Complementary PhD Rules & Regulations Faculty of Applied Engineering

Approved by Faculty Board, 31/01/2020

I General provisions

- Art. 1. These rules and regulations apply to PhD studies at the University of Antwerp Faculty of Applied Engineering. These studies include the doctoral study programme and the PhD. They are complementary to the University of Antwerp PhD rules and regulations and the University of Antwerp basic paper on the doctoral study programme, approved by the University of Antwerp Board of Governors [30/01/2018].
- **Art. 2.** Within the Faculty of Applied Engineering, the following boards and commissions are responsible for PhD studies:
 - the faculty board (FR)
 - the individual PhD commission (IDC);
 - the faculty PhD commission (FDOC),
 - the faculty PhD coordinator (FCD)

The research board (OZC) of the Faculty of Applied Engineering takes on the responsibilities of FDOC. The chairperson of OZC also chairs FDOC. The policy officer for the faculty's doctoral study programme acts as secretary for FDOC meetings. The authority of the different boards and commissions in connection with PhD studies is covered in the following articles.

Art. 3. With regard to PhD studies, FR has the authority of decision on:

- a) composing the PhD jury, appointing its chair and secretary when the candidate has been accepted to his/her dissertation defence (see Articles 25 to 29 of the University of Antwerp PhD rules and regulations);
- b) appointing the faculty PhD coordinator (FCD) who is also chair of FDOC.

Art. 4. With regard to PhD studies, FDOC has the authority of decision on:

- a) the organization, quality control and follow up of the doctoral study programme;
- admitting a candidate to the PhD studies¹ and the doctoral study programme, based on an examination of the candidate's suitability and the suitability of the research project (see Article 8 of the University of Antwerp PhD rules and regulations);
- c) appointing the supervisor(s) of the dissertation (see Article 14 of the University of Antwerp PhD rules and regulations);
- d) composing the individual PhD commission (IDC) and appointing its chair when the candidate is accepted (see Articles 14 to 19 of the University of Antwerp PhD rules and regulations). The supervisor proposes the IDC to the FDOC;
- e) where necessary, determining the course program¹ during the PhD for candidates who fall under Article 11 of the University of Antwerp PhD rules;
- f) where necessary, determining the preparatory program for candidates with a foreign master's degree, a non-university master's degree or a master's degree other than in Applied Engineering, and assessing whether the program was completed successfully (see Articles 9 to 11 of the University of Antwerp PhD rules and regulations);
- g) approving the assessment reports by the individual PhD commissions following the progress reports (see Articles 20 and 21 of the University of Antwerp PhD rules and regulations);
- h) approving the assessment reports by the faculty peer review commission following the annual progress report on the doctoral study programme;
- i) granting permission to submit the dissertation in a language other than Dutch or English;
- j) proposing the composition of PhD juries for the FR, on the recommendation of the supervisor(s);

¹ The decision on a mandatory course program is made jointly by the FDOC and the supervisor(s).

- **Art. 5.** With regard to PhD studies, IDC provides advice to FDOC on:
 - a) the progress of the PhD student²'s doctoral research on the basis of a report and, if necessary, a personal meeting (see Article 20 of the University of Antwerp PhD rules and regulations);
- **Art. 6.** With regard to PhD studies, FCD provides advice to FDOC on:
 - a) the assessment of the annual progress report on the doctoral study programme; for this, FCD is assisted by the peer review commission, which is composed each year;
 - b) where necessary, assessment of the preparatory course program defined by FDOC.
- Art. 7. With regard to PhD studies, FCD provides advice to FR on:
 - a) composing the PhD jury, appointing its chair and secretary when the candidate has been accepted to his/her dissertation defence (see Articles 25 to 29 of the University of Antwerp PhD rules and regulations);

II Eligibility criteria

- Art. 8. PhD studies in Applied Engineering are open to any candidate who fulfils the conditions set out in Article 67 of the decree of 04/04/2003 on the restructuring of higher education in Flanders, and who has, after FDOC has examined his/her suitability as a candidate, been given explicit permission.
- **Art. 9.** The examination of a candidate's suitability by FDOC takes place on the basis of a file, presented by the university's Education Administration Office to the chair of FDOC, consisting of the subscription form and the resume of the candidate, supplemented with proposals on research topic and supervisor(s). A written consent of the latter must be included in the file. The examination of the candidate's suitability may include a language test.
- **Art. 10.** The candidate shall be informed on the result of the examination within a reasonable time period. A period of 6 weeks is considered to be reasonable. This time period cannot be guaranteed between 20 July and 31 August. If the result of the examination in the framework of Article 7 or 8 of the University of Antwerp PhD rules and regulations is not available within a period of three months, the decision is always positive. This is not true for a suitability examination in the framework of Article 10 or 11 of the University of Antwerp PhD rules and regulations. Also in this case a decision in a reasonable period of time shall be aimed.
- Art. 11. The following chronology applies for applying for PhD studies in Applied Engineering:
 - a) the candidate submits his/her application for PhD studies in Applied Engineering to the central student administration using the mandatory forms (see attachment 3 of the University of Antwerp PhD rules and regulations);
 - b) after receiving the application from the central student administration, FDOC decides on its acceptance;
 - c) if FDOC imposes a course programme on the candidate (see Article 4, paragraphs e and f of these complementary rules and regulations), it must inform the candidate of this together with the result of the examination of the candidate's suitability, all within a reasonable time limit;

² In this document the term PhD student is used for students of each gender.

- d) if FDOC imposes a preparatory programme with exams on the candidate , it informs the candidate within a reasonable time limit. This preparatory programme contains up to 30 credits. In justified cases, 'Eerder Verworven Competenties' (prior experience) and/or 'Eerder Verworven Kwalificaties' (prior qualifications) can count towards all or part of the preparatory programme. This programme cannot form part of the candidate's doctoral study programme. The candidate will register with the student administration with a diploma contract for the elements in this preparatory programme;
- e) after acceptance of the application, FDOC appoints (a) supervisor(s) who propose an individual PhD commission (IDC) as specified in articles 17 to 19 of the University of Antwerp PhD rules and regulations. FDOC decides in this matter and appoints the chair of the IDC;
- f) the progress of the candidate is recorded in a bi-annual progress report written by the candidate and assessed by IDC and FDOC;
- g) on suggestion of the IDC and after completion of the doctoral study programme, FR composes a doctoral jury and appoints its chair and secretary;
- h) following the mandatory pre-defence, the doctoral jury allows the candidate to the public defence;
- i) the public defence of the candidate's dissertation concludes the PhD studies.
- **Art. 12.** If a PhD student wants to change supervisors in the course of the PhD process, he/she submits a reasoned and adjusted proposal to FDOC. Upon acceptance by FDOC, FDOC appoints a new IDC following the proposal of the new supervisor(s).

III Doctoral study program

- Art. 13. Within the doctoral study programme, the PhD student must hone his/her skills as a junior researcher. He/She reports yearly on the progress made via the online Student Information System Antwerp (SisA). Using the <u>competence profile</u> for PhD students at the University of Antwerp, in consultation with his/her supervisor(s), the PhD student determines which activities he/she will undertake. In order to successfully complete the doctoral study programme, the PhD student must submit an activity file to which the following general rules apply:
 - a) a total of at least 30 credits' worth of activities must be undertaken;
 - b) at least 1 credit should be obtained in at least 4 categories of the competence profile;
 - c) up to half of the total credits may be obtained in one competence category;
 - d) Proof of participation must be provided for all activities. Evidence can consist of lists of participants, certificates of attendance, enrolment confirmations, programmes mentioning the name of the PhD student(s), certificates, copies of the first page of published or accepted articles, the academic bibliography, etc. (see ADS website for more information on valid proofs).

If no proof is available for certain activities, the signature of the promoter is sufficient. It is not allowed to use the signature of the promoter as the sole proof for all the activities.

The PhD student ends the doctoral study programme before the official composition of the PhD jury and this according to the procedure described on the website of Antwerp Doctoral School (ADS).

Art. 14. The table below applies to the awarding of credits per activity, with the specifications and limitations listed in Articles 15 to 18 of these complementary rules and regulations. The maxima mentioned below are valid for the entire doctoral study programme. ADS courses followed and successfully completed since the academic year 2015-2016 are automatically included in the activity overview in SisA (with the corresponding credits and relevant competence category). The PhD student need not add these activities in SisA.

The table also lists the category in SisA where the activity belongs. The categories in SisA are:

- 1. Training and career development.
- 2. Education and (acad.) services.
- 3. Publications and prd./real.
- 4. (Academic) communication
- 5. Project proposals and recognition

Competence categories	Activity + number	Credits per activity	Max. per activity	Category SisA
A. Research skills and techniques	A.1. Course ³	0,1/hour	max. 0,7 credits/day	1.
	A.2. Research visit ⁴	0,5/working day	max. 5 credits (F.2 included)	1.
	A.3. Member of a jury/co-reader (thesis, project proposal, award,)	0,1/year		2. (evaluate/jury)
	A.4. Review book/article, evaluation proposal, manuscript	1	max. 5 credits	3.
	A.5. Summer schools	0,5/day	max. 5 credits	1.
 B. Adapting to the research environment 	B.1.Course⁵	0,1/hour	max. 0,7 credits/day	1.
	B.2. Member of counsel/commission ⁶	1/year/council or commission	max. 4 credits	2.
	B.3. Mentor	1/year		2.
C. Research management	C.1. Course ⁷	0,1/hour	max. 0,7 credits/day	1.
	C.2. Supervision of a master thesis ⁸	2/master thesis	max. 8 credits	2.
	C.3. Supervision of a bachelor thesis ⁸	1/bachelor thesis		2.
	C.4 Organisation of a conference or a scientific activity	0,5/day of the conference or the activity		4.
D. Personal effectiveness	D.1. Course ⁹	0,1/hour	max. 0,7 credits/day	1.
	D.2. Lectures and similar ¹⁰	0,1/hour	max. 9 credits	1.
	Scientific publication with 'peer review' ¹¹ , - D.3. first author (or similar)	3	total: max. 9 credits	3.

³ e.g. Excel, Access, Scientific Reasoning and Reporting

⁴ Research visits (not taking samples) can be awarded in A.2. (or F.2.). A research visit can only be taken into

account, if the PhD student works in the research group.

⁵ e.g. Innovation Management & Entrepreneurship

⁶ Also peer review committee doctoral programme (docop)

⁷ e.g. Project management, Word, Mindmapping

⁸ The title page should contain the name of the PhD student as supervisor.

⁹ e.g. Time management, Achieving your goals

¹⁰ Lectures can be awarded, if there is proof of active participation (e.g. a critical review, a copy of notes, a short report, etc.). Meetings and public defences are no lectures or courses. Attending lectures during conferences is considered as passive participation. This is not awarded.

¹¹ Publications are awarded, if they are accepted (proof of editor or copy of publication). Abstracts of conferences are not awarded. The award is included in E.5. or E.6. (poster/presentation). Reports of and applications for projects/scholarships/etc. are no publications, e.g. FWO application.

	- D.4. other author (or similar)	1		
	D.5. Scientific publication without 'peer review' ¹¹	1		3.
	D.6. Scientific award	To be defined by peer-review commission (1-3)		5.
	D.7. Patent or licence agreement ¹²	3		5.
	D.8. Membership of the editorial board of a scientific journal	1/year		3.
E. Communication skills	E.1. Course ¹³	0,1/hour	max. 0,7 credits/day	1.
	E.2. Language course	0,1/hour	max. 6 credits	1.
	E.3. Teaching in higher education ¹⁴	0,2/hour	max. 3 credits/course	2.
	E.4. Lab and teaching support ¹⁴	0,1/hour	max. 3 credits/course	2.
	International conference (or similar) ¹⁵ - E.5. presentation - E.6. poster presentation	3 per presentation 2 per poster		4.
	National conference (or similar) ¹⁵ - E.7. presentation - E.8. poster presentation	2 per presentation 1 per poster	max. 9 credits	4.
	E.9. Presentation of one's own research, not in the research group ¹⁶	0,5		4.
	E.10. Teaching in a company/broad audience	2		4. (presentation)
	E.11. Participation in Kinderuniversiteit, Wetenschapsweek, Open Campusdag or similar	1/day		4. (presentation)
	E.12. Publication to popularize science (e.g. newspaper, PINTRA)	1		4. (presentation)
F. Netw orking and	F.1. Course ¹⁷	0,1/hour	max. 0,7 credits/day	1.

¹² Accepted patent.

¹³ e.g. Presentation skills, writing, communication, PowerPoint, Webdesign, Writing proposals, etc.

¹⁴ The supervisor is expected to check and confirm the tasks performed by the PhD student.

¹⁵ Passive participation is not taken into account.

¹⁶ Presentations during meetings are not taken into account. Presentations for e.g. companies, visitors, etc. can be taken into account.

¹⁷ e.g. Leadership and team work

	F.2. Research visit ¹⁸	0,5/working day	max. 5 credits (A.2 included)	1.
	F.3. Member of a board of a scientific society	1/year		1. (Network)
G. Carreer management	G.1. Course ¹⁹	0,1/hour	max. 0,7 credits/day	1.
	G.2. Trade fairs and thematic conferences ²⁰	1	max. 3 credits	1. (traineeship or professional experience)
	G.3. User committees ²¹	1		1. (traineeship or professional experience)
	G.4. Training ²² in a non-academic environment	0,5/working day	max. 5 credits	1. (traineeship or professional experience)

Art. 15. In general, the following specifications apply:

- a) the credits in the table, determined by the Faculty of Applied Engineering, apply to all PhD students doing a PhD within the fields of Applied Engineering;
- b) for PhD students who enrol in the doctoral study programme for the first time in academic year 2015-2016 or later, the maximum number of obtainable credits is limited per section as described in the table above and in Article 15-17; For PhD students who enrolled in the doctoral study programme for the first time before academic year 2015-2016, individual agreements will be made, taking into account the credits and maxima described in the faculty rules version 01052013;
- c) activities followed after obtaining the degree, which give access to enrolment for the preparation of the dissertation but before the actual enrolment, can be fully or partially recognized in the context of the doctoral study programme. FDOC decides on this, based on a reasoned proposal, substantiated with the necessary documents.
- d) The competence category (e.g. A.1., C.4., etc) needs to be mentioned when submitting the yearly report.
- e) When accepting the activities, the maximum number of credits is not taken into account. The maximum is only taken into account at the closure of the doctoral study programme. The peer review commission does not refuse activities when the maximum number of credits in a certain category is obtained. All activities submitted in SisA are taken into account for the diploma supplement. Hence, PhD students are expected to submit all activities that they would like to be mentioned on their diploma supplement, in SisA with the correct number of credits.

¹⁸ Research visits (not taking samples) can be awarded in A.2. (or F.2.). A research visit can only be taken into account, if the PhD student works in the research group.

¹⁹ e.g. job application training

²⁰ Lectures, workshops, trade fairs, thematic conferences, etc with external partners can be awarded if there is a proof of active participation (e.g. a copy of notes, a short report, etc.). Meetings are no lectures.

²¹ Meetings are no active participation. Organisation of and active participation (presentation, reporting on results, etc) in user committees with companies are awarded (TETRA, SBO, etc)

²² This is a research stay in a company.

- **Art. 16.** The list of activities described in the table above is not exhaustive. If an activity is not mentioned in the table, a credit for the activity can be proposed.
- Art. 17. For trainings and courses the following specification applies:
 - a) Courses and trainings = max. 9 credits for the entire doctoral study programme.
- Art. 18. Under very exceptional circumstances, candidates with special qualifications may be exempt from the obligations and limitations as listed in Articles 13 to 17. It involves activities and competences obtained before the start of the doctoral study programme that can be taken into account for the doctoral study programme. FDOC decides on this, based on a reasoned proposal, substantiated with the necessary documents.

IV Assessment of the PhD studies and the doctoral study programme

- **Art. 19.** Every year before the 1st of May, each PhD student submits a progress report for the PhD programme via SisA Selfservice. In this report, the candidate shows which activities he/she has carried out and shows to what extent the 30 credits of the doctoral study programme have already been obtained. ADS organizes the communication about this. The evaluation is done by a faculty peer review committee, composed by ADS.
- Art. 20. The progress of the research is evaluated by the IDC at least every two years. The timing of the progress report is linked to the effective starting date of the doctoral research. This date is communicated to the research staff member by the supervisor upon registration. At the start of the PhD, the PhD student takes the initiative for an informal meeting with the members of his/her IDC.
- Art. 21. In the second half of the second research year (based on the effective start date), the PhD student(s) submits the progress report. The PhD student receives an invitation and the template for the progress report of the research staff member. After submitting the progress report, the PhD student contacts the IDC members to set a date for a meeting in which the PhD student(s) explain the progress report orally by means of a presentation. The meeting must take place before the end of the second research year.
- Art. 22. During the meeting, the IDC gives feedback on the progress and results of the PhD work and possibly gives recommendations for further research plans. On the basis of the interview, the IDC evaluates whether the PhD student's progress is sufficient to continue the PhD trajectory. The IDC can also decide that the student should be heard again in the third year following the same procedure.
- Art. 23. After consensus of the IDC, the IDC chairperson sends a signed evaluation form to the research staff member or uploads it in SisA, after which the files are submitted to the FDOC for approval. If the IDC chairperson has not yet done so, the staff member registers the evaluation in SisA, together with a copy of the report, where the PhD student can consult it. The evaluation must be available by the end of the second research year at the latest. A negative evaluation will immediately be reported by the IDC chairperson to the research executive who will put it on the agenda of the next meeting of the FDOC.
- **Art. 24.** At the start of the second half of the fourth research year, the research staff member invites the PhD student(s) to submit a written report no later than four months before the end of the

fourth research year. The research staff member provides a template for this. The IDC assesses this report. If the IDC is insufficiently convinced of the progress of the research on the basis of the report, it can request an oral report as in Article 21.

- **Art.25**. The reporting in the fourth year of research expires if, before the end of the fourth year, the PhD student submits a first version of the dissertation to the IDC for the start of the defence procedure.
- **Art. 26.** If the PhD has not been completed after four years, the PhD candidate is evaluated by the IDC at the end of each subsequent research year as stipulated in Articles 24 and 25. In the case of mandate assistants with a six-year research track, the IDC can decide to deviate from this, subject to approval from the FDOC.
- Art 27. The FDOC evaluates annually the evaluation reports.
- Art. 28. The IDC can be convened at any time at the request of the PhD students or one of the IDC members.
- **Art. 29**. In case of a negative assessment by the IDC, the FDOC will hear the candidate. The FDOC may refuse the PhD student further enrolment (cf. Article 20 of the doctoral regulations of the University of Antwerp).

V PhD dissertation

- Art. 30. The dissertation may take the form of a monograph, possibly based on a collection of manuscripts published by the PhD student in question (see Article 22 of the University of Antwerp PhD rules and regulations). If the dissertation consists of a collection of academic manuscripts, an introduction and general conclusion are added. It is necessary to have at least one accepted A1/P1 publication when the dissertation consists of a collection of academic manuscripts.
- Art. 31. The dissertation must have a homogeneous structure and layout. The faculty guidelines are:
 - The document can be made in A4-format. Please take into account that it will be reduced to 18 x 26 cm.
 - Inside:
 - Page numbers: as in a book (recto-verso, left and right page or centred)
 - Margins: as in a book (recto-verso, left and right page or centred).
 - Cover:
 - The PhD student contacts the New Media Services department for the lay-out of the cover;
 - The information delivered by the PhD student (title, supervisor(s), picture, etc.) will be used to produce the faculty cover;
- **Art. 32.** The dissertation must be written and defended in Dutch or English as the PhD student prefers. The dissertation must always contain a summary in the other language.
- **Art. 33.** The procedure leading up to the public defence is initiated when the PhD student submits sufficient copies of his/her draft dissertation to the members of IDC. The IDC informs the PhD student on its advice in writing within 4 weeks.

- **Art. 34.** In case of a positive assessment of the dissertation by IDC, FDOC examines whether all criteria for the doctoral study programme have been met (see Articles 13 to 18 of these Rules and regulations). ADS delivers a letter of confirmation to the PhD student upon completion of the doctoral study programme. Only when all necessary credits are earned, FDOC composes a doctoral jury for FR consisting of at least 5 and no more than 8 members, as recommended by the supervisor(s), and proposes its chair and secretary. All supervisors are part of the doctoral jury, but cannot be either its chair or secretary. The PhD student delivers sufficient copies of the draft dissertation to the members of his/her doctoral jury.
- **Art. 35.** The pre-defence of the dissertation is mandatory, and takes place within six weeks after submitting the draft dissertation to the members of the doctoral jury. The defence cannot take place if fewer than two thirds of the doctoral jury members are in attendance, if necessary via teleconferencing; at least two of those in attendance must not be involved in the doctoral thesis. The pre-defence starts with a presentation in which the PhD student explains his/her research. A discussion follows the presentation of about 15 à 20 minutes. The total duration of the pre-defence is 3 hours at maximum. After the pre-defence the doctoral jury decides, preferably in consensus (see Article 33), whether or not to allow the candidate to the public defence. The pre-defence can lead to one of the following decisions:
 - a) The dissertation is accepted without any further conditions;
 - b) The dissertation is accepted with a limited number of adaptations ("minor revision"). This revision is the supervisor's responsibility;
 - c) The dissertation is accepted on condition of a number of important adaptations ("major revision"). The entire jury must agree to the revised text before the dissertation is accepted for public defence;
 - d) The dissertation is refused and shall, after thorough revision, be submitted to a new predefence. The doctoral jury conveys the candidate a written report spelling out the necessary steps leading to a new pre-defence. No more than two pre-defences can be organized in total.
- **Art. 36.** In case the pre-defence leads the doctoral jury to consent to the public defence of the dissertation (see Articles 33 to 35 in the University of Antwerp PhD rules and regulations), the chair of the doctoral jury informs the PhD student, the dean of the Faculty of Applied Engineering and the chair of FDOC. The PhD student informs the university's Education Administration Office and delivers sufficient copies of his/her final dissertation to the jury. The deanship Applied Engineering distributes the dissertation to the library. The public defence is held at the earliest three weeks after informing the Education Administration Office about the decision of the jury. Within six weeks following this moment the date of the public defence must be fixed. The public defence shall take place within a reasonable period.
- Art. 37.The PhD student decides together with the chair of the doctoral jury whether the jury attends in toga. It is important that all jury members are equal. If one decides to wear a toga, all jury members shall wear a toga. The faculty owns toga's that can be used for a public defence.
- **Art. 38.** The doctoral jury convenes at least half an hour before the start of the public defence. The defence cannot take place if fewer than two thirds of the doctoral jury members are in attendance, if necessary via teleconferencing; at least two of those in attendance must not be involved in the doctoral thesis. The public defence consists of the following components:
 - a) the chair of the jury introduces the procedure of the public defence and the PhD student;
 - b) the chair introduces the dissertation and the members of the doctoral jury;
 - c) the PhD student presents his/her dissertation (max. 40 minutes);
 - d) the chair leads the interrogation by the members of the doctoral jury (max. 50 minutes);
 - e) the chair leads a public debate;

- f) the chair leads the discussion among the doctoral jury and jury members sign the deliberation report (attachment 1);
- g) the chair proclaims the PhD student 'Doctor in Applied Engineering'. No degrees of distinction are awarded.

VI Special provisions

- **Art.39** The IDC and doctoral jury preferably decide in consensus. If no consensus is possible, a positive decision is only possible with a majority of votes. The supervisors jointly have one vote. If the supervisors do not agree, their vote is decided by majority.
- **Art. 40** In case of deviations, negligence, problems the procedure described in the University of Antwerp PhD rules and regulations applies (Article 48 to 57).
- Art. 41. These rules and regulations came into force on 1 October 2018. Any student who enrolled for PhD studies in Applied Engineering at the University of Antwerp after 1 October 2018 automatically follows the new system.

Evaluation form PhD public defence

Title:

During his/her PhD, the private defence on <date> and the public defence, Mr/Mrs/Miss <name> has met following criteria:

- The research performed by the candidate is of a both qualitative and comprehensive level.
- The thesis manuscript is well written, well-structured and scientifically sound.
- The candidate situates his/her research within the existing field-of-study and proves that this research is of an added value compared with the existing literature.
- The candidate shows a critical approach towards the existing research in the used literature and his/her own research.
- The candidate has the skills to present his/her research on a both technical level at the private defence as well as an accessible level at the public defence.
- The candidate has demonstrated an good mastering of the research topics presented in the thesis.
- The candidate can answer the questions asked by the members of the jury adequately.

Comments/motivation:

Chairperson,

Secretary,

Promotor(s),

Jury,

Antwerp, <date>