PhD Development Training

Courses and activities for developing your professional and personal competences

PhD Competence Model

Research Skills & Knowledge
Responsible Conduct of Science
Personal Effectiveness
Communication
Professional Development
Leadership & Management
Teaching

Graduate School of Medical Sciences

university of groningen

umcg

How it works

PhD students are encouraged to follow a PhD Development Training which fits the duration and type of contract of the PhD project. The GSMS invites PhD students to shape their learning trajectories by selecting courses and activities based on the competences that they wish to develop (test your competences here). A certificate from the GSMS will be handed over when the requirements for the PhD Development Training are met.

The GSMS curriculum is based on the European Credit Transfer and Accumulation System. While carrying out your PhD project, European Credit (EC) points must be obtained by taking courses and activities related to the PhD research or one of the competences. One EC is equivalent to a workload of 28 hours.

EC points can be obtained by:
- Courses and activities on offer in our PhD Development Training (note that some courses are obligatory*)
- Courses and activities outside the GSMS (at least Master level and related to the PhD research or one of the competences**)
  Note: E-learning courses are also permitted. Please consult our guidelines.

Obligatory courses
- Research Data Management
- Scientific Integrity
- Managing your PhD (not applicable for: Sandwich PhD, Employee in PhD track, Externally financed PhD candidate, External PhD candidate)

** For the competence personal effectiveness, only the courses and workshops in the overview will be accepted for a reimbursement of the training budget and awarded with EC points.

Requirements PhD students from the institutes GUIDE, SHARE, KOLFF and CRCG
- **Courses**: A minimum of 1/3 of the required EC must be obtained by taking courses or following summer schools related to the PhD research or one of the competences.
- **Activities**: A minimum of 1/3 of the required EC must be obtained by conducting other PhD research activities or competence related activities (appendix).
- The remaining of the required EC may be collected by a mixture of the two above.

For example: a PhD candidate with a 4 years appointment has obtained 30 EC at the end of the PhD project, of which 18 EC were obtained by taking courses (minimum required 10 EC) and 12 EC by conducting activities (minimum required 10 EC).

EC required		
Employed PhD candidate, Scholarship PhD candidate		
4 years		30 EC
4 years	0.8 fte	22.5 EC
4 years	< 0.8 fte	15 EC
3 years		22.5 EC
2 years		15 EC
Employee in PhD track, Externally financed PhD candidate, External PhD candidate		
Regardless of the duration		15 EC

Requirements PhD students from the institute Brain & Cognition
BCN PhD students from the institute Brain and Cognition must meet the requirements (including obligatory courses) for the BCN PhD training programme to obtain the BCN certificate. Please consult the BCN website or BCN ring binder.

Need to know / abbreviations

The GSMS has made an overview of courses and activities that are offered to PhD students, both internally at the GSMS and elsewhere within the UMCG and UG. All of them are categorized by seven core competences. However, you may also select courses and activities outside this range on offer.

The overview also provides the following additional information:

Preferred phase: Within which phase of my PhD does the course or activity fit? This is a general recommendation only, courses and activities can be taken at any time during your PhD. Only for the obligatory courses there is a strong recommendation.

Provider: PhD students can select courses and activities from numerous providers. The provider is mentioned in this column.

Format: The programme consists of a variety of training elements. This can be a course or an activity such as a workshop, symposium, scientific conference or miscellaneous.

Transferable skills: For each course or activity we show whether skills can be acquired which you bring to future employment settings.

EC: The amount of European Credit that can be obtained. This may be variable depending on the workload or whether the PhD student also take an exam.

Do I need to pay?

The GSMS courses are offered free of charge for registered PhD students (including all students from BCN and GRIP). Courses and activities from the providers below may request a (small) fee for participation. The GSMS supplies a training budget with a maximum of €600 per calendar year for participation in external courses (outside the GSMS), and another €600 for attending conferences.

CIT = Center for Information Technology
CMB = Central Medical Library
CRO = Clinical Research Office
GGS (CPS) = Groningen Graduate Schools (Career Perspective Series)
LC = Language Centre
UG = University of Groningen
UGCE = University of Groningen Centre of Entrepreneurship
UIT = UMCG Impact Team

ABOUT THIS INTERACTIVE PDF

MENU to go to the overview of the competences on the front page.
Competence to go directly to the overview of courses and activities belonging to the competence.
Advanced Clinical Epidemiology to get more information and to register for the course or activity on the website.
* to go directly to the appendix for more information.

We advice you to check the most recent version of this pdf regularly.
The pdf will be maintained and updated when necessary.

For corrections and suggestions regarding this document, please email gsms@umcg.nl

Research Skills & Knowledge

The ability to design and conduct solid research as well as to be aware and constructively critical when evaluating the latest developments within your field.

	PREFERRED PHASE	PROVIDER	FORMAT	TRANSFERABLE SKILLS	EC
Courses A minimum of 1/3 of the required EC must be obtained by taking courses or following summer schools related to the PhD research or one of the competences.					
Advanced Clinical Epidemiology		GSMS	Course		3
Advanced Drug Delivery & Drug Targeting		GSMS	Course		2
Advances in Genetic Epidemiological Research and Data Analysis		GSMS	Course		1.5
Applied Longitudinal Data Analysis: modelling change over time		GSMS	Course		1.5-2
Basic Clinical Epidemiology		GSMS	Course		3
Basics in Medicine (Research Master: limited space for PhD students)		GSMS	Course		8
Basics in Psychology and Psychosocial Factors (Research Master: limited space for PhD students)		GSMS	Course		8
BCN Advanced (non)linear regression techniques in R		GSMS	Course		2
BCN Advanced fMRI course "From Voxel to Networks"		GSMS	Course		1
BCN Functional Neuroscience: EEG Part (Research Master: limited space for PhD students)		GSMS	Course		5
BCN Human Neuroanatomy (Research Master: limited space for BCN PhD students only)		GSMS	Course		var.
BCN Introductory fMRI Course		GSMS	Course		1.5
BCN Mathematics for Neuroscientists		GSMS	Course		1 - 1.5
BCN Orientation Course (for BCN PhD obligatory)		GSMS	Course		3
BCN Philosophy of Neuroscience (Research Master: limited space for BCN PhD students only)		GSMS	Course		var.
BCN Statistics Course		GSMS	Course		2
Beyond Multiple Linear Regressions with R (Research Master: limited space for PhD students)		GSMS	Course		3
Critical Appraisal of Literature (CAT)	Start-Middle	GSMS	Course	✓	1.5
Data programming courses	Start-Middle	CIT	Course	✓	var.
Epidemiology and Applied Statistics		GSMS	Course		3
Gene Expression Data for Beginners		GSMS	Course		2
GWP 1: Beginners guide to grant writing	End	GGS (CPS)	Course	✓	0.5
GWP 2: From Chaos to Focus - How to develop your own research plan	End	GGS (CPS)	Course	✓	0.5
GWP 3a: Rubicon Grant Writing Training	End	GGS (CPS)	Course	✓	0.5

(courses continue on next page)

Research Skills & Knowledge

The ability to design and conduct solid research as well as to be aware and constructively critical when evaluating the latest developments within your field.

	PREFERRED PHASE	PROVIDER	FORMAT	TRANSFERABLE SKILLS	EC
Courses A minimum of 1/3 of the required EC must be obtained by taking courses or following summer schools related to the PhD research or one of the competences.					
BCN Lectures		GSMS	Seminar		0.2
GWP 3b: Writing your grant like a pro - The narrative of your grant proposal	End	GGS (CPS)	Course	✓	0.5
Handling LifeLines data on the UMCG High Performance Cluster		LifeLines	e-learning		var.
Health Psychology; advanced course (Research Master: limited space for PhD students)		GSMS	Course		5
Introduction into R		GSMS	Course		1.4
Introduction to Genetic Epidemiological Research and Data Analysis		GSMS	Course		1
Intuitive Statistics		GSMS	Course		0.5
Laboratory Animal Science		CDP	Course		2
Measuring Concepts in Quantitative Research (Research Master: limited space for PhD students)		GSMS	Course		4
Basic Medical Statistics	Start	GSMS	Course		2.5 - 3.5
Microbiological Safety		GSMS	Course		1
Phase II/III Clinical Trials		GSMS	Course		1.5
Psychiatric Epidemiology (Research Master: limited space for PhD students)		GSMS	Course		4
Python in biology for beginners and advanced		GSMS	Course		2
Quality-of-Life and Patient-Reported Outcome Measures (QoL & PROMs)		GSMS	Course		2.5
Quantitative Bioanalysis (Master course: limited space for PhD students)		FSE	Course		5
Scientific Illustrations in Cell Biology		GSMS	Course		0.5
Single cell RNAseq data for beginners		GSMS	Course		0.5
Study Design in Clinical Epidemiology (Research Master: limited space for PhD students)	Start	GSMS	Course		4
Systematic reviews and meta-analysis	Start-Middle	GSMS	Course		2
Very Quick-R		GSMS	Course		0.5

(activities start on next page)

Research Skills & Knowledge

The ability to design and conduct solid research as well as to be aware and constructively critical when evaluating the latest developments within your field.

	PREFERRED PHASE	PROVIDER	FORMAT	TRANSFERABLE SKILLS	EC
Activities* A minimum of 1/3 of the required EC must be obtained by conducting other PhD research activities or competence related activities.					
BCN Master Classes		GSMS	Masterclass		0.5
BCN PhD Retreat once with and once without Presentation (only for BCN PhD students)		GSMS	Meeting		var.
BCN Poster Presentation - without poster (only for BCN PhD students)		GSMS	Meeting		0.2
BCN Symposium		GSMS	Symposium		0.5
Data programming workshops	Start-Middle	CIT	Workshop		var.
EndNote		CMB	Workshop		0.1
Mendeley Introduction		CMB	Workshop		0.1
PubMed	Start	CMB	Workshop		0.1
Search Strategy for a Systematic Review		CMB	Workshop	✓	0.1
Annual PhD meeting Research Institutes		var.	Meeting	✓	0.25 / meeting
Attending scientific conferences/ symposia (only if no presentation is given)		var.	Scientific conference / symposium	✓	0.25 / meeting
Journal clubs		var.	Misc.	✓	0.1 / journal club
Supervised reviewing of manuscripts		var.	Misc.	✓	0.5 / manuscript
Granted project proposal - 1st author		var.	Misc.	✓	var. (appendix)
Research stay at another institute (min. 4 weeks)		var.	Misc.	✓	max. 4
Other Workshops / Masterclasses / Seminars					4
ORCID		CMB	Workshop		0.1

* For more information see appendix.

Responsible Conduct of Science

The ability to follow the code of scientific conduct as well as to demonstrate a collaborative attitude and openness towards managing and sharing data for the advancement of scientific knowledge.

	PREFERRED PHASE	PROVIDER	FORMAT	TRANSFERABLE SKILLS	EC
Courses A minimum of 1/3 of the required EC must be obtained by taking courses or following summer schools related to the PhD research or one of the competences.					
Basic course on Regulations and Organization of Clinical Trials (BROK®)	Start	NFU	e-learning		1.5
Privacy in Research (with UMCG account)	Start	CRO	e-learning		0.2
Privacy in Research					
Research Data Management Awareness (obligatory)	Start	GSMS	Course	✓	0.1
Scientific integrity (obligatory)	Start-Middle	GSMS	Course	✓	2.5
**Activities* **A minimum of 1/3 of the required EC must be obtained by conducting other PhD research activities or competence related activities.					
Are your ready for Open Access publishing?		CMB	Workshop		0.1
PURE		CMB	Workshop		0.1
Other Workshops / Masterclasses / Seminars		var.	Misc.		

Personal effectiveness

The ability to focus on achieving your goals through commitment and self-initiative as well as to deal with setbacks and to learn from feedback and self-reflection.

	PREFERRED PHASE	PROVIDER	FORMAT	TRANSFERABLE SKILLS	EC
Activities* A minimum of 1/3 of the required EC must be obtained by conducting other PhD research activities or competence related activities.					
For the competence personal effectiveness, only the courses and workshops in the overview will be accepted for a reimbursement of the training budget and awarded with EC points.					
Embrace imperfection		SSC	Course	✓	0.3
Individual sessions with a psychologist		SSC	Misc.		
Learn to fail (and stay happy about it!)	Start	GGS (CPS)	Workshop	✓	0.2
Mindfulness-based stress reduction		SSC	Online		
Online self-support (e-health)		SSC	e-learning		
Overcome your fear of failure		SSC	Course	✓	0.4
Peer-group coaching (the intervision method)		GSMS	Workshop		0.4
Stop procrastinating		SSC	Course	✓	0.3
Work-life balance	Start	SSC	Workshop	✓	0.1
Living life to the fullest		SSC	Course		

Communication

The ability to transfer your message clearly and convincingly through speech and text as well as to enable effective communication through open-minded listening.

	PREFERRED PHASE	PROVIDER	FORMAT	TRANSFERABLE SKILLS	EC
Courses A minimum of 1/3 of the required EC must be obtained by taking courses or following summer schools related to the PhD research or one of the competences.					
Academic Writing: Reduce Anxiety		GGS (CPS)	Course		0.2
Dutch CEFR A0 up to B1 (max 126 hours, (partially) reimbursed by RUG)		LC	Course	✓	var.
Dutch CEFR B1 and onwards		LC	Course	✓	var.
English CEFR B2 level and onwards (ENG 4, 5 and 6)		LC	Course	✓	var.
Presentation skills	Start	GSMS	Course	✓	0.5
Publishing in English (Beginner's course)	Start	GSMS	Course	✓	3
Science Writing for clinical or epidemiological research	Start	GSMS	Course	✓	2
Scientific Writing for biomedical/translational research	Start	GSMS	Course	✓	4
Activities* A minimum of 1/3 of the required EC must be obtained by conducting other PhD research activities or competence related activities.					
30+ tips "How to improve your research impact" (Dutch or English)		CMB	Workshop		0.1
Academic CV Building	End	GGS (CPS)	Workshop	✓	0.2
Assertiveness now and at your new job	Middle	GGS (CPS)	Workshop	✓	0.2
BCN Poster Presentation - with poster (only for BCN PhD students)		GSMS	Meeting	✓	1
Content Creation for the PhD Science Communication Platform: "MindMint"		GGS (CPS)	Workshop	✓	0.3 / article
CV building and writing outside academia	End	GGS (CPS)	Workshop	✓	0.2
Discovering the Dutch (culture)	Start	LC	Workshop	✓	1
Interview skills	End	GGS (CPS)	Workshop	✓	0.2
Media Training	Middle	GGS (CPS)	Workshop	✓	0.2
Motivation and cover letter writing outside academia	End	GGS (CPS)	Workshop		0.2
Negotiation Skills	Middle	GGS (CPS)	Workshop	✓	0.2
Networking for people who hate it	Start	GGS (CPS)	Workshop	✓	0.2
PhD Support in planning writing your thesis: practical project groups	Start-Middle-End	GSMS	Misc.	✓	-
Recruitment - How does it work		GGS (CPS)	Worksop		0.2
Social media for researchers		UIT	Workshop		
Storytelling	Middle	GGS (CPS)	Workshop	✓	0.2
Invited lecture outside institute		var.	Misc.	✓	0.5 / meeting
Prize for best abstract/poster/presentation		var.	Misc.		0.5 / prize
Oral or poster presentation at a conference		var.	Misc.	✓	0.5 / conference
Other Workshops / Masterclasses / Seminars		var.	Misc.		

* **For more information see appendix.**

Professional Development

The ability to adapt to responsibilities and a willingness to push the boundaries of one's own capabilities in order to further common goals.

	PREFERRED PHASE	PROVIDER	FORMAT	TRANSFERABLE SKILLS	EC
Courses A minimum of 1/3 of the required EC must be obtained by taking courses or following summer schools related to the PhD research or one of the competences.					
Entrepreneurship and Valorization for medical sciences	End	GSMS	Course	✓	5
Extracurricular course on Entrepreneurship	Middle	UGCE	Course	✓	0.8
My future career (BWC: Be, Want, Can training)	Middle	GGS (CPS)	Course	✓	1
Activities* A minimum of 1/3 of the required EC must be obtained by conducting other PhD research activities or competence related activities.					
PhD Introductory Event	Start	UG	Event		1
Attending the annual PhD Day		UG	Event		1
Careers in Consultancy	Middle	GGS (CPS)	Workshop		0.2
Entrepreneurship	Middle	GGS (CPS)	Workshop		0.2
From PhD to Patents, your next career path	End	GGS (CPS)	Workshop		0.2
Introduction to Careers Inside Academia		GGS (CPS)	Misc.		0.2
Introduction to Careers Outside Academia		GGS (CPS)	Workshop		0.2
Make it in the North: Outside Academia Training Opportunities for PhDs	End	GGS (CPS)	Workshop		0.2
Membership GSMS PhD council		var.	Misc.	✓	2 per yr
Membership Research Institutes PhD council		var.	Misc.	✓	2 per yr
Organising a symposium / conference		var.	Misc.	✓	var.
Other Workshops / Masterclasses / Seminars		var.	Misc.		
Personal branding: How to build and make the most of your personal brand		GGS (CPS)	Workshop		0.2
The Landscape of Post-PhD Career tracks		GGS (CPS)	Workshop		0.2
Toolbox for Career Opportunities after your PhD		GGS (CPS)	Workshop		0.2
Working in the Humanitarian Sector		GGS (CPS)	Workshop		0.2
Working Perspectives at a University of Applied Sciences (Hogeschool)	End	GGS (CPS)	Workshop		0.2

Leadership & Management

The ability to effectively plan and prioritize when working towards joint results as well as to contribute to a healthy team spirit and to enable colleagues to grow by providing feedback.

	PREFERRED PHASE	PROVIDER	FORMAT	TRANSFERABLE SKILLS	EC
Courses A minimum of 1/3 of the required EC must be obtained by taking courses or following summer schools related to the PhD research or one of the competences.					
BCN Management Competences, Part 1 (for BCN PhD obligatory)	Start	GSMS	Course	3	0.5
BCN Management Competences, Part 2 (for BCN PhD obligatory)	Start	GSMS	Course	3	1.5
Managing your PhD (obligatory)	Start	GSMS	Course	✓	2.5
The Empowered PhD: How to get beyond being a good student	Start	GGS (CPS)	Course	✓	0.3
Time Management Series		UG	Course	✓	
Women's paths to leadership	Middle	GGS (CPS)	Course	✓	0.3
Activities* A minimum of 1/3 of the required EC must be obtained by conducting other PhD research activities or competence related activities.					
Course Patient Involvement for Researcher at UMCG/UG		UIT	Workshop		0.25
Diversity and Leadership in Academia		GGS (CPS)	Workshop		0.3
Scrumming and other project management techniques	Start	GGS (CPS)	Workshop	✓	0.2
Speedreading	Start-Middle	SSC	Workshop	✓	0.1
Team work	Mid	GGS (CPS)	Workshop	✓	0.2
Other Workshops / Masterclasses / Seminars		var.	Misc.		

Teaching

The ability to convey clear learning goals and to provide supervision as well as to demonstrate openness to using feedback for improvement and reflecting on teaching practices.

	PREFERRED PHASE	PROVIDER	FORMAT	TRANSFERABLE SKILLS	EC
Courses A minimum of 1/3 of the required EC must be obtained by taking courses or following summer schools related to the PhD research or one of the competences.					
Introduction to teaching (for PhD students who are not officially teaching a course but would like to learn more about teaching and mentoring)	Start-Middle	CIT	Course	✓	0.5
Start to teach: Taking steps in your professional development as a teacher (Specifically for PhDs who will be actively teaching a course)	Middle	CIT	Course	✓	1.5
Start to supervise (for (new) PhD students with current or upcoming supervision tasks)	Start	CIT	Course	✓	0.4
Activities* A minimum of 1/3 of the required EC must be obtained by conducting other PhD research activities or competence related activities.					
Teaching and supervision of students (at university level)	Middle-End	var.	Misc.	Depending on time invested	
Tutor/mentor					
Lecture					
Coach master or bachelor scientific thesis					
Other Workshops / Masterclasses / Seminars		var.	Misc.		
University Teaching Qualification (BKO) (Please note: this training is not covered by the GSMS training budget. Please contact gsms@umcg.nl about the registration of the BKO in your portfolio)		UG	Misc		

* Appendix
PhD research or competence related activities

COMPETENCE	CREDITS

PhD research or competence related
Workshops/Master classes/seminars

≤ half a day	0.1 EC/meeting
half a day < ≥ 1 day	0.25 EC/meeting
> 1 day	0.5 EC/meeting
Fixed EC	

Research skills and knowledge

Annual PhD meeting Research Institutes	0.25/annual meeting
Journal clubs	0.1/journal club
Attending scientific conferences/ symposia (only if no presentation is given)	0.25/conferences
Granted project proposal – 1st author:	
< 10,000 Euro	0.5 EC
10,000 <> 30,000 Euro	1 EC
> 30,000 Euro	2 EC
Supervised reviewing of manuscripts	0.5/manuscript
Research stay at another institute (minimum 4 weeks)	4 EC (only awarded once)

* Appendix
PhD research or competence related activities

COMPETENCE	CREDITS
Communication	
Presenting data at scientific conferences - oral or poster	0.5/conference
Invited lecture outside institute	0.5/meeting
Prize for best abstract/poster/presentation	0.5/prize
Professional Development	
Attending the annual PhD Day RUG	1 EC/event
Attending PhD Introductory Event RUG	1 EC/event
Membership GSMS PhD council	2 EC/year
Membership Research Institutes PhD councils	2 EC/year
Organisation of symposium/conference	Depending on time invested (28 hrs per EC)
Teaching At university level	
Teaching / supervision of students:	
Tutor/mentor	Depending on time invested (28 hrs per EC)
Lecture	
Coach master or bachelor scientific thesis	

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Graduate School of Medical Sciences