

HANDBOOK FOR COLLABORATION

HOW TO?

FONTYS
ICT

InnovationLab



Welcome to the Lab!

Starting something new comes with plenty of questions: where to find things, who to ask, and how things actually get done around here. This handbook is here to help you answer them. It brings together the practical essentials, the values we share and the way we work as a team.

At the InnovationLab, curious minds, bold ideas and people from different backgrounds come together to work on what's next. Nobody is a bystander here. Every perspective adds something, and that includes yours.

In the pages ahead you'll find useful resources, the right people to contact and tips to help you find your feet in the first weeks. Once you've settled in, keep it close. It's meant to be a guide you can come back to whenever you need it. Great to have you on board.

Together we shape tomorrow.



TABLE OF CONTENTS

- Introducing the InnovationLab
- Types of collaboration
- Guidelines
- Tips & tricks



INTRODUCING THE INNOVATIONLAB

Fontys ICT InnovationLab

is a leading hub in the Brainport and Midpoint region, focused on exploring and innovating the digital world. In this inspiring ecosystem, students, lecturers, researchers, and professionals collaborate to develop groundbreaking and impactful solutions.

We connect ideas, knowledge, and people, thereby fostering sustainable digital transformations & innovations and supporting a culture of continuous learning. From smart cities to inclusive technologies, we harness the power of technology to achieve a positive societal impact.



Key InnovationLab characteristics

- **Integration** of education, research, and business to drive innovative ICT solutions.
- **Close collaboration** between students, lecturers, researchers, and industry partners.
- **Challenge-based learning** through authentic projects with societal and business relevance.
- **Student-centered approach** with personal guidance, ownership and talent development.
- **Societal impact** as projects contribute to sustainable digital transformation.
- **Continuous learning** and **knowledge exchange** for all participants.

Fontys InnovationLab etiquette



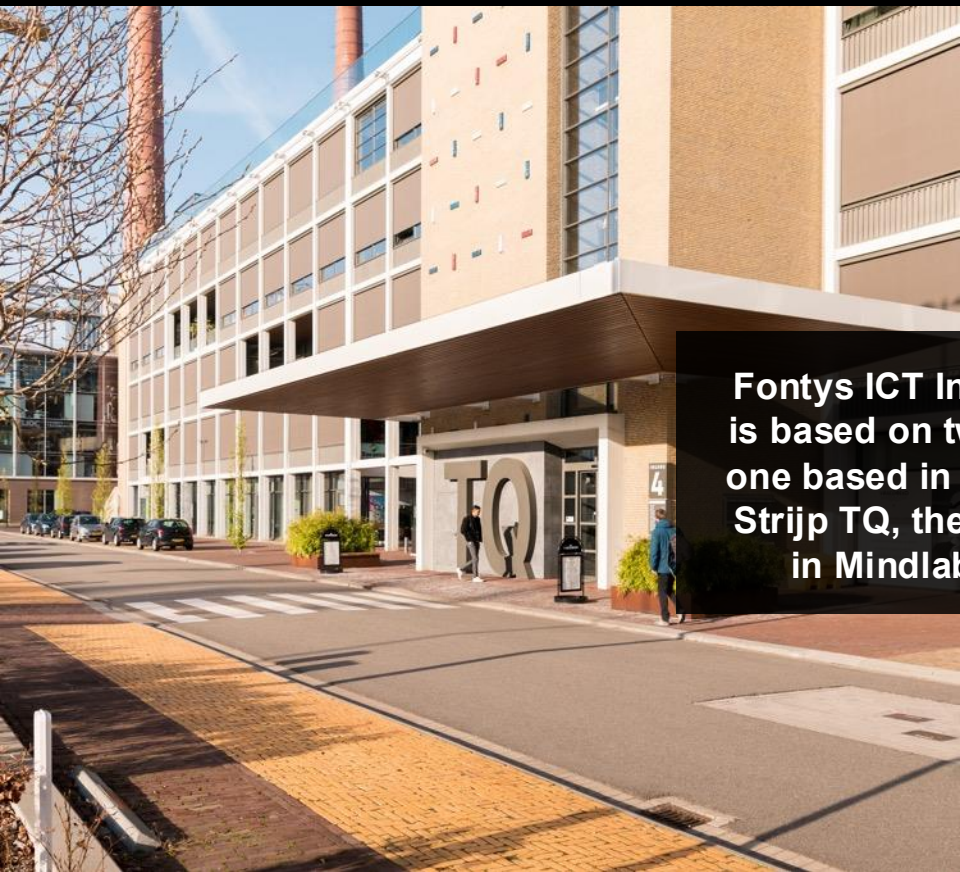
To make sure studying and working at the InnovationLab is a joy for everyone we have created a Fontys ICT InnovationLab etiquette.

We kindly ask you to respect the etiquette rules when on location.

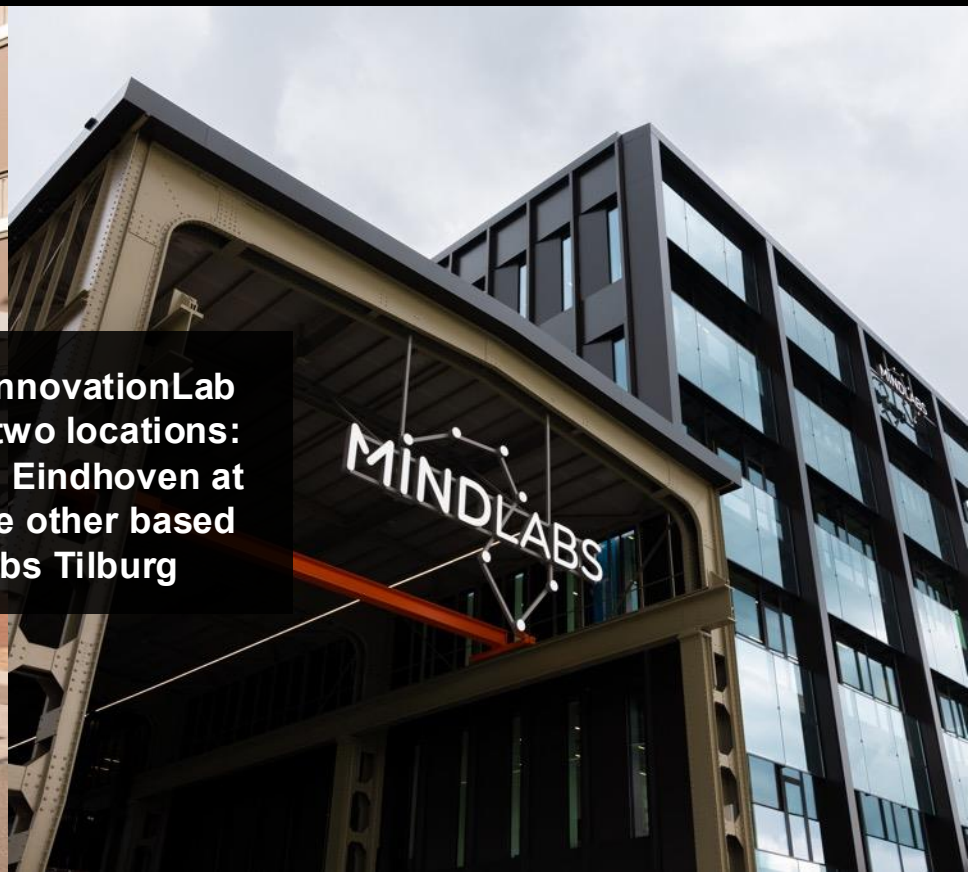
On the Lab floors ...

- We are considerate of each other.
- We keep noise levels low and use headphones if necessary.
- Working hours are from 09.00-12.00 / 13.00-16.00
- Lunch time 12.00-13.00
- We keep all areas clean and organised.
- We put furniture back at the place where we've taken it from.
- We are mindful of your own and others' needs for focus and concentration.
- We respect each others privacy and personal space.
- We are on time or let everybody involved know you are late.
- We use the available meeting rooms for group meetings (max. 1 hour).
- We book the presentation tribunes for max. 1 hour.
- We respect presentation mode on tribunes by lowering noise levels from project work.
- We use the quiet working spaces for focussed work. No calls or (online) meetings.
- We help each other to make the guidelines work.
- It is ok to remind each other of the collective responsibility to create a productive, safe and professional working environment.

Two locations



Fontys ICT InnovationLab
is based on two locations:
one based in Eindhoven at
Strijp TQ, the other based
in Mindlabs Tilburg



Core values



Challenge based learning

A one-stop shop with access to ICT expertise, domain knowledge, and practical assignments.



Regional knowledge partner

Translating technology into societal impact.
Alignment with regional agendas.



Focus on key technologies

With the Transformative Technologies.



Partners in Innovation

Network of permanent partners for long-term cooperation.



One Fontys (for society)

Collaborating institutes.



Welcome to the Fontys ICT InnovationLab.
Our unique learning environment at Strijp-T in Eindhoven.

Education

Associate
Degree

Bachelor
(semester 6 & 7)

Masters

PRO

Research

3 ICT
Lectorates

Fontys CoE AI
for Society

A wide variety of education and research is found on the Lab floors.
Leading to a broad spectrum for cooperation, innovation and societal impact.

Each year

> 1500
students

> 80
colleagues

> 25
nationalities

> 250
projects

> 25
partners

> 30
researchers

Student centered education

Meaningful and practice-oriented

Our education connects learning, research, and professional practice. Students work on impactful projects, collaborate with professionals, and develop the skills needed for their future careers in an international context.

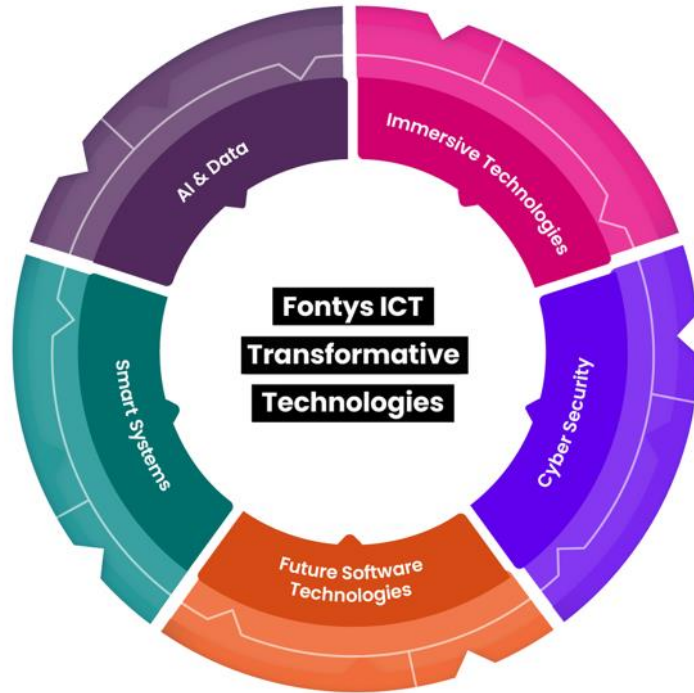
Talent-oriented and personal

We foster the development of individual talents. Students can shape their learning journey based on their interests and ambitions, supported by guidance when needed.

Social

Learning is a collaborative process. Students, lecturers, researchers, and partners work together, share knowledge, and learn from one another in an open, informal and multicultural environment.

Areas of expertise



CYBER SECURITY
SOFTWARE ENGINEERING
INFRASTRUCTURE & CLOUD

GAME DESIGN & DEVELOPMENT
MULTIMEDIA DESIGN & CONCEPTS
USER INTERACTION DESIGN & DEVELOPMENT

ROBOTICS
SMART INDUSTRY & IOT
EMBEDDED SOFTWARE ENGINEERING

ARTIFICIAL INTELLIGENCE
BUSINESS INTELLIGENCE & DATA
BUSINESS IT & MANAGEMENT
OPEN LEARNING



MORE INFO

Transformative Technologies

Fontys has adopted an ICT-driven focus to prepare students and the region for a rapidly changing world, based on key technologies (KIA) and Brainport and Midpoint developments to ensure future relevance and impact.

This has resulted in the five Transformative Technologies:

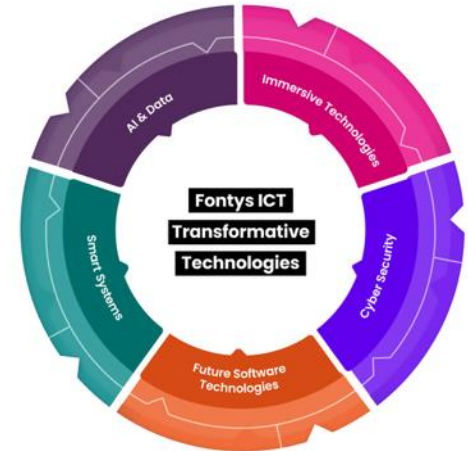
AI & Data: Innovative AI solutions that connect data to societal issues – technically advanced and ethically responsible.

Immersive Technologies: Seamless integration of human and artificial intelligence via sensitive virtual humans, XR, and conversational AI for positive societal impact.

Cyber Security: Technical expertise combined with a holistic vision of security – not only protecting, but proactively strengthening against future threats.

Future Software Technologies: Next-generation software – flexible, scalable, and future-proof – with cloud-native architectures and event-driven systems that push traditional boundaries.

Smart Systems: Autonomous systems that combine sensors, AI and IoT into seamlessly collaborative intelligent solutions.



CoE and Research groups

- The Centre of Expertise (CoE) AI for Society is located at the InnovationLab.
- The CoE works on reliable AI solutions for people, practice, and society.
- The CoE functions as a network organization and a driver of new research and collaboration.
- With the aim of stimulating transdisciplinary research to solve complex societal issues.

Fontys ICT has three lecturers:

- **Gerard Schouten**: AI & Data
- **Teade Punter**: Smart Systems
- **Mark de Graaf**: Immersive Technologies

and two associate lecturers:

- **Suzana Andova**: Cyber Security
- **Petra Heck**: Future Software Technologies

Partners who wish to participate in long-term research projects can speak with (associate) lecturers.

AI & Data



Smart Systems



Immersive Technologies



Cyber Security



Future Software Technologies

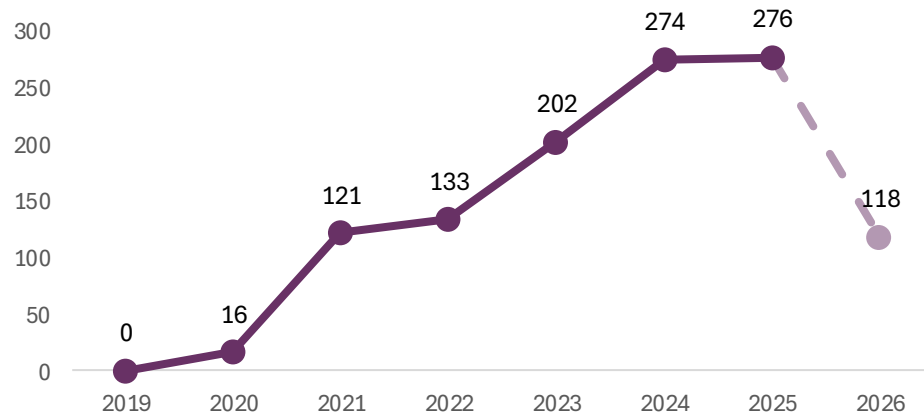


Dream to reality



- 🌱 started in 2019
- 🚀 every half year 100+ new innovation projects
- 🎓 >7.500 students with hands-on experience
- 💡 >1086 innovation projects
- 🔗 >55 (highly diverse) work field partners connected
- 💰 >1 mio in co-financing enabling applied research
- ✅ a solid foundation to accelerate digital transformation

Totaal aantal studentprojecten per jaar



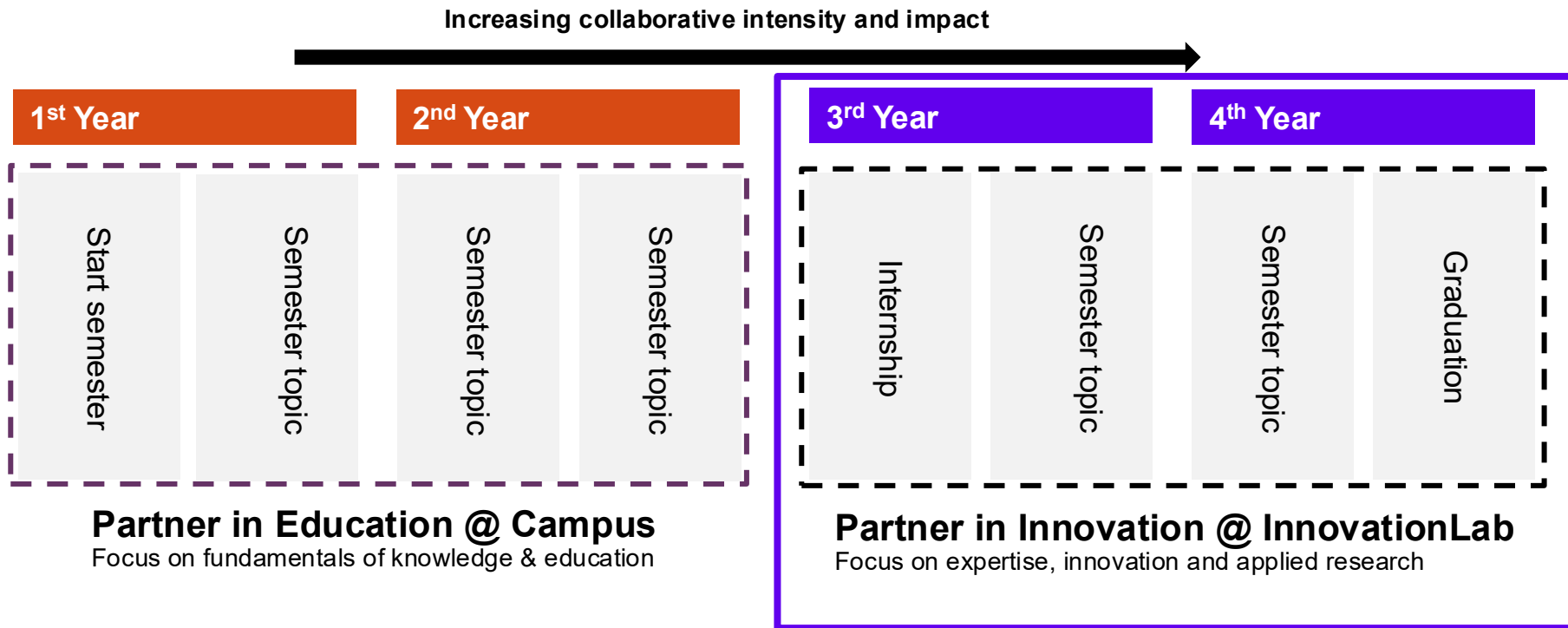
A group of people are seated on a tiered stage in a modern, brightly lit room. In the foreground, a woman with dark hair, wearing a light blue blazer and black skirt, is gesturing with her hands while speaking. To her left, a woman with curly hair, wearing a beige blazer, is listening. To the right, a man in a blue blazer is smiling and looking towards the speaker. Other people are visible in the background, some wearing face masks. The setting appears to be a formal event or conference.

"We want a more inclusive programme, and here we have a great example of how to work together with companies, researchers, professionals and young people."

Mariya Gabriel -EU Commissioner Innovation, Research, Culture, Education & Youth
May 2021

TYPES OF COLLABORATION

Curriculum





What's in a name: coöperation

Members of SPARC contribute practice-oriented research projects that – after approval – are carried out as applied research within an educational context. In return, SPARC members contribute to the innovation fund managed by SPARC. This innovation fund is used to co-finance subsidized research projects in the field of ICT.



Sharing Platform for Applied Research Cooperation

Partners in Innovation

- ⚡ Strengthening one's own innovative capacity by contributing research questions for semester projects (20 weeks).
- ⚡ Active collaboration at the Fontys ICT InnovationLab with third- and fourth-year students.
- ⚡ Participation in [Career Day](#) (career fair for Fontys ICT students).
- ⚡ Networking opportunities within SPARC.
- ⚡ Access to facilities, expertise, and network via SPARC membership (see also the various membership models).
- ⚡ Receiving partner mail and the possibility to post vacancies in the alumni newsletter.
- ⚡ Societal impact through a contribution to the cooperative's innovation fund, which co-finances subsidized research projects with Fontys ICT.

Why participate?

- ⚡ Collaboration with students increases your organization's innovative capacity. Student teams investigate (pre-competitive) innovation challenges within your organization.
- ⚡ Collaboration between your own staff on innovation challenges leads to the professional development of your employees.
- ⚡ Through long-term involvement in education, you provide input to the ICT curriculum of the future.
- ⚡ Social engagement and contribution to research and innovation in the future ICT field.
- ⚡ Sustainable collaboration ensures the organic acquisition of ICT talent.



FONTYS ICT

PARTNER POLICY

EDUCATION PARTNER (FONTYS ICT)

INNOVATION PARTNER (SPARC)

RESEARCH GROUP PARTNER (FONTYS ICT)

SOCIAL PARTNER (FONTYS ICT)

START-UP PARTNER (SPARC)

DESCRIPTION	Organisations eager to contribute to education and educational development. They want to raise their profile among students and want to allocate themselves for the greater good of society.	In addition to their contribution to education, they contribute to research and innovation of ICT professional practice. They want to get to know the students even better and guide and at the same time professionalise themselves through this intensive	Involved in an (externally subsidised) research consortium of a specific research group. They are exclusively part of the consortium in which they participate.	Non-profit organisations interested in researching and innovating together with ICT on specific mission-driven issues from society.	Through sponsored SPARC membership, they get the opportunity to set up their own research and innovation at the InnovationLab, expand their network, strengthen their image and professionalise their organisation.
MOTIVATION					
CONTRACT	2-year covenant	Indefinite Membership SPARC	Duration of lectureship project	Mission-driven (covenant is tailor-made on based on agreed project)	1-year membership of SPARC
CAREERDAY					
INTERNSHIP & GRADUATION	Access to ASAM	Access to ASAM	Access to ASAM	Access to ASAM	Access to ASAM
GAS LESSONS					
COMPANY VISIT					
WAC					
COMMITMENT SEMESTER TO 4	~ 40 hours per semester				
SPARC MEMBERSHIP		€ 15.000			
RESEARCH LAB ASSIGNMENTS			Directly linked to lectureship project		
SLT		 Funding SPARC	Commissioned only by research group		
PARTNER IN RESEARCH CONSORTIUM VIA LECTORATES					

LEGENDA

- Contribution to education and research from a social perspective
- Using the expertise of the study programme or other partners
- Professionalising employees
- Develop new innovative solutions, products and/or processes
- Development of new knowledge and research results
- Expanding and/or strengthening the network
- Contribution to cross-organisational social innovations
- Contribution to good name and image
- Recruit students as potential new employees
- Financial benefits, such as cost reduction or spreading financial risks
- Other motives, namely:
 - Professionalising own staff through Lifelong Development Pathways
- The Partner has access to this facility and is also expected to use it
- The Partner may make use of this facility if required
- The Partner does not have access to this facility
- The Partner does not have access to this facility

What can partners expect from Fontys?

□ Time investment:

Teams work on the project for at least 2.5 days per week.

□ Duration:

One semester (20 weeks, from kick-off to completion).

□ Team:

3-6 students working as a self-organizing team.

□ Guidance:

Lecturers provide tailored coaching and encourage a methodical approach.

□ Result:

Research results, innovative solutions, final presentation and handover.

What can Fontys expect from partners?

- **Authenticity:**

A real, practice-oriented research question with urgency and significance.

- **Availability:**

Involvement in at least sprint demos (start, interim, conclusion). For optimal collaboration: weekly contact.

- **Feedback:**

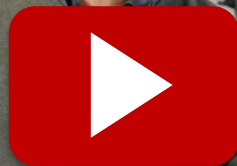
Constructive feedback during the process and assessment of the final result.

- **Openness:**

Willingness to share knowledge and contribute ideas.

- **Learning attitude:**

Partners are also part of the learning process.



My name is Peter Bosch.
I am the operational director at GAC.

Contactpersons Fontys ICT

Management



Barbara van Nisselroy-Vermelis
Manager Partners
b.vannisselroy@fontys.nl

Contact her for more information on collaboration



Suzanne van Kuijk
Innovationmanager InnovationLab
s.vankuijk@fontys.nl

Contact her for collaboration possibilities and the program of the Lab

Partner coordinators



Joeri van Belle
Partner Coordinator
j.vanbelle@fontys.nl

Contact him for Smart industry & embedded software projects



Joris van der Straten
Partner Coordinator
j.vanderstraten@fontys.nl

Contact him for Future of Software & Cyber security projects



Wouter Boendermaker
Partner Coordinator
w.boendermaker@fontys.nl

Contact him for Immersive Experiences projects & Social partnerships



Niek Schmitz
Partner Coordinator
n.schmitz@fontys.nl

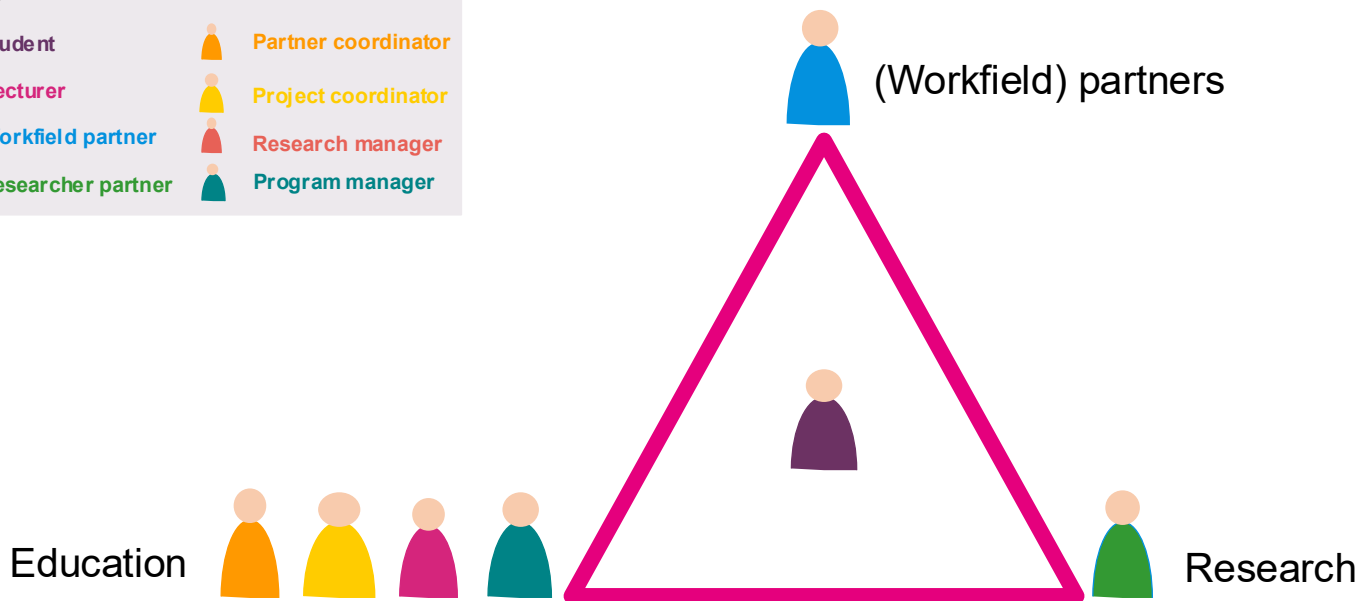
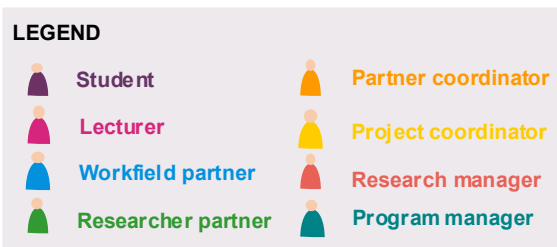
Contact him for AI & Data projects

PARTICIPANTS

Who do we work with?

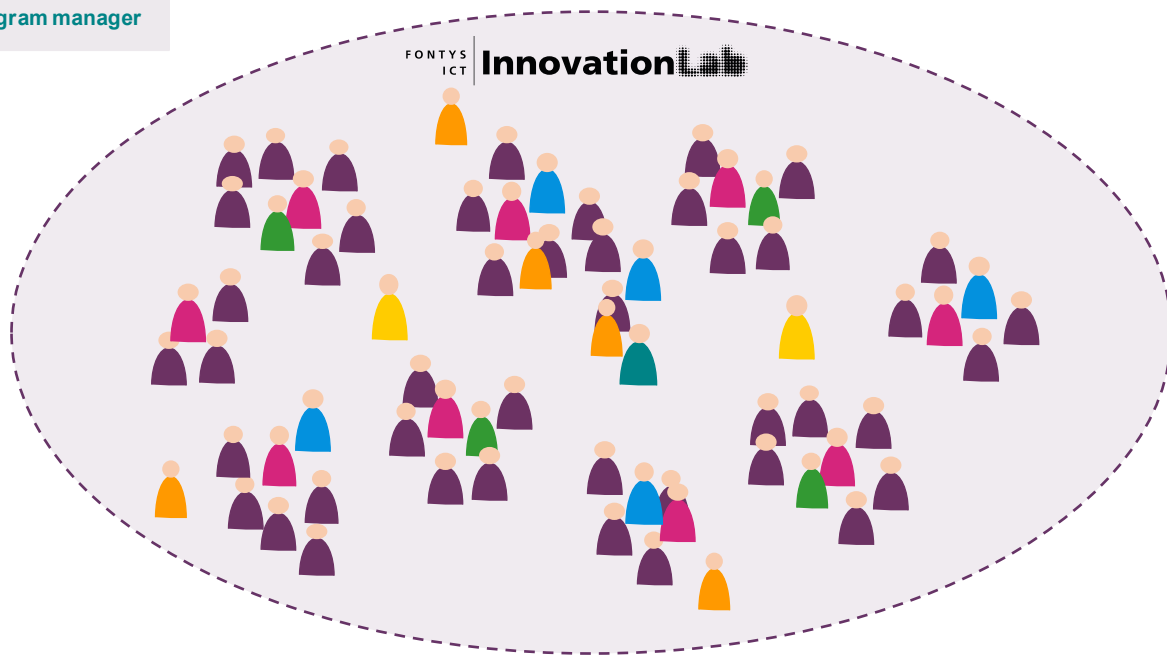


Close collaboration



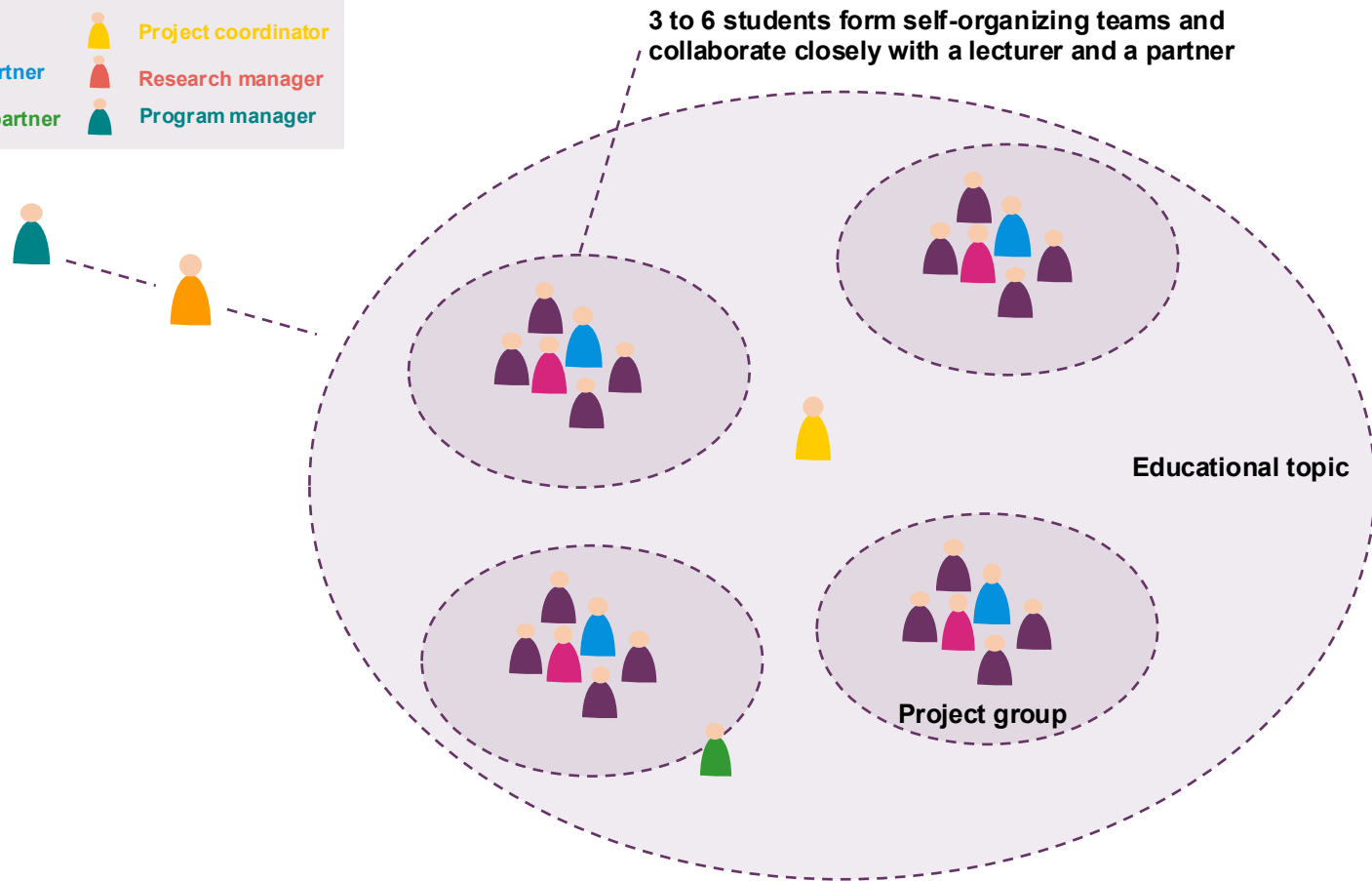
LEGEND

	Student		Partner coordinator
	Lecturer		Project coordinator
	Workfield partner		Research manager
	Researcher partner		Program manager



LEGEND

	Student		Partner coordinator
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	Researcher partner		Program manager



DIVISION OF ROLES

Student



- ❑ Works in a self-organizing team
- ❑ Takes responsibility for own learning process, including professional skills
- ❑ Works on practice-oriented issues using a research-based approach
- ❑ Actively seeks interaction with partners, lecturers, and fellow students
- ❑ Delivers a proof of concept or minimal viable product (MVP)

Lecturer



Project coach

- Is the first point of contact for the project
- Attends kick-offs and demos
- Encourages a methodical approach
- Assesses results

Student coach

- Provides personal guidance to students
- Coaches the study career
- Supports well-being
- Helps with difficult decisions

Expert

- Offers professional expertise
- Provides technical support
- Shares relevant knowledge
- Connects with networks

Partner / researcher

- Introduces an authentic research question
- Provides feedback on interim results
- Gives advice to the assessment of final results
- Facilitates access to information and experts when necessary
- Is an active part of the learning process and is open to learn
- Shares experiences and knowledge, and reflects on new insights

Educational management

Program manager



- Responsible for the hybrid learning environment program.
- Responsible for further development and innovation of the concept.
- Stimulates and facilitates collaboration with the professional field and research partners.

Partner coordinator



- Primary point of contact for partners for new assignments, questions and collaborative issues.
- Ensures initial assignment formulation with the partner.
- Ensures transfer and coordination with the teams and topics where the research assignment takes place.

Project coordinator



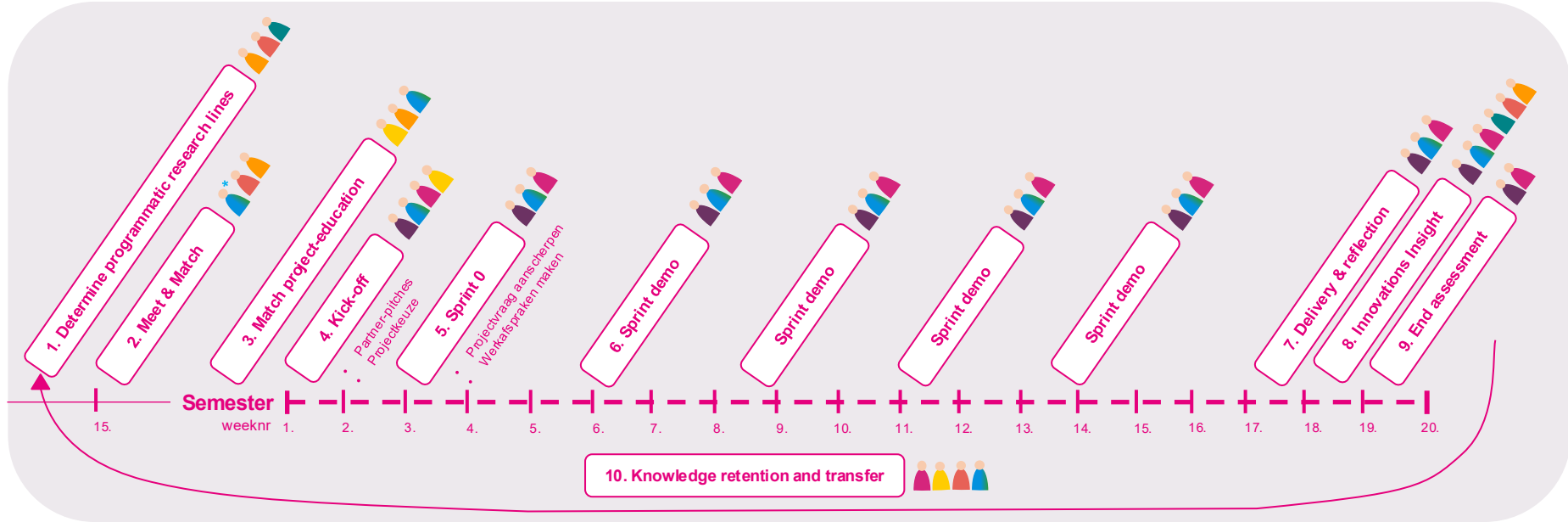
- Coordinates further details of the assignment (based on learning outcomes) after consultation with the partner coordinator and partner.
- Primary point of contact for the operationalization of the assignment in the semesters.
- Point of contact, together with the lecturer, during the execution of the semester.
- Responsible for initiating kick-off presentations for the educational topics and takes the lead for the sprint demo planning with students, lecturers and partners.

GUIDELINES

Getting started

- Team topics: [study guide advanced semesters](#)
- Semester lasts 20 teaching weeks.
- Starts in September and February.
- Teams of 3 - 6 students during the advanced semesters (semester 6 and 7).
- Tailored guidance by lecturers.
- Learning during the project.
- Matching learning goals and projects: during kick-off of the semester

Structure of a semester



LEGEND

	Student		Partner coordinator		* Partner
	Lecturer		Project coordinator		
	Workfield partner		Research manager		
	Researcher partner		Program manager		

Structure of a semester – steps 1-5

1. Programmatic research lines are determined by the research manager, partner coordinator, and project coordinator. These lines form the framework for projects that can be submitted.
2. Meet & Match in week 15 of the preceding semester. Clients, research manager, partner coordinators, project coordinators, and program manager meet to discuss programmatic research lines, discuss current practical issues faced by clients, and link them to suitable educational units.
PLEASE NOTE: one week prior to the Meet & Match, the partner coordinator sends the programmatic research lines to clients, including a form where they can pitch their problem/question. They pitch this to all participants in 1 minute during the Meet & Match.
3. Clients and partner coordinators refine the problem/question into a project assignment. The defined project is tailored to the educational unit in collaboration with the client, partner coordinator, and project coordinator.
4. The project kick-off takes place in teaching week 1, where clients briefly pitch their project to the chosen educational unit. Based on all the pitches, students select a project and form project teams. The project coordinator facilitates this kick-off. Once project groups have been formed, a lecturer is assigned to each group to guide them throughout the semester.
5. Shortly thereafter, the first sprint meeting (sprint 0) follows, during which students, together with the partner/researcher and lecturer, refine the project question to align with their personal learning goals. This is also a suitable time to establish and schedule working agreements.

Structure of a semester – steps 6-9

6. Several sprint meetings take place throughout the semester, attended by the student, lecturer, and partner/researcher. The progress students make is shown and discussed at these meetings.
7. Around teaching week 17, the project is completed and the result is delivered to the client. This is also a moment for reflection on the collaboration between students and the client. Optionally, a final meeting can be held between the lecturer and partner/researcher to look back on the project progress, achieved results, and provide input for the students' final assessment. In teaching week 18, all project results will be presented during Innovations Insight, an event organized by Fontys ICT where everyone is welcome, and the SPARC award ceremony for the 3 winning projects..
8. The final student assessment takes place in teaching weeks 19 and 20, attended by both lecturers and students.
9. At the end of the semester, knowledge must be secured so that it remains usable and transferable for a potential new project group to continue the work. Depending on the project, a 'knowledge owner' must be designated; this can be the client, a lecturer, project coordinator, or research manager who is associated with the project for an extended period. The knowledge owner transfers the project to the next semester if desired.

SPARC

SPARC AWARDS

Categories:

- Most Innovative
- Most Technical Advanced
- Most Societal Impact

TIPS & TRICKS



Kick-off

- Introduction:
 - *Who are you?*
 - *What degree program are you pursuing / what position do you hold?*
 - *What skills do you possess?*
 - *In what areas do you want to develop further this semester / what do you hope to achieve?*
- Review the semester schedule
- Discuss the assignment and align it with learning objectives
- Explore and distribute tasks and roles
- Express expectations regarding the project and collaboration
- Align working methods
- Schedule initial meetings



Sprint demo's

- The sprint demos should be planned in close collaboration with project coach and partner – preferably you plan the meetings for the entire semester with all stakeholders in advance.
- During sprint demo's you can cover the following topics:
 - Welcome
 - Sprint goals of the sprint
 - Deliverables the sprint
 - Persona's
 - Demonstration of deliverables
 - Next steps / next sprint goals



Project Evaluation

It can be worthy to evaluate the collaboration and improvements during the project in order to steer the process in time when needed. Here's an example:

- Questions to ask each other:
 - *How do you experience the project until now?*
 - *Are you able to develop the skills you want to improve on?*
 - *Are you able to achieve the goals you've set in the beginning of the project?*
- Find out if things are going in the right direction and if everyone's goals are about to be achieved.
- If not figure out a way to change this!

Note: at the end of each year a general partner evaluation takes place among (workfield) partners and researchers in order to improve the collaboration on a management level.



Assessment

Assessment at Fontys ICT supports the development of students into competent ICT professionals. We believe that high-quality education goes hand in hand with thoughtful and fair assessment. Assessment is therefore more than a way to measure performance: it is a means to make learning visible, to stimulate development, and to safeguard quality. You can learn more about the assessment policy in the [wiki](#).

- In general you have three formative assessments and one end conversation.
- Via three snapshots of your portfolio (in Portflow; see portfolio tile in Canvas) you will collect feedback on your learning process and your assessors define your level of mastery at that moment using the development-oriented feedback scale.
- At the end of the semester an end conversation will take place with your assessors to share their final proposed judgement.
- During the summative assessment, all assessors join in a meeting to calibrate all proposed judgements and formulate the (your) final grade for the semester.



Innovations Insight

Innovations Insight is the ultimate moment when our students show you what they've been doing at the Fontys ICT InnovationLab and at MindLabs during this semester. They present you with their research projects. These project presentations are accessible to a wider audience and also uploaded to [the InnovationLab website](#).

Students will share their work and results and share their experiences about the process. Students collaborate with professionals and researchers during their projects to develop innovative solutions to practical questions from their work field.



F O N T Y S
I C T

Innovation



Would you like to use parts of the report for your own project / collaboration?

Get in touch with s.vankuijk@fontys.nl or j.jansen@fontys.nl to get access to the PowerPoint version.