



TechHope Transitions

Bridging Nations, Elevating Diversity, Building Futures

TechHope Transitions Summer Program and Kickoff Workshop Blueprint

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Executive Summary

TechHope Transitions Summer Program and Workshop

Introduction

The TechHope Transitions (THT) University Incubator Program represents a strategic partnership between THT and the National University of Life and Environmental Sciences of Ukraine. This collaboration aims to leverage the strengths of both organizations to create a nurturing environment for female IT students, fostering innovation and leadership. The overall objective is to ensure not only the success of the students but also the long-term sustainability of the program, benefiting from the experiences and insights gained throughout the incubator's lifecycle.

For the Students

This two-week intensive session is designed to help you become a leader in the IT industry through practical experience, mentorship, and professional development. During this program, you will work on a real-world project that will not only enhance your technical skills but also enable you to make a meaningful impact on your community. You'll collaborate with industry experts, receive guidance from experienced mentors, and gain hands-on experience. Though our commitment is to gender equality, this program ensures that everyone will have the opportunities and support to excel and inspire others. Through this program, you will build a solid foundation for your future career while contributing to economic growth and innovation in your region. Join us and take the first step towards becoming a change-maker in the tech industry.

Purpose of TechHope Transitions

TechHope Transitions was founded with the mission to address the profound impact of the ongoing war on women's professional lives in Ukraine. By establishing incubators in partnership with esteemed institutions such as Yale University, Karazin National University, and National University of Life and Environmental Sciences of Ukraine, THT creates hubs of empowerment and innovation for female IT students. These incubators are designed to foster a nurturing environment that equips women with in-demand IT skills and champions their leadership and creativity in tech spaces.

Two-Week Summer Program Overview

The two-week Summer Program is designed to assess and filter students who wish to be a part of the incubator program. This intensive program aims to provide participants with a solid foundation in running technical projects, focusing on the Secure



Development Lifecycle (SDLC), the SDLC process, status reporting, and communication strategies.

- **Week 1: Foundations of Technical Project Management**
 - **Orientation and Introduction:** Students are introduced to THT, the program's objectives, and the key principles of Agile methodologies and the SDLC.
 - **Introduction to Secure Development Lifecycle (SDLC):** Detailed sessions cover each phase of the SDLC, emphasizing secure coding practices and the importance of quality assurance.
 - **Understanding the SDLC Process:** Students engage in activities to design projects using SDLC principles and familiarize themselves with tools and technologies used in each phase.
 - **Status Reporting and Communication:** Training on effective status reporting and communication strategies, including role-playing exercises.
 - **Practical Application and Team Projects:** Formation of project teams, initial project discussions, and setup of project management tools.
- **Week 2: Hands-On Project Work and Assessments**
 - **Project Kickoff and Planning:** Formal project kickoff, detailed planning sessions, and mentorship guidance.
 - **Implementation and Development:** Teams work on project implementation with daily stand-ups and continuous mentorship.
 - **Testing and Quality Assurance:** Hands-on testing activities, identifying bugs, and implementing fixes.
 - **Finalizing Projects and Preparing Presentations:** Teams finalize projects, prepare presentations, and rehearse with mentors.
 - **Final Presentations and Evaluations:** Teams present their projects to a panel of judges, receive feedback, and top candidates are selected for the incubator program.

One-Week Kickoff Workshop Overview (details will be presented at the beginning of the fall semester)



The one-week Kickoff Workshop is designed to educate students on how the incubator will function, clarify roles and responsibilities, and set expectations for the projects. This workshop runs Monday through Friday from 13:00 to 17:00 EEST.

- **Introduction and Overview:** Detailed explanation of the incubator's mission, vision, and goals, with interactive activities to build team cohesion.
- **Roles and Responsibilities:** Clarification of roles for support staff, THT team, university faculty, and students.
- **Agile Methodologies and SDLC:** In-depth sessions on Agile principles, Scrum and Kanban frameworks, and the SDLC process.
- **Project Planning and Management:** Effective project planning, status reporting techniques, and communication strategies.
- **Mentorship and Support Systems:** Explanation of mentorship structure and support systems available to students.

TechHope Transitions' Summer Program and Kickoff Workshop are integral to the University Incubator initiative, which seeks to empower Ukrainian women in IT by providing hands-on experience, mentorship, and access to state-of-the-art resources. These programs are designed to cultivate a new generation of female IT leaders who will drive innovation and lead the tech industry in Ukraine and beyond. By participating in these programs, students will gain invaluable skills, knowledge, and opportunities, contributing to a transformative impact on the IT sector and promoting gender diversity and inclusion.



Two-Week Summer Program

Week 1 Plan

Objective: Week 1 will focus on building a strong foundation in technical project management, including understanding the Secure Development Lifecycle (SDLC), the overall SDLC process, effective status reporting, and communication strategies.

Schedule: Monday to Friday, 13:00 – 17:00 EEST

Day 1: Orientation and Introduction

13:00 - 13:30: Welcome and Introduction

- Introduction to TechHope Transitions (THT) and the University Incubator program.
- Overview of the program objectives and agenda.
- Ice-breaking activities to build team cohesion.

13:30 - 14:30: Program Overview and Expectations

- Detailed explanation of the program structure and timeline.
- Setting expectations for participation, teamwork, and outcomes.
- Introduction to key staff, mentors, and support personnel.

14:30 - 15:00: Break

15:00 - 17:00: Introduction to Agile Methodologies

- Overview of Agile principles and values.
- Introduction to Scrum and Kanban frameworks.
- Interactive session on the importance of flexibility and iterative development in projects.

Day 2: Introduction to Secure Development Lifecycle (SDLC)

13:00 - 14:00: SDLC Overview

- Definition and importance of the SDLC in technical projects.



- Detailed explanation of each phase: Planning, Analysis, Design, Implementation, Testing, Deployment, and Maintenance.
- Real-world examples of secure development practices.

14:00 - 14:30: Break

14:30 - 17:00: Secure Coding Practices

- Introduction to secure coding principles and techniques.
- Hands-on exercises to practice writing secure code.
- Discussion on common security vulnerabilities and how to mitigate them.

Day 3: Understanding the SDLC Process

13:00 - 15:00: In-Depth SDLC Phases

- Detailed walkthrough of each SDLC phase with practical examples.
- Group activities to design a simple project using SDLC principles.
- Discussion on the roles and responsibilities at each phase of the SDLC.

15:00 - 15:30: Break

15:30 – 17:00: Tools and Technologies for SDLC

- Overview of tools commonly used in each SDLC phase (e.g., project management tools, version control systems, testing tools).
- Hands-on session to familiarize students with these tools.
- Discussion on best practices for tool usage and integration into project workflows.

Day 4: Status Reporting and Communication

13:00 - 14:00: Effective Status Reporting

- Importance of status reporting in project management.
- Techniques for creating clear and concise status reports.
- Examples of good and bad status reports and lessons learned.



14:00 - 14:30: Break

14:30 - 17:00: Communication Strategies

- Strategies for effective communication with different stakeholders.
- Role-playing exercises to practice communication scenarios (e.g., team meetings, stakeholder presentations, conflict resolution).
- Tips for maintaining clear and consistent communication throughout the project lifecycle.

Day 5: Practical Application and Team Projects

13:00 - 15:00: Team Formation and Project Assignments

- Formation of project teams based on students' skills and interests.
- Assignment of initial project topics and goals.
- Introduction to project charters and how to create them.

15:00 - 15:30: Break

15:30 - 17:00: Initial Project Planning

- Team sessions to discuss project ideas and create initial plans.
- Guidance from mentors on setting realistic goals and milestones.
- Setup of project management tools and initial project schedules.

This Week 1 plan will ensure that students gain a comprehensive understanding of key concepts in technical project management and are well-prepared for hands-on project work in Week 2. The schedule includes a mix of lectures, interactive sessions, hands-on exercises, and team activities to reinforce learning and build practical skills.

Week 2 Plan

Objective: Week 2 will focus on hands-on project work, applying the concepts learned in Week 1. Students will work in teams to develop and implement their projects, emphasizing Agile methodologies, SDLC principles, and effective communication.

Schedule: Monday to Friday, 13:00 – 17:00 EEST



Day 6: Project Kickoff and Planning

13:00 - 14:00: Formal Project Kickoff

- Official start of project work.
- Teams present their initial project plans and receive feedback from mentors and peers.
- Finalize project scope, objectives, and deliverables.

14:00 - 14:30: Break

14:30 - 17:00: Detailed Project Planning

- Detailed planning sessions within teams.
- Define tasks, assign responsibilities, and set deadlines.
- Use project management tools to create a project timeline and task board.

Day 7: Implementation and Development

13:00 - 14:00: Development Sprint 1

- Teams begin working on their projects, focusing on implementation.
- Daily stand-up meetings to discuss progress, challenges, and next steps.
- Mentorship and guidance from technical mentors.

14:00 - 14:30: Break

14:30 - 17:00: Continued Development

- Continue with the implementation phase.
- Ensure adherence to Agile practices and SDLC principles.
- Regular check-ins with mentors to ensure teams are on track.

Day 8: Testing and Quality Assurance

13:00 - 15:00: Introduction to Testing



- Overview of testing methodologies (unit testing, integration testing, system testing, acceptance testing).
- Importance of quality assurance in project development.

15:00 - 15:30: Break

15:30 - 17:00: Hands-On Testing

- Teams conduct testing on their projects.
- Identify and document bugs and issues.
- Implement fixes and improvements based on test results.

Day 9: Finalizing Projects and Preparing Presentations

13:00 - 15:00: Project Finalization

- Teams finalize their projects, incorporating feedback from testing.
- Ensure all deliverables are completed and meet the defined requirements.

15:00 - 15:30: Break

15:30 - 17:00: Presentation Preparation

- Teams prepare their final presentations, highlighting key learnings, challenges, and outcomes.
- Rehearsal sessions with mentors to refine presentations and improve delivery.

Day 10: Final Presentations and Evaluations

13:00 - 16:00: Final Presentations

- In keeping with Agile stand-up sessions, teams will have 15 minutes to present their completed projects to a panel of judges, including faculty, industry experts, and THT representatives.
- The presentations will walk the judges through the SDLC project lifecycle, including applicable lessons learned. If slides are included, 9 slides (including title slide, etc. maximum will be permitted. An example slide deck will be provided prior to the end of week-one.



- Constructive project feedback will be provided in real time including project quality, adherence to SDLC principles, status reporting, and communication effectiveness.

16:00 - 16:30: Break

16:30 - 17:00: Feedback and Reflection

- Judges provide feedback on the projects and presentations.
- Reflection session for students to share their experiences and lessons learned.
- Announcement of students selected for the incubator program based on performance.

This Week 2 plan will ensure that students apply their learning in a practical setting, working through the entire project lifecycle from planning to implementation, testing, and final presentation. The schedule will balance hands-on project work with mentorship and feedback sessions, providing a comprehensive learning experience that prepares students for future roles in the incubator program and beyond.