

Skills to be developed in the Electronics for Measuring Systems lab

This laboratory will help you to develop the following skills:

- Design or produce technical solution to meet specifications.
- Cooperate in a team or in a project mode.

They are part of the framework adopted in Phelma (see the presentations of Lorena Angel and Charlotte Vendrely).

You should be able to explain in a **relevant, concrete, reflective, responsible** and **personal** way WHY you think you have acquired a skill. Therefore, you should:

- provide authentic and specific evidence
- your argument must be relevant, i.e. related to the topic
- your argument must be focusing on the topic

Each component of a group should include in the appendices of the report a **short personal discussion** (max 2 pages per person) about the competences they developed in the project.

To help you through this exercise of self-evaluation, the skill “Design or produce technical solution to meet specifications” is related to the Circuit and metrology as well as Tools criteria of the following table. The skill “Cooperate in a team or in a project mode” is related to the “Project” criteria of the following table.

	Criterion	Validated	To be improved	Insufficient
Circuit and metrology	<i>Study of the circuit in different building blocks</i>	The different blocks meet the specifications	Some blocks are missing or does not meet the specifications	The building blocks of the circuit are not identified and studied.
	<i>Study of the overall circuit</i>	A complete calibration of the whole system allows to use the circuit as a weighting scale	Calibration data are available only for some blocks but not the whole circuit.	No calibration is done or it is unsatisfactory
	<i>Study of the limits of the circuit</i>	The measuring range is clearly specified including in situations where noise is added in the circuit	The measuring range is specified in the ideal situation.	No discussion of the measuring range is provided
Tools	<i>The tools used for the measurements are clearly specified</i>	The setup is clear and can be reproduced easily	Some details are missing but the general structure of the measurement is given	Major information about the measuring setup is not specified and is not mastered
	<i>The relevant metrologic characteristics of the instruments are investigated</i>	The most appropriate measuring instruments are used and their specifications are mastered	Details are missing and the choice of the tools can be improved	Major mistakes render the measurements unreliable and/or non-reproducible
Project	<i>Advancement</i>	Respecting the schedules	Late	Important tasks are not started
	<i>Tasks repartition</i>	Well balanced	Not balanced	Someone does not work at all in the group
	<i>Global vision of the project</i>	Clear	Blurred	Inexistent