



Hur bygger vi framtidens medarbetare?

Greta Braun | Chalmers Tekniska Högskola | Industri- och Materialvetenskap



The Industrial Revolutions



1



2



3



4



The Industrial Revolutions

1



2



3



4



5

Human-centric

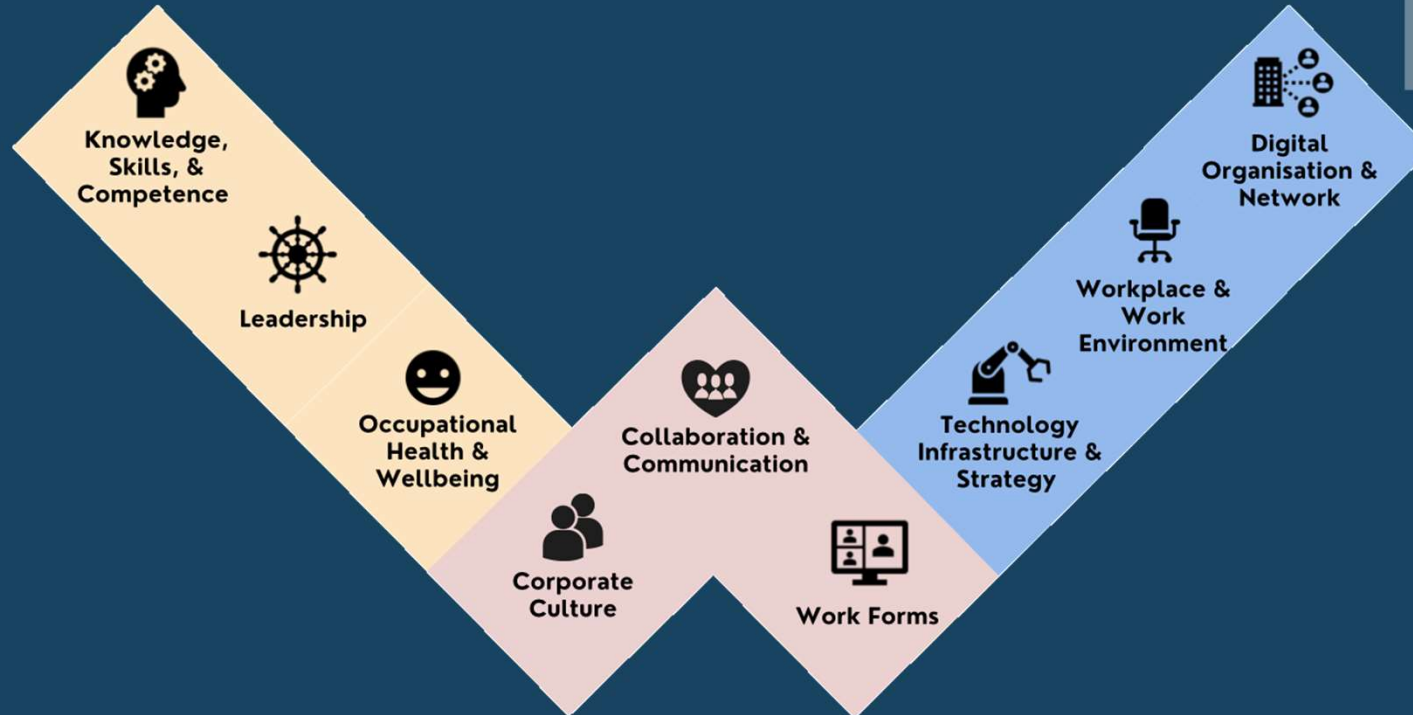
Resilient

Sustainable

“44% of employees’ skills will have to change drastically.”
World Economic Forum, 2023



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Singer-Coudoux, K., Braun, G., Stahre, J. *Managing Change Towards the Future of Work*. 2023. IFIP Advances in Information and Communication Technology.



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WORLD
ECONOMIC
FORUM



**Don't expect more
of AI than it can do,
says Sam Altman**

4:54



***Europa behöver vara ledande inom innovation
för att kunna vara konkurrenskraftig.***

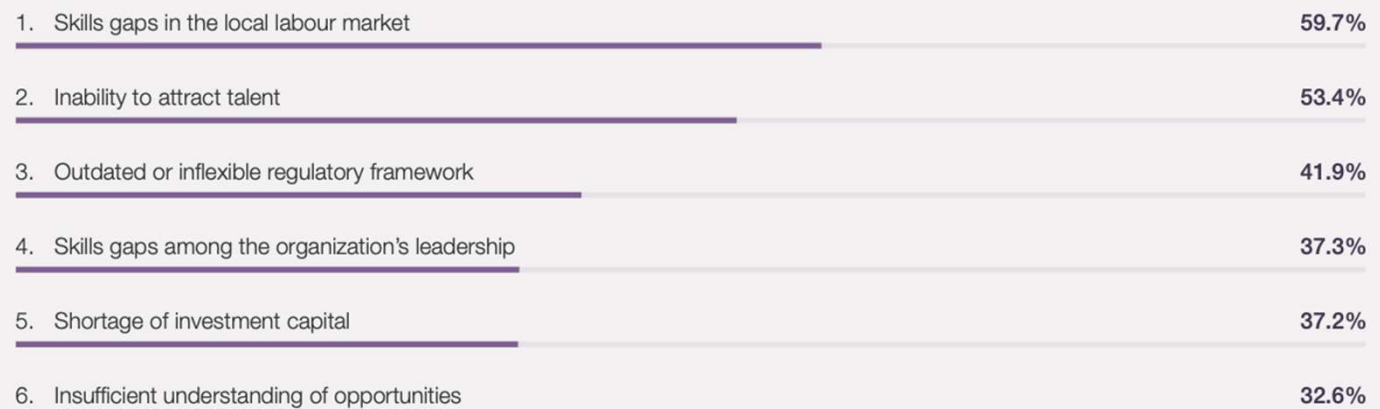
ERT Vision Paper. Securing Europe's place in a new world order. 2023.



***För att kunna vara ledande inom innovation
behöver vi investera i kompetensutveckling.***

ERT Vision Paper. Securing Europe's place in a new world order. 2023.

Barriers to business transformation, 2023-2027



Source

World Economic Forum, Future of Jobs Survey 2023.



Business changes, and so do work roles



Fastest growing vs. fastest declining jobs

Top 10 fastest growing jobs

1.	AI and Machine Learning Specialists
2.	Sustainability Specialists
3.	Business Intelligence Analysts
4.	Information Security Analysts
5.	Fintech Engineers
6.	Data Analysts and Scientists
7.	Robotics Engineers
8.	Big Data Specialists
9.	Agricultural Equipment Operators
10.	Digital Transformation Specialists

Top 10 fastest declining jobs

1.	Bank Tellers and Related Clerks
2.	Postal Service Clerks
3.	Cashiers and ticket Clerks
4.	Data Entry Clerks
5.	Administrative and Executive Secretaries
6.	Material-Recording and Stock-Keeping Clerks
7.	Accounting, Bookkeeping and Payroll Clerks
8.	Legislators and Officials
9.	Statistical, Finance and Insurance Clerks
10.	Door-To-Door Sales Workers, News and Street Vendors, and Related Workers

Source
World Economic Forum, Future of Jobs Report 2023.

Note
The jobs which survey respondents expect to grow most quickly from 2023 to 2027 as a fraction of present employment figures



"An operator who assembles batteries"

 Image Creator from Designer

Powered by DALL-E 3

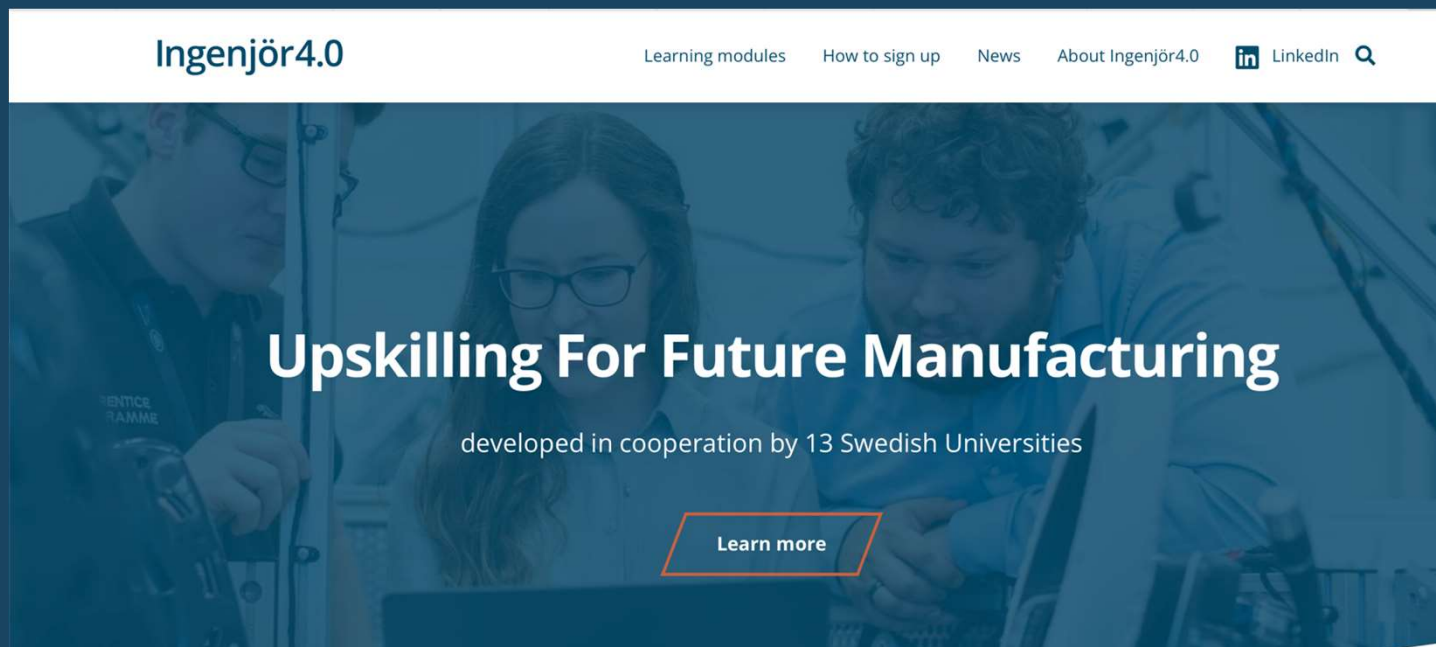


"A future worker in industry 5.0"

 Image Creator from Designer

Powered by DALL-E 3

Kompetensutveckling med Ingenjör4.0



The screenshot shows the top navigation bar of the Ingenjör4.0 website. The navigation bar includes the site name 'Ingenjör4.0' on the left, and links for 'Learning modules', 'How to sign up', 'News', and 'About Ingenjör4.0' in the center. On the right, there are social media icons for LinkedIn and a search icon. Below the navigation bar is a large hero image with a blue overlay. The main heading on the page is 'Upskilling For Future Manufacturing', followed by the subtitle 'developed in cooperation by 13 Swedish Universities'. A 'Learn more' button is positioned at the bottom of the hero section.

Ingenjör4.0

Learning modules How to sign up News About Ingenjör4.0 [LinkedIn](#) [Search](#)

Upskilling For Future Manufacturing

developed in cooperation by 13 Swedish Universities

[Learn more](#)

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Apply now!

ingenjor40.se



Ingenjör4.0

Module-based upskilling
for future manufacturing

Initiated by



Developed and operationalized by



Funded by





Deep Tech Talent Initiative

The screenshot shows the website for the Deep Tech Talent Initiative. At the top left is the 'eit Tech Talent' logo, followed by the European Union flag and the text 'Funded by the European Union'. The navigation menu includes 'THE INITIATIVE', 'THE PLEDGE', 'COURSES', 'RESOURCES', 'NEWS AND EVENTS', and 'CONTACT'. There are also icons for a user profile, search, and a menu. The main content area features a large blue banner with the text 'One million people skilled in deep tech by 2025'. Below this text are two buttons: 'Courses' and 'Join the Pledge!'. To the right of the text is a circular image of a woman working in a laboratory. Below the banner are three white boxes with statistics: '769 582 Pledged Talent', '116 Pledge members', and '89 Available courses'.

eit Tech Talent

Funded by the European Union

THE INITIATIVE THE PLEDGE COURSES RESOURCES NEWS AND EVENTS CONTACT

One million people skilled in deep tech by 2025

Courses Join the Pledge!

769 582 Pledged Talent

116 Pledge members

89 Available courses



Hur får vi rätt kompetenser till rätt person vid rätt tidpunkt?

Hur kan vi brygga skill gapet?

Skill gap är gapet mellan de kompetenser en anställd har och de skills som arbetsgivaren efterfrågar.



Kompetensutveckling!

Arbetsgivare

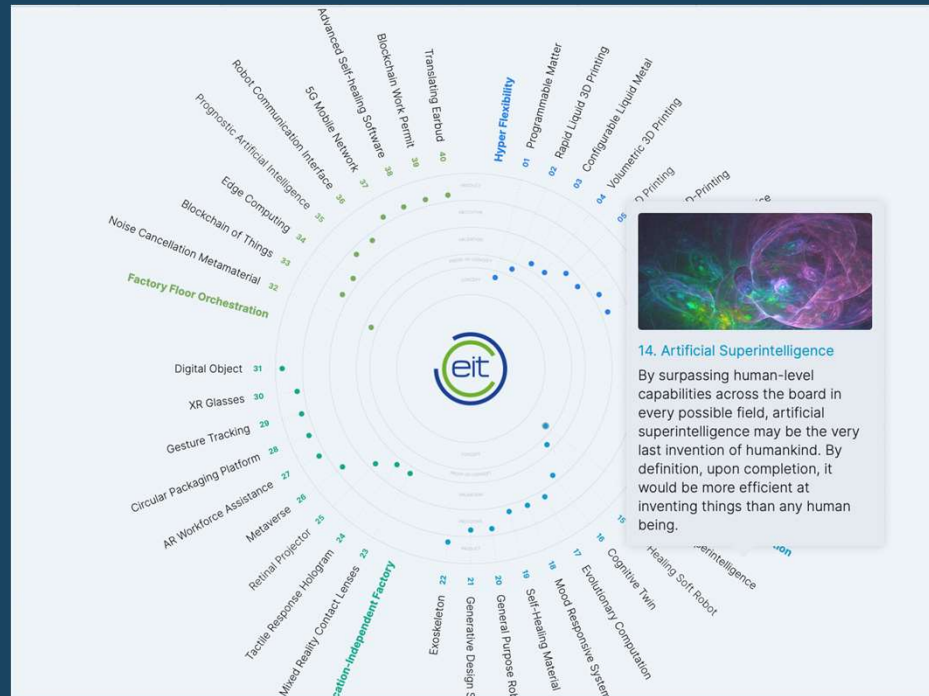
Anställda

Utbildnings-
leverantörer



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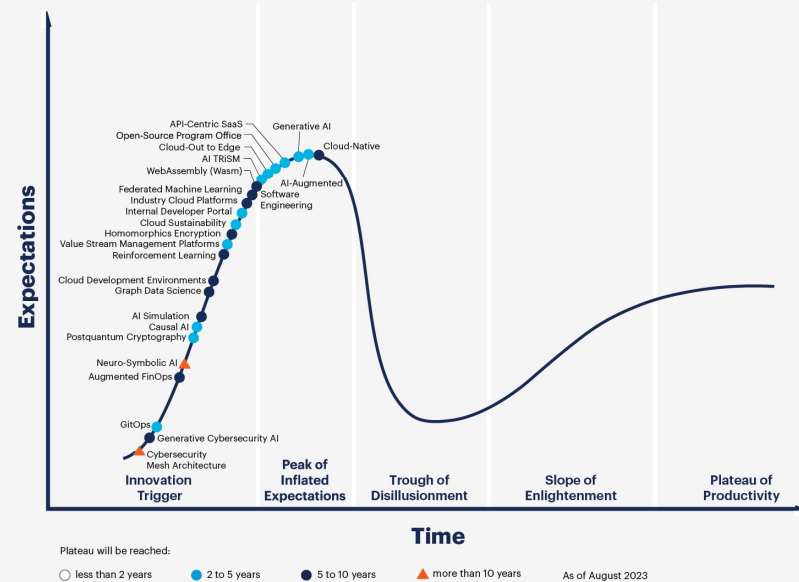
Deep Tech Radar





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Hype Cycle for Emerging Technologies, 2023



gartner.com

Source: Gartner
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Skill gap analysis for Ingenjör4.0

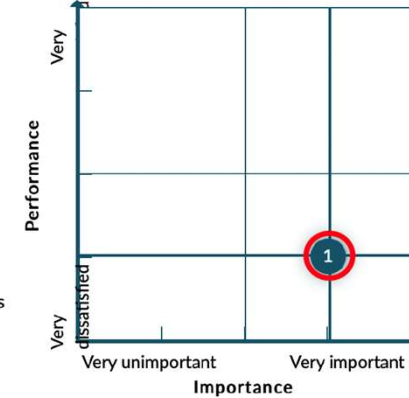


1. Additive manufacturing

2. Autonomous Robots
3. Big Data, Machine Learning and Sensors
4. Connectivity, 5G and Cloud Communication
5. Cyber Physical Systems and Digital Twins
6. Cyber Security, Industrial Data Protection and Data integrity
7. Global Production and Digital Supply Chains
8. Human Robot Collaboration
9. Management of Manufacturing Digitalization
10. Smart Maintenance
11. Smart Products and Industrial Internet of Things
12. Standards and Interoperability in Digitized Industry
13. Sustainable Product Systems
14. Sustainable Production systems
15. Visualization, Augmented Reality, and Virtual Reality Interfaces

1. Additive manufacturing Next

Place your answer below





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Hör gärna av dig om du vill prata mer om detta!

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2024-02-01