

***Wageningen University Engineering Doctorate (EngD)**
Training and Supervision Plan (TSP)

For more detailed information on the TSP see: [EngD Training and Education - WUR](#)

The Training and Supervision Plan (TSP) describes the planned training and teaching activities of an EngD candidate, as well as agreements on supervision and evaluation of performance and progress. Besides having a formal function, the TSP also **facilitates** the planning of activities related to personal development and the frequency, format and responsibilities of supervision. The candidate should use the TSP to discuss these matters with the supervisors so that both parties agree on the EngD candidate's training and supervision.

The TSP:

- Must be submitted by the EngD candidate within the first month of the start of the programme.
- Is signed by the main supervisor, daily supervisor and (if present) the design assignment supervisor and is officially approved by the EngD Coordinator. Therefore, rights and obligations related to training, education and supervision are formalised through this document.
- Can be altered in the course of the EngD programme when needed but only when the candidate and supervisors agree on the changes with the prerequisite that all criteria are met. Agreements on supervision can also be changed when required but when this involves changes in the supervision team the EngD office must be informed. Specific changes in the training components do not have to be reported when altered, provided minimum criteria are met.

After filling in the TSP, please send a WORD version of the TSP to the EngD Programme Coordinator for final evaluation and check. Accordingly, have the TSP signed and send this as a PDF to the EngD Programme Coordinator.

Personal details of EngD candidate

First name	
Family name	
Email address	

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b. General / Methodological / Statistical courses in Design

Courses meant to given an overview of design science and broaden scientific and methodological knowledge and insight

i. Mandatory courses

ii. Optional courses

c. Specific In-Depth / Methodological / Statistical courses in Design

Courses meant to deepen scientific and methodological knowledge and insight

d. Laboratory training and working visits

This involves training or visits to universities/institutes/companies other than the candidate's affiliated institute(s) where the candidate obtains knowledge and insight required to fulfil the design.

A2: SKILLS, COMPETENCES AND CAREER DEVELOPMENT

Courses meant to develop and strengthening of skills and competences needed for an Engineering doctorate.

a. Mandatory courses

b. Optional courses

See: [Wageningen Graduate Schools Courses \(wur.nl\)](http://wur.nl) for an overview of the courses available

c. Supervising Students

This involves supervising BSc or MSc thesis student(s) according to the following requirements:

- *The topic should be related to the EngD candidates EngD design*
- *There is always co-supervision needed, to fill in the learning circle*

Supervision of Design challenges or living labs (only if related to design) are also included in this category

A3: EXPOSURE/INTERACTION

a. Local meetings, seminars and discussion groups

- *Main aims are to stimulate interaction and networking beyond your own specific field of expertise and beyond your existing (scientific) network.*
- *Listed activities may be within or outside WU.*

b. (Inter)national symposia, workshops, conferences or societal exposure

- *Credits can only be obtained when the candidate has an active involvement in the event (e.g. poster, talk, interview). **Participation without presentation is credited in category 3a.***
- *Credits: 1 ECTS is obtained for the presentation, poster or interview, which is added to the ECTS obtained for attendance (0.3 ECTS per day). So, a two-day meeting results in 1.6 ECTS.*
- *When an international meeting on a subject of interest is not scheduled yet, indicate subject of interest and year in which you hope to participate. To aid this, one can think of the annual meeting of societies that cover the field.*

B. SUPERVISION AND OWNERSHIP AGREEMENTS

This section contains the supervision and ownership agreements between the supervisors and the candidate.

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A. THE EngD TRAINING PROGRAMME

The EngD training programme focuses on the development of T-shaped skills of a candidate within the context of an engineering doctorate:

- Vertical bar of the T:
 - In-depth knowledge and insight in the design topic.
 - Developing/strengthening competences and skills to work as an Engineering Doctorate.

- Horizontal bar of the T:
 - Broadening of knowledge and insight in the field of design.
 - Developing/strengthening competences and skills at large.
 - Able to place the design in a societal context (that of the stakeholders) and communicate this.
 - Exploring future career options.

Moreover, it is essential for EngD candidates to be able to perform in and interact with a diverse set of fora active in sustainability of agrifood and ecological systems. Hence, scientific interaction with peers and stakeholders is also a component of the training programme.

The intended learning outcome of an EngD programme are to act/operate as an independent designer, by being able to:

- Develop a design that meets the stakeholders' requirements.
- Provide a solid scientific basis to a design.
- Integrate the design within the framework of its own discipline as well as in a broader scientific and societal context.
- Document and communicate in clear language the process that leads to the design.

EngD candidates must obtain 60 ECTS (= The European Credit Transfer and Accumulation System, 1 ECTS = 28 hours) in training, education and (scientific) meetings.

Note:

- An exemption can be provided for a maximum of 12 ECTS for skills/courses when the candidate has proven experience that can replace certain education/training activities. For clarify, the minimum credits that the candidate must obtain in training, education and (scientific) meetings is 48 ECTS. Courses or activities that the candidate followed after their MSc degree and which are relevant to the candidate as an EngD can also be listed in the TSP.
- In case of an exemption for part of the 60 ECTS, an explanation needs to be added to the TSP.

Besides obtaining a minimum of 48-60 ECTS in total, there are mandatory minimum requirements for the different elements within categories of the TSP which are indicated in brackets after the category title. Activities that do not have ECTS noted can be scored with 0.3 ECTS per full day activity.

Bachelor courses cannot be part of the curriculum. Master courses are permitted, but the credits are limited to 12 ECTS. Capita Selecta courses at poster-master level are capped at 6 ECTS. Additional master-level Capita Selecta courses can be included, but are limited to 6 ECTS and count towards the 12 ECTS cap for master courses.

MOOCs or online courses require a certificate and written supervisor confirmation on the post-master or master educational level.

A1: DESIGN KNOWLEDGE, INSIGHT AND OVERVIEW**a. EngD Design proposal (6 ECTS)**

- All EngD candidates write and present a EngD design proposal, see for the requirements the EngD proposal form.

Title of review / project proposal	ECTS
	6.0

Description of the project (max 200 words)

b. General / Methodological / Statistical courses in Design (Minimum: 14 ECTS)

- Courses meant to given an overview of design science and broaden scientific and methodological knowledge and insight

i. Mandatory courses (10 ECTS)

Course title	Organisers	Year	ECTS
Principles of Design			8.0
EngD Sustainability course			2.0

ii. Optional courses (Minimum: 4 ECTS)

Course title	Organisers	Year	ECTS

c. Specific In-Depth / Methodological / Statistical courses in Design (Minimum: 8 ECTS)

- Courses meant to deepen scientific and methodological knowledge and insight

Course title	Organisers	Year	ECTS

d. Laboratory training and working visits (Maximum: 6 ECTS)

- This involves training or visits to universities/institutes/companies other than the candidate's affiliated institute(s) where the candidate obtains knowledge and insight required to fulfil the design. Also design hacks, participation in design events and design challenges could be written here.

Topic under investigation	Institute	Year	ECTS
1)			
2)			

A2: SKILLS, COMPETENCES AND CAREER DEVELOPMENT

- These courses and activities are part of:

- Development and strengthening of skills and competences needed as an Engineering doctorate (e.g. writing and presenting skills, time planning, project management, communication skills) and beyond.
- Obtaining clear career perspectives, e.g., courses or orientation activities.

a. Mandatory courses (Minimum: 2.6 ECTS)

Title of the activity	Organisers	Year	ECTS
EngD Days			0.3 - 1.0
Scientific Integrity			0.6
Ethics for Designers			1.0

b. Optional courses (Minimum: 6 ECTS)

- See: [Wageningen Graduate Schools Courses \(wur.nl\)](http://wur.nl) for an overview of the courses available

- Example:

- Project and time management
- Effective communication
- Interview techniques
- Career development courses

Title of the activity	Organisers	Year	ECTS

c. Supervising Students (Maximum: 3 ECTS)

This involves supervising BSc or MSc thesis student(s) according to the following requirements:

- The topic should be related to the EngD candidates EngD design
- There is always co-supervision needed, to fill in the learning circle

Supervision of Design challenges or living labs (only if related to design) are also included in this category. It is not allowed for EngD candidates to write credits for teaching courses or supervising practicals.

Title of the activity	Organisers	Year	ECTS

A3: EXPOSURE/INTERACTION**a. Local meetings, seminars and discussion groups (Minimum: 3, maximum: 6 ECTS)**

- Main aims are to stimulate interaction and networking beyond your own specific field of expertise and beyond your existing (scientific) network.
- Listed activities may be within or outside WU.
- Consider ± 0.1 ECTS for a 2-hour meeting and 1.5 ECTS per year for active participation in a discussion group.

Name of discussion group, local seminar or other scientific meeting	Years	ECTS
1)		
2)		
3)		

b. (Inter)national symposia, workshops, design projects, conferences or societal exposure (Minimum: 1.6 ECTS, maximum: 6 ECTS)

- Credits can only be obtained when the candidate has an active involvement in the event (e.g. poster, talk, interview). **Participation without presentation is credited in category 3a.**
- Credits: 1 ECTS is obtained for the presentation, poster or interview, which is added to the ECTS obtained for attendance (0.3 ECTS per day). So, a two-day meeting results in 1.6 ECTS.
- When an international meeting on a subject of interest is not scheduled yet, indicate subject of interest and year in which you hope to participate. To aid this, one can think of the annual meeting of societies that cover the field.

Name of international symposium, workshop, or conference	Location	Year	ECTS
1)			
2)			
3)			

Total Credits

Total credits (ECTS) for education, training and exposure/interactive activities Sum of category A 1-3. Minimum required = 60 ECTS If less than 60 ECTS (minimum 48 ECTS), provide a detailed explanation	
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B. SUPERVISION AND OWNERSHIP AGREEMENTS

This section contains the supervision and ownership agreements between the supervisors and the candidate.

B1. SUPERVISION ARRANGEMENTS

*This section is filled in after supervisors and the EngD candidate have had a discussion on how supervision will be arranged and who is responsible for what. Involvement and tasks/responsibilities of supervisors can change during the EngD track, provided that they are discussed with the EngD candidate. More specifically, the **frequency** (avg. hours per week or days per month), **format** (i.e. weekly/monthly meetings based on appointments or more on an ad hoc basis) and responsibilities of supervisors (who does what) are described.*

Principal Supervisor/Principle supervisor ¹

Name	
Frequency	
Format / Type	
Responsible for	

Daily supervisor

Name	
Task / Position ¹	
Frequency	
Format / Type	
Responsible for	

Supervisor 3 (optional)

Name	
Task / Position ¹	
Frequency	
Format / Type	
Responsible for	

External supervisor

Name	
Task / Position ¹	
Frequency	
Format / Type	
Responsible for	

¹ **Principle supervisor:** professor or academic staff member with ius promovendi who formally approves the EngD degree.
Daily supervisor: a scientist with special expertise in the field in which the EngD candidate is making the design.
External supervisor: supervisor who from the company/organisation who has given the assignment.
Advisor: a scientist / specialist who is involved in the project but not on a regular and formal basis.

Advisor (optional)

Name	
Task / Position ¹	
Frequency	
Format / Type	
Responsible for	

Additional Comments on Supervision	
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Evaluation of progress and process, and the Go/No-Go

How often will the entire project team meet for a general progress and process evaluation (we advise to do this at least once every 3-6 months)?	
The Go/No-Go evaluation (approx. 6-8 months after start) is mandatory Have the Go/No-Go procedure, the evaluation criteria, the timeline, and the consequences of a Go or a No-Go been discussed for this project?	YES / NO

B2. AGREEMENT ON (CO-) AUTHORSHIP / OWNERSHIP

*Doing an EngD could end with a scientific publication. As part of this process, the EngD candidate and the supervisory team will need to discuss who qualifies for co-authorship, and based on which criteria, but also on the ranking of the author list. To aid this process and to provide a general guideline (co)authorship guidelines are given below. **The EngD office specifically asks the project team to take note of the following guidelines** and to indicate whether the team plans to deviate from these guidelines when a scientific publication is written.*

General advice regarding the publication process

- Make an agreement about the criteria for first authorship and the ranking of co-authors very early in the research process and also about the required tasks and activities to meet the criteria for author- and co-authorship.
- Decide on authorship and the ranking of the co-authors collectively.
- In case of disagreement or doubts about authorship or ranking of authors, feel free to consult the EngD Programme Coordinator.

Authorship and co-authorship

Starting point should be that all authors of a paper have contributed *substantially* to the paper, have reviewed the final version of the manuscript, approve it for publication, and take public responsibility for the content of the paper.

Someone's contribution is substantial if he/she contributed to at least two of the following four aspects:

- Problem definition, design of the experiment or research project, planning. This may include acquisition of the project, writing of the project or research proposal, designing the experimental setup.
- Practical execution of the lab or field work. Production of data.
- Analyses and interpretation of the results.
- Writing of the manuscript.

The contribution to two of these four aspects must really have made a difference. This does not necessarily mean that the contribution took much time. Consequently, someone who supplies data can only be a coauthor if he/she also contributes to one of the other three aspects. It may help to be clear about this in an early stage, for instance when you ask someone for data.

People who contributed to a paper, but whose contribution does not meet the above-mentioned criteria for a co-author should be mentioned in the acknowledgements of a paper. Finally, the author who submits a manuscript for publication accepts the responsibility of having included as co-authors all persons appropriate and none inappropriate. The submitting author should have sent each living co-author a copy of the manuscript and have obtained the co-author's assent to submit it as such.

Author Ranking

- The 'first author' is always the person who has made the most important integrating contribution.
- All other authors are ranked in accordance with the general rules or customs of the specific discipline. Authors may be ranked in order of decreasing importance of their integrating contribution, or a special position may be assigned to the 2nd author and last author, unless the editorial board of a scientific journal has determined other rules for author ranking explicitly.
- Keep in mind the tasks and competences of the author in order to balance the importance of their "substantial individual contributions".

Team statement on authorship arrangements:

Is the project team planning to adhere to the EngD authorship guidelines?	YES / NO
<i>If no, on which aspects is the team planning to deviate from the above-mentioned guidelines?</i>	

C. APPROVAL / SIGNATURES

Adjustments with respect to supervision are possible, as it is almost impossible to foresee every development that occurs during the two-year appointment. The agreed plan, however, is an essential part of the file of every EngD candidate. Both the EngD candidate and the supervisors derive rights and obligations from it. Therefore, it is necessary to submit the form as soon as possible.

By signing this Training and Supervision Plan, the principle supervisor declares that a budget of at least € 10.000,- (for the 2-year period) is available to support the training and education activities of the EngD candidate.

EngD candidate	Principal Supervisor	Daily Supervisor
Name:	Name:	Name:
Date:	Date:	Date:
Supervisor 3 (optional)	External Supervisor	Advisor (optional)
Name:	Name:	Name:
Date:	Date:	Date:

Head of Research Group
Name:
Date:

Signature of approval by the EngD Program Coordinator:

Date:

Before submitting the final signed version of the TSP in PDF to the EngD Programme Coordinator, please send her/him a draft version by email to your EngD Programme Coordinator, so (s)he can check whether all requirements have been met.