

Indivist Certification and Curriculum

Coding has become a task that AI can perform. Yet people are the ones who direct that work. You can develop a system without knowing how to write every line of code, but without basic knowledge you may struggle to tell AI what to do. You need a broad understanding of computers, even if you do not master every detail, because AI can assist with detailed implementation.

This calls for a new kind of education, along with a way to recognize what learners have achieved. Indivitech aims to train people who build IT systems with AI in this new era. We call the qualification Indivist.

Indivist Qualification Paths

Indivist Professional

A person who uses basic computer and IT knowledge to develop general-purpose systems with AI.

Theory: programming languages, computer architecture, and web systems. Practice: developing business systems.

Indivist Expert

A person who develops a wide range of systems with computers and creatively develops new technologies.

Theory: systems, mathematical foundations, and algorithms. Practice: developing specialized systems.

Subjects

Subject	Content	Path
Programming languages	Basic structures of C, C++, Java, Swift, OOP, and other languages	Professional
Computer architecture	Computer system architecture and network systems	Professional
Web systems	HTTP, HTTPS, JavaScript, JSP, PHP, and Apache web systems	Professional
Systems	Operating systems and databases	Expert
Mathematical foundations	Matrices, vectors, series, Fourier series, cosine transforms, discrete cosine transforms, and graphs	Expert
Algorithms	JPEG and PNG image formats, MPEG-4 video, face and fingerprint recognition, speech and phoneme recognition, and natural language processing	Expert

Indivist certification is planned to begin in 2027.

Why Is Indivist Certification Necessary?

What Changes in the Age of AI?

Indivitech has introduced a system that uses AI to develop software. Explain a program in detail to AI, and the tool can create one system for use on PCs, smartphones, and the web in a short time. This is the capability we want people to learn to use.

Many such tools are emerging in the age of AI. People use AI to create music, designs, videos, and many kinds of IT programs. We can call this an era of AI-assisted production.

Can AI make everything while people do nothing? There are many views on this question. My answer is that even when AI performs specialist work, people without expertise in that field may not get the best result. For an expert, AI can be an enormous help. For someone who knows nothing about the field, it may be little more than a toy. AI may eventually surpass today's experts in many tasks. Even then, I believe the combination of a leading expert and AI will produce results that a nonexpert will find difficult to match.

Give AI Accurate Information

Figure 1 shows three linear functions.

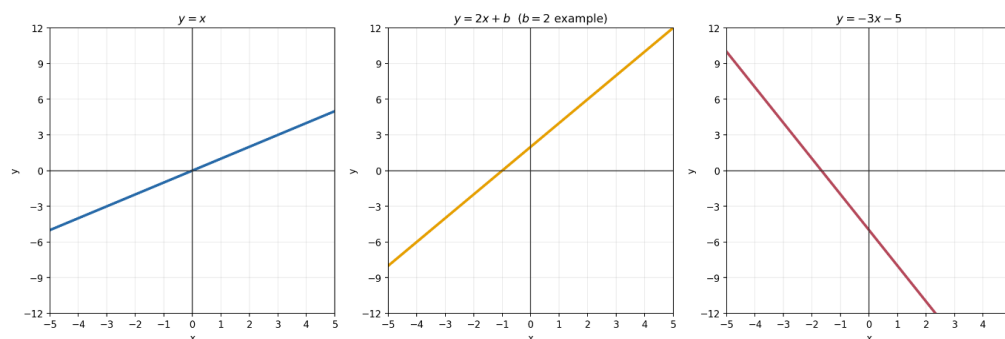


Figure 1 Different graphs of linear functions

A linear function has the form $y = ax + b$. Its graph changes according to the values of the constants a and b . The graphs labeled (a), (b), and (c) in Figure 1 are all different. Suppose someone asks:

“AI, this phenomenon follows a linear function. Does that mean we will succeed or fail?”

Without the values and the context, any answer has too little basis for a sound judgment. The values of a and b can change the shape and direction of the graph. If we give AI those values, it can tell us whether the function is increasing or decreasing.

We sometimes see a similarly vague question: “We are going to sell an AI development tool. Can we succeed?”

AI might ask:

“What kind of development tool is it?”

The user replies:

“Just a software development tool.”

AI might then say:

“There are many major development tools worldwide, so competition will be intense. Building AI development systems can also demand powerful GPUs and substantial infrastructure.”

Now suppose the user adds:

“We do not have GPUs. It is a development tool that runs on an ordinary PC.”

AI could understandably reach a pessimistic conclusion. Major AI software development systems already exist, backed by substantial technology and infrastructure. Without those resources, why would AI predict success? But if we explain our tool’s distinguishing features, the field it serves, how it is used, and who its users are, AI can begin to model the business and examine its market and potential for growth.

When someone gives AI only a brief description and then sees an unfavorable answer, they may say, “This is serious. The AI result is very bad.” Many people use AI this way across different fields, and it can create confusion about what the answer actually means.

If we do not give AI accurate information, it can suggest the wrong conclusion.

AI Builds on Knowledge Accumulated by People

Put simply, AI draws on the body of knowledge and technology people have created. It organizes and presents information developed up to now; it does not hand us the future itself. We must make the future. To do that, we need access to the best information available today. AI can provide that information, while people use it to develop new ideas and combinations.

“AI can never create something truly original.”

This is why I believe people in the AI era should develop expertise across many fields. They do not need to know every detail; AI can help explain details as needed. In economics, for example, they should know the concept of using a Markov model even if they cannot build the model themselves. If you have never heard of that model, it may be harder to ask AI for useful help in economics or management. A person who understands those fields can get very different results from the same AI than someone who does not.

Learn Broadly, Rather Than Only in Depth

Education needs to change. Instead of studying each subject only in isolation and depth, we should also learn a broad range of disciplines and how they connect.

Imagine a company trying to retain customers and reduce churn. A person might think, “Perhaps we should evaluate this with a Markov model,” and then tell AI, “I will give you the data needed for a Markov model. Analyze it for me.” AI can then produce a more useful, optimized assessment. The person needs to know what the model is, even if AI handles its detailed setup and can explain it on request.

A Markov model is not the only way to examine retention and churn. There are other algorithms, and people should know what they are and how they differ so they can decide which to use. That judgment remains a human responsibility. Without that knowledge, someone may only ask, “AI, why are customers leaving?” and receive an answer too vague to be useful.

The Difference Between Experts and Nonexperts

Two videos were made with the same AI video tool, Kling. One was made by someone without video expertise, and the other by a video expert. The difference between the results is clear to me.

Comparison video 1 <https://youtu.be/2Vgrw7Am4Xg?si=akZd2QYHPyBjqmPT>

Comparison video 2 https://youtube.com/shorts/qfE3Nu_gk_A?si=xluQB7eYju4SWILO

Even with AI, a lack of expertise in a field can make a substantial difference to the result.

Learn with AI in the Age of AI

The Indivitech development tool makes all the source code visible. Open an individual source file in the corresponding tool and you can see its contents. In simple terms, this is an open-source concept: users can inspect the source of what they build.

The commercial value lies in the server system rather than a charge for the development tool. A system needs a server in order to run. Indivitech combines the physical server and operating environment as a turnkey service, and charges for operating that server system. “The development tool is free to use, while operating the server system incurs a fee.” That cost is comparable in nature to renting a server on the market.

The difference is that our server system also comes with the AI development tool and an environment configured to run its core solutions: live broadcasting, video conferencing, internet calling, chat, and community features.

As a system grows, its visible source can be deployed on a server that the customer operates directly.

Become an Expert by Building with Indivitech

The Indivitech system can help you become an expert. It includes the major core engines used by its IT systems. Show the source to AI, and AI can explain how it is structured and what it does. “As you build programs with the Indivitech development tool, you develop your expertise as a programmer.”

AI can explain the algorithms behind video conferencing, live broadcasting, and chat in detail. That broadens your knowledge of programming. Even if you do not know how to code a chat system yourself, understanding its structure allows you to ask AI to build another system that works in a similar way. You can develop expertise in chat systems through that process. Using Indivitech means learning and growing as a developer while you make programs.

The people needed in the AI era are those who can give AI specialized instructions. A programming professional in this era is someone who can specify the right programming algorithms for AI to implement. Indivitech aims to help you become that person.