Association 42 Lyon Auvergne-Rhône-Alpes
78, route de Paris
69260 Charbonnières-les-Bains
FRANCE

ACADEMIC RESULTS FOR DANIS CINDRAK

I, the undersigned, Caroline LE BRUN, Managing director of the school 42 Lyon located at 78, route de Paris 69260 Charbonnières-les-Bains, hereby certify that:

Danis Cindrak, born on June 18, 2002 in Amberieu en bugey (France)

obtained the grades detailed below as of August 31, 2025.

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

Selected in: **July 2023**
Curriculum started on: **November 06, 2023**
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: **15.11.**

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 42 advanced part.**
See details below.

Made in Charbonnière les Bains, on August 31, 2025

Campus Région du Numérique
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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:

Danis Cindrak : Common core achieved at: **100%.**

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, authentification, 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, ...).

- Security: 1
- Devops: 1
- System & Kernel: 1

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	Rigor, Algorithms & AI, Imperative programming	November 10, 2023
get_next_line	70H	Pass with bonus	Rigor, Algorithms & AI, Unix	November 16, 2023
ft_printf	70H	Pass	Rigor, Algorithms & AI	November 16, 2023
Born2beroot	40H	Pass	Rigor, Network & system administration	November 22, 2023
Exam Rank 02	3H	Pass		November 28, 2023
so_long	60H	Pass	Graphics, Imperative programming	December 01, 2023
pipex	50H	Pass	Unix, Imperative programming	December 01, 2023
push_swap	60H	Pass	Rigor, Algorithms & AI, Unix, Imperative programming	December 08, 2023
Exam Rank 03	3H	Pass		December 12, 2023
Philosophers	70H	Pass	Rigor, Unix, Imperative programming	January 05, 2024
minishell	210H	Pass with bonus	Rigor, Unix, Imperative programming	January 22, 2024

NetPractice	50H	Pass	Rigor, Network & system administration	January 24, 2024
CPP Module 00	22H	Pass	Rigor, Imperative programming, Object-oriented programming	February 15, 2024
CPP Module 01	12H	Pass	Rigor, Imperative programming, Object-oriented programming	February 19, 2024
CPP Module 02	12H	Pass	Rigor, Imperative programming, Object-oriented programming	February 26, 2024
CPP Module 03	12H	Pass	Rigor, Imperative programming, Object-oriented programming	February 28, 2024
miniRT	280H	Pass	Rigor, Algorithms & AI, Graphics, Imperative programming	March 06, 2024
Exam Rank 04	0H	Pass		March 12, 2024
CPP Module 04	12H	Pass	Rigor, Imperative programming, Object-oriented programming	March 12, 2024
CPP Module 05	25H	Pass	Rigor, Imperative programming, Object-oriented programming	March 19, 2024
CPP Module 06	25H	Pass	Rigor, Imperative programming, Object-oriented programming	March 25, 2024
CPP Module 07	25H	Pass	Rigor, Imperative programming, Object-oriented programming	March 27, 2024
CPP Module 08	25H	Pass	Rigor, Imperative programming, Object-oriented programming	April 09, 2024
CPP Module 09	40H	Pass	Rigor, Imperative programming, Object-oriented programming	May 07, 2024
Inception	210H	Pass with bonus	Rigor, Network & system administration	June 07, 2024
Exam Rank 05	0H	Pass		June 18, 2024
ft_irc	175H	Pass with bonus	Rigor, Unix, Network & system administration, Object-oriented programming	June 20, 2024
Exam Rank 06	0H	Pass		June 27, 2024
ft_transcendence	245H	Pass with bonus	Rigor, Web, Group & interpersonal	July 10, 2024

APPENDIX 2

Projects covered during the 42 advanced:

Name	Estimated workload	Result	Associated skills	Validation date
snow-crash	147H	Pass	Unix, Security, Adaptation & creativity	March 01, 2025
Work Experience I	2880H	Pass with bonus	Company experience, Group & interpersonal	March 24, 2025
malloc	49H	Pass with bonus	Algorithms & AI, Unix	April 01, 2025
Inception-of-Things	200H	Pass with bonus	Rigor, Network & system administration	August 07, 2025
avaj-launcher	50H	Failed	Rigor, Adaptation & creativity, Imperative programming, Object-oriented programming	August 09, 2025
ft_ping	49H	in progress	Unix, Network & system administration, Imperative programming	-
Work Experience II	2880H	in progress	Company experience, Group & interpersonal	-
ft_IaC	350H	in progress	Security, Adaptation & creativity, Network & system administration	-

Internship and professional experiences				
Company name	**Duration**	**Validation**	**Skills**	**Validation date**
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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.
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.
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.
Exam Rank 02	
so_long	This project is a small 2D game with minilibx. You'll learn about textures, sprites and tiles.
pipex	This project aims to deepen your understanding of the two concepts that you already know: Redirections and Pipes. It is an introductory project for the bigger UNIX projects that will appear later on in the cursus.
push_swap	This project involves sorting data on a stack, with a limited set of instructions, and 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	
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.
NetPractice	NetPractice is a general practical exercise to let you discover networking.
CPP Module 00	This first module of C++ is designed to help you understand the specifities of the language when compared to C. Time to dive into Object Oriented Programming!
CPP Module 01	This module is designed to help you understand the memory allocation, reference, pointers to members and the usage of the switch in CPP.
CPP Module 02	This module is designed to help you understand Ad-hoc polymorphism, overloads and orthodox canonical classes in CPP.
CPP Module 03	This module is designed to help you understand Inheritance in CPP.
miniRT	This project is an introduction to the beautiful world of Raytracing.
Exam Rank 04	
CPP Module 04	This module is designed to help you understand Subtype polymorphism, abstract classes and interfaces in CPP.
CPP Module 05	This module is designed to help you understand Try/Catch and Exceptions in CPP.
CPP Module 06	This module is designed to help you understand the different casts in CPP.
CPP Module 07	This module is designed to help you understand Templates in CPP.
CPP Module 08	This module is designed to help you understand templated containers, iterators and algorithms in CPP.
CPP Module 09	This module is designed to help you understand the containers in CPP.
Inception	This project aims to broaden your knowledge of system administration by using Docker. You will virtualize several Docker images, creating them in your new personal virtual machine.
Exam Rank 05	
ft_irc	Create your own IRC server in C++, fully compatible with an official client.
Exam Rank 06	
ft_transcendence	This project is centered around the design, development, and organization of a full-stack web application.
snow-crash	This project is an introduction to computer security. Snow Crash will make you discover security in various sub-domains, with a developer-oriented approach. You will become familiar with several languages (ASM/perl/php...), develop a certain logic to understand unknown programs, and become aware of problems linked to simple programming errors
Work Experience I	Your first step in a company is an important milestone in your 42 training. This employment project is designed to help you discover the professional world and apply your work ethic and adaptability in a real-world context. It represents a first asset for your resume and offers an opportunity to identify your future field of interest.
malloc	What's the deal with malloc? You've been using it since the piscine C but it's not a system call. Find out the workings behind optimum memory management and recode it, as well as free and realloc.
Inception-of-Things	This project aims to introduce you to kubernetes from a developer perspective. You will have to set up small clusters and discover the mechanics of continuous integration. At the end of this project you will be able to have a working cluster in docker and have a usable continuous integration for your applications.