

EDUCATIONAL STANDARD – E-RAPID TOOLS

I. GENERAL

1. Purpose and scope

This standard defines the **content criteria** and **minimum quality requirements** for **E-Food e-rapid tools** used in **short-term education** within the E-Food project framework. E-rapid tools are understood as **digital learning tools and platforms** that enable rapid, efficient and measurable acquisition of knowledge and skills related to **innovative food product development**, food technologies, safety/quality, sustainability and digitalisation.

2. Definitions

- **E-rapid tools**: digital solutions (modules, micro-courses, interactive resources, assessment tools, virtual/remote labs, simulation and case-based environments) designed for **short-duration training**, enabling accelerated learning pathways.
- **Short-term education**: structured learning activities delivered in a **condensed timeframe** (typically up to 10 hours), with clear learning outcomes and assessment/validation approach.
- **Learning unit**: a coherent block (micro-lesson, activity, case, lab or assessment) that can be completed independently and contributes to defined learning outcomes.

3. Target groups

E-rapid tools shall be suitable for one or more of the following target groups:

- higher education students (BSc/MSc/PhD);
- academic staff and trainers;
- industry professionals (brewing/food sector, QA/QC, R&D, production, product managers);
- lifelong learners seeking upskilling/reskilling.

4. Quality principles

E-rapid tools covered by this standard shall comply with the following principles:

- **Outcome-based design**: each tool/module includes explicit learning outcomes aligned with the course scope.
- **Relevance to innovative food development**: content is clearly linked to food product development and related technologies, trends and challenges.
- **Active learning**: learners engage through tasks, problem-solving, case studies, labs/simulations, peer interaction and/or applied assignments.
- **Assessment and feedback**: learning is verified through appropriate assessment with feedback loops.
- **Accessibility and inclusiveness**: content supports diverse learners and follows accessibility good practices.
- **Consistency and interoperability**: structure and metadata enable reuse across partners and contexts.
- **Continuous improvement**: systematic collection of learner feedback and periodic content review.

5. Content criteria (minimum requirements)

Each e-rapid tool or micro-course shall include, at minimum:

1. **Title, level and short description** (who it is for; prerequisites).
2. **Core content** (structured learning units with clear progression).
3. **Learning activities** (practical tasks, cases, mini-projects, quizzes, labs, etc.).
4. **References and resources** (open where possible; properly cited).
5. **Quality and update statement** (version/date; responsible partner/author).
6. **Licensing and reuse conditions** (open access requirements in line with project rules, where applicable).

6. Delivery and learner support

E-rapid tools shall provide clear guidance for:

- how to start and complete the unit;
- navigation and expected outputs;
- contact/support channel (technical and/or academic);
- recommended time schedule and completion criteria.

II. E-FOOD E-RAPID TOOLS STRUCTURE

1. Structural model (mandatory components)

The E-Food e-rapid tools shall follow a common structural logic to ensure comparability, transferability and quality across partner institutions. Each tool shall be organised into the following components:

A. Learning Design (Didactic Core)

- Learning outcomes (3–8 recommended);
- Competences addressed (technical + transversal where relevant);
- Learning pathway (sequence of units; optional enrichment);
- Estimated total workload and unit-level workload.

C. Content Units (Micro-structure)

1. **Unit goal** (what the learner will achieve)
2. **Key concepts** (brief and focused)
3. **Core learning content** (text/video/interactive)
4. **Activity** (task, case, calculation, design step, lab/simulation)
5. **Knowledge check** (quiz/short questions)
6. **Resources** (references, datasets, templates)

E. Assessment & Validation

- assessment method(s) aligned with learning outcomes;
- scoring logic (pass/fail, points, rubric, mastery thresholds);
- feedback type (automatic, trainer, peer);

- completion rules and evidence of achievement (badge/certificate/micro-credential statement if applicable).

F. User Experience & Technical Layer

- clear navigation and modular access;
- device compatibility (desktop/mobile where feasible);
- accessibility elements (readability, captions, alternative text, downloadable materials);
- interoperability: exportable formats and consistent naming/metadata.

2. Recommended tool types within E-Food

E-rapid tools may be implemented as one or a combination of:

- micro-courses (self-paced or tutor-led);
- interactive learning objects (calculators, decision trees, quizzes);
- virtual/remote labs and simulations;
- case study packages with templates and datasets;
- rapid assessment modules (diagnostic + personalised pathway);
- micro-credential-ready modules (with explicit workload, outcomes and evidence).

3. Standardised templates (recommended)

To ensure harmonisation, each e-rapid tool should use shared templates for:

- unit structure (goal → content → activity → check → takeaways);
- assessment rubrics (criteria, performance levels, scoring);
- case study briefs (context, task, deliverables, dataset/resources);
- learner feedback form (usability, clarity, workload, relevance).