

# Transitional arrangements from TOM to TOM2.0 in BSc Chemical Science and Engineering (CSE)

For students enrolled in B-CSE before Academic year 2020-2021

Final version, 7 July 2020

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In accordance with article 8.4 of the general section of the EER and article 9 of the CSE programme-specific appendix of the EER, this document explains the transfer from TOM to TOM2.0 and, where applicable, transitional arrangements to provide alternatives for module parts that have changed because of changes in the study programme. These transitional arrangements take effect on 31 August 2020 and are valid in the academic year 2020-2021.

## From integrated to coherent CSE modules

Detailed information about the TOM2.0 model is communicated separately. For your convenience, some general information is added at the end of this document.

## Changes: the registration of grades for TOM1.0 modules

- *Default registration and option for alternative*

We expect that for most students, it will be beneficial to still pass uncompleted TOM (hereafter called: TOM1.0) modules under the TOM1.0 rules if a student followed but not yet passed that whole module. Therefore, this will be the default option; the TOM1.0 compensation rules still apply, and ultimately, a module of 15 EC is passed with one final grade. The implications are listed below, per cohort.

- The cohorts of students that started in CSE before or in academic year 2017-2018 pass uncompleted modules 1-12 under TOM1.0 in 2020-2021.
- The cohort of students that started in CSE in academic year 2018-2019 passes uncompleted modules 1-8 under TOM1.0 in 2020-2021. Modules 9-12 will be under TOM2.0.
- The cohort of students that started in CSE in academic year 2019-2020 passes uncompleted modules 1-4 under TOM1.0 in 2020-2021. Modules 5-12 will be under TOM2.0.
- For all cohorts: if any of the uncompleted TOM1.0 modules is not passed in academic year 2020-2021, these modules will be transferred to the TOM2.0 model. TOM1.0 compensation rules no longer apply for those uncompleted modules after academic year 2020-2021.

Students can choose to diverge from this standard (see Figure 1, right column). If they wish to have study results from uncompleted modules from 2019-2020 or earlier transferred to the new TOM2.0 modules, they can request that in a meeting with the study advisor. There are a few prerequisites:

- The choice to transfer results from TOM1.0 modules to TOM2.0 modules is irreversible.
- The request has to be made no later than 20 September 2020. Otherwise, by default, the uncompleted modules remain in TOM1.0 in academic year 2020-2021.
- When results from uncompleted TOM1.0 modules are transferred to TOM2.0, module components are converted to study units and passed ECs are instantly awarded.

A student cannot choose to follow future modules under TOM1.0. Modules given in 2020-2021 or later follow TOM2.0 rules. Module test plans in 2020-2021 will show assessment schemes for both TOM1.0 and TOM2.0.

- *In case a student already passed (some) module component(s)*

According to our EER (art. 5a, paragraph 2a), students that joined our programme before/in 2019-2020 and that have passing grades<sup>1</sup> for module components without passing the entire module, got

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<sup>1</sup> In TOM2.0, one math component in one of the modules 1-4 that was completed with a grade in the range 5.0-5.4 counts as a pass and has unlimited validity when at least 1 other math component in another module (from module 1-4) was completed with a grade  $\geq 6.5$ . See EER.

these results registered. New results will be registered and transferred back to the original TOM1.0 module in 2020-2021, ultimately resulting in a finalised module of 15 EC with one grade. The TOM1.0 compensation rules apply. See first column in Figure 1.

- *In case a student passed (some) part(s) of module component(s)*

If students passed only a part of a module component, they formally need to redo that module component. Students discuss their study plan with the study advisor. Results are registered in the TOM1.0 module in 2020-2021, that is passed once all 15 ECs are in. See second column in Figure 1.

- *In case a student lacks any result from an “old” module*

If a student redoes a whole module from an earlier year of his/her programme, by default it will be registered as a TOM1.0 module in 2020-2021. See third column in Figure 1.

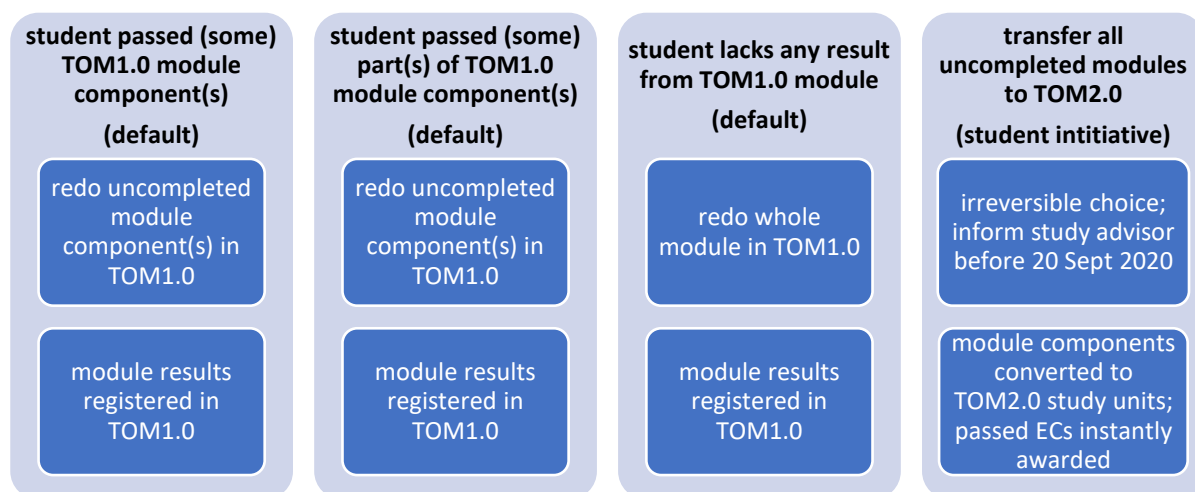


Figure 1: Possibilities in 2020-2021 for finishing uncompleted modules. Refer to test plans.

## Changes: content

In 2019-2020, the B-CSE programme already complied with the new TOM2.0 curriculum, meaning that the module components (TOM1.0) can be converted 1:1 to *study units* (TOM2.0) in 2020-2021. Next to that, the programme will also undergo some changes in content. This applies to module 4, and to module 7 and 11 in the subsequent years (cohort 2020-2021).

### Changes in CSE Module 4

The foreseen changes in Module 4, starting in academic year 2020-2021, are depicted in Table 1.

Table 1: Curriculum CSE Module 4 before and after 1 September 2020

Module 4, old TOM1.0 curriculum “Physical and Analytical Chemistry”	EC	Module 4, new TOM2.0 curriculum “Equilibria & Electrochemistry”	EC
Equilibria and analytical chemistry	<b>9.5</b>	Equilibria	<b>5.0</b>
<i>Chemical equilibria</i>	3.0	<i>Chemical equilibria</i>	3.0
<i>Electrochemistry</i>	1.5	<i>Phase equilibria</i>	1.5
<i>Phase equilibria</i>	1.5	<i>Phase equilibrium experiment</i>	0.5
<i>Analytical chemistry</i>	2.5	Electrochemistry	<b>7.0</b>
<i>Project</i>	1.0	<i>Electrochemistry (theory)<sup>2</sup></i>	3.0
Lab course analytical chemistry	<b>2.5</b>	<i>Practicum + Project</i>	4.0
Calculus 2	<b>3.0</b>	Calculus 2	<b>3.0</b>

<sup>2</sup> 1.5 EC was already in TOM1.0 Module 4; the rest is new

The parts that are written in italics are subgrades. If students have passing subgrades yet failed to pass the module component of the old curriculum, they can contact the study advisor to discuss the possibility of using these results to pass the module. Students need to contact their study advisor to make arrangements and to set up a study plan that enables them to pass this module. Table 2 depicts transitional arrangements for Module 4: what should a student do to still pass the module?

Table 2. Transitional arrangements CSE Module 4.

<b>Failed part(s) of module 4</b>	<b>Required action to pass module 4</b>
Equilibria and analytical chemistry (9.5 EC)	<ul style="list-style-type: none"> <li>• Follow all actions of the subparts (in italics) below.</li> <li>• In case you also failed the Lab course, you can do a virtual lab course, or consider following part of the new module.</li> <li>• In either case: discuss with study advisor before 20 Sept. 2020!</li> </ul>
<i>Chemical equilibria (3.0 EC)</i>	Do resit. Resits will be organised in 2020-2021 together with students in new module. Lectures and/or slides in old Canvas page.
<i>Electrochemistry (1.5 EC)</i>	<ul style="list-style-type: none"> <li>• Redo Electrochemistry (1.5 EC) by making a designated part of the new exam. Discuss with lecturer and with study advisor!</li> <li>• Students can also opt for enlarging “old” TOM module to 16.5 EC and take 3 EC Electrochemistry in the new module.</li> </ul>
<i>Phase equilibria (1.5 EC)</i>	<ul style="list-style-type: none"> <li>• Do the resit together with new students.</li> <li>• Lectures and/or slides are in old Canvas page.</li> </ul>
<i>Analytical chemistry (2.5 EC)</i>	Redo Analytical Chemistry. Lecture contents and/or slides are in old Canvas page and resits will be organised in 2020-2021.
<i>Project (1.0 EC)</i>	Discuss with lecturer and redo online (individually or in group).
Lab course analytical chemistry (2.5 EC)	<ul style="list-style-type: none"> <li>• Redo Lab course online. Discuss this plan with module coordinator.</li> <li>• In case you also failed Equilibria and analytical chemistry (9.5 EC), it may be more convenient to transfer to the new module.</li> <li>• In both cases: discuss with study advisor!</li> </ul>
Calculus 2 (3.0 EC)	Lectures and/or slides are in old Canvas page and resits will be organised in 2020-2021 together with students in the new module.
All module components and subparts (no “pass” on any)	By default, the TOM1.0 module is registered. See actions above. Because the module changes in 2020-2021, it may be more convenient to transfer to the new module. Discuss study plan with your study advisor before 20 September 2020.

The changes apply to module 4 in 2020-2021. Related to that, modules 7 and 11 will also undergo some changes, starting 2021-2022.

### Changes in a nutshell

- From 2020-2021, credits of study units will be registered separately (for all new modules)
- From 2020-2021, compensation of grades within new TOM2.0 modules is no longer possible<sup>3</sup>
- In 2020-2021, students that did not yet finish TOM1.0 modules can still finalise these, with TOM1.0 compensation rules still in place (transfer of these not-yet-passed “old” modules to TOM2.0 is unnecessary). This is organised by default. Until 20 September 2020, a student can request to have uncompleted TOM1.0 modules transferred to TOM2.0 modules.
- CSE Module 4 will have different content as of 2020-2021; transitional arrangements are explained in Table 2 and adapted study plans have to be made with the study advisor. Refer to the 2020-2021 test plan of this module.

<sup>3</sup> Exception for Mathematics, see footnote 2 and EER

## Background information: from integrated to coherent CSE modules

The Twente Educational Model (in Dutch: Twents OnderwijsModel, "TOM") provided *integrated* 15-EC modules, resulting in one grade for one module that was made up of different *module components*.

With the start of academic year 2020-2021, we proceed with TOM2.0, and the BSc programme in Chemical Science and Engineering consists of *coherent* modules of 15 EC. These modules, starting simultaneously for all years of the CSE programme, are made up of smaller *study units*.

While each study unit is completed with a grade, modules as such no longer have a concluding grade. Compensation within a module will not be possible anymore<sup>3</sup>. Modules still exist as coherent packages within the curriculum, and as a means of organisation; they contain study units (including projects) focused around a certain theme. Although study units within a module are registered separately, they are coherent and are preferably taken together.

All new, coherent modules that a student takes part in are set up according to these TOM2.0 rules. Passed TOM1.0 modules remain in TOM1.0. If a student failed one or more TOM1.0 modules, these modules can still be passed according to the TOM1.0 rules in 2020-2021.

From September 2020 onwards, *grades* for newly passed module components, modules (TOM1.0) and study units (TOM2.0), will be either x.0 or x.5 (and not "x"). All new exam results of a study unit are expressed in half grades from 1.0 up to and including 5.0 and from 6.0 up to and including 10.0. Earlier passed TOM1.0 modules and module components keep their grade ("x", no decimal).