

Challenge-Based Learning in MSc Robotics

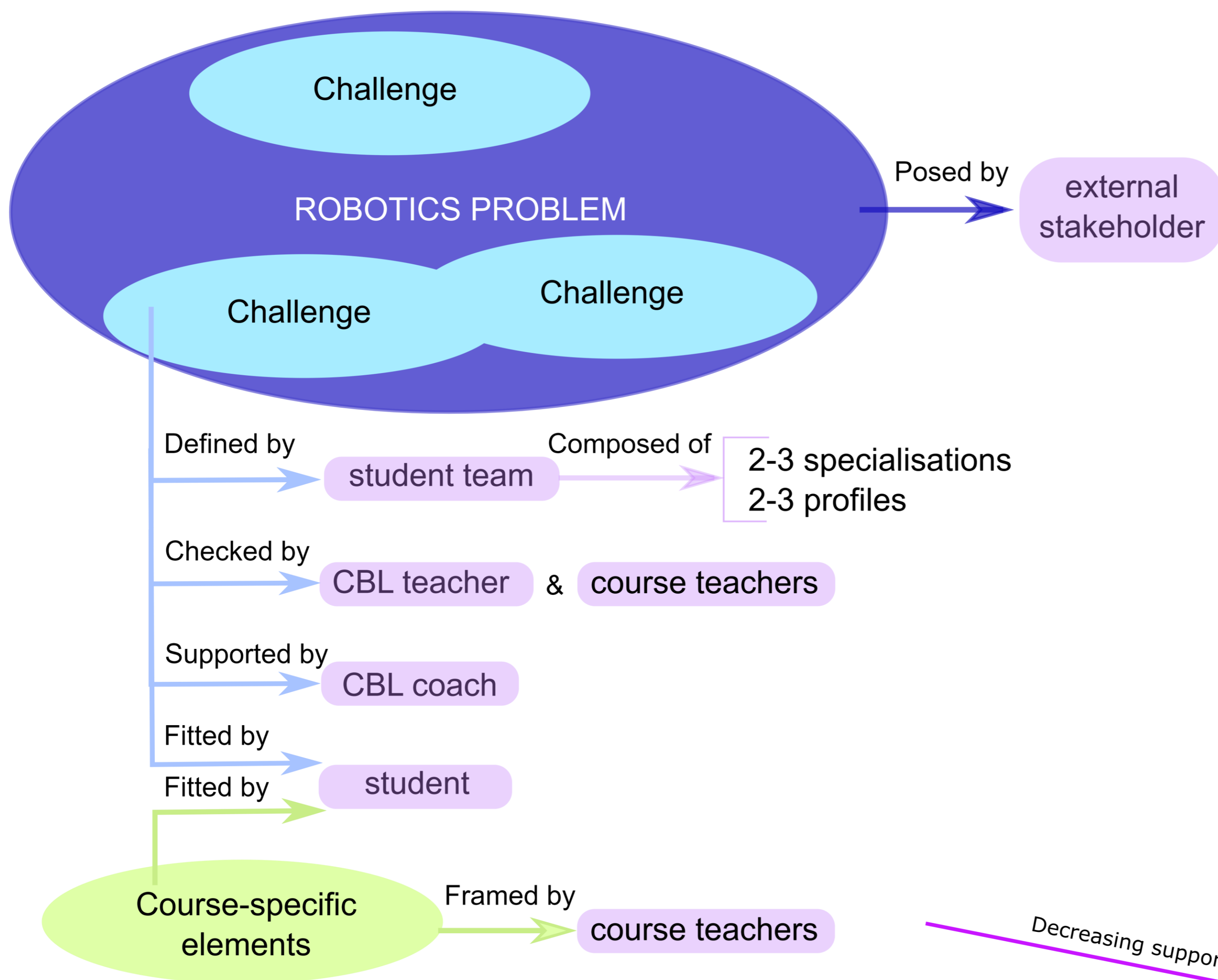
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MSc-Robotics Programme

- **3 Specialisations** (6 courses, 30 EC)
 - Mechatronics & Physical AI
 - Algorithms & Software AI
 - Human-Robot Interaction & Social AI
- **3 Profiles** (2 electives, 10 EC)
 - Research
 - Design
 - Innovation & Entrepreneurship
- 4 electives (20 EC)
- Internship / Academic-Skills project / Electives
- MSc-Thesis Project

CBL in MSc-Robotics Programme

- Challenging, open-ended problems from practice
- Better preparation for MSc-Thesis project
- Better preparation for professional career
- Better preparation for continuous learning
- One project per quartile
- Multidisciplinary student teams
- Growing complexity of projects
- CBL teachers & course teachers



Coordination / teaching

- CBL teachers
 - next to course teachers
- CBL coaches (TAs)
- Educational support

Student-Team Composition

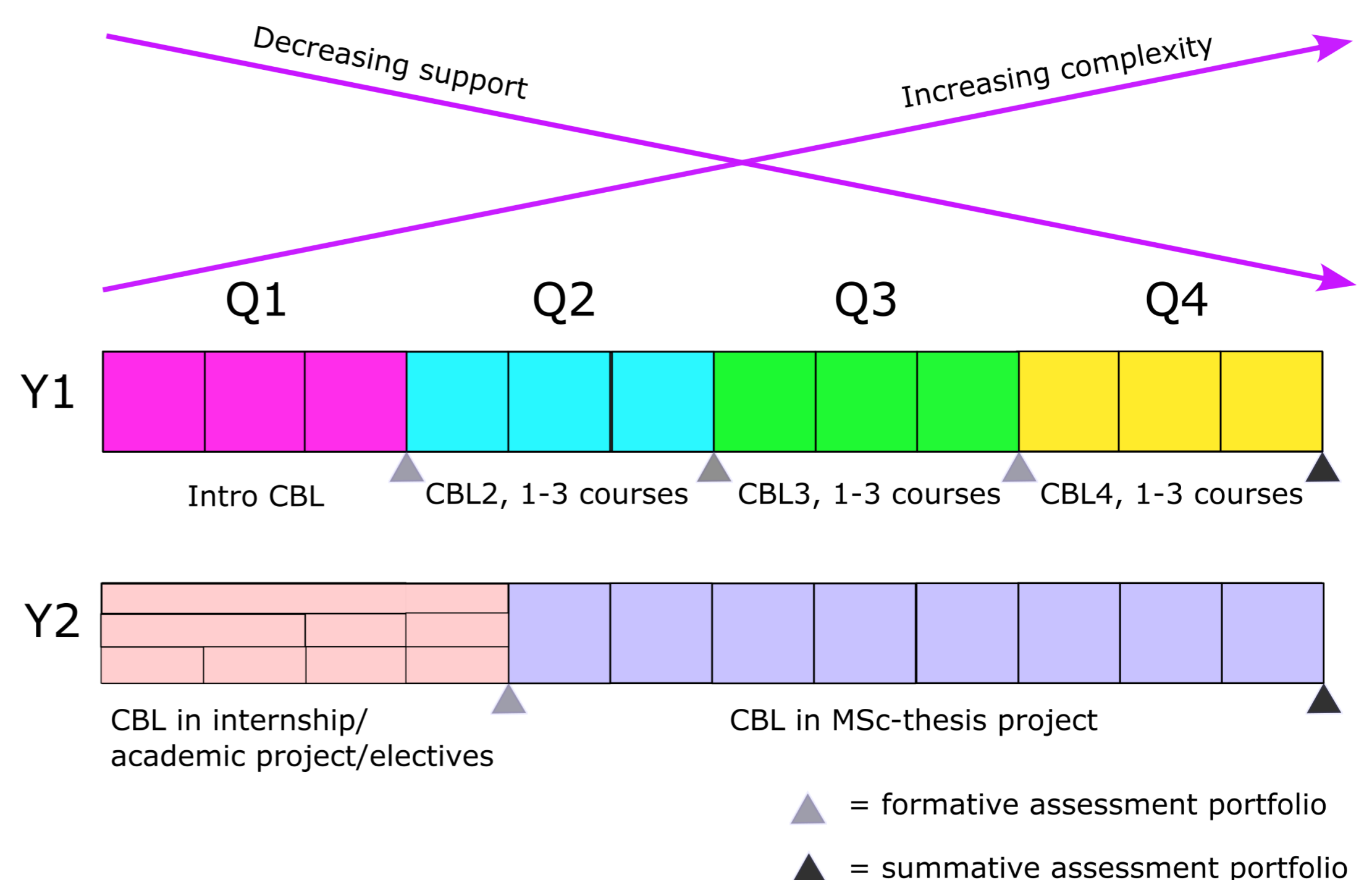
- Teams span multiple specialisations
- Teams span multiple profiles for multidisciplinary

One Project per Quartile

- Each quartile one CBL project
- Feedback / assessment per project
- Reset each quarter eases process

Maturity of CBL projects

- Complexity grows
 - stakeholder involvement
 - course topics
- Decrease support
 - more freedom
- Focus from learning to performing



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More information:
<https://www.utwente.nl/en/education/master/programmes/robotics/>
<https://www.utwente.nl/CBL/>