

Skills analysis Twente region

an analysis of the demand side of the labour market for six high-tech key technologies

Colophon

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Intelligence Group

Weena 210-212

3012 NJ Rotterdam

T +31 (0)88 730 28 00

info@intelligence-group.nl

www.intelligence-group.nl

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Introduction

Van Haelst & Co has asked Intelligence Group to provide insight into the labour market in the Twente region for six key technologies (see below). The analysis focuses primarily on the demand side of the labour market.

This report provides insight into labour demand in the Twente region for the following six key technologies*:

- Photonics & optical technology;
- Chip technology / semiconductors / nanotechnology;
- Robotics / automated systems / smart manufacturing;
- Artificial intelligence (AI), data & smart systems;
- Medical technology (MedTech) & sensor technology;
- Sustainable energy / battery technology / circular technology.

The focus is on skills and competencies, but the analysis also covers professions/occupations and the required level of education and experience level. This data was obtained by analyzing tens of thousands of job vacancies posted in the last two years (February 2024 – January 2026) by companies and institutions active in one or more of the above key technologies (see Appendix I for more information). The results distinguish between the individual key technologies but also address the overlap between the technologies.

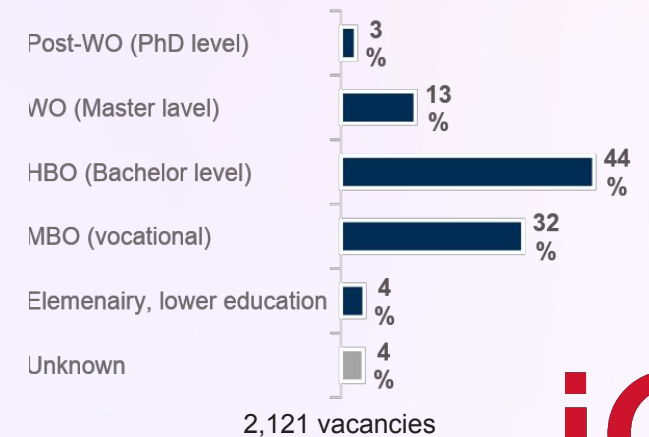
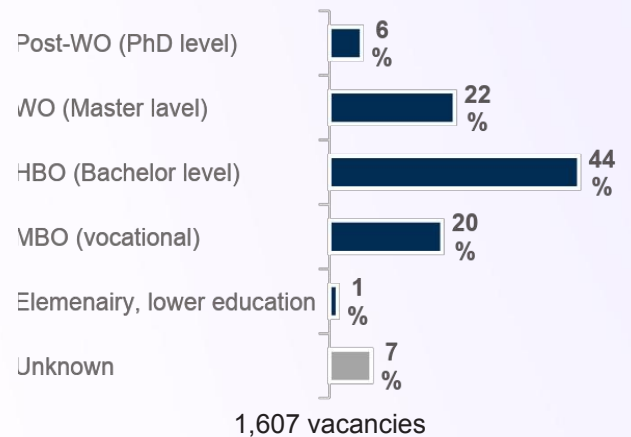
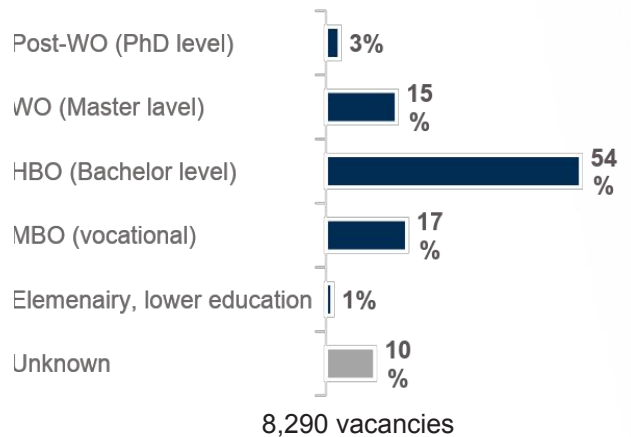
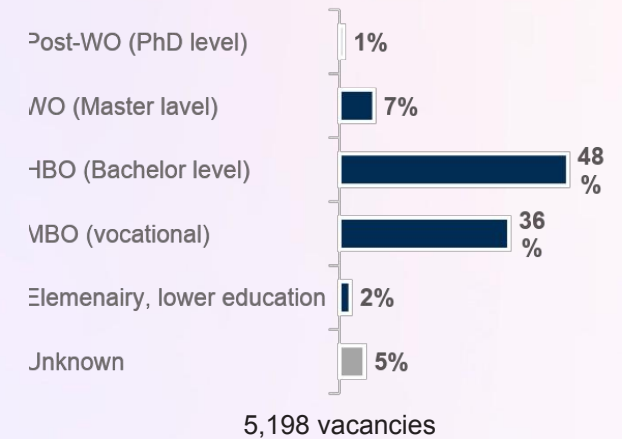
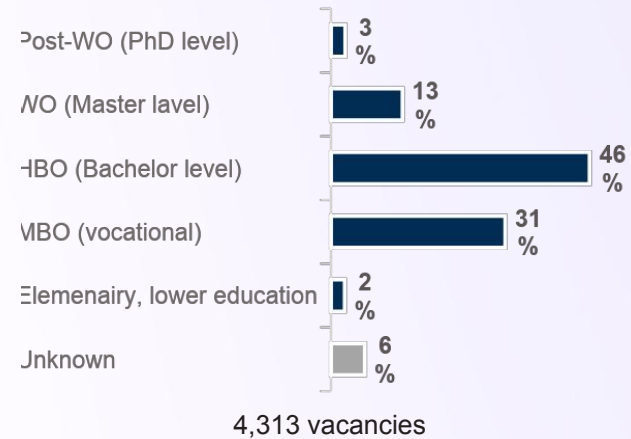
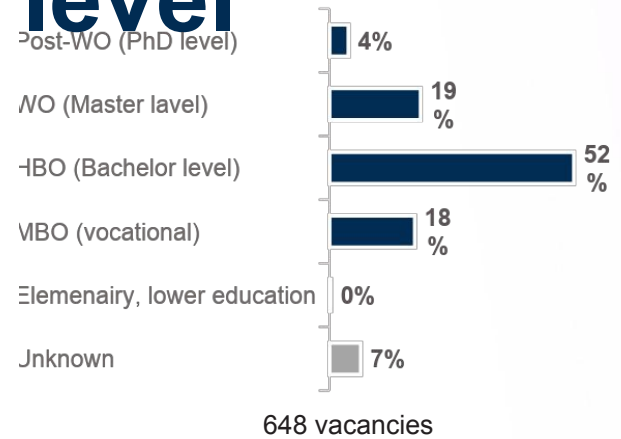
Region

The analysis and results focus primarily on the Twente region. Where possible and relevant, comparisons have been made with the Eindhoven region (Eindhoven +25 km). National results have been used for the analysis of the fastest growing skills. This is because the numbers in the Twente region quickly become small, causing comparisons over time to fluctuate greatly.

* For the sake of readability and space, the names of the key technologies in graphs and tables have been shortened to Photonics & Optics, Chips, Semiconductors & Nanotech, Robotics & Smart Manufacturing, AI & Intelligent Systems, Medical & Sensor Technologies and Energy & Circular Technologies.

Composition of labour demand – education

level

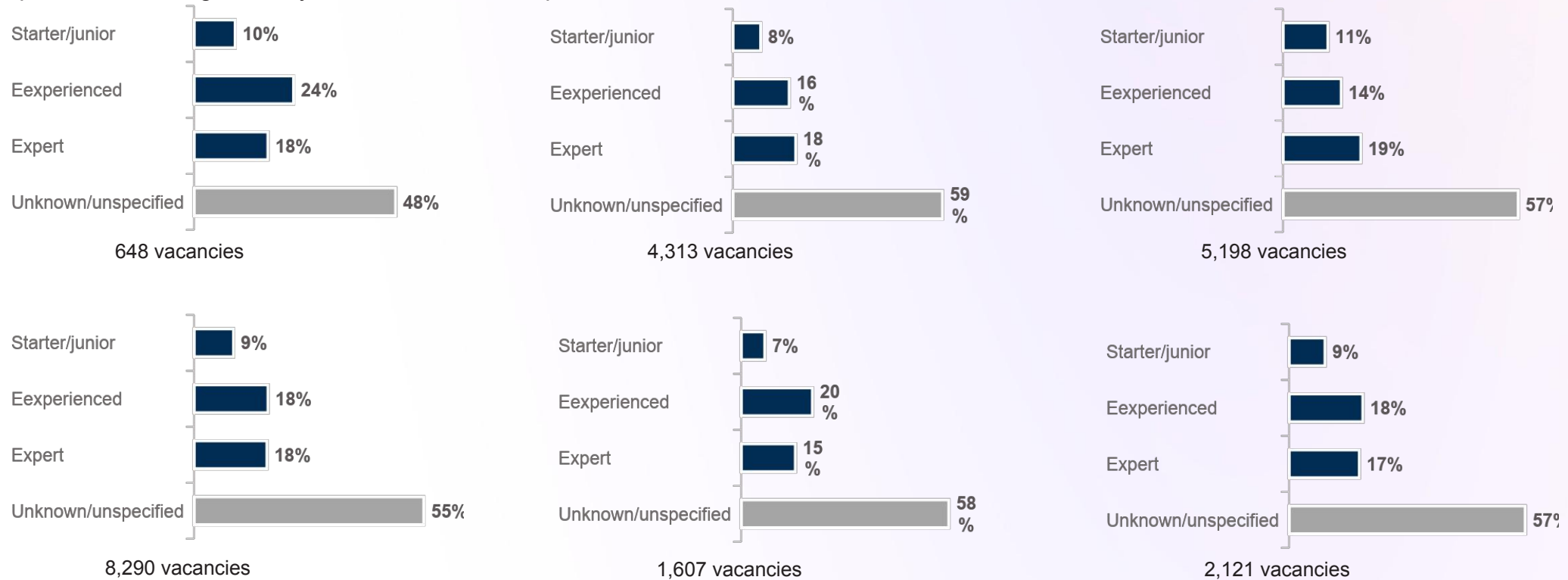


Note: Some vacancies do not specify a single educational level, but rather a combination (e.g. hHBO/WO). Such vacancies are classified at the lower of the two levels (in this case, HBO).

Source: Bullhorn Market IQ, analysis by Intelligence Group.

Composition of labour demand – experience level

For a significant proportion of vacancies, the level of experience required is not specified. This is partly because the level of experience is not always clearly recognized in job advertisements, but it is largely because it is not specified, or is insufficiently specified, in job advertisements. Some employers omit information about the level of experience required from the advertisement because it is not relevant or to avoid limiting the candidate pool. By not labeling a role as junior, mid-level, or senior, the vacancy remains open to a broader audience, which is particularly valuable in tight labor markets. In other cases, the level may depend on the candidate. Organizations may be willing to tailor responsibilities based on experience, allowing flexibility in how the role is shaped.



Composition of labour demand – organisations

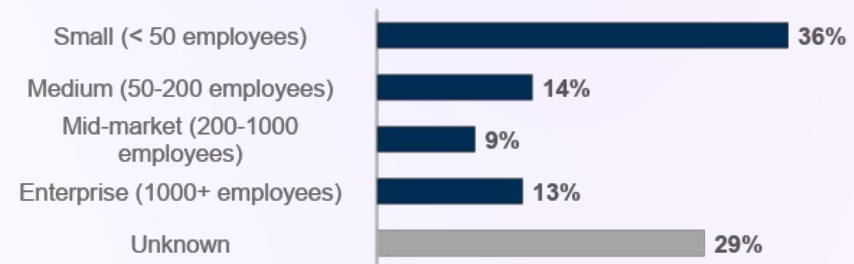
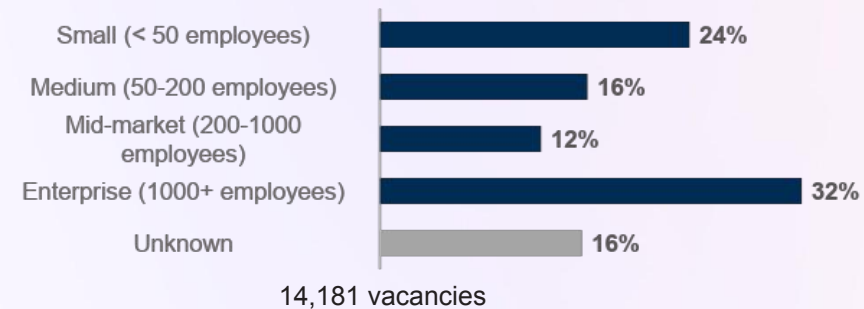
Top employers in terms of number of vacancies

Employer	# vacancies
University of Twente	1,539
Thales Nederland	1,344
Nedap	621
Voortman Steel Group	379
Saxion	323
Demcon	255
Benchmark Electronics	245
Eaton	217
VDL Groep	197
HoST Group	196

Large companies/employers dominate the list. Especially when they are active in several key technologies. Of course, also smaller companies (in terms of vacancies at least) focusing on one of the key technologies are included in the analysis. Examples are **Trumpf, PHIX, Lionix, NTS, Urenco, Romia Robotics, Micronit, Medspray, Laborie Medical Technologies, Enrichment Technology Company** en **Nx Filtration**.

Size class

The graphs show a breakdown by size class for the number of vacancies and number of organizations. The categories differ slightly from regular classifications, but these are the categories that are distinguished by the data provider (Bullhorn Market IQ).



Composition of labour demand – occupations

Most in-demand occupations by key technology

x Occurs in top list of multiple key technologies

Photonics & Optics	Chips, Semiconductors & Nanotech	Robotics & Smart Manufacturing	AI & Intelligent Systems	Medical & Sensor Technologies	Energy & Circular Technologies
PhD positie	PhD positie	Mechanical engineer	PhD positie	PhD positie	PhD positie
Wetenschappelijk onderzoeker	Software engineer	Software engineer	Software engineer	Wetenschappelijk onderzoeker	Mechanical engineer
Programmeur C, C++	Ingenieur elektrotechniek	Ingenieur elektrotechniek	Wetenschappelijk onderzoeker	Verpakkingsoperator	Servicemonteur installatietechniek
Systems engineer	Wetenschappelijk onderzoeker	Elektromonteur	Medewerker klantenservice	Financial controller	Inkoper
Software engineer	Projectleider	Servicemonteur	Java ontwikkelaar	Systems engineer	Projectleider
Business development manager	Mechanical engineer	Projectleider	Projectleider	Kwaliteitsingenieur	Engineer (overig)
Ict test engineer	Ict test engineer	Hardware engineer	Ict test engineer	Business development manager	Business development manager
Engineer (overig)	Productiemedewerker	Servicemonteur buitendienst	Systems engineer	Assemblagemedewerker	Servicemonteur
Projectleider	Inkoper	Technisch werkvoorbereider	Financial controller	Mechanical engineer	Ingenieur elektrotechniek
Tester software	Systems engineer	Inkoper	Full stack developer	Procesingenieur	Wetenschappelijk onderzoeker

Recruitment feasibility

The table below shows the most important (most demanded) occupations across the six key technologies (based on the previous table) and the recruitment feasibility in the Twente region and the Netherland. It indicates to what extent more or less effort is needed to recruit the target group. The recruitment feasibility depends on the ratio between demand (vacancies) and supply (the number of people who actively search for a (new) job). The higher the ratio, the more difficult it becomes to recruit the target group. Some of the occupations in the demand data are too broad or insufficiently specified (PhD positions, research scientist, project leader). For those occupations there is no recruitment feasibility data, hence they are excluded from the table.

Since the level of scarcity can vary for different experience levels, the table also indicates the recruitment feasibility for junior (0-5 years experience), medior (5-10 years) and senior (10+ years) for the Twente region. In general, experienced people are harder to recruit than

Occupation	Recruitment feasibility Twente region	Recruitment feasibility NL	Expectation coming 6-12 months	Junior/medior/senior
Software engineer (526)	● Fairly difficult to recruit	● Fairly difficult to recruit	↘ but remains fairly difficult	● ● ●
Mechanical engineer (332)	● Fairly difficult to recruit	● Fairly difficult to recruit	→ remains fairly difficult	● ● ●
Ingenieur elektrotechniek (302)	● Difficult to recruit	● Difficult to recruit	↗ but remains difficult	● ● ●
Systems engineer (211)	● Extremely difficult to recruit	● Very difficult to recruit	→ remains extremely difficult	● ● ●
Ict test engineer (203)	● Fairly difficult to recruit	● Difficult to recruit	↘ but remains fairly difficult	● ● ●
Financial Controller (196)	● Very difficult to recruit	● Very difficult to recruit	→ remains very difficult	● ● ●
Business developm. manager (186)	● Very difficult to recruit	● Very difficult to recruit	↑ becomes extremely difficult	● ● ●
Inkoper (184)	● Very difficult to recruit	● Difficult to recruit	↗ but remains very difficult	● ● ●
Service monteur (177)	● Extremely difficult to recruit	● Extremely difficult to recruit	↘ but remains extremely difficult	● ● ●

Not difficult ● ● ● ● ● Extremely difficult

Recruitment feasibility – International (Europe)

Based on the analysis of the most in-demand occupations, it appears that the following profiles/occupational groups are important for the six key technologies:

- Engineering
- IT/development
- Finance
- Mechanics

The following pages provide an overview of the scarcity/recruitment feasibility in Europe for each profile/occupational group. The data is derived from [Giant](#), the talent intelligence dashboard from Intelligence Group. The data is ranked by country. The ranking depends on recruitment feasibility, but also takes into account the (estimated) size of the target group (the larger the group, the easier it is to recruit), labour market activity (the higher the activity rate, the more people are actively looking for work and the easier it is to recruit), sourcing pressure (the more often people are approached, the more difficult it is to recruit), international mobility (the greater the proportion of people willing to recruit abroad, the easier it is to recruit) and labour costs in the country concerned (the higher they are, the more difficult it is to recruit).







Recruitment feasibility – International (Europe)

Engineering (1/2)

COUNTRY	SIZE OF TARGET GROUP	RECRUITMENT FEASIBILITY	JOB MARKET ACTIVITY	SOURCING PRESSURE	INTERNATIONAL MOBILITY	LABOUR COSTS
 Germany	187.200		26%	43%	34%	€ 43,40
 Romania	15.500		19%	41%	28%	€ 12,50
 Ireland	20.300		23%	46%	37%	€ 42,50
 Finland	15.200		9%	25%	34%	€ 37,70
 Bulgaria	2.800		16%	27%	21%	€ 10,60
 Greece	1.300		12%	13%	27%	€ 16,70
 Croatia	2.000		8%	19%	30%	€ 16,50
 Austria	4.200		17%	56%	36%	€ 44,50
 Lithuania	4.100		10%	33%	30%	€ 16,30
 Spain	22.600		13%	53%	32%	€ 25,50
 Switzerland	11.600		16%	56%	27%	n/a
 Denmark	13.800		16%	52%	43%	€ 50,10
 Slovakia	5.700		16%	34%	17%	€ 18,50
 Portugal	6.000		13%	49%	34%	€ 18,20

Recruitment feasibility – International (Europe)

Engineering (2/2)

COUNTRY	SIZE OF TARGET GROUP	RECRUITMENT FEASIBILITY	JOB MARKET ACTIVITY	SOURCING PRESSURE	INTERNATIONAL MOBILITY	LABOUR COSTS
 Norway	4.400		10%	35%	45%	€ 53,70
 Poland	55.900		7%	58%	19%	€ 17,30
 Hungary	12.500		9%	62%	33%	€ 14,10
 Sweden	4.000		10%	45%	31%	€ 40,30
 France	34.400		11%	50%	18%	€ 43,70
 Czech Republic	7.700		11%	46%	15%	€ 18,20
 Slovenia	2.600		17%	30%	18%	€ 27,10
 United States	n/a		15%	60%	23%	n/a
 Latvia	1.000		5%	22%	16%	€ 15,10
 Estonia	900		5%	29%	20%	€ 19,60
 Italy	9.300		11%	55%	25%	€ 30,90
 United Kingdom	n/a		11%	58%	28%	€ 36,50
 Belgium	4.200		4%	62%	17%	€ 48,20













Recruitment feasibility – International (Europe)

IT/development (1/2)

COUNTRY	SIZE OF TARGET GROUP	RECRUITMENT FEASIBILITY	JOB MARKET ACTIVITY	SOURCING PRESSURE	INTERNATIONAL MOBILITY	LABOUR COSTS
 Croatia	23.800		20%	42%	37%	€ 16,50
 Greece	7.400		19%	36%	37%	€ 16,70
 Poland	133.300		10%	52%	34%	€ 17,30
 Romania	30.500		13%	54%	33%	€ 12,50
 Germany	48.000		16%	55%	31%	€ 43,40
 France	29.800		16%	39%	21%	€ 43,70
 Switzerland	19.000		9%	62%	35%	n/a
 Finland	2.900		8%	29%	40%	€ 37,70
 Hungary	22.800		9%	64%	30%	€ 14,10
 Ireland	9.000		18%	61%	40%	€ 42,50
 Bulgaria	20.100		15%	57%	18%	€ 10,60
 Latvia	2.100		14%	40%	35%	€ 15,10
 Norway	11.000		12%	44%	32%	€ 53,70
 Slovenia	4.800		12%	34%	27%	€ 27,10



Recruitment feasibility – International (Europe)

IT/development (2/2)

COUNTRY	SIZE OF TARGET GROUP	RECRUITMENT FEASIBILITY	JOB MARKET ACTIVITY	SOURCING PRESSURE	INTERNATIONAL MOBILITY	LABOUR COSTS
 Sweden	22.200		13%	75%	43%	€ 40,30
 United States	n/a		16%	58%	34%	n/a
 Portugal	43.100		13%	71%	28%	€ 18,20
 Lithuania	8.600		8%	52%	24%	€ 16,30
 Italy	17.200		11%	55%	27%	€ 30,90
 Estonia	1.900		6%	42%	34%	€ 19,60
 Spain	24.200		14%	67%	22%	€ 25,50
 Slovakia	6.300		5%	45%	27%	€ 18,50
 Denmark	3.000		5%	50%	27%	€ 50,10
 United Kingdom	n/a		9%	69%	40%	€ 36,50
 Czech Republic	23.500		3%	56%	17%	€ 18,20
 Austria	11.500		6%	54%	22%	€ 44,50
 Belgium	13.000		5%	70%	14%	€ 48,20























Recruitment feasibility – International (Europe)

Finance (1/2)

COUNTRY	SIZE OF TARGET GROUP	RECRUITMENT FEASIBILITY	JOB MARKET ACTIVITY	SOURCING PRESSURE	INTERNATIONAL MOBILITY	LABOUR COSTS
 Romania	165.100		12%	44%	32%	€ 12,50
 Ireland	42.700		23%	38%	32%	€ 42,50
 Bulgaria	56.400		7%	26%	17%	€ 10,60
 Croatia	12.400		9%	13%	22%	€ 16,50
 Finland	19.300		11%	24%	31%	€ 37,70
 Switzerland	28.500		17%	47%	24%	n/a
 Italy	38.400		12%	21%	12%	€ 30,90
 Spain	58.000		11%	27%	13%	€ 25,50
 Hungary	35.700		17%	52%	30%	€ 14,10
 Portugal	57.800		10%	41%	28%	€ 18,20
 Lithuania	30.500		12%	26%	12%	€ 16,30
 Poland	85.400		15%	52%	19%	€ 17,30
 Estonia	10.600		10%	23%	18%	€ 19,60
 Norway	22.000		18%	15%	21%	€ 53,70



















Recruitment feasibility – International (Europe)

Finance (2/2)

COUNTRY	SIZE OF TARGET GROUP	RECRUITMENT FEASIBILITY	JOB MARKET ACTIVITY	SOURCING PRESSURE	INTERNATIONAL MOBILITY	LABOUR COSTS
 Slovenia	5.200		10%	21%	24%	€ 27,10
 Czech Republic	35.500		12%	39%	15%	€ 18,20
 United States	n/a		12%	47%	23%	n/a
 Greece	53.700		6%	33%	10%	€ 16,70
 Slovakia	31.900		11%	28%	14%	€ 18,50
 Latvia	3.900		2%	22%	9%	€ 15,10
 Belgium	46.800		8%	49%	29%	€ 48,20
 France	274.100		7%	40%	17%	€ 43,70
 United Kingdom	n/a		14%	52%	33%	€ 36,50
 Germany	274.600		8%	62%	27%	€ 43,40
 Sweden	34.300		9%	50%	24%	€ 40,30
 Austria	32.000		9%	50%	26%	€ 44,50
 Denmark	25.100		13%	51%	20%	€ 50,10

























Recruitment feasibility – International (Europe)

Mechanics (1/2)

COUNTRY	SIZE OF TARGET GROUP	RECRUITMENT FEASIBILITY	JOB MARKET ACTIVITY	SOURCING PRESSURE	INTERNATIONAL MOBILITY	LABOUR COSTS
 Romania	67.600		15%	22%	23%	€ 12,50
 Spain	121.700		20%	32%	19%	€ 25,50
 Lithuania	5.700		11%	19%	29%	€ 16,30
 Estonia	5.800		18%	24%	39%	€ 19,60
 Croatia	17.600		11%	20%	29%	€ 16,50
 Hungary	38.500		17%	42%	23%	€ 14,10
 Finland	20.000		14%	23%	34%	€ 37,70
 Italy	130.600		7%	30%	26%	€ 30,90
 Sweden	28.000		23%	26%	27%	€ 40,30
 Portugal	13.800		19%	29%	23%	€ 18,20
 Norway	18.500		12%	19%	24%	€ 53,70
 Slovenia	7.100		7%	16%	27%	€ 27,10
 Poland	78.500		14%	39%	7%	€ 17,30
 Belgium	39.200		4%	27%	43%	€ 48,20

Recruitment feasibility – International (Europe)

Mechanics (2/2)

COUNTRY	SIZE OF TARGET GROUP	RECRUITMENT FEASIBILITY	JOB MARKET ACTIVITY	SOURCING PRESSURE	INTERNATIONAL MOBILITY	LABOUR COSTS
 Bulgaria	8.100		6%	19%	17%	€ 10,60
 Switzerland	40.200		7%	29%	20%	n/a
 United States	n/a		18%	37%	26%	n/a
 Greece	6.100		14%	23%	18%	€ 16,70
 Latvia	6.700		18%	22%	19%	€ 15,10
 Germany	690.900		6%	32%	29%	€ 43,40
 Austria	35.500		6%	21%	17%	€ 44,50
 Slovakia	8.300		14%	32%	21%	€ 18,50
 United Kingdom	n/a		13%	37%	35%	€ 36,50
 Czech Republic	45.800		6%	32%	17%	€ 18,20
 France	245.500		3%	34%	16%	€ 43,70
 Denmark	8.500		11%	29%	14%	€ 50,10

Skills

The following pages provide an overview of the skills that appear in job vacancies. A distinction is made between the following three types of skills:

- IT skills;
- Professional skills;
- Social skills.

When it comes to professional skills, this partly concerns skills and competencies, but sometimes also areas of knowledge.

For each type of skill, an overview is provided of the **most in-demand** skills (those that occur most frequently in job vacancies). In addition, attention is also paid to the **most typical** skills. These are skills that appear relatively often in job vacancies within the relevant key technology. To determine the relative position, a comparison was made with *all* job vacancies in the Twente region during the same period (last two years). This includes job vacancies outside the six key technologies. It shows the skills that distinguish the key technologies, from each other and from the rest of the market. When determining the typical skills, a lower limit was applied; skills must appear in at least ten different job vacancies and in at least one per cent of the job vacancies.

Regional comparison

The six key technologies are also strongly represented in the Eindhoven region. For the purposes of the skills analysis, a comparison was therefore made with that region. The results are included in Appendix II. It shows the most in-demand and most typical skills in the Eindhoven region and the extent to which the results correspond to or differ from those in the Twente region.

Fastest growing skills

In addition, the fastest growing skills are examined. This was done for the six key technologies, but at the national level. The focus is on skills that have been growing for two years in a row, both in 2024 and 2025. In this case, growth means that the importance of the skill in all job vacancies is increasing. The importance/share is used so that growth (or decline) is not dependent on or strongly influenced by a rising (or falling) job market.

New and upcoming skills and technologies

Finally, with the help of AI chatbots (paid versions) we have investigated for each key technology which skills and technologies are new or upcoming. Hence, in this case, we are not reasoning on the basis of the source data (job vacancies). We then examined the extent to which these new skills and technologies are mentioned in job vacancies for both the Twente and Eindhoven regions. This was done regardless of whether they had been recognized and classified as skills by the supplier (Bullhorn Market IQ).

IT skills – most in-demand

		x Occurs in top list of multiple key technologies		x Occurs in top list of all key technologies	
Photonics & Optics	Chips, Semiconductors & Nanotech	Robotics & Smart Manufacturing	AI & Intelligent Systems	Medical & Sensor Technologies	Energy & Circular Technologies
Systems Engineering	Software Engineering	Software Engineering	Software Engineering	Python	SAP Applicaties
C++	C++	Backend	Scrum	C++	Python
Software Engineering	Linux	Python	Python	Software Engineering	Kunstmatige Intelligentie
Python	Systems Engineering	Kunstmatige Intelligentie	Kunstmatige Intelligentie	Systems Engineering	Data-Analyse
Agile Methodologie	Python	Data-Analyse	Agile Methodologie	Data-Analyse	C++
Linux	Agile Methodologie	Front End	Java	Programmeren (Computer)	Software Engineering
C#	Data-Analyse	Solidworks	Data-Analyse	Kunstmatige Intelligentie	Solidworks
Continuous Integration	Scrum	3D-Modellering	Backend	MATLAB	Power BI
Scrum	Informatiebeveiliging	Java	Continuous Integration	C#	Machine Learning
Java	3D-Modellering	C++	Linux	SAP Applicaties	Systems Engineering
Software Architectuur	Epic Stork	C#	C++	Solidworks	Programmeren (Computer)
Solidworks	Java	Eplan	Systems Engineering	Embedded Software	Dataverwerking
Kunstmatige Intelligentie	Programmeren (Computer)	Scrum	Front End	Machine Learning	SCADA
Git	Kunstmatige Intelligentie	Continuous Integration	Devops	Afas	3D-Modellering
Systeemarchitectuur	SAP Applicaties	SAP Applicaties	Informatiebeveiliging	Systeemarchitectuur	C#

Source: Bullhorn Market IQ, analysis by Intelligence Group.

IT skills – most typical

x

Occurs in top list of multiple key technologies

x

Occurs in top list of all key technologies

Photonics & Optics	Chips, Semiconductors & Nanotech	Robotics & Smart Manufacturing	AI & Intelligent Systems	Medical & Sensor Technologies	Energy & Circular Technologies
Visuele Systemen	Epic Stork	Kotlin	Cucumber (Software)	Engineering Base	Datacenters
Engineering Base	Embedded Software	Eplan	Cisco Nexus Switches	FPGA	SCADA
Elektro- en Computertechniek	MATLAB	Github	MATLAB	MATLAB	Machine Learning
Algoritmeontwerp	Systems Engineering	Embedded Software	Github	Embedded Software	SAP Applicaties
Software Architectuur	Systeemarchitectuur	SCADA	Jenkins	Systeemarchitectuur	Geografische Informatie Systemen
Systems Engineering	C++	Autodesk Inventor	Systeemintegratie	Programmeren (Computer)	Programmeren (Computer)
C++	Apache Maven	Vue.Js	Systems Engineering	FMEA	Solidworks
Systeemarchitectuur	Programmeren (Computer)	Solidworks	Apache Maven	Systems Engineering	Eplan
C (Programmeertaal)	Linux	C#	Machine Learning	C++	Python
C#	Jenkins	MATLAB	Microservices	Python	Systems Engineering
Apache Maven	C#	3D-Modellering	Test Automatisering	C#	C++
MATLAB	Informatiebeveiliging	Backend	Unit Testing	Machine Learning	C#
Cisco Nexus Switches	3D-Modellering	Front End	Programmeren (Computer)	Solidworks	3D-Modellering
Jenkins	CAD	Typescript	Java	SAP Applicaties	Power BI
Python	Agile Methodologie	Grafische Software	C++	Kunstmatige Intelligentie	Informatiesystemen

IT skills – Twente compared to Eindhoven

Photonics & Optics	Chips, Semiconductors & Nanotech	Robotics & Smart Manufacturing	AI & Intelligent Systems	Medical & Sensor Technologies	Energy & Circular Technologies
characteristic of the Twente region					
Engineering Base	Epic Stork	Autodesk Inventor	Cucumber	Engineering Base	Datacenters
Elektro- en Computertechniek	Informatiebeveiliging	Vue.Js	Jenkins	Systeemarchitectuur	Geografische Informatie Systemen
Algoritmeontwerp	3D-Modellering	Typescript	Apache Maven	FMEA	Informatiesystemen
Apache Maven	Systems Engineering	Front End	Microservices	Solidworks	Power BI
Cisco Nexus Switches	SAP Applicaties	Solidworks	Unit Testing	Systems Engineering	SAP Applicaties
characteristic of the Eindhoven region					
Lidar	ASIC	Allen-Bradley	Scikit-learn	DICOM	Smartgrid
Ray Tracing	Systemverilog	Codesys	Deep Learning	HL7	CAN Bus
Zemax	VHDL	PCS 7	PyTorch	Medische Informatica	Distributed Computing
FTIR	FPGA	Robotautomatiseringssoftware	Tensorflow	Klinische Gegevensopslag	Simulink
Low-latency	Verilog	Cyber-physical Systems	Generative AI	Prompt Engineering	Deep Learning

Overall conclusion regarding the differences in IT skills between the Twente and Eindhoven region (ChatGPT): Twente's IT skill profile is primarily characterized by systems engineering, architecture, and industrial integration. The region shows strong capabilities in system design, enterprise IT, DevOps tooling, and applied engineering within complex industrial environments. Eindhoven, in contrast, is defined by deep technological specialization and hardware-oriented expertise, particularly in semiconductors, embedded systems, advanced optics, and core AI technologies. Twente focuses on integrating and applying technology, while Eindhoven concentrates on foundational deep-tech development.

Professional skills – most typical

x

Occurs in top list of multiple key technologies

x

Occurs in top list of all key technologies

Photonics & Optics	Chips, Semiconductors & Nanotech	Robotics & Smart Manufacturing	AI & Intelligent Systems	Medical & Sensor Technologies	Energy & Circular Technologies
Opto-elektronica	Halfgeleider	Winstdeling	Winstdeling	Developmental Coordination Disorder	Gemiddelde Spanning
Photonics	Cryogenics	Robotics	Analyse van Vereisten	Biomedische Technologie	Fossiele Brandstof
Autonome Voertuigen	Cleanrooms	Elektromagnetische Compatibiliteit	Toegepaste Fysica	Fysische Geneeskunde en Revalidatie	Secundaire Markt
Drones	Microscopie	Buitendienst-Management	Persoonlijke Ontwikkeling	Biomedische Techniek	Communicatiewetenschappen
Nanotechnologie	Printplaat	Elektrische Schema's	Metrics	Industrieel Ontwerp	Membranen
Geïntegreerde Schakeling	Technische Natuurkunde	Productietechniek	Radars	ISO 13485	Energietransformatie
ISO 13485	Elektromagnetische Compatibiliteit	Cleanrooms	Lucht- en Ruimtevaartindustrie	Medische Technologie	Hernieuwbare Energie
Halfgeleider	Hightechindustrie	Schakelmateriaal	Innovatie Management	Design Engineering	Werken in de Ondergrond
Elektromagnetisme	Massaproductie	Staalbouw	Montage en Demontage	Kernenergie	Biogas
Technische Natuurkunde	Biomedische Techniek	Embedded Systems	Managementsystemen	Chronische Ziekte (Vakkennis)	Sociale Wetenschappen
Massaproductie	Product Lifecycle	Hoogspanningstechnologie	Algoritmes	Werktevredenheid	Windkracht
Algoritmes	Toegepaste Fysica	Innovatie Management	Experimenten	Printplaat	Offshore Werk
Radars	Radars	Onderhoud van Industriële Installaties	Luchtvaart- en Ruimtevaarttechniek	Polymer Chemistry	Energiedistributie
Cleanrooms	Embedded Systems	Inbedrijfstelling	Architectuur	Orthopedische	Batterijen
Natuurkunde	Simulaties	Mechatronica	Schaalbaarheid	Veiligheidscultuur	Econometrie

Source: Bullhorn Market IQ, analysis by Intelligence Group.

Professional skills –Twente compared to

Eindhoven

Photonics & Optics	Chips, Semiconductors & Nanotech	Robotics & Smart Manufacturing	AI & Intelligent Systems	Medical & Sensor Technologies	Energy & Circular Technologies
characteristic of the Twente region					
Radars	Cryogenics	Buitendienst-Management	Analyse van Vereisten	ISO 13485	Gemiddelde Spanning
Drones	Printplaat	Productietechniek	Innovatie Management	Developmental Coordination Disorder	Werken in de Ondergrond
Nanotechnologie	Technische Natuurkunde	Staalbouw	Experimenten	Fysische Geneeskunde en Revalidatie	Biogas
Geïntegreerde Schakeling	Massaproductie	Onderhoud van Industriële Installaties	Architectuur	Chronische Ziekte (Vakkennis)	Energiedistributie
Opto-elektronica	Product Lifecycle	Inbedrijfstelling	Schaalbaarheid	Veiligheidscultuur	Offshore Werk
characteristic of the Eindhoven region					
Optisch Lensontwerp	IC Design	Siemens S7	Predictive Modeling	Radiofarmaca	Accutechnologie
Optische Metrologie	Lithografie	PROFINET	Data Science	Microfluidics	Elektrochemie
Quantumcommunicatie	Mixed-signal Circuit	Industry 4.0	Toegepaste Wiskunde	Iso 14971	Brandstofcel
Wafer-Fabricatie	Circuitontwerp	Machinebesturing	Datamodelering	Iec 62304	Model Voorspellende Controle
Spectroscopie	Halfgeleiderapparaat	Manufacturing Execution System	Beeldbewerking	Patiëntelveiligheid	Elektrolyten

Overall conclusion regarding the differences in professional skills between the Twente and Eindhoven region (ChatGPT): Twente's professional skill profile is centered on industrial engineering, system integration, and production lifecycle management, with a strong focus on applied implementation and manufacturing contexts. Eindhoven, in contrast, stands out for deep-tech expertise in semiconductor fabrication, advanced manufacturing systems, optical engineering, and medical device regulation. In short, Twente emphasizes industrial system application, while Eindhoven concentrates on technological depth and high-tech specialization.

Source: Bullhorn Market IQ, analysis by Intelligence Group.

Social skills – most in-demand

x

Occurs in top list of multiple key technologies

x

Occurs in top list of all key technologies

Photonics & Optics	Chips, Semiconductors & Nanotech	Robotics & Smart Manufacturing	AI & Intelligent Systems	Medical & Sensor Technologies	Energy & Circular Technologies
Zelfmotivatie	Communicatie	Zelfmotivatie	Communicatie	Zelfmotivatie	Zelfmotivatie
Werken in Groepsverband	Zelfmotivatie	Communicatie	Zelfmotivatie	Communicatie	Communicatie
Communicatie	Werken in Groepsverband	Werken in Groepsverband	Werken in Groepsverband	Werken in Groepsverband	Werken in Groepsverband
Gepassioneerd	Doelgericht	Coördineren	Gepassioneerd	Gepassioneerd	Gepassioneerd
Analytisch Denken	Gepassioneerd	Doelgericht	Doelgericht	Doelgericht	Coördineren
Doelgericht	Aandacht voor Detail	Gepassioneerd	Analytisch Denken	Analytisch Denken	Doelgericht
Coördineren	Coördineren	Aandacht voor Detail	Coördineren	Coördineren	Aandacht voor Detail
Probleemoplossing	Analytisch Denken	Analytisch Denken	Probleemoplossing	Aandacht voor Detail	Analytisch Denken
Aanpassingsvermogen	Probleemoplossing	Leiderschap	Leergierig	Aanpassingsvermogen	Probleemoplossing
Aandacht voor Detail	Aanpassingsvermogen	Servicegerichtheid	Aandacht voor Detail	Creativiteit	Aanpassingsvermogen
Creativiteit	Creativiteit	Probleemoplossing	Creativiteit	Leiderschap	Servicegerichtheid
Leergierig	Servicegerichtheid	Leergierig	Aanpassingsvermogen	Probleemoplossing	Leiderschap
Leiderschap	Leiderschap	Aanpassingsvermogen	Servicegerichtheid	Interpersoonlijke Vaardigheden	Leergierig
Overtuigingskracht	Leergierig	Strategisch Denken	Strategisch Denken	Strategisch Denken	Overtuigingskracht
Servicegerichtheid	Strategisch Denken	Creativiteit	Leiderschap	Leergierig	Strategisch Denken

Professional skills – most in-demand

x

Occurs in top list of multiple key technologies

x

Occurs in top list of all key technologies

Photonics & Optics	Chips, Semiconductors & Nanotech	Robotics & Smart Manufacturing	AI & Intelligent Systems	Medical & Sensor Technologies	Energy & Circular Technologies
Multidisciplinair	Machinebouw	Machinebouw	Innovatie	Multidisciplinair	Elektrotechniek
Machinebouw	Innovatie	Elektrotechniek	Stakeholder Management	Machinebouw	Veiligheidsprincipes
Elektrotechniek	Elektrotechniek	Consultancy	Coaching en Begeleiding	Innovatie	Machinebouw
Mechatronica	Multidisciplinair	Procesverbeteringen	Multidisciplinair	Onderzoek	Procesverbeteringen
Testen	Procesverbeteringen	Multidisciplinair	Consultancy	Elektrotechniek	Electrische Installaties
Innovatie	Coaching en Begeleiding	Coaching en Begeleiding	Veiligheidsprincipes	Coaching en Begeleiding	Stakeholder Management
Coaching en Begeleiding	Veiligheidsprincipes	Innovatie	Procesverbeteringen	Elektronica	Onderhoud
Radars	Onderzoek	Stakeholder Management	Testen	Procesverbeteringen	Projectmanagement
Hightechindustrie	Testen	Mechatronica	Onderzoek	Consultancy	Consultancy
Elektronica	Elektronica	Automatisering	Projectmanagement	Testen	Innovatie
Montage	Projectmanagement	Projectmanagement	Elektrotechniek	Mechatronica	Coaching en Begeleiding
Procesverbeteringen	Consultancy	Montage	Machinebouw	Fabricage	Duurzaamheid
Sensortechnologie	Mechatronica	Testen	Automatisering	Gezondheidszorg	Multidisciplinair
Productontwerp	Montage	Veiligheidsprincipes	Verkoop	Financiën	Financiën
Natuurkunde	Fabricage	Machinerwerkzaamheden	Infrastructuur	Kwaliteitsmanagement	Hernieuwbare Energie

Social skills – most typical

x

Occurs in top list of multiple key technologies

x

Occurs in top list of all key technologies

Photonics & Optics	Chips, Semiconductors & Nanotech	Robotics & Smart Manufacturing	AI & Intelligent Systems	Medical & Sensor Technologies	Energy & Circular Technologies
Analytisch Denken	Vooruitdenken	Betrouwbaarheid	Ethiek	Analytisch Denken	Ethiek
Assertief	Pragmatisch	Pragmatisch	Vooruitdenken	Betrouwbaarheid	Kritisch Denken
Probleemoplossing	Analytisch Denken	Leiderschap	Probleemoplossing	Probleemoplossing	Assertief
Pragmatisch	Probleemoplossing	Probleemoplossing	Analytisch Denken	Communicatie	Betrouwbaarheid
Overtuigingskracht	Betrouwbaarheid	Analytisch Denken	Netwerken	Besluitvaardigheid	Overtuigingskracht
Vasthoudend	Netwerken	Strategisch Denken	Betrouwbaarheid	Vasthoudend	Netwerken
Doelgericht	Overtuigingskracht	Netwerken	Pragmatisch	Leiderschap	Probleemoplossing
Aanpassingsvermogen	Communicatie	Besluitvaardigheid	Strategisch Denken	Doelgericht	Analytisch Denken
Betrouwbaarheid	Doelgericht	Communicatie	Communicatie	Zelfmotivatie	Besluitvaardigheid
Netwerken	Besluitvaardigheid	Coördineren	Leergierig	Gepassioneerd	Communicatie
Creativiteit	Werken in Groepsverband	Overtuigingskracht	Overtuigingskracht	Werken in Groepsverband	Strategisch Denken
Positieve Instelling	Leiderschap	Doelgericht	Doelgericht	Strategisch Denken	Leiderschap
Werken in Groepsverband	Strategisch Denken	Zelfmotivatie	Creativiteit	Vriendelijkheid	Coördineren
Gepassioneerd	Vasthoudend	Leergierig	Besluitvaardigheid	Overtuigingskracht	Vasthoudend
Leiderschap	Zelfmotivatie	Zakelijk Bewustzijn	Vasthoudend	Netwerken	Zelfmotivatie

Social skills –Twente compared to Eindhoven

Photonics & Optics	Chips, Semiconductors & Nanotech	Robotics & Smart Manufacturing	AI & Intelligent Systems	Medical & Sensor Technologies	Energy & Circular Technologies
characteristic of the Twente region					
Vasthoudend	Vooruitdenken	Betrouwbaarheid	Ethiek	Vasthoudend	Ethiek
Overtuigingskracht	Pragmatisch	Zakelijk Bewustzijn	Netwerken	Besluitvaardigheid	Netwerken
Positieve Instelling	Netwerken	Besluitvaardigheid	Strategisch Denken	Strategisch Denken	Strategisch Denken
Assertief	Betrouwbaarheid	Coördineren	Pragmatisch	Veiligheidscultuur	Besluitvaardigheid
Aanpassingsvermogen	Overtuigingskracht	Leiderschap	Besluitvaardigheid	Netwerken	Vasthoudend
characteristic of the Eindhoven region					
Hogere Orde Denken	Diversiteitsbewustzijn	Kritisch Denken	Thought Leadership	Nederigheid	Kritisch Denken
Kritisch Denken	Assertief	Diversiteitsbewustzijn	Visionair	Opbouwen van Vertrouwen	Zakelijk Bewustzijn
Diversiteitsbewustzijn	Creativiteit	Netwerken	Wendbaarheid	Thought Leadership	Positieve Instelling
Procesgericht	Pragmatisch	Analytisch Denken	Strategisch Denken	Systeemdenken	Analytisch Denken
Hard Werken	Besluitvaardigheid	Assertief	Creativiteit	Kritisch Denken	Doelgericht

Overall conclusion regarding the differences in social skills between the Twente and Eindhoven region (ChatGPT): Twente's social skill profile is characterized by pragmatism, reliability, persistence, and strong collaborative orientation within industrial environments. The emphasis lies on practical coordination, strategic alignment, and steady execution. Eindhoven, in contrast, demonstrates a more conceptual and forward-looking social profile, with stronger signals in critical thinking, higher-order reasoning, diversity awareness, and thought leadership. In short, Twente reflects execution-driven collaboration, while Eindhoven shows more visionary and strategic orientation.

Fastest growing IT skills

The Netherlands, IT skills growing 2024 and 2025, by key technology. Columns are sorted on the growth rate in 2025.

Photonics & Optics	Chips, Semiconductors & Nanotech	Robotics & Smart Manufacturing	AI & Intelligent Systems	Medical & Sensor Technologies	Energy & Circular Technologies
Hardware-Ontwerp	Kunstmatige Intelligentie	Warehouse Management Systemen	Systeemintegratie	Kunstmatige Intelligentie	Communicatieprotocollen
PIC Microcontroller	Systemverilog	Systeemintegratie	Figma	Continuous Integration	Systeemintegratie
Adobe Indesign	Github	CAD	Adobe Illustrator	Git	Kunstmatige Intelligentie
Systeemintegratie	Signaalverwerking	Autocad	A / b Testen	APIs	Git
Git	Computer Vision	Codesys	Kunstmatige Intelligentie	Systems Engineering	Postgresql
Visuele Systemen	Tensorflow	Allen-Bradley	Adobe Creative Cloud	C++	SCADA
CAD	Test Automatisering	Operationele Systemen	Marketing Automation	Machine Learning	Machine Learning
Lidar	C#	Eplan	Pytorch	Amazon Web Services	Eplan
Deep Learning	Jira	SCADA	Gegevens-/recordregistratie	Informatiemanagement	C++
Python	Front End	Tia Portal	Geografische Informatie Systemen	Python	Modbus

- x Is also in most in-demand in the same key technology in Twente region
- x Is also in most typical in the same key technology in Twente region
- x Is in both most in-demand as well as most typical in the same key technology in Twente region

Fastest growing professional skills

The Netherlands, professional skills growing 2024 and 2025, by key technology. Columns are sorted on the growth rate in 2025.

Photonics & Optics	Chips, Semiconductors & Nanotech	Robotics & Smart Manufacturing	AI & Intelligent Systems	Medical & Sensor Technologies	Energy & Circular Technologies
Procesverbeteringen	Microfluidics	ATEX	Identificeren van Leads	Milieubescherming	Verkoopproces
Onderzoeksontwikkeling	Milieubescherming	Afwijkingsbeheer	Workflows	Farmaceutische Ontwikkeling	Duurzame Technologieën
Business Efficiëntie	Radars	Technologie Roadmap	Belasting	Strategische Samenwerking	CV Installaties
Optische Communicatie	Onderzoeksontwikkeling	PROFINET	Campagnes	Workflows	Dashboards
Kwaliteitsbewaking	Workflows	Actief Luisteren	Boekhoudcontrole	Technische Tekeningen	Afwijkingsbeheer
Naleving van de Regelgeving	Gezondheidszorg	Radars	Strategische Samenwerking	Medicatie	Hightechindustrie
Hightechindustrie	Halfgeleiderapparaat	Foutanalyse	Personeelszaken	Content Creatie	Workflows
Controlesystemen	Hygiëne	Windkracht	Grafisch Ontwerp	Lifecycle Management	Onderzoeksontwikkeling
Vorraadbeheer	Bedrijfsplanning	Instrumentatietechniek	ISO / IEC 27001	Onderzoeksontwikkeling	Verkoop
Business Relationship Management	Operational Excellence	Technische Documentatie	Klantenwerving	Technische Documentatie	Ondersteuning van Klanten

- x Is also in most in-demand in the same key technology in Twente region
- x Is also in most typical in the same key technology in Twente region
- x Is in both most in-demand as well as most typical in the same key technology in Twente region

Fastest growing social skills

The Netherlands, social skills growing 2024 and 2025, by key technology. Columns are sorted on the growth rate in 2025.

Photonics & Optics	Chips, Semiconductors & Nanotech	Robotics & Smart Manufacturing	AI & Intelligent Systems	Medical & Sensor Technologies	Energy & Circular Technologies
Aandacht voor Detail	Vooruitdenken	Multitasking	Vooruitdenken	Vooruitdenken	Betrouwbaar
Strategisch Denken	Kritisch Denken	Coördineren	Strategisch Denken	Opbouwen van Vertrouwen	Betrouwbaarheid
Stress Management	Leiderschap	Probleemoplossing	Aandacht voor Detail	Thought Leadership	Diversiteitsbewustzijn
Kritisch Denken	Aandacht voor Detail	Servicegerichtheid	Empathisch	Besluitvaardigheid	Servicegerichtheid
Servicegerichtheid	Vriendelijkheid		Betrouwbaarheid	Aandacht voor Detail	Vooruitdenken
Zelfmotivatie	Hard Werken		Besluitvaardigheid	Procesgericht	Aanpassingsvermogen
Coördineren	Gepassioneerd		Leiderschap	Betrouwbaarheid	Aandacht voor Detail
Aanpassingsvermogen			Multitasking	Zelfverzekerd	Assertief
Analytisch Denken			Professionele Houding	Empathisch	Stiptheid
Betrouwbaarheid			Zelfmotivatie	Aanpassingsvermogen	Zelfmotivatie

- x Is also in most in-demand in the same key technology in Twente region
- x Is also in most typical in the same key technology in Twente region
- x Is in both most in-demand as well as most typical in the same key technology in Twente region

New and upcoming skills and technologies

The latest and emerging skills and technologies (see Appendix III for more details) appear to be rarely (< 2%) or never mentioned in job advertisements. This applies to both the Twente and Eindhoven regions. The fact that emerging technologies hardly appear in job postings does not necessarily mean they are not being used. In many cases, these technologies are still in the R&D or pilot phase, handled by specialized research teams without dedicated job titles. Moreover, marketing and innovation terminology often move faster than HR language: terms used in whitepapers and conferences are frequently replaced by broader, more generic descriptions in job ads.

Standardization is another factor. New technologies often have multiple names or vendor-specific labels, making them difficult to track consistently in vacancy data. In other cases, the expertise is embedded within broader role descriptions (“advanced node design” instead of “CFET”), or recruiters deliberately avoid niche terminology to attract a wider pool of candidates. Finally, volume matters: technologies adopted by only a handful of firms will naturally generate limited job postings. The absence of specific keywords in vacancies therefore often reflects the stage of adoption rather than the strategic importance of the technology itself.

Appendix I

Selecting the relevant vacancies in Twente region

Several steps were taken to make a relevant selection of companies that are active in one or more of the key technologies. First, a list of companies was drawn up based on desk research and information provided by the client. Next, a list of relevant keywords (synonyms) was created for each of the key technologies in order to search for job vacancies at companies that match those keywords. This resulted in a list of potentially relevant companies. AI and internet searches were then used to verify whether the companies are actually active in the relevant key technology. This was done, for example, to exclude employers whose primary focus is on providing care from the key technology 'Medical technology (MedTech) & sensor technology'.

The analysis of job vacancies in the Twente region was based on the final list of companies. A number of very large companies/employers are active in multiple key technologies, but it would be 'unfair' to include all of these companies' job vacancies in each of the key technologies. For the analysis of the vacancies at these companies, the condition was therefore included that they must meet certain keywords relevant to the key technology. In this way, not all vacancies are included, but only those that are relevant/suitable. Examples of employers to which this condition applied are University of Twente, Thales Nederland, Saxion, ROC van Twente, Essent and Enexis.

Finally, because we have based our analysis on relevant companies in the region, vacancies from intermediaries (employment agencies, etc.) have not been included in the analysis. This is because the actual company behind the vacancy is often unknown.

Appendix II

Eindhoven region, most in-demand IT skills

x Is also in top list of same key technology in Twente region

Photonics & Optics	Chips, Semiconductors & Nanotech	Robotics & Smart Manufacturing	AI & Intelligent Systems	Medical & Sensor Technologies	Energy & Circular Technologies
Python	Python	Software Engineering	Kunstmatige Intelligentie	Data-Analyse	Python
MATLAB	Software Engineering	SCADA	Python	Kunstmatige Intelligentie	Software Engineering
Data-Analyse	Data-Analyse	Python	Data-Analyse	Software Engineering	Kunstmatige Intelligentie
Programmeren (Computer)	MATLAB	Kunstmatige Intelligentie	Software Engineering	Python	MATLAB
Visuele Systemen	C++	C++	Machine Learning	Agile Methodologie	Data-Analyse
C++	Programmeren (Computer)	Eplan	SQL	C++	CAD
Software Engineering	Agile Methodologie	Programmeren (Computer)	Windows Azure	Systems Engineering	Programmeren (Computer)
Kunstmatige Intelligentie	Kunstmatige Intelligentie	Tia Portal	Cloud Computing	FMEA	Systeemintegratie
FMEA	FMEA	Data-Analyse	Agile Methodologie	SAP Applicaties	Machine Learning
Signaalverwerking	SAP Applicaties	Operationele Systemen	Power BI	Machine Learning	C++
Lidar	Machine Learning	Machine Learning	Programmeren (Computer)	Programmeren (Computer)	Neurale Netwerken
Dataverwerking	Scrum	C#	C++	Cloud Computing	Cloud Computing
Beeldvormingstechnologie	Linux	CAD	Databases	MATLAB	Autocad
PIC Microcontroller	Softwaresystemen	Computertechnologie	Scrum	Adobe Indesign	Systems Engineering
Machine Learning	Scripting	MATLAB	Continuous Integration	Scrum	3D-Modelling

Source: Bullhorn Market IQ, analysis by Intelligence Group.

Appendix II

Eindhoven region, most typical IT skills

x Is also in top list of same key technology in Twente region

Photonics & Optics	Chips, Semiconductors & Nanotech	Robotics & Smart Manufacturing	AI & Intelligent Systems	Medical & Sensor Technologies	Energy & Circular Technologies
Lidar	ASIC	Cyber-physical Systems	Scikit-learn	Medische Informatica	Smartgrid
Ray Tracing	Tool Command Language	Allen-Bradley	Machine Learning	Medische Software	CAN Bus
Zemax	Systemverilog	Tia Portal	Deep Learning	Klinische Gegevensopslag	Computernetwerkbewerkingen
Beeldvormingstechnologie	Digitaal Ontwerp	Codesys	Neurale Netwerken	DICOM	Modbus
Visuele Systemen	Verilog	PCS 7	Machine Learning Operations	Cts+	Julia
Netwerkbediening	Neurale Netwerken	Robotautomatiseringssoftware	Natuurlijke Taalverwerking	Health Level Seven International	Neurale Netwerken
JMP (Statistical Software)	COMSOL Multiphysics	SCADA	Generative AI	Sysml	Distributed Computing
Scientific Computing	VHDL	Eplan	Data-Infrastructuur	Minitab	Computersimulatie
Low-latency	PIC Microcontroller	Computer Vision	Kunstmatige Intelligentie	Prompt Engineering	Simulink
PIC Microcontroller	Code Coverage	Simulink	Pytorch	Beeldanalyse	Open Source Technology
Minitab	Signaalverwerking	Communicatieprotocollen	Tensorflow	Working Model 2D	MATLAB
COMSOL Multiphysics	Scaled Agile Framework	Computertechnologie	Pandas	Beeldvormingstechnologie	Deep Learning
Optimization Algorithms	MATLAB	Mens-Computer Interactie	Spark	Reliability Engineering	Systeemintegratie
Datasheets	FPGA	Ethernet	Data Lakes	Datavalidatie	Systems Engineering
FTIR	Teamcenter	Labview	Datapijplijn	Windchill	CAD

Source: Bullhorn Market IQ, analysis by Intelligence Group.

Appendix II

Eindhoven region, most in-demand professional skills

x Is also in top list of same key technology in Twente region

Photonics & Optics	Chips, Semiconductors & Nanotech	Robotics & Smart Manufacturing	AI & Intelligent Systems	Medical & Sensor Technologies	Energy & Circular Technologies
Optiek	Innovatie	Automatisering	Innovatie	Innovatie	Innovatie
Natuurkunde	Machinebouw	Elektrotechniek	Stakeholder Management	Stakeholder Management	Elektrotechniek
Photonics	Cleanrooms	Mechatronica	Automatisering	Medische Technologie	Onderzoek
Innovatie	Stakeholder Management	Machinebouw	Consultancy	Gezondheidszorg	Machinebouw
Elektrotechniek	Halfgeleider	Innovatie	Procesverbeteringen	Procesverbeteringen	Energietechnologie
Fabricage	Mechatronica	Robotics	Coaching en Begeleiding	Kwaliteitsmanagement	Batterijen
Multidisciplinair	Fabricage	PLC-Programmering	Data Science	Medisch Materiaal	Hernieuwbare Energie
Onderzoek	Procesverbeteringen	Procesverbeteringen	Elektrotechniek	Coaching en Begeleiding	Multidisciplinair
Onderzoeksontwikkeling	Elektrotechniek	Testen	Onderzoek	Projectmanagement	Veiligheidsprincipes
Halfgeleider	Montage	Multidisciplinair	Financiën	Klinisch Werk	Automobielandustrie
Stakeholder Management	Natuurkunde	Consultancy	Multidisciplinair	Fabricage	Electrische Installaties
Meetsystemen	Elektronica	Stakeholder Management	Veiligheidsprincipes	Multidisciplinair	Stakeholder Management
Elektronica	Multidisciplinair	Machinewerkzaamheden	Projectmanagement	Productontwerp	Projectmanagement
Cleanrooms	Coaching en Begeleiding	Montage	Marketing	Elektrotechniek	Testen
Coaching en Begeleiding	Logistieke Operaties	Coaching en Begeleiding	Infrastructuur	Onderzoeksontwikkeling	Coaching en Begeleiding

Source: Bullhorn Market IQ, analysis by Intelligence Group.

Appendix II

Eindhoven region, most typical professional skills

x Is also in top list of same key technology in Twente region

Photonics & Optics	Chips, Semiconductors & Nanotech	Robotics & Smart Manufacturing	AI & Intelligent Systems	Medical & Sensor Technologies	Energy & Circular Technologies
Optisch Lensontwerp	Halfgeleiderapparaat	Bewegingscontrole	Internet of Things	Radiofarmaca	Accutechnologie
Optische Technologie	Halfgeleider	Geautomatiseerde Apparatuur	Data Science	Biomateriaal	Batterijbeheer
Optische Metrologie	Fabricage van Halfgeleiderapparatuur	Robotics	Voorspellende Analyse	Microfluidics	Elektrochemie
Optische Communicatie	Nanotechnologie	PROFINET	Numerieke Natuurkunde	Synthetische Biologie	Energiebesparing
Lasersystemen	Microelectronics	Wincc	Robotics	Regeneratieve Geneeskunde	Brandstofcel
Quantumcommunicatie	Geïntegreerde Schakeling	Frequentieomvormer	Predictive Modeling	Medische Technologie	Elektrolyten
Photonics	Lithografie	Servomotoren	Predictief Onderhoud	Biomedische Technologie	Model Voorspellende Controle
Spectroscopie	Cleanrooms	Industry 4.0	Econometrie	Chemische Biologie	Wetenschappelijke Programmering
Wafer-Fabricatie	Etsen	Siemens S7	Datamodellering	Persoonlijke Gezondheidsdossiers	Elektrodes
Opto-elektronica	Mixed-signal Circuit	Controletheorieën	Algoritmes	Iso 14971	Omvormers
Partiële Differentiaalvergelijking	IC Design	Manufacturing Execution System	Toegepaste Wiskunde	21 CFR	Membranen
Kwantummechanica	Photonics	Machineveiligheid	Draadloze Communicatie	Medisch Materiaal	Batterijen
Veiligheidsbeheersystemen	Circuitontwerp	Machinebesturing	Immigratie	Patiëntenveiligheid	Defensief Rijden
Technologieoverdracht	Transmissie-elektronenmicroscopie	Controlesystemen	Intelligente Systemen	Iec 62304	35 Mm-film
Glasvezel Communicatie	Toegepaste Fysica	Actuators	Beeldbewerking	Marktrisico	Voltage

Source: Bullhorn Market IQ, analysis by Intelligence Group.

Appendix II

Eindhoven region, most in-demand social skills

x Is also in top list of same key technology in Twente region

Photonics & Optics	Chips, Semiconductors & Nanotech	Robotics & Smart Manufacturing	AI & Intelligent Systems	Medical & Sensor Technologies	Energy & Circular Technologies
Communicatie	Communicatie	Zelfmotivatie	Communicatie	Communicatie	Communicatie
Werken in Groepsverband	Werken in Groepsverband	Communicatie	Zelfmotivatie	Werken in Groepsverband	Zelfmotivatie
Zelfmotivatie	Zelfmotivatie	Werken in Groepsverband	Werken in Groepsverband	Zelfmotivatie	Werken in Groepsverband
Doelgericht	Doelgericht	Doelgericht	Doelgericht	Analytisch Denken	Doelgericht
Probleemoplossing	Probleemoplossing	Gepassioneerd	Gepassioneerd	Doelgericht	Gepassioneerd
Analytisch Denken	Analytisch Denken	Analytisch Denken	Analytisch Denken	Probleemoplossing	Probleemoplossing
Gepassioneerd	Aandacht voor Detail	Probleemoplossing	Probleemoplossing	Gepassioneerd	Analytisch Denken
Leergierig	Gepassioneerd	Aandacht voor Detail	Creativiteit	Leiderschap	Aandacht voor Detail
Leiderschap	Aanpassingsvermogen	Coördineren	Leergierig	Coördineren	Coördineren
Creativiteit	Creativiteit	Leergierig	Coördineren	Aandacht voor Detail	Leergierig
Aanpassingsvermogen	Coördineren	Aanpassingsvermogen	Aandacht voor Detail	Aanpassingsvermogen	Aanpassingsvermogen
Aandacht voor Detail	Leiderschap	Creativiteit	Strategisch Denken	Strategisch Denken	Hard Werken
Hard Werken	Pragmatisch	Pragmatisch	Leiderschap	Leergierig	Creativiteit
Pragmatisch	Leergierig	Leiderschap	Aanpassingsvermogen	Besluitvaardigheid	Leiderschap
Coördineren	Hard Werken	Servicegerichtheid	Besluitvaardigheid	Interpersoonlijke Vaardigheden	Betrouwbaarheid

Source: Bullhorn Market IQ, analysis by Intelligence Group.

Appendix II

Eindhoven region, most typical social skills

x Is also in top list of same key technology in Twente region

Photonics & Optics	Chips, Semiconductors & Nanotech	Robotics & Smart Manufacturing	AI & Intelligent Systems	Medical & Sensor Technologies	Energy & Circular Technologies
Hogere Orde Denken	Kritisch Denken	Kritisch Denken	Thought Leadership	Nederigheid	Kritisch Denken
Kritisch Denken	Diversiteitsbewustzijn	Pragmatisch	Visionair	Opbouwen van Vertrouwen	Betrouwbaarheid
Diversiteitsbewustzijn	Probleemoplossing	Probleemoplossing	Ethiek	Thought Leadership	Probleemoplossing
Betrouwbaarheid	Pragmatisch	Betrouwbaarheid	Wendbaarheid	Systeemdenken	Netwerken
Probleemoplossing	Betrouwbaarheid	Diversiteitsbewustzijn	Kritisch Denken	Hogere Orde Denken	Vooruitdenken
Pragmatisch	Analytisch Denken	Analytisch Denken	Diversiteitsbewustzijn	Creatief Problemen Oplossen	Pragmatisch
Netwerken	Assertief	Netwerken	Betrouwbaarheid	Ethiek	Analytisch Denken
Procesgericht	Communicatie	Communicatie	Analytisch Denken	Visionair	Doelgericht
Analytisch Denken	Creativiteit	Leergierig	Probleemoplossing	Diversiteitsbewustzijn	Positieve Instelling
Doelgericht	Netwerken	Doelgericht	Vooruitdenken	Betrouwbaarheid	Communicatie
Communicatie	Aanpassingsvermogen	Werken in Groepsverband	Netwerken	Wendbaarheid	Zakelijk Bewustzijn
Leiderschap	Besluitvaardigheid	Zelfmotivatie	Pragmatisch	Kritisch Denken	Leergierig
Leergierig	Doelgericht	Leiderschap	Strategisch Denken	Probleemoplossing	Hard Werken
Besluitvaardigheid	Leiderschap	Assertief	Besluitvaardigheid	Analytisch Denken	Vasthoudend
Hard Werken	Werken in Groepsverband	Creativiteit	Creativiteit	Leiderschap	Besluitvaardigheid

Source: Bullhorn Market IQ, analysis by Intelligence Group.

Appendix III

Below an overview of the new and upcoming skills and technologies. The lists have been compiled based on desk research and input from various paid versions of AI chatbots (Claude, Gemini and ChatGPT).

Photonics & optical technology

Optical I/O chiplet, Optical IO chiplet, optical interconnect chiplet, 1.6T transceiver, 1.6 Tbps transceiver, LPO, Linear Pluggable Optics, Linear Drive Optics, CPO, Co-packaged optics, co packaged optics, silicon photonics for AI, silicon photonics, optical computing, photonic accelerator, photonic AI accelerator, neuromorphic photonics, photonic neural network, InP-on-silicon, InP on silicon laser, TFLN, thin-film lithium niobate, LNOI, barium titanate photonics, BTO photonics, quantum photonics, quantum photonic sensor, QKD, Quantum Key Distribution, free-space optics, FSO communication, metasurface optics, flat optics, optical frequency comb, Li-Fi industrial, LiFi industrial.

Chip technology / semiconductors / nanotechnology

Intel 18A, 18A node, TSMC 2nm, 2nm node, backside power delivery, BSPD, PowerVia, High-NA EUV, High NA EUV, glass substrate semiconductor, glass core substrate, HBM4, High Bandwidth Memory 4, UCIe, Universal Chiplet Interconnect Express, heterogeneous integration, 2.5D integration, 3D integration, advanced interposer design, chiplet thermal co-design, CFET transistor, complementary FET, gate-all-around transistor, GAA transistor, atomic layer deposition, ALD 3D NAND, AI defect detection semiconductor, yield learning semiconductor, GaN-on-silicon, PFAS-free semiconductor, sustainable fab operations, DTCO, design technology co-optimization, power delivery network optimization

Robotics / automated systems / smart manufacturing

Vision-Language-Action model, VLA robotics, end-to-end transformer robotics, transformer robotics, zero-shot robot learning, humanoid fleet management, humanoid robot fleet, tactile sensing skin, robotic skin sensor, autonomous mobile manipulator, AMM robot, software defined automation, SDA industrial automation, virtual PLC, real-time digital twin control, generative design robotics, AI gripper design, reinforcement learning control robotics, sim2real robotics, simulation to real robotics, 3D point cloud perception, fleet orchestration robotics, multi-robot orchestration, human-in-the-loop robot teaching, AI safety robotics, circular robot maintenance, modular robot maintenance

Appendix III

Artificial intelligence (AI), data & smart systems

agentic AI, AI agent orchestration, multi-agent systems AI, small language model, SLM AI, sovereign AI infrastructure, sovereign LLM deployment, RAG 2.0, graph RAG, retrieval augmented generation, multimodal data engineering, multimodal AI pipeline, causal AI, causal inference AI, privacy enhancing technologies AI, PETs AI, homomorphic encryption AI, secure multiparty computation AI, AI red teaming, automated red teaming AI, AI observability, LLM observability, model governance AI, LLM governance, synthetic data generation AI, green AI optimization, energy efficient model training, LLM evaluation pipeline, vector database AI, hybrid search AI, confidential AI deployment

Medical technology (MedTech) & sensor technology

ambient sensing healthcare, WiFi sensing medical, remote photoplethysmography, rPPG monitoring, hearables medical device, EEG earbuds medical, bio-integrated electronics, epidermal electronics patch, in-body nanosensor, ingestible biosensor, molecular breath analysis, breath biomarker sensor, AI lab-on-a-chip, smartphone lab-on-chip, patient digital twin, digital twin of the patient, neural interface calibration, brain computer interface calibration, energy harvesting implant, self-powered medical implant, sensor fusion diagnostics, edge AI medical device, digital biomarker analytics, non-contact vital signs monitoring, medical device cybersecurity

Sustainable energy / battery technology / circular technology

sodium-ion battery commercialization, sodium ion battery pack, semi-solid state battery, semi solid battery, iron-air battery storage, iron air battery grid storage, bidirectional charging, vehicle-to-grid integration, V2G, V2X grid integration, digital battery passport, battery passport compliance EU, direct lithium extraction, DLE lithium, smart grid edge intelligence, distributed grid control AI, perovskite silicon tandem cell, tandem PV solar, recyclable wind turbine blade, circular wind blade, AI heat network optimization, district heating optimization AI, battery recycling automation, battery carbon footprint methodology, virtual power plant orchestration, microgrid power electronics, hydrogen electrolyzer optimization, thermal energy storage system, energy digital twin