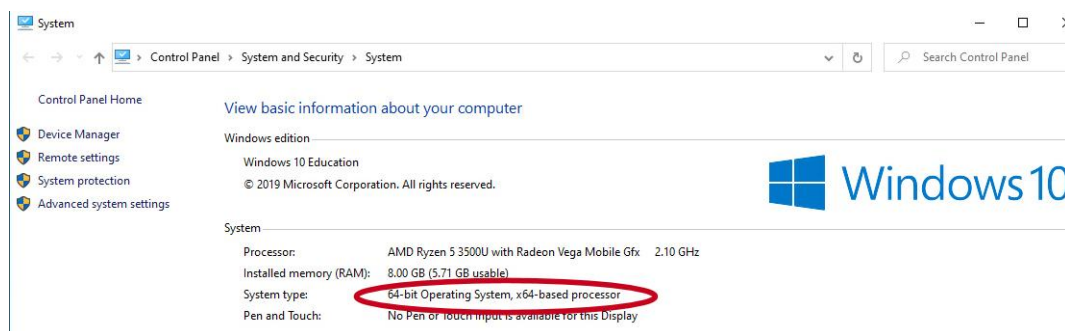
Installing HFSS

HFSS (High Frequency Structure Simulator) is part of ANSYS Electronics Desktop. You can download the software and run it from your home computer. First you must login to the RF-OPTO server: in the menu go to **Students > Student List > *group* > *student*** and login with your email address or your password (for full access including exams/labs).

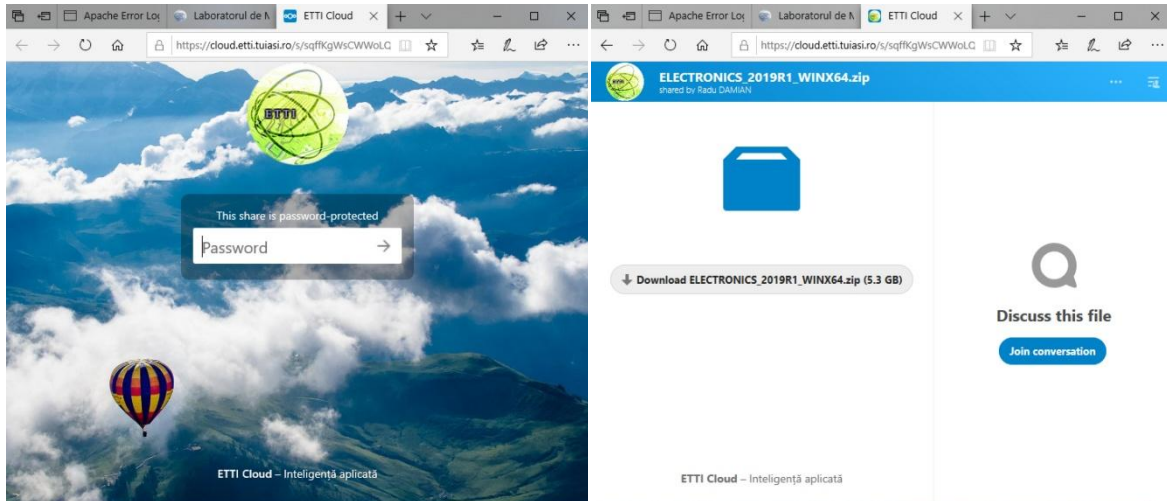
Then on Antennas and Propagation page **Courses > Antennas** you will find the link to download the software.



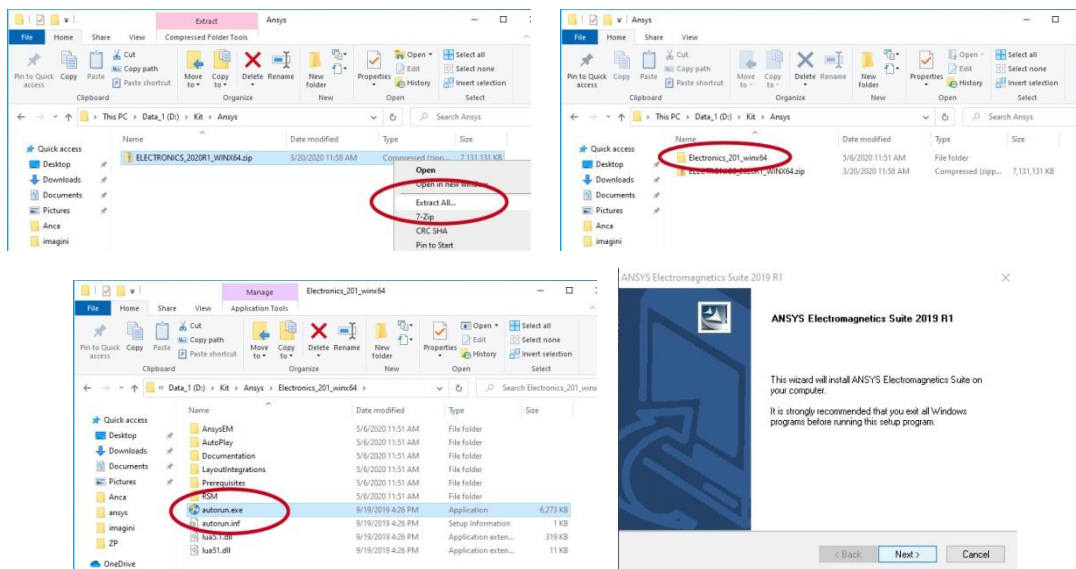
First, verify that you have access to a compatible computer. Currently **only 64 bit** operating systems are supported. On the lab's page you will find the Win64 version, a Linux 64 version being available on request, but not supported in our lab.



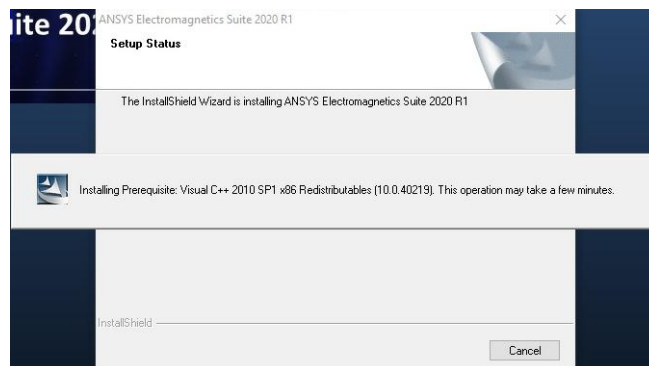
The software is version 2019R1, when the university license server will be upgraded to a newer version you might find newer versions of the software, at the same link. The link will direct you to the faculty's cloud server, the link is password protected and password is: **RF-opto3#**



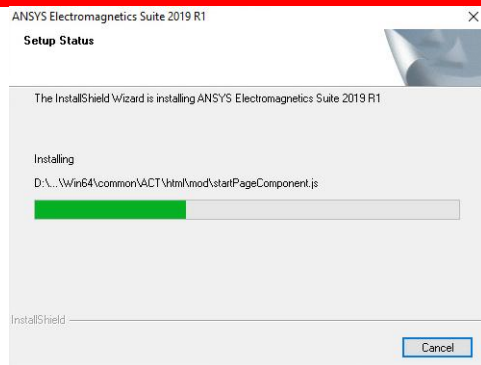
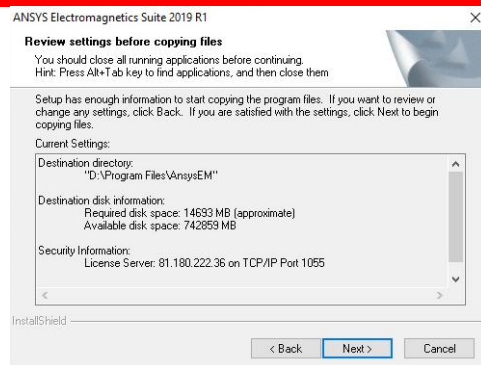
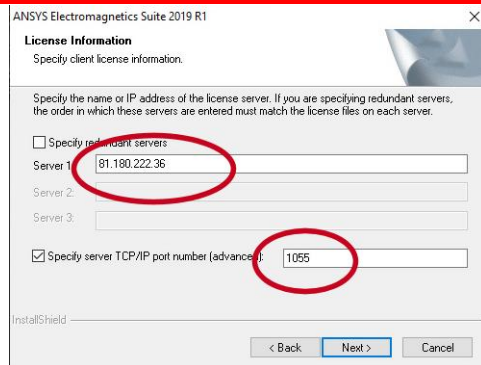
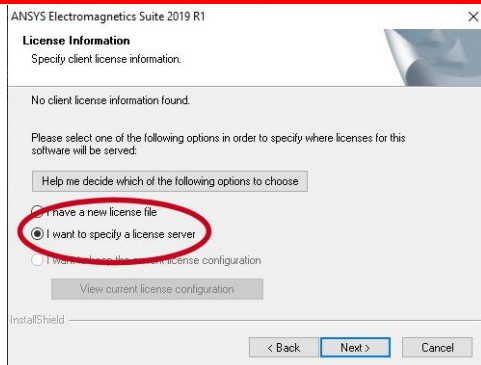
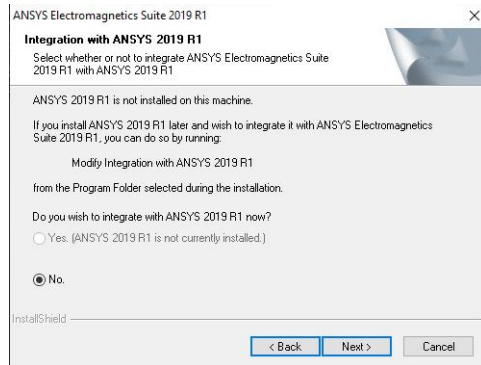
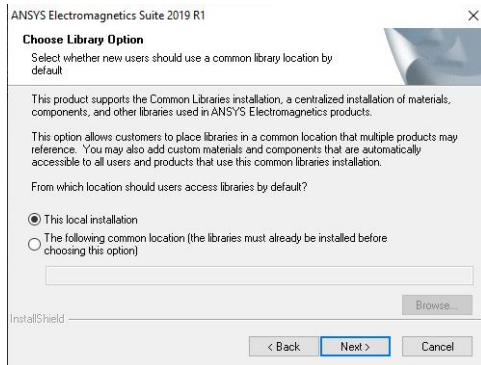
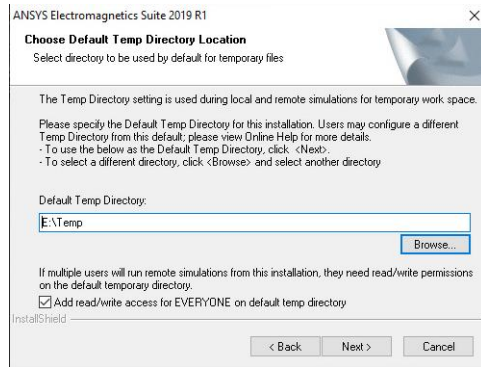
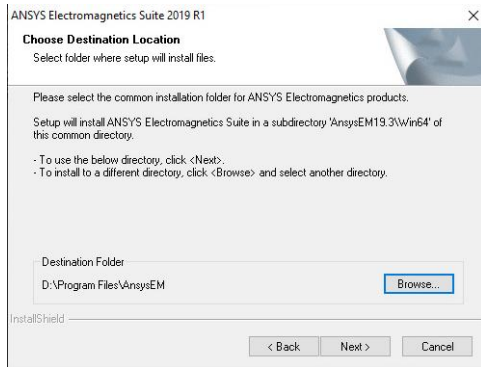
After downloading the zip package (5.3GB) you can begin the installation procedure, first extracting all files in the archive, going to that folder and running **autorun.exe**

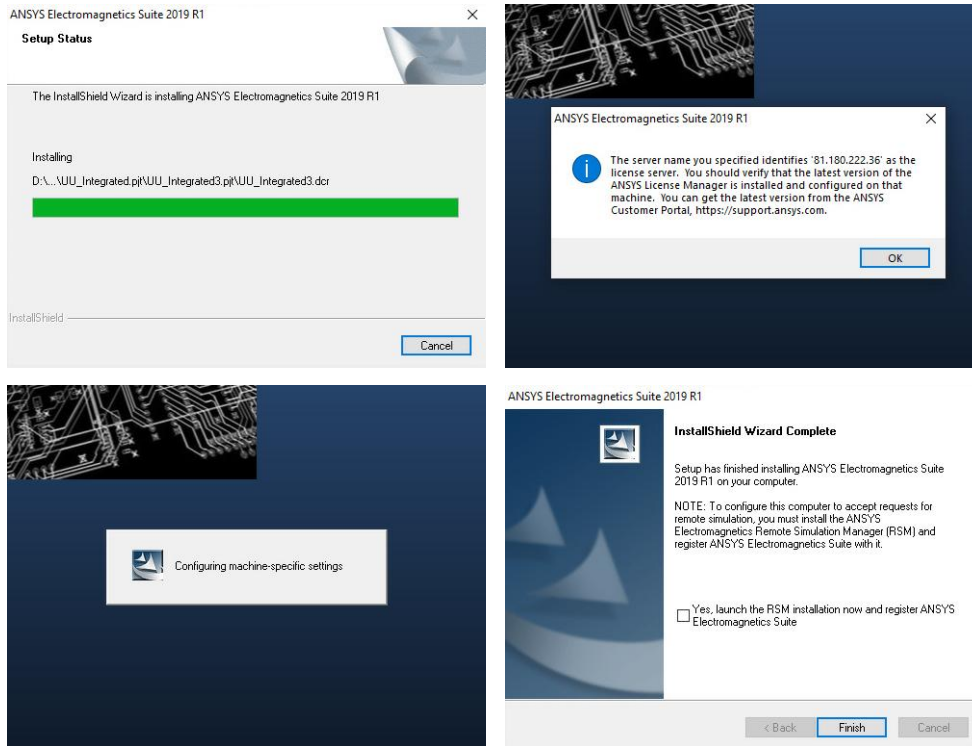



The installation is straightforward, you might have to install some prerequisites, (Visual C++ Redistributables) depending of the status of your operating system.

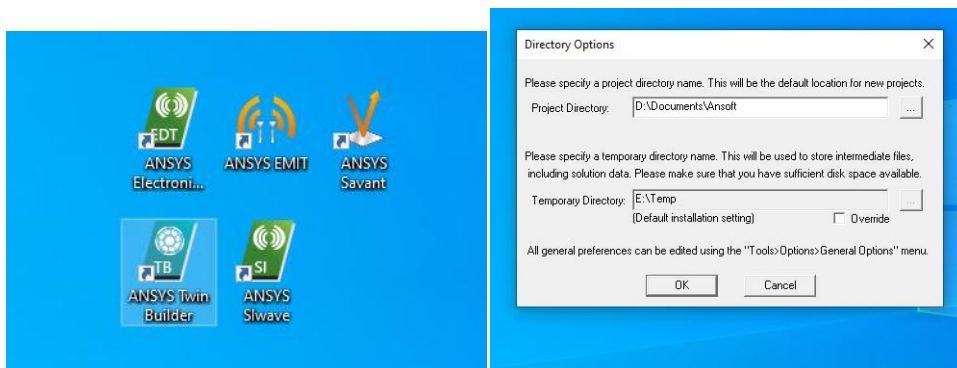


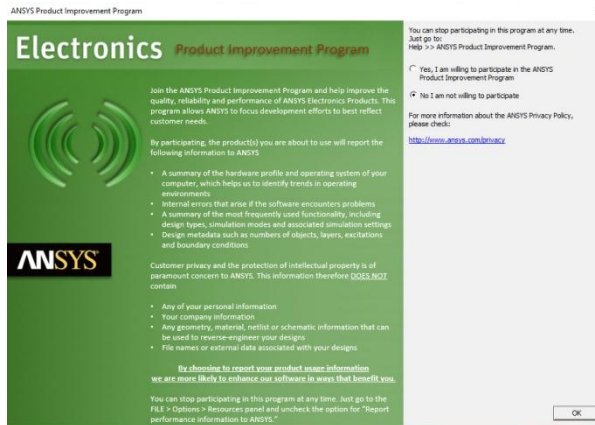
Very Important! Special care must be taken at the step where you specify licensing options (I want to specify a license server) and Server 1 (Server IP: **81.180.222.36** , Port: **1055**) because you can't modify them later inside the software, only by reinstalling the product.



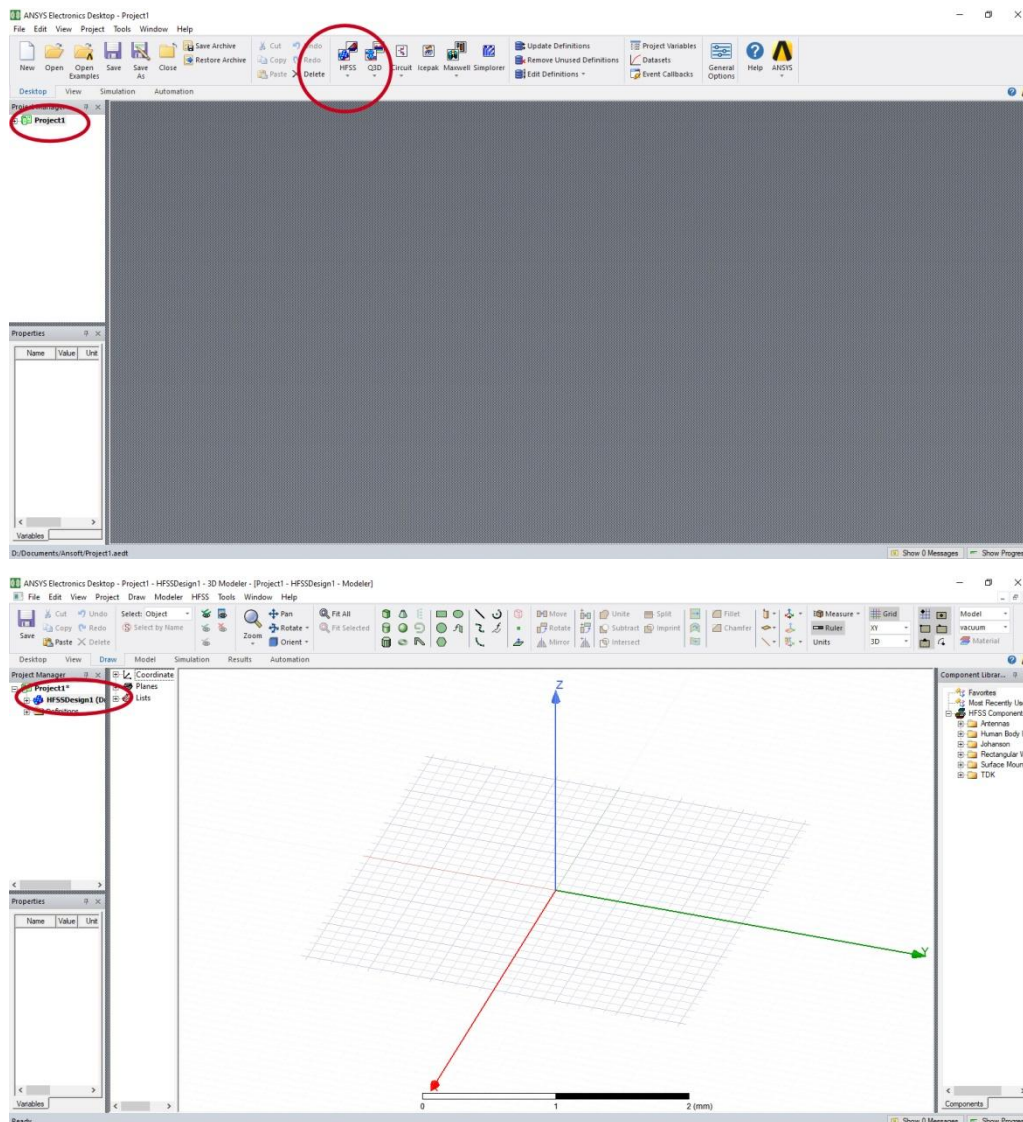


You can expect a 1 hour long installation procedure, depending on your system. Shortcuts for the individual applications will be available on your desktop. Start ANSYS Electronics Desktop clicking the ANSYS Electronics Desktop icon  or from the Windows Start menu, select ANSYS EM Suite 2019 R1 > ANSYS Electronics Desktop 2019 R1.



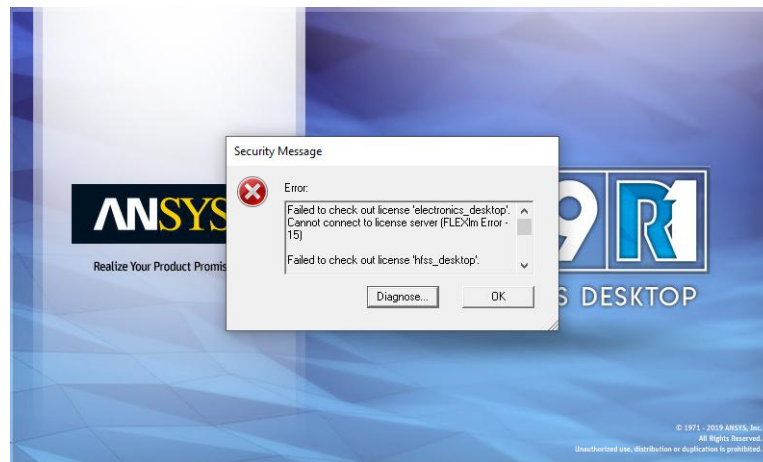


After choosing a temporary directory and participation in Product Improvement Program (No) the Ansys Electronics Desktop starts for the first time. Start a HFSS project by clicking the corresponding icon in the ribbon.



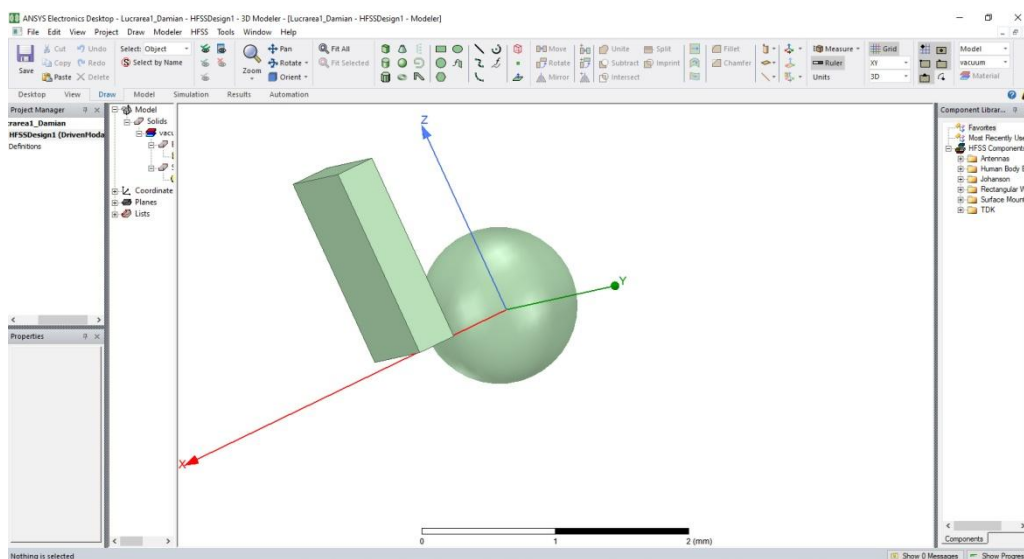
Very Important! Ansys Electronics Desktop requires a functional network connection with the license server in order to function. If you get the following error during start-up check

your network connection and eventually set your firewall to accept connections with IP: **81.180.222.36** , on port: **1055** .

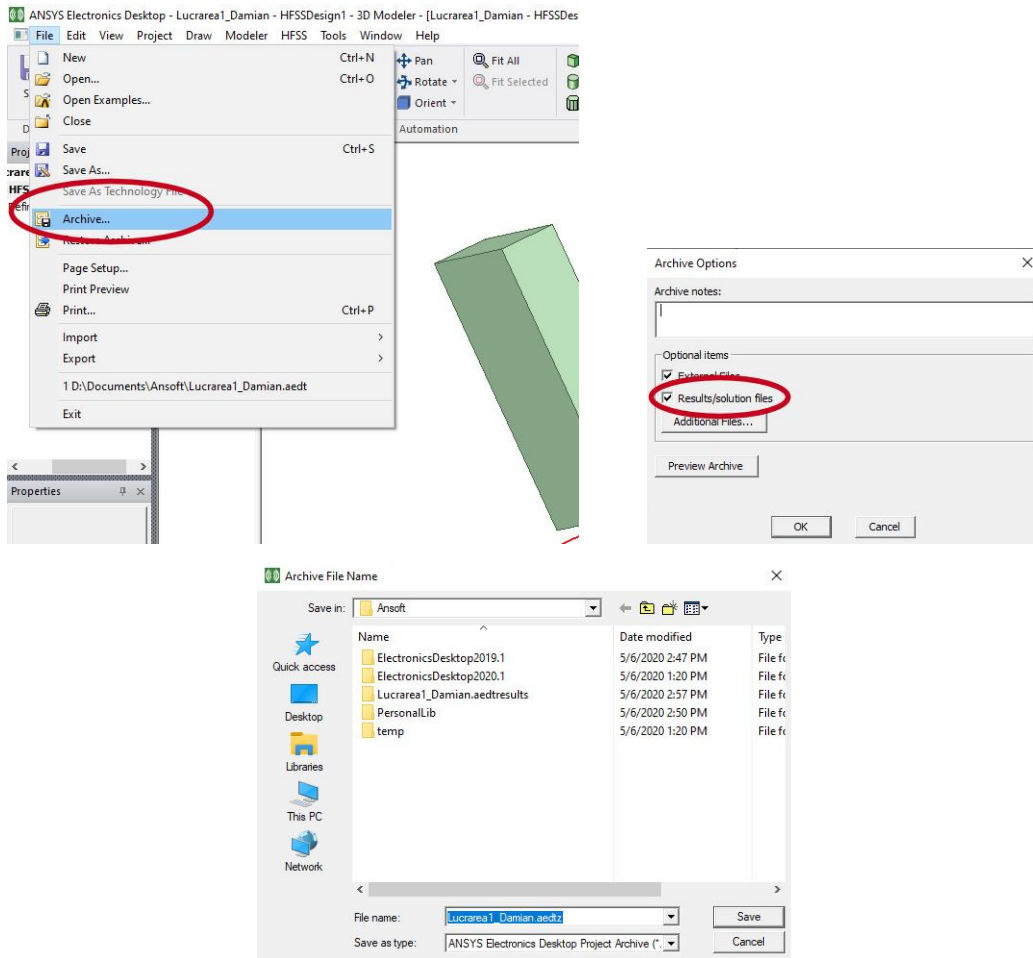


Activity in the laboratory

1. Install the product as instructed
2. Start a HFSS project, draw **any** structure, save the project



On the HDD a HFSS project is composed of a file with the extension "*.aedt" (X.aedt) and a folder with the name "X.aedtresults". If for the completion of the lab you must submit a single file you must use the "Archive" command from HFSS. This creates a single file with the extension "aedtz" from your project, a file you can email and can be used by HFSS directly with the command "Restore Archive".



3. Create an archive of your project and submit it to the lab's web server (**it must** be a single file)