

DIGI-ME — DIGital skills for transformative Innovation Management and Entrepreneurship

EU Digital Europe Programme, Grant Agreement No. 101123009 — University of Vaasa site

Information sheet, privacy notice and consent to participate in research

This document has three parts. Part 1 explains the study and what taking part would involve. Part 2 is the privacy notice required by Articles 13 and 14 of the GDPR. Part 3 is the form you sign if you decide to take part. Please read all three parts before deciding, and ask us anything you want to ask.

Part 1 — Information about the study

1. What is this study about?

DIGI-ME is a European education project that builds master's-level programmes in digital skills for innovation management and entrepreneurship, run jointly by the University of Pavia, the University of Vaasa and Grenoble Ecole de Management. The research question behind it is whether a university education programme can usefully be built around personalised learning — that is, whether adapting a study path to an individual student's starting skills, motivation and working patterns produces better learning than a fixed path.

To answer that, the project collects information about how students learn: their digital and soft skills, their academic motivation, and — for those who choose the optional modules described below — physiological indicators of attention and stress while studying. The purpose is educational. This is not medical research, no diagnosis is made, and no treatment or health intervention of any kind is given.

Around 105 students at three universities in three countries are expected to take part.

2. Why have I been invited?

You have been invited because you are enrolled in a master's programme at the School of Management that forms part of the DIGI-ME educational offer. All participants are adults (18 or over).

3. Taking part is voluntary, and it will not affect your studies

You decide whether to take part. You may decline, and you may withdraw later, at any point and without giving a reason.

Because the people running this study also teach and assess you, we want to be explicit about what that means:

- Your decision to take part, to decline, or to withdraw has no effect on your grades, your assessment, your supervision, your study rights, or your standing at the university, and no member of staff involved in assessing you will know or take into account what you decided.
- You are not recruited into the study by a person who grades your work.
- Declining does not exclude you from the DIGI-ME courses themselves. You study exactly as you would otherwise.

4. What would taking part involve?

The study is built in layers. You can take part in the first layer only, or add either or both of the optional layers. You choose separately for each, on the form in Part 3, and you can change your mind about the optional layers at any time while remaining in the study.

Core participation

- Use of the DIGI-ME learning platform (Moodle), where your course enrolments, activity and progress are recorded as you study.

- An assessment of your digital skills using the PIX platform (pix.org).
- An assessment of career aptitude, ambition and soft skills using the JobTeaser platform (jobteaser.com).
- Questionnaires on academic motivation and wellbeing at enrolment and every six months thereafter until the end of your programme: the Academic Motivation Scale (AMS-C 28), the Depression Anxiety Stress Scales (DASS-21), the General Self-Efficacy Scale (GSE), and, at follow-up points, the Motivated Strategies for Learning Questionnaire (MSLQ).

Each questionnaire round takes roughly 30–40 minutes in total.

Optional module A — personalised study path (run by CNR-IFC)

If you opt in, physiological measurements are taken during defined study sessions and are analysed by the Institute of Clinical Physiology of the Italian National Research Council (CNR-IFC) to generate a personalised study path recommendation. The measurements are:

- Heart rate and heart rate variability, and electrodermal (skin conductance) activity, recorded with a wrist-worn Withings ScanWatch 2.
- Electrical activity of the brain, recorded with an ENOBIO EEG headset with surface electrodes placed on the scalp. Nothing penetrates the skin and no current is applied; the device only records.

These are special categories of personal data under Article 9 GDPR, and CNR-IFC acts as an independent data controller for this module. You will receive a separate privacy notice from CNR-IFC and give separate explicit consent to it. You may take part in the study without this module.

Optional module B — intelligent tutoring (run by CNR-ITD)

If you opt in, an adaptive tutoring system developed by the Institute for Educational Technology of the Italian National Research Council (CNR-ITD) monitors your progress within the platform and adjusts the exercises and support it offers you. CNR-ITD acts as an independent data controller for this module, with its own privacy notice and its own consent. You may take part in the study, with or without module A, without this module.

Virtual reality activities

If virtual reality activities run at the Vaasa site, CNR-ITD will clearly describe the exposure limit and the withdrawal procedure if the participant feels unwell.

5. What are the possible benefits?

You may benefit from a study path adapted to how you actually learn, and from structured feedback on your digital and soft skills that you would not otherwise receive. We cannot promise that personalisation will improve your results — finding that out is the point of the study. There is no payment for taking part, and no cost to you.

6. What are the possible risks, and what do we do about them?

Algorithmic bias

The personalisation uses machine learning, and machine learning can be biased. No decision about your studies is made by an algorithm alone: recommendations are reviewed by teaching staff, you can always disregard a recommended path, and you can ask for a human review of any recommendation that affects you (see Section 11 of the privacy notice).

The questionnaires

Some questions ask about low mood, anxiety and stress. Answering them can be uncomfortable, and occasionally people find that putting their state into words is itself unsettling. You may skip any question and stop at any point. These instruments are research and screening tools, not diagnostic ones; a score is not a diagnosis.

The wearable devices

There are no known health risks from wrist-worn heart rate sensors or from surface EEG recording. The EEG gel can leave the scalp damp and, rarely, causes mild skin irritation.

Virtual reality

VR can cause motion sickness, eye strain, disorientation or headache. Where VR is used, exposure is time-limited and you can stop immediately at any point without explanation.

7. What happens if something unexpected shows up?

The questionnaires and physiological measurements are not designed to detect illness, and we do not screen for it. Even so, it is possible that a questionnaire score or a recording will point to something worth attention — for example a DASS-21 score in a range associated with clinically significant distress, or an unusual pattern in a heart or brain recording.

If that happens, this is what we do:

1. A designated member of the research team reviews the result. We do not interpret it as a clinical finding, because it is not one.
2. We contact you directly and privately, and tell you what we saw and what it does and does not mean.
3. We recommend that you contact the Finnish Student Health Service (FSHS / YTHS) and, with your agreement, help you arrange that contact. You are free to do nothing with the information.

If you would prefer not to be told about such findings at all, you can say so on the form in Part 3, and we will respect that — with one exception we should be honest about: if a finding suggested an immediate and serious risk to your safety, we would contact you regardless.

8. Can I change my mind after I have started?

Yes, at any time, and you do not have to explain why. Tell any member of the research team (contacts in Section 10) and we stop collecting data about you immediately.

What happens to data already collected is set out in Section 13 of the privacy notice. In short: data collected before you withdrew may be kept where removing it would seriously impair the research, but nothing new is collected, and you can object to the continued processing on grounds relating to your particular situation.

We may also have to end your participation without your asking — for example if you are no longer enrolled in the programme, or if the project itself is discontinued. We would tell you and explain why.

9. Who do I contact?

At the University of Vaasa:

- Romy Narayan, postdoctoral researcher — romy.narayan@uwasa.fi, +358 45 662 3351
- Sniazhana Diduc, researcher — sniazhana.diduc@uwasa.fi, +358 45 860 5919
- Prof. Adam Smale, Dean of the School of Management, principal investigator at this site — adam.smale@uwasa.fi, +358 44 024 4536

Project coordinator:

- Prof. Maria Chiara Demartini, University of Pavia — mariachiara.demartini@unipv.it

Data protection questions:

- Data Protection Officer, University of Vaasa — tietosuojavastaava@uwasa.fi; katja.laine@uwasa.fi

If you want to raise something with someone who is not part of the research team, you can contact the Research Ethics Committee of the University of Vaasa, or the Data Protection Ombudsman (details in Section 15 of the privacy notice).

10. Has this been ethically reviewed?

A statement has been requested from the Research Ethics Committee of the University of Vaasa. The study is conducted in accordance with the ethical principles of research with human participants issued by the Finnish National Board on Research Integrity (TENK) and with the Declaration of Helsinki so far as it applies to non-medical research.

[Will insert the committee's statement number and date once received.]

11. What happens to the results?

Results are published in scientific journals and presented at conferences, and are reported to the European Commission as part of the project's obligations. Only aggregated or anonymised results are published; you are not identifiable in any publication. You may ask us for a summary of the overall findings at any time.

Part 2 — Privacy notice (Articles 13 and 14 GDPR)

1. Who is responsible for your data?

Joint controllers

The following three universities are joint controllers for the DIGI-ME platform, course delivery and the research described in Part 1:

- University of Vaasa (Vaasan yliopisto), PL 700, 65101 Vaasa, Finland — kirjaamo@uwasa.fi, +358 29 449 8000
- Università degli Studi di Pavia, Corso Strada Nuova 65, 27100 Pavia, Italy — urp@unipv.it
- Etablissement d'Enseignement Supérieur Consulaire Grenoble Ecole de Management, 12 rue Pierre Sépard, 38000 Grenoble, France — info@grenoble-em.com

The essence of the joint controllership arrangement is set out in the Joint Controllers Agreement; you may request a copy from the contacts in Section 10 of Part 1. Whichever controller you contact, you may exercise your rights against any of them.

Processor

Domyn S.p.A., Piazza Gae Aulenti 8, 20154 Milan, Italy, operates the DIGI-ME learning platform on behalf of the joint controllers under a data processing agreement concluded under Article 28 GDPR. Domyn processes your data only on documented instructions and does not use it for its own purposes. Its authorised sub-processor is IS-LM srl, Via Giovanni Giolitti 41, 10123 Torino, Italy. The platform runs on Amazon Web Services infrastructure within the European Union, with backups held in Dublin and Frankfurt.

Independent controllers for the optional modules

If you opt into module A or module B, the following bodies act as independent data controllers for those modules — not as joint controllers with the universities. They decide the purposes and means of that processing and are solely responsible for it, and each will give you its own privacy notice:

- Consiglio Nazionale delle Ricerche — Institute of Clinical Physiology (CNR-IFC), Via Moruzzi 1, 56124 Pisa, Italy — cnr-ifc.segreteria@cnr.it, for module A (personalisation).

- Consiglio Nazionale delle Ricerche — Institute for Educational Technology (CNR-ITD), Via Ugo La Malfa 153, 90146 Palermo, Italy — segreteria.palermo@itd.cnr.it, for module B (intelligent tutoring).

2. Data Protection Officers

- University of Pavia: nadia.pazzi@unipv.it
- University of Vaasa: tietosuoja@uwasa.fi; katja.laine@uwasa.fi
- Grenoble Ecole de Management: dpo@grenoble-em.com
- Consiglio Nazionale delle Ricerche: rpd@cnr.it

3. What data are processed?

Core participation:

- Identification and contact data: first name, surname, institutional email address, user identifier including single sign-on identifiers.
- Profile data: language, role, location and institutional affiliation, date of birth, gender.
- Academic data: programme and master's track of enrolment, year of enrolment, courses completed, ongoing and planned, credits gained, exam grades.
- Platform activity data generated in Moodle: authentication and access logs, course enrolments, page and resource views, completion and progress indicators.
- Assessment outputs: digital skills scores (PIX), career aptitude and soft skills scores (JobTeaser).
- Questionnaire responses and scores: AMS-C 28, DASS-21, GSE, MSLQ. These are special categories of personal data under Article 9 GDPR.

Optional module A additionally:

- Physiological and biometric measurements: heart rate and heart rate variability, electrodermal activity, EEG signal power in defined frequency bands. These are special categories of personal data under Article 9 GDPR.

Optional module B additionally:

- Mastery levels and interaction data generated by the intelligent tutoring system.

Where virtual reality is used, data on your interaction with the virtual environment are also recorded.

4. Purposes and legal bases

4. Conducting the study and the scientific and statistical research based on it. Legal basis: performance of a task carried out in the public interest, Article 6(1)(e) GDPR, together with section 4(3) of the Finnish Data Protection Act (1050/2018). For special categories of personal data — your questionnaire scores and, if you opt into module A, your physiological measurements — the basis is scientific research under Article 9(2)(j) GDPR together with section 6(1)(7) of the Data Protection Act, subject to the safeguards required by section 6(2).
5. Delivering and operating the courses and the learning platform. Legal basis: performance of a task carried out in the public interest, Article 6(1)(e) GDPR (the statutory teaching task of the university).
6. Complying with legal obligations, including reporting to the European Commission and responding to inspections by competent authorities. Legal basis: Articles 6(1)(c) and, where special categories are involved, 9(2)(i) GDPR.

7. Educational and dissemination use within the university, such as theses, teaching examples, seminars and conference presentations, always after anonymisation. Legal basis: Article 6(1)(e) GDPR together with section 4(3) of the Data Protection Act.
8. Optional modules A and B, carried out by CNR-IFC and CNR-ITD as independent controllers. Legal basis: your explicit consent, Articles 6(1)(a) and 9(2)(a) GDPR, given separately to CNR and withdrawable at any time without affecting processing already carried out and without affecting your participation in the rest of the study.
9. Publication of research data in a public repository. Data are anonymised before publication. Where sufficient anonymisation is not possible and data would be published in de-identified form, this is done only with your separate explicit consent under Articles 6(1)(a) and 9(2)(a) GDPR, which you may withdraw at any time.

Why consent is not the basis for the university's own processing:

You may notice that we ask for your consent to take part but do not rely on consent as the legal basis for most of the processing. This is deliberate. Because we are your university and your teachers, the GDPR treats consent given to us as unlikely to be genuinely free (Recital 43). Relying on the public interest basis instead means your permission to take part is what it should be — an ethical decision that you make and can reverse — rather than the thing that makes our processing lawful. It does not reduce your rights; it changes which ones apply, and Section 13 sets those out.

5. Automated decision-making and profiling

The study uses algorithms, including machine learning, to analyse your assessment results and (if you opt into module A) your physiological measurements, and to generate a recommended study path and adapted learning materials. This is profiling within the meaning of Article 4(4) GDPR.

Decisions about your studies are not based solely on automated processing. Recommendations produced by the system are reviewed by teaching staff, are advisory, and do not determine your grades, your progression or your degree. In general terms, the system compares your skill assessments, motivation scores and study activity — and, in module A, indicators of attention and stress derived from your physiological signals — against patterns learned from the study population, and suggests content, sequence and pace on that basis.

You have the right to obtain human intervention in respect of any recommendation that affects you, to express your point of view, and to contest the outcome. Contact the research team (Part 1, Section 10).

6. Where do the data come from?

Most data come from you directly — your questionnaire answers, your platform activity, your measurements. Academic data (enrolment, courses, credits, grades) come from the University of Vaasa's own student records system. Assessment scores come from the PIX and JobTeaser platforms.

7. Who receives your data?

- The joint controllers listed in Section 1, and named researchers within them who are bound by confidentiality.
- Domyń S.p.A. as processor, and IS-LM srl as sub-processor, for the technical operation of the platform.
- Amazon Web Services as hosting infrastructure provider, within the European Union.
- PIX (France) and JobTeaser (France), for the skills and career assessments you complete on their platforms, under their own terms and privacy notices.

- If you opt in, CNR-IFC and CNR-ITD as independent controllers for the optional modules. Only the data strictly necessary are transmitted: a pseudonymous user identifier, basic profile data, and the relevant learning or assessment outputs.
- The European Commission and its agencies, for project reporting and audit.

Your personal data are not disclosed to anyone else. Research findings are published only in aggregated or anonymised form.

8. Pseudonymisation and security

Your identifying details are replaced with a code as early as is practicable, and the key linking the code to your identity is held separately and restricted to named members of the research team. Data are transmitted over encrypted connections (HTTPS/TLS 1.2 or higher) and encrypted at rest. Access is granted on a least-privilege basis to trained, named personnel. Full technical and organisational measures are described in Annex III of the Article 28 agreement and in the data protection impact assessment carried out for this project, both of which you may request.

9. Transfers outside the EU/EEA

No personal data are transferred outside the European Union or the European Economic Area. All processing, hosting and backup takes place within the EU.

10. How long are data kept?

Personal data are retained for the duration of the project and for the periods required afterwards for project obligations and dissemination, and are erased or fully anonymised by 31 January 2031 at the latest. Physiological signals from module A are deleted at that point. Anonymised data — data from which you can no longer be identified — may be retained and shared indefinitely for research purposes; anonymised data are no longer personal data and the rights below do not apply to them.

11. Is providing the data compulsory?

No. Participation, and therefore the provision of your data, is entirely voluntary. If you choose not to provide the data, or if you withdraw, it will not be possible to include you in the study, because the data are what the research consists of. Your decision has no effect on your studies, grades, assessment, supervision or standing at the University of Vaasa.

12. Your rights

In relation to the processing described here, you have the right to:

- Access your personal data and obtain a copy (Article 15).
- Have inaccurate data corrected and incomplete data completed (Article 16).
- Request erasure of your data (Article 17).
- Request restriction of processing (Article 18).
- Object to the processing on grounds relating to your particular situation (Article 21).
- Withdraw consent to the optional modules and to publication of non-anonymised data at any time, without affecting the lawfulness of processing carried out before withdrawal (Article 7(3)).
- Obtain human intervention in relation to profiling, express your point of view and contest a recommendation (see Section 5).

Two honest qualifications, so that nothing here is over-promised:

Erasure is not automatic. Where erasing your data would be likely to render impossible or seriously impair the achievement of the research objectives — for example by breaking a longitudinal series that other analyses depend on — data already lawfully collected may be retained under Article 17(3)(d) GDPR. If we rely on that, we will tell you and explain why. In every case, withdrawing means no further data are collected about you.

The right to data portability under Article 20 does not apply to processing carried out in the public interest, so it is not listed above.

To exercise any right, contact the research team (Part 1, Section 10) or the Data Protection Officer at tietosuoja@uwasa.fi. We answer within one month, or tell you within one month why we need longer, and in any case within three months.

13. Right to lodge a complaint

If you consider that your personal data have been processed unlawfully, you may lodge a complaint with the Finnish supervisory authority:

Office of the Data Protection Ombudsman (Tietosuoja-valtuutetun toimisto), PL 800, 00531 Helsinki — tietosuoja@om.fi, +358 29 566 6700

You may also seek a judicial remedy under Articles 77 and 79 GDPR. Complaints about the processing carried out by CNR under the optional modules may also be addressed to the Italian supervisory authority (Garante per la protezione dei dati personali).

Part 3 — Consent to participate

One copy for you, one for the research file.

Study: DIGI-ME — DIGital skills for transformative Innovation Management and Entrepreneurship (Grant Agreement No. 101123009)

Site: University of Vaasa, School of Management. Principal investigator at this site: Prof. Adam Smale.

Information sheet and privacy notice version 3.0, dated _____.

Name of participant: _____

A. Please confirm each of the following

- ☐ I have read and understood the information sheet and privacy notice (Parts 1 and 2), version 3.0, and I have kept a copy.
- ☐ I have had the opportunity to ask questions, and my questions have been answered to my satisfaction.
- ☐ I have had enough time to consider whether to take part, and to discuss it with others if I wished.
- ☐ I understand that taking part is voluntary, that I may withdraw at any time without giving a reason, and that this will have no effect on my grades, assessment, supervision, study rights or standing at the university.
- ☐ I understand how my personal data will be processed, on what legal basis, and what my rights are, including that data already collected may be retained where erasure would seriously impair the research.
- ☐ I understand that the results will be published without identifying me.

B. Core participation

☐ I agree to take part in the study as described in Part 1, Section 4 (core participation).

C. Optional modules — you may take part without these

Module A — personalised study path with physiological measurement (CNR-IFC as independent controller). I give my explicit consent to the collection and processing of my physiological and biometric data for this purpose:

☐ Yes ☐ No

Module B — intelligent tutoring system (CNR-ITD as independent controller). I give my explicit consent to the processing of my learning data for this purpose:

☐ Yes ☐ No

Note: modules A and B also require a separate consent form provided by CNR. Ticking “Yes” here indicates your willingness; the CNR form is where that consent is formally recorded.

D. Further choices

Publication in a public research repository of data about me that has been de-identified but cannot be fully anonymised. I give my explicit consent:

☐ Yes ☐ No

Being told about unexpected findings that may emerge from the questionnaires or measurements (see Part 1, Section 7):

☐ Yes, tell me ☐ No, do not tell me

Being contacted after the study ends to give feedback on my experience:

☐ Yes ☐ No

E. Signatures

Participant — name in block letters: _____

Signature: _____ Date: ____ / ____ / ____

Researcher who provided the information and obtained consent

I confirm that I explained the study to the participant, answered their questions, gave them sufficient time and opportunity to decide, explained that they may withdraw at any time, and exercised no pressure or undue influence.

Name in block letters: _____

Signature: _____ Date: ____ / ____ / ____

Appendices to this form

10. Questionnaires used: AMS-C 28, DASS-21, GSE, MSLQ.

AMS-C 28 (Academic Motivation Scale - College Version): A 28-item questionnaire that measures a university student's intrinsic motivation, extrinsic motivation, and amotivation (lack of motivation) toward education. (https://www.lrcs.uqam.ca/wp-content/uploads/2017/08/emec_en.pdf)

DASS-21 (Depression, Anxiety, and Stress Scale - 21 items): A self-report clinical tool designed to measure the severity of negative emotional states—specifically depression, anxiety, and tension/stress. (<https://maic.qld.gov.au/wp-content/uploads/2016/07/DASS-21.pdf>)

GSE (General Self-Efficacy Scale): A questionnaire that assesses an individual's belief in their own ability to cope with difficult demands in life and overcome obstacles. (<https://www.carepatron.com/templates/general-self-efficacy-scale-gse/#app-chapter-one>)



general_self_efficacy_scale_gse.pdf

MSLQ (Motivated Strategies for Learning Questionnaire): A tool that evaluates a student's motivational orientation and their use of different cognitive and metacognitive learning strategies (e.g., how they study, manage time, and process information).



motivated_strategies_for_learning_questionnaire_mslq.pdf

In context: A study combining these four questionnaires is likely investigating how a student's mental well-being and self-confidence impact their motivation to study and the specific learning techniques they apply.

11. Privacy notices of third-party platforms: Withings (<https://www.withings.com/fi-fi/policies/privacy-policy>) , PIX (<https://pix.org/en/personal-data-protection-policy>) , JobTeaser (https://d1guu6n8gz71j.cloudfront.net/system/legal_files/351/original.pdf?1781773236) .
12. Privacy notices of CNR-IFC (module A) and CNR-ITD (module B), provided separately with those consent forms.