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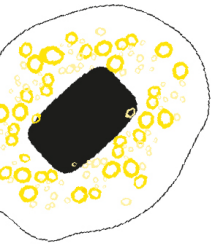
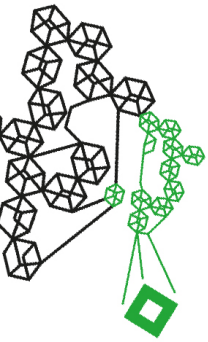


Programme-specific part to the Education and Examination Regulations (EER) 2026-2027

For the Master of Science programme

Educational Science and Technology (EST)



1 Septembe 2026

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1. General provisions

1.1. Admission to the programme

The Admission Committee assesses all applicants to the MSc Educational Science & Technology (EST) programme on an individual basis. The assessment of the applicant's skills is based on formal as well as content-related admission criteria.

The formal criteria are as follows:

A. Bachelor's degree or equivalent
B. **Note**: for international (i.e. non-Dutch students) only:
   IELTS minimum overall score of 6.5 on the IELTS (where each minimal sub score is 6.0) or equivalent,
   Please check the university's website for details and exemptions:
   https://www.utwente.nl/en/education/master/how-to-apply/(inter)national-degree/
C. Applicants from countries where this diploma classification system applies, must have a bachelor's degree with at least a "First Class" classification (CGPA at least 90%), (or a relevant additional qualification in addition to a Second Class Honours - Upper division degree).

The content-related admission criteria require that a student possesses and demonstrates evidence on sufficient knowledge and skills concerning the following:

D. The content of the domain of educational science and technology.
E. Design methodology.
F. Research methodology.
G. Research techniques, including the use of statistics for data analysis.

Ad D. Content of the domain

The domain of Educational Science and Technology can be characterised by the following: a field that encompasses the analysis of learning and performance problems; the design, development, implementation, evaluation, and management of educational and training processes, resources, and arrangements intended to improve learning and performance in a variety of settings. A student meets the domain-specific admission criteria if the student possesses a Bachelor's or Master's level degree in a domain that is similar or related to the domain of this definition, and/or if the student has substantial relevant work experience from which the student has mastered the aforementioned conceptual knowledge.

Ad E. Design methodology

This is a typical content characteristic of all behavioural Bachelor's and Master's programmes in our Behavioural, Management and Social Sciences Faculty, aiming at educating scientific designers. This methodology for systematic problem solving aims to support science-based, systemic approaches and processes for the development, the implementation, and the evaluation of solutions for problems in education and training. To give evidence that a future

student has mastered this methodology, the student has to send us an overview of relevant courses taken and/or reports of systematic design projects the student has intensively been involved in.

Ad F. Research methodology

This refers to the main concepts, procedures, and methods used in social science research, and which aim at systematic, conceptual (literature) analysis, modes of data collection, data analytical schemes, and procedures for interpretation of findings, in order to better understand social phenomena and processes, and/or to support all levels of making choices in and for social reality. This methodology supports the systematic design, execution and evaluation of research activities. A student's basic mastery of this methodology should be proven by courses which the student has taken in this area, and/or reports of research projects or activities the student has been involved in substantially.

Ad G. Research techniques, including the use of statistics for data analysis

This area is dedicated to the skills and understanding of techniques for collection and for analysis of both quantitative and qualitative data. If a student masters this area the student is both able to apply descriptive statistics (distribution, correlation, regression, cross tabling), theory of probability (calculation, expectation, variance, binomial distribution), and aspects from inductive statistics (average based conclusions with known population deviation) as well as applying scientific analytical methods in interviews, observation, and questionnaires, analysing texts, and coding text fragments.

Experience with the use of R or a comparable computer-based statistical package is part of this mastery. Evidence of this can be presented by content review of courses which the student has taken, and/or use of these techniques in research, demonstrated by means of a report or an article.

Evaluation of the entrance criteria

The UT's central Admission Office will first check the formal criteria A, B and C. Only if these have been met, the application is forwarded to the programme to check the content-related admission criteria D, E, F, and G. The programme's Admission Committee will review the information and documents presented and will decide whether a student meets all stated criteria sufficiently. The Admission Committee comprises of the programme director, programme coordinator and the study advisor. The programme director may delegate the membership to a member of the programme's scientific staff, i.e. to one of the programme's teachers.

Evaluation of these content-related entrance criteria may result in one (1) out of two (2) alternative decisions by the Admission Committee:

1. If a student meets all formal and content-related criteria the student will be admitted to the EST Master's programme.
2. If a student does not meet the entry requirements, to be decided by the Admission Committee, the student can be offered the possibility of taking (part of) the EST pre-Master's programme.

1.2. Language of the programme

The language of communication in the MSc programme Educational Science and Technology is English.

This premise requires additional explanation:

- Study materials are in English.
- Classes (lectures, seminars, workshops, practicals, and others) are taught in English.
- Exams and assignments are composed in English and students have to complete all exams and assignments in English.
- Presentations (including the Final Project presentation) have to be prepared in English.

1.3. Connecting Masters' programme(s)

None

1.4. Rights, duties and composition of the programme committee

In line with article 9.18 WHW, each programme has a programme committee, which has the duty to advise programme management on improving and safeguarding the quality of the programme. It has a right of consent regarding a number of topics in the Education and Examination Regulations (EER), e.g. the goals and intended learning outcomes of the programme in terms of knowledge, insight and skills that a student should have acquired at the end of the programme; where necessary the layout of practical exercises; the study load of the programme and its courses units. In addition, the programme committee evaluates on a yearly basis the manner in which the EER has been carried out and has the right to advise programme management and the dean – invited or uninvited – on all matters relating to the teaching in the programme.

The members of the EST programme committee are appointed by the Dean. The members are recruited from students and teaching staff of the Educational Science and Technology programme on an equal basis (50% students and 50% staff). The most up-to-date composition of the committee can be found on the webpage of the programme committee.

2. Contents and structure of the programme

2.1. Contents and structure of the programme

The tables below show the generic structure of the courses which make up the EST master's programme in EC (1 EC = 28 hours of study load) per unit.

	Obligatory courses	**20 EC**
	Elective courses	**20 EC** *(choose 4)*
	Final Project EST	**20 EC**

Table 1: Curriculum Master EST 2026-2027 – September '26 full-time enrolment

Quartile 1A	Quartile 1B	Quartile 2A	Quartile 2B
10 EC obligatory + 5 EC elective (choose 1 out of 2)	10 EC obligatory + 5 EC elective (choose 1 out of 2)	5 EC elective *(choose 1 out of 2)* + 9½ EC final project + ½ EC YABCD	5 EC elective *(choose 1 out of 2)* + 9½ EC final project + ½ EC YABCD
Lifelong Learning in a Changing Society 202500252 (5 EC)	Your Agency, Balance, Career & Development 202500253 (5 EC)	"Your ABCD" meetings	
Learning and Instruction * 202300197 (5EC)	Assessment of Learning and Performance 202500256 (5 EC)		
Team Learning at Work 201500010 (5 EC)	The Art and Science of Change 202500257 (5 EC)	Leading & Organising Employee-Driven Innovation ** 202600167 (5 EC)	Crafting Meaningful and Motivating Learning Experiences 202500255 (5 EC)
Designing Learning & Performance Support 191970340 (5 EC)	4CID for Complex Learning 202200054 (5 EC)	Innovative Technology-based Learning Environments 201400002 (5 EC)	Teacher Learning and Development 201200027 (5 EC)
	x select FP topic + supervisor		
		Final Project EST 202500254 (20 EC)	

* Retake of block 1A is in block 2A, not in1B!
** Lectures are on Mon/Tue but occasional scheduled group meeting with teacher may be on other day of the week!

Table 2: Curriculum Master EST 2026-2027 – September '26 part-time enrolment

Year 1 – 25 to max. 40 EC			
Quartile 1A	**Quartile 1B**	**Quartile 2A**	**Quartile 2B**
10 EC obligatory + 5 EC elective *(choose 1 out of 2)*	9 EC obligatory + 5 EC elective *(choose 1 out of 2)* + 1 EC on final project	5 or 10 EC elective *(choose 1 or 2 out of 2)* + ¼ EC YABCD of 2)	5 or 10 EC elective *(choose 1 or 2 out of 2)* + ¼ EC YABCD + 1 EC on final project
Lifelong Learning in a Changing Society 202500252 (5 EC)	Your Agency, Balance, Career & Development 202500253 (5 EC)		
Learning and Instruction * 202300197 (5EC)	Assessment of Learning and Performance 202500256 (5 EC)		
		Leading & Organising Employee-Driven Innovation ** 202600167 (5 EC)	Crafting Meaningful and Motivating Learning Experiences 202500255 (5 EC)
		Innovative Technology-based Learning Environments 201400002 (5 EC)	Teacher Learning and Development 201200027 (5 EC)
			x select FP topic + supervisor

* Retake of block 1A is in block 2A, not in1B!
** Lectures are on Mon/Tue but occasional (scheduled) group meeting may be on other day of the week!

Year 2 – 30 to max.40 EC			
Quartile 1A	**Quartile 1B**	**Quartile 2A**	**Quartile 2B**
(choose remaining electives) + work on Final Project			
"Your ABCD" meetings			
Final Project EST 202500254 (20 EC)			
Team Learning at Work 201500010 (5 EC)	The Art and Science of Change 202500257 (5 EC)	Leading & Organising Employee-Driven Innovation ** 202600167 (5 EC)	Crafting Meaningful and Motivating Learning Experiences 202500255 (5 EC)
Designing Learning & Performance Support 191970340 (5 EC)	4CID for Complex Learning 202200054 (5 EC)	Innovative Technology-based Learning Environments 201400002 (5 EC)	Teacher Learning and Development 201200027 (5 EC)

Table 3: Curriculum Master EST 2026-2027 – February ‘27 full-time enrolment

<table>
<tr><th>Quartile 2A</th><th>Quartile 2B</th><th>Quartile 1A</th><th>Quartile 1B</th></tr>
<tr><td>10 EC obligatory + 5 EC elective
(choose 1 out of 2)</td><td>9 EC obligatory + 5 EC elective
(choose 1 out of 2) +
1 EC on final project</td><td>5 EC elective
(choose 1 out of 2) +
9½ EC final project
+ ½ EC YABCD</td><td>5 EC elective
(choose 1 out of 2) +
9½ EC final project
+ ½ EC YABCD</td></tr>
<tr><td rowspan="2">Lifelong Learning in a Changing Society
202500252 (5 EC)</td><td rowspan="2">Your Agency, Balance, Career & Development
202500253 (5 EC)</td><td colspan="2">“Your ABCD” meetings</td></tr>
<tr><td></td><td></td></tr>
<tr><td>Learning and Instruction
202300197 (5EC)</td><td>Assessment of Learning and Performance
202500256 (5 EC)</td><td></td><td></td></tr>
<tr><td>Leading & Organising Employee-Driven Innovation **
202600167 (5 EC)</td><td>Crafting Meaningful and Motivating Learning Experiences
202500255 (5 EC)</td><td>Team Learning at Work
201500010 (5 EC)</td><td>The Art and Science of Change
202500257 (5 EC)</td></tr>
<tr><td>Innovative Technology-based Learning Environments
201400002 (5 EC)</td><td>Teacher Learning and Development
201200027 (5 EC)</td><td>Designing Learning & Performance Support
191970340 (5 EC)</td><td>4CID for Complex Learning
202200054 (5 EC)</td></tr>
<tr><td rowspan="2"></td><td>x select FP topic + supervisor</td><td rowspan="2"></td><td rowspan="2"></td></tr>
<tr><td></td></tr>
<tr><td></td><td></td><td colspan="2">Final Project EST
202500254 (20 EC)</td></tr>
</table>

** Lectures are on Mon/Tue but occasional scheduled group meeting with teacher may be on other day of the week!

Table 4: Curriculum Master EST 2026-2027 - February '27 part-time enrolment

Year 1 – 25 to max.40 EC			
Quartile 2A	**Quartile 2B**	**Quartile 1A**	**Quartile 1B**
10 EC obligatory + 5 EC elective *(choose 1 out of 2)*	9 EC obligatory + 5 EC elective *(choose 1 out of 2)* + 1 EC on final project	5 or 10 EC elective *(choose 1 or 2 out of 2)* + ¼ EC YABCD	5 or 10 EC elective *(choose 1 or 2 out of 2)* + ¼ EC YABCD + 1 EC on final project
Lifelong Learning in a Changing Society 202500252 (5 EC)	Your Agency, Balance, Career & Development 202500253 (5 EC)		
Learning and Instruction 202300197 (5EC)	Assessment of Learning and Performance 202500256 (5 EC)		
		Team Learning at work 201500010 (5 EC)	The Art and Science of Change 202500257 (5 EC)
		Designing Learning & Performance Support 191970340 (5 EC)	4CID for Complex Learning 202200054 (5 EC)
			x select FP topic + supervisor

Year 2 – 30 to max.40 EC			
Quartile 2A	**Quartile 2B**	**Quartile 1A**	**Quartile 1B**
(choose remaining electives) + work on Final Project			
"Your ABCD" meetings			
Final Project EST 202500254 (20 EC)			
Leading & Organising Employee-Driven Innovation ** 202600167 (5 EC)	Crafting Meaningful and Motivating Learning Experiences 202500255 (5 EC)	Team Learning at Work 201500010 (5 EC)	The Art and Science of Change 202500257 (5 EC)
Innovative Technology-based Learning Environments 201400002 (5 EC)	Teacher Learning and Development 201200027 (5 EC)	Designing Learning & Performance Support 191970340 (5 EC)	4CID for Complex Learning 202200054 (5 EC)

2.2. Study load

A student's study trajectory in the one-year (60 EC) EST programme consists of 20 EC obligatory courses, 20 EC elective courses, and 20 Final Project.

More specifically, full-time students take the four obligatory core courses Lifelong Learning in a Changing Society (5 EC), Learning and Instruction (5 EC), Assessment of Learning and Performance (5 EC), and Your Agency, Balance, Career & Development (5 EC) during their first semester in the programme. Furthermore, they choose four elective courses (in total 20 EC), one in each quartile. During their second semester (or second year for part-timers) students work on the Final Project (20 EC). Full information on the elective options can be found in section 2.5. Part-time students follow the schedule that is mentioned in 2.3..

2.3. Programme-specific characteristics

The one-year master's programme EST can be followed both in a full-time mode as well as part-time. In the latter case the programme lasts 2 years.

In both modes, the following applies:

- All courses are (predominantly) scheduled on a maximum of two fixed days per week: Mondays and Tuesdays.
- Classes of a specific course take place as much as possible on the same day during the week. However, occasional deviations from this pattern cannot be excluded.
- The Final Project (20 EC) will take approximately 560 hours of work. Full-time students must complete the Final Project within one semester, next to taking an elective course each quartile, which adds up to a workload of a little over 40 hours per week. Part-time students can spread the workload of their Final Project over their second year.

In this way, 'part-timers' are facilitated in arranging at least two, or preferably three, dedicated study days, which can be crucial for those with existing family or employment responsibilities.

Note:

- The actual study load in the part-time mode depends on the number of selected courses in a quartile. As such, it is possible that study load is not always evenly distributed. In order to be able to complete the programme within 2 years, the student should spend on average at least 20 hours = 2.5 days per week on their studies.
- Part-time students take a course in the same manner as full-time students. Within a course no adjustments are made for part-time students.

2.4. Honours programme

For excellent students, the University of Twente offers several extra-curricular master's honours programmes of 15 EC each. These programmes have a distinctive profile which allows students to develop themselves in different roles: as an organiser, designer, negotiator or researcher, or engage in a real-life company case regarding sustainability.

These programmes are:

- Change Leaders
- Great Negotiators
- Research Honours

More information on these programmes and the corresponding selection procedures can be found at the UT honours programmes website:

https://www.utwente.nl/en/honours/master/

2.5. Elective Options

2.5.1 EST Programme electives

The EST programme's elective options can be found in Tables 1-4 (curriculum EST 2026-2027). Typically, students select four of these elective options (5 EC each).

For each elective course, a minimum enrolment number is established based on the specific circumstances of that course. If this number is not reached, programme management will consult with the course coordinator to decide whether the course can still be offered.

2.5.2 Other electives

In case a student would like to follow one or two courses from another master's programme at the University of Twente, another Dutch university or a foreign university as part of their EST study programme, the student needs to submit a motivated request to the programme management. In this request the student states how the electives(s) contribute to the intended learning outcomes of the EST programme. The student needs to submit a formal, complete course description to the request.

The maximum total amount of external electives acceptable, within the 60 EC programme, is 10 EC.

2.6. Pre-master's programme

The pre-master's programme consists of (generic academic and domain-specific) courses that prepare a student for applied, design or evaluation-oriented, scientific reasoning and research during the Master's trajectory Educational Science and Technology. The full pre-master's programme comprises 30 EC. All pre-master's courses must be successfully completed within one semester (full-time students) or two semesters (part-time students) before one can formally begin the Master's programme. The Master's programme Admission Committee

decides which courses of the pre-master's programme the student is required to take to enter the master's programme.

In case a student does not successfully complete the pre-master's programme the student cannot participate in the pre-master's programme again.

The pre-master's programme has two terms of enrolment (September and February). Therefore, the following structure applies:

All courses are predominantly scheduled on a maximum of two fixed days per week: Thursdays and Fridays.

Tables Curriculum Pre-master EST 2026-2027 full-time and part-time enrolment

	BMS academic courses	**15 EC**
	EST courses	**15 EC**
	Self-study package EST	

Full-time programme = ½ year = one semester

September enrolment	
Semester 1	
Quartile 1A	**Quartile 1B**
Research Methodology and Descriptive Statistics (202500251) (5 EC)	Inferential Statistics (202200378) (5 EC)
Designing for Learning in Schools and Organisations (202000264) (5 EC)	Research Studio (202300147) (10 EC)
Academic Writing Premaster (202400115) (5 EC)	
15 EC	15 EC

Self-study package EST

Self-study package EST

February enrolment	
Semester 2	
Quartile 2A	**Quartile 2B**
Research Methodology and Descriptive Statistics (202500251) (5 EC)	Inferential Statistics (202200378) (5 EC)
Designing for Learning in Schools and Organisations (202000264) (5 EC)	Research Studio (202300147) (10 EC)
Academic Writing Premaster (202400115) (5 EC)	
15 EC	15 EC

Self study pack. EST

Self-study package EST

Part-time programme = 1 year = two semesters

Semester 1		Semester 2	
Quartile 1A	**Quartile 1B**	**Quartile 2A**	**Quartile 2B**
Research Methodology and Descriptive Statistics (202500251) (5 EC)	Inferential Statistics (202200378) (5 EC)	Designing for Learning in Schools and Organisations (202000264) (5 EC)	Research Studio (202300147) (10 EC)
Academic Writing Premaster (202400115) (5 EC)			
10 EC	5 EC	5 EC	10 EC

Self-study package EST

Self-study package EST

Registration and limitations in the pre-master's programme

- Pre-master students have a maximum of two chances to pass a course. Within one semester, two chances are offered. (In a few cases where a student uses the second attempt in the next semester (e.g., because of illness at the time of the offered opportunities), this implies a ½ year study delay, with a max. of one year enrolment).

- All pre-master courses must be completed within one year. This is the maximum registration period in the pre-master's programme.

When a student does not pass all courses within two attempts and within one year, the student will be excluded from the programme.

- A student can only enter the master's programme after completing all pre-master courses successfully.
- The aforementioned rules also imply that the student cannot participate in the pre-master's programme again in subsequent years.

Note: The rules mentioned above apply to both full-time and part-time students.
For all students (including part-time students), the pre-master's programme must be completed within one year. Participants are eligible to take each course only once, and each course offers two chances for assessment. One re-take is possible for each graded exam, assignment, or project. If a course has different regulations this is described in the Osiris Course Catalogue. Students failing to successfully complete one or more course(s) will be dismissed from the pre-master's programme EST. This also applies to students who have started other pre-master's programmes at the University of Twente with content that is also part of the EST pre-master's curriculum. Specifically, students who have taken Research Methodology and Descriptive Statistics, and/or Inferential Statistics, and/or Academic Writing and not passed it after the allotted two attempts, are not eligible for the pre-master EST.

Language in the pre-master's programme

The language of communication in the pre-master's programme EST is English:

- Study materials are in English.
- Classes (lectures, seminars, workshops, practicals, and others) are taught in English.
- Exams and assignments are composed in English and students have to complete all exams and assignments in English.
- Presentations have to be prepared in English.

Note: the EST pre-master's programme can also be followed as a so-called transfer minor, as agreed upon with Dutch Universities of Applied Sciences (HBO). Please see the website for more information:

https://www.utwente.nl/en/education/electives/minor/offer/transfer-minor/

3. Programme objectives and intended learning outcomes

3.1. Programme objectives

The main focus of the master's programme is on the design and evaluation of learning arrangements in schools and organisations. This might be the interventions to optimize learning and development in different formal and informal context. In the EST programme students acquire knowledge about theories of learning and assessment, curriculum design and implementation, learning technologies, effective training approaches and learning interventions. Students also learn how to design and evaluate different learning arrangements and translate these into advice and solutions for practical problems.

The EST programme prepares graduates to work in the contexts of formal education and/or continuing professional growth in organisations (e.g. business, government, non-profits).

Graduates from the EST programme will become scientific educational professionals: experts who connect scientific research, scientific design and (their own or future) practice. The outcome of their expertise is based on educational questions and problems from practical contexts (both schools and organisations), which they translate into research questions and which they try to answer by applying a systematic approach, thus finding appropriate solutions for the specific problem. The result of this approach is a design (or a set of designs), which is tested in the context of the problem to see if that solution helps realising an improvement or innovation. This evaluation does not only lead to an improvement or innovation, but it also leads to more knowledge and the forming of new theories. The systematic, technological, and design- and evaluation-based orientation characterises the EST programme and distinguishes our programme at the University of Twente from other education-related degree programmes in the Netherlands. Graduates work in a wide range of organisations, from government, ministries, publishers and educational support services to universities, higher education institutes and multinational companies. A number of graduates have started their own education and training consultancy bureaus.

For those interested in Learning in Education

Courses that are mainly situated in the field of Learning in Education focus predominantly on teacher and educational institution's development, effectiveness, educational technology, and instructional design. They offer learning opportunities related to all levels of structured and institutionalized education. With these courses, students gain expertise in planning, developing, implementing and evaluating innovative learning scenarios.

Questions frequently asked in this context are:

- How can learning innovations be designed and implemented?
- How can technology be used and integrated into education?

- How can educational institutions and teachers be supported in the design, development and implementation of innovations at both educational institution(s) and classroom level?
- How can teachers be empowered in their own professional development for implementing innovative (technology-based) learning innovations?
- Can an educational institution's performance be improved by giving feedback on the level of their performance, e.g., by means of feedback from digital monitoring systems?
- To what degree do educational institutions leadership, culture, and the teamwork between teachers influence the effectiveness of schools?
- Does an educational institution perform better as a result of formal inspections or are the improvements only superficial?

The applied character of EST is visible in all courses of the programme. Courses in which the context of Learning in Education features prominently offer opportunities to:

- Understand and analyse different theories and paradigms related to educational design and –implementation, teacher and educational institution's development, effectiveness, and ICT, in a variety of educational contexts and indicate what they mean for practice.
- Plan, design, and implement innovative educational trajectories to increase its quality, and be able to assess the effect of these curricula.
- Design and validate assessments of learning and performance, aimed at supporting decisions (about placement, learning, diagnosis, certification, system evaluation) in different educational contexts.
- Improve the performance of educational institution(s) by taking leadership, culture and teamwork between teachers into account.
- Conduct scientifically robust and practically relevant research in, for, and with (an) educational institution(s).
- Reflect on the various core issues in the field of Learning in Education and on his or her own position.

For those interested in Learning & Development in Organisations

Learning & Development in Organisations focuses on how adults learn and develop professionally. Leadership, talent development, and lifelong learning are among the focal points in this field. While this area overlaps with the professional development of teachers, it also includes the learning of adults in businesses and other organisations.

Questions frequently asked in this context are:

- How do people learn during their work?
- How do people become experts in their field?
- How can one facilitate workplace learning and professional development?
- What are effective training programmes and how to evaluate these?
- How can one manage learning and knowledge sharing in a company?
- How do organisations change and do HRD professionals assist in this process?
- What is the role of new media and technology in learning?
- How are processes and results of workplace learning and professional development assessed?

The applied character of EST is visible in all courses of the programme. Courses in which the context of Learning & Development in Organisations features prominently offer opportunities to:

- Understand and analyse different HRD theories and paradigms, and what they mean for practice.
- Design innovative and well-thought interventions to increase learning and development in a company or institution.
- Advise companies and institutions on questions related to learning and development of their employees.
- Design and evaluate assessments of learning and performance aimed at supporting decisions and policies (hiring, professional development, certification) in companies and institutions.
- Conduct research on HRD problems and know how to use research for designing good learning interventions and giving solid advice.
- Reflect on the various core issues in the field of HRD and on his or her own position in this.

3.2. Intended learning outcomes

The main aim of the master's programme EST is to deliver competent academics who are scientifically schooled, independent and critical educational designers, decision makers, and advisers who can contribute to the subject area of education in general and to their chosen area of specialisation in particular. To reach this goal, the programme has established the following standards:

- Domain orientation:
  Graduates have a firm and broad overview of learning and development in a formal and informal contexts and of the specialty areas within, and specific expertise in one of the specialty areas that can be used productively and creatively in various related professional contexts.
- Design competency:
  Graduates are able to systematically frame up, fill in, augment, evaluate, and implement designs to support learning environments in various education and training contexts.
- Research competency:
  Graduates are able to systematically collect, analyse, and interpret research data, to draw conclusions from the data, and on the basis of that advise or decide on possible alternatives and activities to be conducted, particularly in a design context.
- Advice competency:
  Graduates are able to advise (educational) organizations, in part based on the three competencies mentioned above, with regard to the implementation of better and more efficient learning environments and organizational as well as policy related arrangements for learning and teaching.

- Academic reflection:
  Graduates are able to critically reflect on processes, resulting products, and achieved results from systematic and relevant scientific, social-cultural, and ethical perspectives in order to contribute to the professional development of the educational specialist and to a broadening and/or deepening of the scientific subject area.

4. Assessment/examination

4.1. Final examination

The master's programme EST is deemed to have been successfully completed if all exams of the agreed courses, including the Final Project (master's thesis), have been completed successfully.

4.2. Assessment format interim examinations/tests

The exam formats of each course in the EST programme are shown in table 5. Written exams are individual tests, unless specified otherwise. The weight attributed to each of the exam components is stipulated in the course's electronic learning environment, and made public before the start of the course.

Table 5: Exam formats for each course

Quartile	**Course code**	**Name (+ study load)**	**Exam formats**
1A & 2A	202500252	Lifelong Learning in a Changing Society (5 EC)	Individual written report (60%), presentation (40%)
1A & 2A	202300197	Learning and Instruction (5 EC)	Closed-book individual exam (50%), open-book individual audit (50%)
1A	201500010	Team Learning at Work (5 EC)	Individual exam (65%), Group assignment (35%)
1A	191970340	Designing Learning and Performance Support (5 EC)	Group product (40%), Group design report (40%), Individual presentation (20%)
1B & 2B	202500256	Assessment of Learning and Performance (5 EC)	1 group psychometric assignment (15%), 4 group construction assignments (15%, 30%, 20%, 10%), 1 individual reflection assignment (10%)
1B & 2B	202500253	Your Agency, Balance, Career & Development (5EC)	3 individual assignments (pass/fail)

1B	202500257	The Art and Science of Change (5 EC)	Individual assignment
1B	202200054	4CID for Complex Learning (5 EC)	Individual open question exam (30%), group assignment (70%)
2A	202600167	Leading & Organising Employee-Driven Innovation (5 EC)	2 Individual assignments (40% and pass fail), 1 group assignment (60%)
2A	201400002	Innovative Technology-based Learning Environments (5 EC)	Group report (100%), Individual peer feedback: a pre-requisite to complete the course
2B	202500255	Crafting Meaningful and Motivating Learning Experiences (5 EC)	Individual assignment
2B	201200027	Teacher Learning and Development (5 EC)	Individual take home exam (30%), group assignment (70%)
1A + 1B / 2A + 2B	202500254	Final Project EST (20 EC)	Project report (90%), colloquium (10%)

4.3. Period of validity of test results

All course grades, as well as sub-grades, that are registered in the Student Information System (Osiris) remain valid indefinitely.

4.4. Maximum number of attempts for tests/interim examinations

- Each year, two separate opportunities are offered for taking an exam associated with a specific course.
    - Courses and their exams can be offered more than once per academic year. If that is the case students may participate in the exams at a maximum of two occasions per academic year.
    - There is in any case at least one opportunity to sit an exam in the period in which the applicable course is taught.
- In exceptional individual cases, the examination board may deviate from the number of times and the manner in which exams can be taken.

4.5. Specific pass-fail regulations

- Courses

Passing grades are final. In addition to Article 3.3 of the BMS Master EER, the following applies in the EST master's programme:

If course has been completed successfully (final grade 6 or more) then this grade is final. If a student feels that there are exceptional circumstances that justify an exemption from this rule (and thus justify an extra opportunity), the student has to send a motivated written request to the Examination Board. Such an exemption can only be granted once per student per programme.

In addition to Article 3.6 of the BMS Master EER, the following applies in the EST master's programme:

If a student cannot attend a group activity, as part of an assessment, the student can make a request to the examination board.

- Final Project

With regard to the Final Project a specific pass-fail and retake regulation applies that deviates from courses:

In case the student has not submitted a 'green light' version of the thesis by the deadline on the Timeline form, or when the thesis could not yet be qualified as sufficient for a minimal grade 5,5 by that time, it has to be considered by the EST programme board what caused this:

A) Was the delay caused by **exceptional personal circumstances**, or was it caused by **circumstances within the project** over which the student had no influence?
As soon as it becomes clear during the Final Project trajectory that either one of these causes plays a role in not being able to meet the deadline, the student must start the procedure to apply for a one-time extension of the first attempt. This procedure must be started well before or, at the lastest, around the date of the initial Green Light meeting (as indicated on the Timeline Form).

   The *Request for extension* form (see: Appendix D) should be filled in by the student and the supervisor. The student submits the form via email to the EST study adviser.

   The request will be reviewed by the EST programme board and after this the student will be informed about the outcome. When the extension has been granted and a new, extended deadline has been set (which is still considered the first attempt), the final steps towards the colloquium on this new date can be continued.

   For the types of personal circumstances and/or supporting documents that could be considered to allow for an extension of the 1st attempt, EST acts in accordance with the UT guidelines that are indicated on the UT website:

   https://www.utwente.nl/en/sgw/regulations/guide/.

B) Did **no such circumstances** outside the control of the student play a role?
Then a 'fail' for this first attempt (= initial deadline at the end of the semester) will be registered in Osiris.

Assuming the student still wants to try and finish the thesis successfully, the procedure to apply for a one-time extension ('second attempt') must be started in order to set a deadline for this second attempt.

The *Request for extension* form (see: Appendix D) should be filled in by the student and the supervisor. The student submits the form via email to the EST study adviser just before or soon after the date of the initial Green Light meeting (as indicated on the Timeline Form).

The request will be reviewed by the EST programme board and after this the student will be informed about the new deadline for the second attempt. When this date has been set, the final steps towards the colloquium can be continued. This means that the student may have one additional meeting with the supervisor and receive feedback once more, before the green light meeting must take place before or on the new deadline.

In case of a retake, components 1 – 5 can be improved by rewriting parts of the thesis. However, when the component Process & Agency was assessed insufficient, this part cannot be redone within the same project. Therefore the way to repair this component is via a reflection report that the student must write.

4.6. Prerequisites / required sequence of interim examinations

Upon meeting the entry requirements of the master's programme EST, students are entitled to participate in all EST courses.

Students must take the obligatory courses during their first semester in the programme. This assures that all students have obtained a similar and required knowledge and skills base before starting the Final Project.

A student from outside the EST programme, who is currently enrolled in a bachelor's or other master's programme and wishes to take an EST course as an elective, must fulfil the prerequisites for this course as stated in the Osiris Course Catalogue. In addition, the student must obtain approval from the Programme Director of the EST programme following the procedure as described in the Osiris Course Catalogue.

4.7. Examination Board

The Examination Board is the body that determines in an objective and expert manner whether a student meets the conditions set under the Education and Examination Regulations (BMS Master EER) concerning the knowledge, insight and skills required to obtain a degree. Members of the Examination Board are appointed by the dean of the faculty.

More information, including the most up-to-date composition of the Examination Board can be found at its website: examination boards BMS. All information for students, examiners and educational support staff about the Examination Boards of BMS is published there, including their Rules and Guidelines, and the procedures and conditions for submitting a request.

4.8. Evaluation of Education

The education in the programme is evaluated via the internal quality assurance system based on the Plan-Do-Check-Act cycle. This includes various items:

- On course level:

Teachers can choose to have their course evaluated through an end-of-course Crowdtech Survey and/or via a student panel feedback meeting (this process is done by the programme committee, see paragraph 1.4 for rights and duties of the programme committee).

The teacher is asked to write a reaction based on the outcomes of the evaluation.

The results of the evaluation, and the reaction from the teacher are posted on the quality assurance webpage of BMS. Furthermore, the results are discussed with the programme committee.

- On programme level:

Students are asked to fill in a survey after they have completed the programme. The outcomes of these surveys are discussed with the programme committee.

5. Transitional arrangements

5.1. General arrangements

If a course, that does not involve a practical exercise, is redesigned or deleted from the programme, article 8.4 of the BMS Master EER is applicable. In this case, students are entitled to two opportunities to take the relevant exam, either orally or in writing, or to undergo another form of assessment in the following academic year. This only applies when exam results from the deleted or changed course are obtained and registered in the Student Information System (Osiris) in the academic year previous to the change. However, a student may also choose to participate in the new version of the course or exam.

6. Other topics

6.1. (Binding) recommendation on continuation of studies

Not applicable in master's programme EST.

6.2. Graduation with distinction

If upon sitting the master's examination, the student has shown evidence of exceptional capability, 'Cum Laude' (with distinction) will be awarded on the degree certificate.

A student is considered to have shown exceptional capability if each of the following conditions is met:

- no graded work was re-done;
- no course was graded less than a 7.0;
- the unweighted average grade for all numerical graded courses without the thesis, is at least 8.0 [*note: this unweighted average can deviate from the weighted average that is generated in the Student Information System (Osiris)*];
- in the determination of this average, the courses that were not evaluated with a numerical mark or for which an exemption was granted are not considered. In the determination of the average, at least 50 EC needs to be registered with a numerical mark in the Student Information System (Osiris);
- the final grade for the Final Project is at least a 8.5.

In special cases and despite not fulfilling these conditions the student is entitled to submit a motivated request for 'Cum Laude' to the Examination Board.

6.3 Changes made to the PSP

Every year the programme management revises the PSP according to the changes that may occur in e.g., the programme, the courses, the curriculum, the BMS-regulations and / or the UT central regulations. In this section the major changes are listed in the order of the PSP chapters.

- In section 1.2 Following the advice of the PC the last bullet point and the sentence below have been removed.

- In section 2.5.1. the following paragraph has been added: For each elective course, a minimum enrolment number is established based on the specific circumstances of that course. If this number is not reached, programme management will consult with the course coordinator to decide whether the course can still be offered.

- In section 2.5.2. the text changed because the mandates of the Examination Board changed.

- In section 2.6 the last bullet point about the language in the pre-master's programme has been removed following the advice of the PC.

- In section 2.6 scheduled days for the pre-master were added.

- In section 3 the terminology EDU and HRD was changed to Learning in Education and Learning & Development in Organisations.

- In section 4.2 the assessment table was updated to represent all assessments in a correct way.

- In section 4.5 the text was changed because students must make a request to the examination board to ask for a change in assessment

- In section 4.8 the text is changed to and/or since a combination of a survey and a student panel feedback meeting is possible. Furthermore the wording slightly changed from a course improvement plan to reaction.

- In section 5.2. the paragraph about the specific arrangements has been removed as that section contained information about the previous PSP.

7. Minor

7.1. Minor Professional Learning in Organisations

The minor Professional Learning in Organisations is a module that can be taken by bachelor students during their minor space in their third bachelor year. This 15 EC minor offers an introduction to the theory and practice of professional learning in organisations. The module consists of three integrated components: a project, theory, and professional development. The learning goals are organized in line with what the respective components offer in the module. Please note that this module is a full-time module with mandatory presence on four days and a workload of five days. As students will work for a real client during this module, also additional appointment will be scheduled outside the planned activities as mentioned in the roster. The planning of these activities will depend on the client's agenda.

7.2. Minor regulations

7.2.1 Integrated Minor

The above mentioned minor is integrated. This means that students must pass all components to receive a final grade in the Student Information System (Osiris).

7.2.2 Validity of grades in minor modules

All course grades, as well as sub-grades, that are registered in the Student Information System (Osiris) remain valid indefinitely.

7.2.3 Exam opportunities

Each year, two separate opportunities are offered for taking an exam associated with a specific study unit.

There is in any case at least one opportunity to take an exam in the period in which the applicable study unit is taught.

7.2.4 Assessment format interim examinations/tests

The assessment formats of each of the study units in the minors is presented in the Canvas' pages of the minors. The weight attributed to each of the exam components is stipulated in the course's Canvas pages and made public before the start of the course. Written tests are individual, unless specified otherwise.

In addition to Article 3.6 of the BMS EER, for the minors the following applies:

If a study unit has been completed successfully (final grade 6 or more) then this grade is final. If a student (due to exceptional circumstances) would like to improve the grade, the student has to submit a motivated request to the Examination Board

The result of a test is to be disclosed to the student within ten working days after the test date.