New curriculum ME starting 2023-24

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New curriculum 2023-24

- First year students who start the bachelor in September 2023 will have a new curriculum

- Courses and content of their program stay the same for the largest part

- Most important changes of the new program:
  - Some basic courses will disappear or change in content
  - Introduction of a few new courses
  - Some current courses change in year, quartile or timeslot
  - USE learning lines disappear

What does this mean for me in 2023-24?

In principle nothing will change for you.
You can simply continue the program you started.

However;
If there are first year courses that you did not pass in 2022-23, then the new curriculum might have an influence on these courses next year.

New curriculum 2023-24: year 1

2023-2024			
1.1	1.2	1.3	1.4
2WBB0 (1) Calculus (A) *Peletier*	4CA10 (1) Principles of design and programming (C) *Remmers, Vrancken*	4MA00 (1) Structure and properties of materials (C) *van Dommelen, Govaert*	4CA20 (2) Signals and Systems (D) *Chong*
4RA00 (1) Mechanics (B) *Zakhari, van Breemen*	4DA00 (1) Dynamics (A) *Fey, Habets*	4RA10 (1) Introduction Transport Phen. (D) *Dam, Anthonissen*	0LVX10 (1) ITEC Ethics (E) *Spahn*
4CBLA00 (1) Intro mech. Engineering & CBL truss structure (C+E) *Anderson, Luttge*	4CBLA10 (1) CBL Design of a Launching mechanism (B+E) *de Lange*	4CBLA20 (1) CBL Multiped Robot (A+B) *Wang*	4CBLA30 (1) CBL Energy storage and transport (A+B) *Verhoosel*

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Two new courses:

- 4CA10 Principles of design and programming
- 0LVX10 ITEC Ethics

Can I take the new courses in year 1 as electives?

No, this is not allowed.

- 4CA10 *Principles of design and programming* has too much overlap with 4CC30 in year 3

- 0LVX10 *ITEC Ethics* has too much overlap with 0SIAB0 *USE Base*

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Existing courses that have moved quartile/year:

- 4MA00 *Structure and properties of materials* from Q4 → **Q3**
- 4CA20 *Systems & Signals* from year 2, Q1 → **year 1, Q4**
- 4CBLA30 *Energy storage and transport* from year 1, Q1 → **year 1, Q4**
- Elective course 4GA50 *CBL Solar Heat* from year 1, Q4 → **year 2, Q1** (so it **cannot be followed in 2023-24 but again in 2024-25**)

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Please note:

You cannot follow 4CA20 (Signals & Systems) or 4CBLA30 (Energy Storage) as a non-first year student in 2023-24!

Enroll for 4CB00 or 4GB00 in Q1 instead (which is still taught).

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Changes in timeslots:

- 4DA00 *Dynamics* moves to A
- 4CBLA10 *Design of a Launching mechanism* moves to B + E
- 4CBLA20 *Multiped Robot* moves to A + B

What about first year courses that I haven’t passed in 2022-23?

- 9 out of 12 first year courses remain in the new program, but some change in quartile (i.e. 4MA00) or timeslot (i.e. 4DA00).

  You can simply re-sit the whole course again.

What about first year courses that I haven't passed in 2022-23?

- In case you haven't passed **3NBB0** *Applied Natural Sciences* or **2IAB0** *Data Analytics* then you can make use of two exam opportunities in 2023-24. However, there most likely won't be live lectures (but you do have access to Canvas and all teaching materials).

- If you haven't passed **0SAB0** *USE Base* then you can follow 0LVX10 *ITEQ Ethics* as a replacement course in 2023-24. *Please note this course is taught in the same quartile but in a different timeslot.*

What about second/third year courses in 2023-24?

- Second & third year courses will be taught in the exact same way in 2023-24.

- **One exception**; 4CC30 & 4DC10

4DC10 & 4CC30 become 4CC40

- Starting academic year 2023-24 4DC10 & 4CC30 are no longer taught
- In their place a combination course **4CC40 *Design principles and analysis of Production Systems*** of 5 ECTS is introduced
- You can transfer your passing final grade from 4DC10 and/or 4CC30 to this new course: both count for 50% in this new course
- *If you've transferred either your grade from 4DC10 or 4CC30 to 4CC40, then you only need to take the exam of the part you are still missing*

What about electives/USE learning lines I have planned in the future?

- Every elective package needs to inform students until when it’s being taught

- Check the education guide on electives to see how long your USE learning line/elective package is being offered

- Plan accordingly in the PlanApp if needed

To conclude;

- If you need to re-take first year courses in 2023-24:
  - Check via the PlanApp if the courses changes in quartile/timeslot and adjust your planning
  - Planning to re-take 3NBB0 or 2IAB0? There are two exam opportunities, but no live lectures available
  - Need to re-take OSAB0? You can follow *ITEC Ethics* next year instead

To conclude;

- In principle nothing changes and you can finish the program you started
  - One exception: 4CC30 & 4DC10 are merged into **4CC40** starting 2023-34
  - If you have a passing final grade from either 4CC30 or 4DC10, then you can transfer this to 4CC40. It will count towards 50% of your final grade.

For USE learning lines/elective packages: check the education guide until when there being offered

To conclude;

- More information? You can find the current and new curriculum on the education guide.

- If you have questions after reading this information (or this presentation) feel free to contact the academic advisors via me.academic.advisors.bsc@tue.nl.

A brief look to the future in year 2+3…

2024-2025			
2.1	**2.2**	**2.3**	**2.4**
4EB00 (2) Thermodynamics (C) *Smeulders*	**4DB00 (2) Dynamics & contol of mechanical systems (E)** *Murguia Rendon*	**4MB00 (2) Solid Mechanics (D)** *Geers, Kouznetsova*	**4PB00 (2) Heat and flow (E)** *Kuerten, Rindt*
2XXXX (2) Statistics & Probability (D) *XXXXXX*	**4CBLB10 (2) CBL Combustion engine (C+D)** *Somers*	**4CBLB20 (2) CBL Control of a flexible robot system (C+E)** *Hattum, Kunnen*	**4CBLW00 (2) Multidisciplinary CBL (C+D)** *van Esch*
free elective *4CBLB00 (2) CBL Solar Heat (A+B)*	**free elective** *4MB10 (2) Material models (A)*	**free elective** *4CB40 (3) Control of Manufacturing Systems (B)*	**free elective** *4CBLB30 (3) CBL mechanical testing (A+B)*
2025-2026			
3.1	**3.2**	**3.3**	**3.4**
4MC10 (3) Computational mechanics (E) *Peerlings, van Brummelen*	**4UC10 (3) Micromanufacturing (D)** *XXXXX*	**BEP (3) (B)**	**BEP (3) (B)**
0LVX20 (2) ITEC Advanced (B) *XXXX*	**free elective** *4CBLC20 (3) CBL CAE (A+B)*	**Major elective** 4CC50 (3) Design principles (A) 4DC00 (3) Dyn. Contr. Robotic Systems (A) 4LC00 (3) Strength and structure (A) 4PC00 (3) Thermofluids Engineering (D)	**Major elective** 4CBLC30 (3) CBL Mech design project (C+E) 4CC10 (3) Mechatronic design (A) 4RC00 (3) Flow and structure (E) 4RC30 (3) intr. Comp. fluid dynamics (A)
free elective *4BC00 (3) Chemically reacting flows (A)* *4CBLC00 (3) Engineering design 1 (C)*	**free elective** *4EC10 (3) Dynamics of energy systems (A)* *4CBLC10 (3) Engineering design 2 (C)*	**free elective**	**free elective**