

> Institut Mines-Télécom presents a portrait of the engineer of 2030

In this fast-changing world with its digital transformation and energy transition, what challenges will engineers be facing in 2030 and, above all, what cross-functional skills will they be expected to have? Plenty has already been written on these questions, but Institut Mines-Télécom felt it was necessary to propose a prospective study sketching a portrait of the engineer of the future. This work aims to serve as a starting point for reflection within the Institut's schools as well as for all stakeholders in higher education, students in post-secondary education, those preparing to enter Grandes Ecoles, and future employers.

The Institut Mines-Télécom approach

This portrait, sketched by the Institut Mines-Télécom's Career Observatory, in connection with Sociovision, is based on:

- an in-depth analysis of the prevailing trends that have long-term effects on the environment that **engineering** skills are used in;
- information needed for defining future directions (the "drivers"), collected through interviews with experts and the monitoring of publications;
- a schema of cross-functional skills in five fields, based on a two-dimensional reference frame.

2030: five essential fields of skill

Educating the engineers of tomorrow will require investing in five essential fields of cross-functional skills:

> Expertise: a strong conceptual sense of reasoning with which to address technological transitions,

> **Ingenuity:** the ability to reach beyond one's own knowledge and frames of reference through an understanding of different customs and cultures,

> **Agility**: the ability to be creative and empathize with the client, to understand that the solution lies with others,

> **Responsibility**: the ability to review the present to define the future, with a sense of the collective interest,

> **Influence**: the ability to draw different skills around oneself and to be an interface that generates trust and loyalty.

A study for the whole of the educational community

"Since this is a prospective approach," explains Bertrand Bonte, Director of Development & Careers at Institut Mines-Télécom, "the work constitutes more of a sketch than a definitive portrait of the engineer of 2030. Institut Mines-Télécom is putting it forward for consideration and discussion to anyone in the educational community who may be interested."

Watch the video :

http://www.mines-telecom.fr/en/training/career-perspective-and-jobs-outlook/careerobservatory/

And you, what is your vision of the engineer of tomorrow? Debate and follow the discussions on Twitter: #Ingénieur2030

About Institut Mines-Télécom www.mines-telecom.fr

Institut Mines-Télécom is a public establishment dedicated to higher education, research and innovation in the engineering and digital fields. It is made up of 10 Mines and Télécom "grandes écoles", under the aegis of the Minister for Productivity. There are 2 subsidiary schools and 2 strategic partners and a network of 11 partner schools.

Institut Mines-Télécom is nationally and internationally renowned for the high standard of its courses for engineers, managers and PhD students, and its research and innovation activities.

Institut Mines-Télécom is a member of the Allistene, Aviesan and Athena national alliances for research planning. It maintains close relationships with the business world and has two Instituts Carnot. Every year, some one hundred start-up businesses are born.

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