



Association 42
96, Boulevard Bessières
75017 Paris
FRANCE

ACADEMIC RESULTS FOR GIOVANNI PIROZZI

I, the undersigned Sophie VIGER, Managing Director of 42 Paris located at 96, Boulevard Bessières, 75017 Paris, FRANCE, hereby certify that:

Giovanni Pirozzi, born on 09 agosto 1999 in Bagno a ripoli (Italia)

obtained the grades detailed below as of 21 maggio 2025.

This certificate is delivered upon request for all legal intents and purposes.

Selected in: Ottobre 2024

Curriculum started on: 18 novembre 2024

Curriculum ended on: -

Founded in 2013, 42 is a worldwide network of ICT schools. We are a non-traditional educator offering high-quality and scalable software engineering education to anyone who wants to learn.

It is our mission to prepare the next generation for the jobs of today and tomorrow. We do so using an innovative educational model, which relies on peer-to-peer learning, project-based and hands-on approach to programming. Our innovative model, allowing individual pace and path, has proven that our students become industry-ready software engineers within 2 to 5 years.

The progression of the student inside the curriculum is represented by its level, over 21.

The current level of the student is: 4.19.

The 42 curriculum is divided into two halves: the common core and the 42 advanced part. Once students complete the first half (the common core), they have the option to either continue their journey in the 42 advanced part, or conclude their progression and become an alumni at any point during this second part.

The current situation of the student is: in the Common Core.

See details below.

Made in Paris, on 21 maggio 2025

DETAILS

Here is a description of each part of the curriculum and the current position of the student:

The Common Core

The common core of the 42 curriculum represents the minimum set of skills to be ready for a first professional experience. It provides basic and standard coding skills, as well as a fruitful range of soft skills. The delay of the CC is approximately between 1 and 2 years. The following information represent the skills developed during this part of the curriculum and the current progression of the student:

Giovanni Pirozzi : Common core achieved at: 36%.

Developed skills during the entire common core:

- **Algorithms & AI:** Standards algorithms on standards structures: searching, sorting, insertion, deletion, balance, on: arrays, linked lists, trees. State machine and asynchronous management.
- **Graphics:** Image management, RGB structure of an image, manipulating areas, drawing into an image, interacting with the window management system and getting user events and inputs from keyboard and mouse, programming with callbacks and event loop.
- **Group & interpersonal:** Collaboration, relationships and group management situations, including different kinds of interactions between people (friendly, tensions ...)
- **Imperative programming:** Basics of coding in C : the C syntax, variable, loops, conditional branches, functions, recursivity, instructions, calculus and expressions, comparisons operators, standard and advanced types, strings processing, structures, includes and libraries, memory allocation and release, linked lists, trees, the C standard library
- **Network & system administration:** Basics of computer networking : IP addresses, subnets, default routing, local network structure, host to host connectivity to network services; Basics of system administration : operating system installation with Linux, setting up security, access, users, storage, installing network services like mail, dns, web server, ...
- **Object-oriented programming:** Object programming principles in C++, classes, namespaces, constructors and destructors, memory management in C++, inheritance, abstraction, overloading, templates, standard C++ library types and tools
- **Rigor:** The need to fulfill administrative and technical constraints. The need for a wide and deep testing process to eliminate failure.
- **System programming:** Classic Unix system interactions : system calls, filesystem access and management, process creation, execution, management; inter-process communications : pipes and signals; device management and ioctl, terminal capabilities; network communication : TCP & UDP sockets, DNS resolution, endianness
- **Web:** The client-server architecture involved in the web, role and actions of the web server, role and actions of the web browser; The HTTP protocol; Web technologies involved : HTML, CSS, Javascript, images and videos; Backend language and framework for dynamic websites: one among php, ruby, python, go, javascript, Rails, Symfony, Django, Node, ... ; MVC model; users web services : web sessions, authentication, cookies, search, caddie, backoffice configuration, ... ; Basics of user experience, user interface, and

design.

Details of each validated project in appendix 1.

The 42 Advanced Part

The 42 Advanced offers a choice of path among various ICT specialisations: each student can select the topic(s) she/he wants to develop and improve. This part of the curriculum also contains several professional experiences (internships, part-time jobs, ...).

No projects completed yet

Professional experience: no professional experience yet

Details of the validated projects in appendix 2.

SPECIAL

A student can eventually benefit from special programs or projects valuable for their personal skill set, and thus included in their curriculum. They are mentioned here:

Name	Equivalent workload
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APPENDIX 1

Projects covered during the common core:

Name	Estimated workload	Result	Associated skills	Validation date
Libft	70H	Pass with bonus	Rigor, Algorithms & AI, Imperative programming	30 novembre 2024
ft_printf	70H	Pass	Rigor, Algorithms & AI	17 dicembre 2024
Born2beroot	40H	Pass with bonus	Rigor, Network & system administration	10 gennaio 2025
get_next_line	70H	Pass with bonus	Rigor, Algorithms & AI, Unix	13 gennaio 2025
minitalk	50H	Pass with bonus	Rigor, Unix	17 febbraio 2025
so_long	60H	Pass with bonus	Imperative programming, Graphics	26 febbraio 2025
Exam Rank 02	0H	Pass		27 febbraio 2025
push_swap	60H	Pass with bonus	Rigor, Algorithms & AI, Unix, Imperative programming	05 marzo 2025
Exam Rank 03	0H	Pass		20 marzo 2025
Philosophers	70H	Pass with bonus	Rigor, Unix, Imperative programming	27 marzo 2025
minishell	210H	Pass	Rigor, Unix, Imperative programming	19 maggio 2025

APPENDIX 2

Projects covered during the 42 advanced:

Name	Estimated workload	Result	Associated skills	Validation date
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Internship and professional experiences				
Company name	Duration	Validation	Skills	Validation date
-				

APPENDIX 3

Description of each covered project:

Name	Description
Libft	This project is your very first project as a student at 42. You will need to recode a few functions of the C standard library as well as some other utility functions that you will use during your whole cursus.
ft_printf	This project is pretty straightforward, you have to recode printf. You will learn what is and how to implement variadic functions. Once you validate it, you will reuse this function in your future projects.
Born2beroot	This project aims to introduce you to the wonderful world of virtualization.
get_next_line	May it be a file, stdin, or even later a network connection, you will always need a way to read content line by line. It is time to start working on this function, which will be essential for your future projects.
minitalk	The purpose of this project is to code a small data exchange program using UNIX signals. It is an introductory project for the bigger UNIX projects that will appear later on in the cursus.
so_long	This project is a small 2D game with minilibx. You'll learn about textures, sprites and tiles.
Exam Rank 02	This project will evaluate your abilities and knowledge about programming.
push_swap	This project involves sorting data on a stack, with a limited set of instructions, and using the smallest number of moves. To make this happen, you will have to manipulate various sorting algorithms and choose the most appropriate solution(s) for optimized data sorting.
Exam Rank 03	This project will evaluate your abilities and knowledge about programming.
Philosophers	This project aims to teach concurrent programming, focusing on multithreading and multiprocessing.
minishell	The objective of this project is for you to create a simple shell.