







Molengeek International

Techgrounds Pathways Program



Table of Contents

O	ocumentation and Transfer of the Techgrounds Pathways Program	5
	Section 1: General Program Information	5
	Section 2: Program Objectives and Description	6
	Section 3: Structure and Modules	<u>C</u>
	Section 4: Delivery Methods and Tools	-11
	Section 5: Localization and Adaptation	- 12
	Section 6: Outcomes and Evaluation	
	Section 7: Supporting Materials	-17
	Conclusions	- 18

Molengeek International

Documentation and Transfer of the Techgrounds Pathways Program

This document describes the structure, content, and delivery method of the Techgrounds Pathways Program, intended for standardization and inclusion in the MolenGeek International Handbook.

Section 1: General Program Information

- **Program Title:** Techgrounds Pathways Program (IT Orientation Platform)
 - The program is known as the "Techgrounds Pathways Program", and is sometimes further specified as the "Techgrounds Pathways IT Orientation Platform". This title reflects the core function of the program: providing an orientation to the IT sector.
- Organisation: Stichting Techgrounds (Techgrounds Foundation)
 - The Pathways program is offered by Stichting Techgrounds, an organization focused on closing the gap in the IT labor market in the Netherlands.
- Country / Local Context: Netherlands
 - The program operates nationwide within the Netherlands and is fully accessible online. Techgrounds itself has physical locations in cities such as Amsterdam (Nieuw-West, Zuidoost), Utrecht, Rotterdam, and Zaanstad. The Dutch context is characterized by a significant shortage of IT personnel and a strong societal and economic need to increase diversity and inclusion within the technology sector.
 - Although Techgrounds has established physical hubs, often in disadvantaged neighborhoods to activate local talent, the Pathways program transcends these geographical limitations with its 100% online nature. This strategic choice for online delivery maximizes accessibility and enables Techgrounds to reach "hidden talent" from all over the country, not just limited to the immediate vicinity of the physical centers. This implies that the orientation phase of their model can be scaled up faster and more broadly than if it were dependent on the expansion of physical locations.

Molengeek International

- Target Audience (e.g., youth, NEETs, reskilling adults): Reskillers, job seekers, underutilized talents, and individuals considering a career in IT, regardless of prior education.
 - The primary target audience consists of "reskillers", "hidden talent," and individuals who are unemployed or underutilized in their current jobs. This includes people with no or limited IT skills and explicitly focuses on underrepresented groups such as women and individuals with diverse cultural backgrounds. There are no specific prior education requirements or diplomas needed to participate in Pathways. Techgrounds reports that 35% of their participants are women and 55% are 40 years or older, although these figures may pertain to all Techgrounds programs. The Pathways program is open to everyone, but it is noted that IT jobs (the ultimate goal after any subsequent training) are often less suitable for individuals with a work and thinking level of MBO2 or lower.
 - This broad inclusivity, combined with the pragmatic note about the MBO2 level, indicates a well-thought-out strategy. On the one hand, the door is opened wide for orientation via Pathways, attracting a diverse audience. On the other hand, there is subtle expectation management regarding progression to demanding IT functions, which require a certain cognitive level. Pathways facilitates this self-awareness among participants.
- Language(s) of Delivery: (Always two, the original Language and ENG)
 - o Dutch (Original), English
 - The language of instruction for Techgrounds and the Pathways program information is predominantly Dutch. In accordance with the template requirements, English is listed as the second language.

Section 2: Program Objectives and Description

Overall Goal of the Program:

The overarching goal of the Pathways program is to help individuals orient themselves in the IT job market. Participants gain insight into what the IT sector has to offer, discover if a career in IT suits them, identify which roles align with their talents, and are informed about suitable follow-up training and funding options. Ultimately, Pathways contributes to solving the mismatch in the IT labor market by activating "hidden talent".

Molengeek International

The positioning of Pathways as the first step in Techgrounds' two-pronged approach (orientation followed by reskilling through the Academy) is crucial. The program functions as an essential "pre-skilling" filter and facilitator. The direct goal is not job placement, but ensuring that individuals who progress to more intensive and often employer- or UWV-funded Academy programs are well-informed, motivated, and suited for an IT career. This reduces dropouts and mismatches in the later, more costly phases of reskilling, thereby increasing the efficiency and success rate of the entire pathway.

Specific Learning Objectives:

- Participants understand essential IT terminology and the content of various IT professions.
- Participants experience whether they have an affinity for and enjoy IT-related work.
- Participants identify which IT roles and domains (such as Data, Front-end, Robotics) match their personal talents and interests.
- Participants acquire basic knowledge of IT fundamentals, including the role of programming languages and operating systems.
- Participants are introduced to the basic principles of programming in languages such as Python, JavaScript, HTML, and CSS.
- Participants develop a personal career and reskilling plan as a concrete next step.
- o Participants gain insight into funding options for further education in IT.
- Participants understand the impact of Artificial Intelligence (AI) on the current and future job market.

• Brief Overview of Curriculum Topics:

- The curriculum covers a wide range of topics designed to provide a holistic view of the IT sector:
 - Pathways Learning Principles: Introduction to computational thinking, effective learning strategies ('learning to learn'), prompt engineering, and the basics of ChatGPT.
 - Career Planning: Actively creating a personal reskilling and career plan using provided templates.
 - The 10 IT Domains: An in-depth exploration of ten different specialization areas within IT to make an informed choice.
 - **IT Fundamentals:** Basic concepts, the role and function of programming languages, and the operation of operating systems.

Molengeek International

- **Programming Basics:** Introduction to and practical exercises in Python, JavaScript, HTML, and CSS, supported by theoretical modules and webinars.
- Orientation Modules: Specific modules focused on domains such as Data, Front-end development, and Robotics.
- In-depth Material (Bonus): Optional modules on more advanced topics such as Web3 and lean startup methodologies.
- Impact of AI: A module dedicated to the influence of Artificial Intelligence on work and the future.
- The development of **soft skills**, although not explicitly mentioned as a separate module for Pathways, is an integral part of the broader Techgrounds philosophy and approach.

Duration (total hours, weeks):

- Approximately 100 hours of learning content and activities, designed to be completed within 4 weeks, with flexible access to the material for up to 3 months.
- This includes access to 40 hours of essential IT basic knowledge modules and 40 hours of orientation modules. Additionally, there are five live sessions per week. Assuming one hour per live session, this amounts to approximately 20 additional hours over a four-week period.

• Prerequisites (knowledge, experience):

- There is no specific prior knowledge of IT or a particular educational diploma required to participate in the Pathways program. The selection of participants is primarily based on their motivation and learning potential.
- The absence of formal entry requirements makes Pathways highly accessible. However, the emphasis on "motivation and learning potential" as selection criteria suggests that, despite open enrollment, there is an informal assessment of candidates' drive and ability to learn. This is important because the program, although orientational, has a certain learning pace. This approach allows Techgrounds to tap into a broad and diverse talent pool while simultaneously assembling a cohort that has the potential to successfully complete the program and benefit from it to the fullest.

Molengeek International

Section 3: Structure and Modules

The Techgrounds Pathways Program is composed of various components that together offer a comprehensive orientation experience. The structure is designed to guide participants step-by-step from basic principles to concrete career planning. The combination of self-study, live interaction, peer support, and practical tools creates a layered and multimodal learning experience. This is particularly valuable for a diverse target audience, including individuals who are completely new to IT. The integration of current elements such as AI modules and LinkedIn Premium underscores its relevance to the current job market.

The table below provides an overview of the main modules and components:

Table 1: Techgrounds Pathways Program: Module Overview

Module/Component	Key Topics/Activities	Learning Method	Intended Outcomes
Learning Block 1: Pathways Learning Principles	Computational thinking, 'learning to learn', prompt engineering, introduction to ChatGPT.	Self-study modules, interactive content.	Development of fundamental thinking and learning skills relevant to the IT sector.
Learning Block 2: Career Planning	Creating a personal reskilling and career plan using templates.	Guided assignments, use of templates.	A concrete and personal plan for the next steps in an IT career.
Learning Block 3: The 10 IT Domains	In-depth exploration of 10 different IT specialization areas.	Self-study modules, informational content.	Insight into various IT domains to identify a suitable specialization direction.
Learning Block 4: IT Fundamentals	Basic principles of IT, role of programming languages, operation of operating systems.	Self-study modules.	Basic understanding of the technical foundations of IT.

Molengeek International

Learning Block 5:	Introduction to and practice	Theoretical modules,	Initial practical experience with
Programming Basics	with Python, JavaScript, HTML, CSS.	practical exercises, webinars.	programming; assessing affinity for coding.
Learning Block 6: In-depth and Bonus	Optional material on topics such as Web3, lean startups.	Self-study modules.	Opportunity for deeper exploration of specific areas of interest.
Core Essential Modules	Approx. 40 hours of modules on the basics of IT.	Self-study via online platform.	Solid foundational knowledge of IT concepts.
Orientation Modules	Approx. 40 hours of modules focused on specific domains ike Data, Front-end, Robotics.	Self-study via online platform.	Deeper insight into specific IT directions.
Weekly Live Sessions	5 live sessions per week: masterclasses, Q&As with IT professionals, peer consultation.	Interactive online sessions, webinars.	Direct interaction with experts, networking opportunities, answering questions, sharing experiences.
Career Assessment & Planning	Career assessment to discover interests and talents; developing a personal career plan.	Online assessment tools, reflection assignments, coaching.	Self-insight into talents and interests; a clear personal career plan as the final product.
Peer Learning & Network Tools	Slack channel for interaction with fellow participants; 1-year access to LinkedIn Premium; IT Navigator tool.	Online community, networking platform, exploration tool.	Mutual support, network building, skills in online profiling, exploring IT jobs and training.
Module Impact of Al	Module on the influence of Artificial Intelligence on work and the future.	Self-study module.	Awareness of the role and impact of AI in the modern IT world and beyond.

Molengeek International

Section 4: Delivery Methods and Tools

• Mode of Delivery (e.g., in-person, hybrid, online):

 100% online. This fully online delivery makes the program nationally accessible and offers maximum flexibility for participants.

• Digital Tools / Platforms Used:

- A specific online learning platform forms the basis for the modules and content.
- **Slack** is used for peer-to-peer communication and community building.
- The IT Navigator, a tool for exploring IT jobs and training programs, is made available.
- Participants receive access to LinkedIn Premium for one year to support their professional network and online visibility.
- A platform for webinars and live sessions (e.g., Zoom or similar, though not explicitly mentioned) is necessary for the weekly interactive components.
- ChatGPT is covered as a topic within the learning principles and can also potentially be used as a supportive learning tool.

Teaching Methods (e.g., project-based, lectures, mentoring):

- The program uses a diverse pedagogical approach:
 - **Self-study modules:** Participants work through online material at their own pace.
 - Webinars and IT trial lessons: Live and recorded sessions provide instruction and the opportunity to "taste" IT topics.
 - **Tech workshops and practical assignments:** Hands-on activities, including basic programming exercises, promote practical learning.
 - **Q&A sessions:** Interaction with trainers, experienced professionals (reskilled individuals), and IT experts.
 - **Guidance by IT orientation coaches:** Personal support and advice for career planning.
 - Peer learning: Learning from and with fellow participants, facilitated by the Slack channel, among other things. This is a core principle that is also strongly present at MolenGeek.
 - Career assessment: Tools for self-reflection and talent identification.
 - The underlying philosophy, partly inherited from MolenGeek, is "learning by doing" ("C'est en forgeant qu'on devient forgeron" It is by forging that one becomes a blacksmith).

Molengeek International

For a target audience largely new to IT, a purely theoretical approach would be insufficient. The integration of "IT trial lessons," "practical assignments", and concrete coding exercises allows participants to truly experience the IT world. This is reinforced by robust community elements like Q&A sessions and the Slack channel, which are essential for support and lowering the barrier for newcomers. This practical, supportive environment is crucial for achieving the program's goal: helping individuals determine if IT is a good fit for them by letting them "taste" the sector instead of just reading about it.

Assessment Methods (tests, projects, presentations):

- Assessment within Pathways is primarily formative and focused on self-reflection and personal development, rather than formal grading.
 - A central "assessment moment" is the career assessment, which helps in discovering interests and talents.
 - The main final product, which can be seen as a form of assessment of the learning and planning process, is the **personal career plan**.
 - The practical exercises with programming basics will likely lead to self-evaluation or informal feedback.
 - Specific formal tests or exams for the Pathways program are not detailed in the available information. The emphasis is on facilitating self-discovery and creating a well-considered plan for the future.

Section 5: Localization and Adaptation

Was the program adapted from another context?

 Yes, the TechGrounds model, and thus indirectly the Pathways program, is based on the MolenGeek initiative from Brussels, Belgium.

• If yes, describe original version:

The original version is MolenGeek, founded in Molenbeek, Brussels. MolenGeek's mission is to make technology accessible to everyone, regardless of background or education level, with a focus on practical, hands-on training ("C'est en forgeant qu'on devient forgeron" - It is by forging that one becomes a blacksmith) and stimulating entrepreneurship. Its core activities include a coworking space, short and long training courses (such as Coding School, Digital Marketing, AWS re/Start, Salesforce Administrator), and events like hackathons. Many

Molengeek International

programs are free for job seekers, often young people (e.g., up to 29 years old) registered with Actiris, and there are no prior education requirements. MolenGeek collaborates with major tech partners like Google, Salesforce, and AWS.

Describe the localization process and changes made:

- TechGrounds adopted MolenGeek's core philosophy (accessibility, practical learning, community focus) and adapted it to the Dutch context.
 The initiative was co-founded by TechConnect, a program of the Amsterdam Economic Board.
- Initially, the focus was on disadvantaged neighborhoods in Amsterdam (like Nieuw-West), similar to MolenGeek's focus on Molenbeek, but this was later expanded.
- A key Dutch adaptation is the development of an explicit two-pronged approach: first, the low-threshold, online Pathways orientation program, followed by the more intensive Techgrounds Academy reskilling tracks, often with a job guarantee. This structured preliminary orientation appears to be a significant Dutch innovation. Pathways, with its 100% online setup, allows for national scalability, which differs from MolenGeek's more location-based initial model.
- Partnerships were adapted to the Dutch situation, with collaborations with the UWV (the Dutch employee insurance agency), Dutch municipalities (Amsterdam, Rotterdam), and Dutch companies such as Booking.com, Randstad, Rabobank, KPN, and TomTom.
- The Pathways curriculum is specifically designed for orientation (exploring 10 IT domains, IT fundamentals, etc.) and differs in this respect from MolenGeek's direct, more specialized training tracks.
- A specific soft skills program was developed and refined for the Dutch context, partly with support from the SIDN Fund for further scaling.
- This structured, nationally accessible online orientation (Pathways) as a gateway to more intensive training (Techgrounds Academy) is a key Dutch innovation. This model addresses the Dutch labor market's need for better matching and enables a broader initial intake than physical centers alone could achieve. The close collaboration with Dutch government bodies like the UWV and municipalities is also a crucial localization aspect, making the Dutch model potentially more systematic in guiding a diverse population towards IT careers on a large scale.
- Challenges encountered during adaptation:

Molengeek International

- Although not specifically documented for the adaptation of Pathways, Saskia Verstege (Managing Director of Techgrounds) shared a broader, initial challenge for Techgrounds (likely related to the Academy). Initially training people without direct coordination with employers led to many students remaining unemployed, causing Techgrounds to, in effect, "create its own mismatch". This insight led to a strategic shift to a model where employers are involved earlier in the process.
- This early experience with mismatches likely co-shaped the role and design of Pathways. By having individuals first explore the IT market and their own suitability via Pathways before starting specialized (and more expensive) training, Pathways acts as a mechanism to reduce this risk of mismatch. It serves as a crucial de-risking step for both participants and the subsequent Academy programs, leading to better alignment and higher success rates in job placement after the Academy.
- If the program was transferred from Belgium to the Netherlands, what needs to be changed next to the language, if any? Example the cloud course, in the Netherlands there is more demand for AZURE, so from AWS to AZURE.
 - Besides language, several crucial adaptations are necessary:
 - Curriculum Relevance: The demand for specific technologies, such as the balance between AWS and Azure cloud services, must be continuously aligned with the Dutch labor market. Techgrounds Academy offers training for both AWS and Azure, indicating an awareness of this dynamic.
 - Integration with National Systems: Coordination with Dutch government agencies like the UWV and municipalities for funding, referrals, and participant support is essential.
 - Labor Market Integration: Building a network with Dutch employers and continuously gauging their specific needs is crucial for successful placement after follow-up training.
 - **Cultural Nuances:** The soft skills training, in particular, needs to be adapted to the Dutch work culture and communication styles.
 - **Regulations:** Compliance with Dutch legislation regarding, for example, data protection (GDPR) and any quality requirements for education.
 - The example of AWS versus Azure in the template instruction highlights a core challenge: technological trends and employer demand are

Molengeek International

constantly changing. To remain effective in the Netherlands, Techgrounds (especially the Academy, to which Pathways leads) must continuously adapt its offerings based on Dutch market insights. The "employer-first" approach attests to this principle. Adaptation is therefore not a one-time action but an ongoing process of curriculum revision, partner development, and alignment with the evolving Dutch tech landscape. Pathways plays a role in this by providing broad initial exposure, from which more specific training needs can be identified.

Section 6: Outcomes and Evaluation

Number of Participants Trained: (Choose a single group with best results)

 Over 1,400 individuals have participated in the Techgrounds Pathways orientation program to explore IT careers. This figure reflects the number of people specifically helped to discover IT through Pathways.

• Completion / Certification Rate:

 Specific completion rates for the Pathways program are not publicly detailed. The program is focused on orientation and developing a personal career plan, and does not issue a formal certification in the traditional sense. Participants who decide within the first three days that the program is not a good fit can use a money-back guarantee, which may indicate some early attrition but does not represent a formal completion rate.

Post-training Outcomes (e.g., job placements, continued learning):

- The primary outcome after completing Pathways is a clear, personal career plan. This enables participants to make informed decisions about pursuing further IT education (such as the Techgrounds Academy or programs from other providers) or, if relevant, applying directly for suitable entry-level positions.
- While direct job placement is not the immediate goal of Pathways, it serves as a crucial preparation and pipeline to reskilling programs that report high placement rates. For instance, graduates of the Techgrounds Academy, who often enter after an orientation track, have a job placement rate of 80-85%. Other sources mention that over 70% of TechGrounds (Academy) graduates find work within six months.

Molengeek International

The effectiveness of Pathways is therefore not measured so much by direct job placements, but by the extent to which it successfully prepares and guides individuals to the *right next step*. The high placement rates of the Academy are an indirect validation of Pathways' effectiveness in the preliminary selection and preparation phase.

Participant Feedback Summary:

Participant feedback on the Pathways program is predominantly positive. Users emphasize the program's effectiveness in providing a clear overview of IT opportunities, facilitating self-discovery, and assisting in the creation of a reskilling plan. The program is described as an "eye-opener" and valuable for market orientation. An isolated, possibly outdated, review mentioned concerns about costs and program changes, but current official information presents a transparent and affordable pricing structure for Pathways. The broader Techgrounds ecosystem, of which Pathways is a part, is praised for its strong sense of community and support.

Lessons Learned and Suggestions for Future Transfer:

- A crucial lesson from the development of Techgrounds is the importance of a specific, structured orientation phase like Pathways prior to intensive reskilling. This ensures a better fit for participants and reduces mismatches, a problem Techgrounds initially encountered.
- Online delivery of the orientation phase significantly increases reach and accessibility.
- A strong community and peer support are vital, especially for newcomers to a field.
- Collaboration with local employers and government agencies is fundamental for relevance, funding, and support.
- For future transfer of the model to other contexts, it is suggested to:
 - Replicate the two-pronged model (orientation followed by reskilling).
 - Ensure the orientation phase is low-threshold and broadly accessible (online delivery is effective for this).
 - Build strong local partnerships in the new context (employers, government, training providers).
 - Continuously adapt the content to local labor market needs.
 - Maintain a strong focus on soft skills development and community building.

Molengeek International

The two-pronged model (Pathways + Academy) represents a significant, transferable innovation. The strategic use of Pathways as an explicit, structured online orientation and pipeline module for more intensive programs is a key factor. This approach addresses the challenge of attracting diverse talent while ensuring they are well-prepared and matched for demanding tech roles. When transferring the program, it is crucial to adopt this philosophy; simply copying course content without the strategic orientation phase could lead to the same mismatch problems that Techgrounds initially experienced.

Section 7: Supporting Materials

List of all supporting documents, slides, exercises, or external resources:

- Official Program Webpage: https://techgrounds.nl/pathways/
- o Techgrounds Main Website: https://techgrounds.nl/
- Online Learning Modules (approx. 80 hours, incl. IT fundamentals, the 10 IT domains, programming basics, AI impact)
- Recordings or materials from weekly live sessions (masterclasses, Q&As, peer consultation with IT professionals)
- Career assessment tools and questionnaires
- Templates for creating personal reskilling and career plans
- Access to the 'IT Navigator' tool for exploring IT jobs and training programs
- Dedicated Slack channel for peer-to-peer learning and support
- One-year access to LinkedIn Premium for participants
- The 'Techgrounds Guide' (a free introductory tool often used before or alongside Pathways)

Add URLs or attach files as appropriate.

• The relevant URLs are listed above. No files are available in the provided information to attach physically.

Molengeek International

Conclusions

The Techgrounds Pathways Program serves as a strategic and accessible online orientation platform within the Dutch IT training landscape. It is designed to help a diverse group of individuals, regardless of their prior education or background, navigate the complex IT job market and make a well-informed choice about a potential career in the sector.

Key features of the program include its low threshold, focus on self-discovery and practical introduction to IT domains and basic skills, and the strong emphasis on developing a personal career plan. The structure, which combines self-study with live interactions, peer support, and coaching, is tailored to the needs of reskillers and newcomers to the field.

The adaptation of the MolenGeek model to the Dutch context, particularly the development of Pathways as a distinct, scalable first step before more intensive reskilling tracks like the Techgrounds Academy, demonstrates a learning approach that responds to the specific needs of the Dutch labor market and the goal of reducing the IT skills gap. Collaboration with Dutch employers, government agencies, and continuous alignment with local market demand are crucial for the success of the broader Techgrounds initiative, of which Pathways is a fundamental part.

For any transfer or replication of this model to other contexts, the two-pronged approach (orientation followed by specialized training), the online and flexible delivery of the orientation phase, and the strong emphasis on community building and local partnerships are key elements to consider. The effectiveness of Pathways lies not primarily in direct job placement, but in empowering individuals to take successful and sustainable next steps in their IT careers.

Molengeek International