

West Midlands region priority and growth sectors

Priority sectors	Black Country	Coventry & Warwickshire	Greater Birmingham	The Marches	Worcestershire
Advanced manufacturing and engineering	✓	✓	✓	✓	✓
Agri-tech				✓	✓
Automotive/transport technologies	✓	✓			
Business, finance & professional services	✓	✓	✓	✓	
Construction	✓			✓	
Cultural & creative		✓	✓		
Creative digital		✓	✓	✓	
Food and drink production			✓	✓	✓
ICT (including. cyber security and defence)				✓	✓
Life sciences			✓		
Low carbon and environmental technologies	✓	✓	✓	✓	
Visitor economy		✓	✓		✓

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Sector	Some of the jobs that will be required	About this sector	Hard to fill jobs
Advanced manufacturing and engineering including automotive, transport technologies and aerospace	aerospace engineer, automotive technician, energy, precision engineering, machinery and equipment manufacturing, advanced materials (such as metals, ceramics and polymers), defence and security, robotics, cyber security, biomedical technology, satellites, driverless vehicles, smart energy, building technologies, agri-tech, hi-tech gaming/ICT	<p>20,000 predicted annual shortfall of engineering graduates.</p> <p>Almost half of the roles on the national Shortage Occupation List are engineering-related professions.</p> <p>Drive to encourage more young people to continue with STEM qualifications, especially girls.</p> <p>Growth in number of apprenticeship starts.</p> <p>Every extra person employed in engineering supports another 1.74 other jobs.</p> <p>A predicted trend towards a growing demand for highly skilled jobs means the STEM-related and knowledge-based skills that come with jobs in this sector will be in high demand.</p> <p>HS2 to create thousands of local jobs in this sector – directly and in the supply chain.</p> <p>Brexit likely to affect both sides of the supply/demand equation.</p>	<p>Engineer: mechanical; electrical; electronics; design & development;</p> <p>production and process; quality control & planning</p> <p>Engineering project managers</p> <p>Engineering technician</p> <p>Production manager</p> <p>Welder and other metal workers</p> <p>Vehicle technician</p> <p>Machine operative</p>
Agri-tech	equipment and machinery design engineer, microbial scientist, technical manager, agricultural technician, electrical engineer, agroecologist, site manager, genomic researcher, sales executive, carbon solutions manager, biochemist, robotics engineer	<p>High-tech agriculture industries are set to grow over the next 15 years; one of the fastest growing agri-tech subsectors is expected to be precision farming and engineering with investment in cutting-edge technologies.</p> <p>The UK's limited land supply and growing environmental and climate change means demand for roles will continue.</p> <p>HE courses in agriculture have one of the highest rates of graduate employment in the UK.</p> <p>The majority of businesses are SMEs</p>	<p>Engineer: mechanical; design & development; production and process; quality control & planning</p> <p>Science research roles</p> <p>Technician roles</p> <p>Managers</p>
Business, finance & professional services	ecommerce manager, sales and customer service adviser, accountant, actuary, business analyst, HR manager, logistics administrator, legal adviser, environmental accountant, big data engineer, data security manager, ethical hacker,	<p>A constantly changing sector with new technologies, including automation and AI, expected to eliminate some mid-level jobs in the future.</p> <p>After a period of stagnation since the recession, some areas are seeing growth but the number of full-time employees in finance is lower than previous 5 years.</p> <p>The Fintech sector, one of the UK's fastest growing sectors, is facing a skills shortage.</p>	<p>Architectural technician</p> <p>Digital project manager</p> <p>Pricing analyst</p> <p>Financial analyst</p> <p>Linguist</p> <p>Cyber security specialist</p> <p>Informatician</p> <p>Data scientist</p>

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	compliance manager, risk consultant, social media manager	SMEs are looking for people with a combination of skills such as HR, legal and IT.	Audit compliance manager Software developer (Fintech) Recruitment and HR professional Legal secretary Sales adviser Solicitor Accountant
Construction	project manager, electrician, architect, quantity surveyor, carpenter/joiner, plant operative, bricklayer, labourer, drone operator, CAD technician, IT manager, materials engineer, design engineer, scaffolder, administrative assistant	<p>179,000 jobs to be created over next five years.</p> <p>The West Midlands has an Average Recruitment Requirement of 2,800 in the five years to 2021.</p> <p>Large infrastructure projects are providing many UK jobs - crossrail, HS2, road improvements, energy sector. Transport Infrastructure Skills Strategy as a whole is expected to 30,000 apprenticeships in roads and rail by 2020</p> <p>Many new and emerging roles: robotics engineer, 3D visualiser, virtual reality design, drone technology, materials innovation, energy efficiency R&D, offsite construction</p> <p>Regional variations exist – see www.citb.co.uk/research/construction-skills-network/west-midlands</p> <p>Aim to create gender parity by 2030</p>	Project manager Civil engineer Architect Quantity surveyor Wood trades & interior fit out Electrical trades Technical and IT roles Landscape architect
Creative digital	digital marketer, publisher, SFX/VFX specialist, games developer/tester, consumer insight expert, vlogger, advertising executive, software developer, app developer, photo imaging expert, 3D animator, web designer, audio engineer, photographer, virtual reality designer, haptic programmer	<p>More employers are looking for STEAM skills (science, technology, engineering, arts, maths) – combining creative with engineering and technology.</p> <p>Digital skills across all sectors are increasing in demand.</p> <p>Growing number of apprenticeships in digital media</p> <p>HS2 is likely to have some impact on creative digital jobs although it is hard to predict how it will go.</p> <p>Over 50% of creative jobs are in London and the South East.</p> <p>90% of creative companies employ fewer than five people.</p>	These roles in 2D/3D computer animation: engineer, animator, designer, software developer, supervisor, technical director, producer, modeller, artist Games developer

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Cultural & creative	textiles technologist, actor, illustrator, musician, museum curator, festival organiser, theatre attendant, art director	<p>It's estimated 2.9m people work in the UK creative sector or 1 in 11 of all UK jobs.</p> <p>This sector is hugely important to the UK economy and is often closely linked with the visitor economy.</p> <p>Approximately half of all creative jobs are found outside the 'creative industries' in sectors such as retail, manufacturing, ICT, education and engineering.</p> <p>56% of creatives find work through informal recruitment.</p>	<p>Highly skilled dancers and musicians</p> <p>2D/3D computer animation artist/illustrator</p>
Food and drink production	food technologist, chocolatier, marketing professional, quality technician, design engineer, cheese maker, microbial scientist, production planner, environmental technologist, butcher, farmer, site manager, logistics administrator, forklift truck driver, supply manager, grain trader, buyer, agronomist	<p>Has an ageing workforce - over one third of the 400,000 strong workforce is due to retire by 2020.</p> <p>Sector is becoming increasingly hi-tech.</p> <p>Lots of opportunities for those with STEM qualifications</p> <p>Sector may be affected by Brexit and a loss of migrant labour</p> <p>Increase in higher skilled roles means sector may create better pathways for new entrants</p>	<p>Machinery and equipment engineer and technician</p> <p>LGV driver</p> <p>Manager</p>
Health and social care	GP, allied health professional, art therapist, geneticist, podiatrist, social worker, healthcare assistant, lab technician, receptionist, patient transport driver, dentist, health informatics professional, training administrator, facilities manager, theatre nurse, public health practitioner, school nurse, pharmacist, anaesthesia assistant, health records administrator, pathologist, surgeon	<p>Influencers on this sector include a need for more social care, an ageing population, public/social issues, a move towards more care in the community and advances in technology all of which are changing and creating demand for a variety of jobs.</p> <p>Number of EU nurse applicants has dropped by 96% since the Brexit referendum. The situation is exacerbated by the fact that one in three nurses is due to retire in the next 10 years; there are 24,000 nurse jobs unfilled.</p> <p>Growth areas include: telehealth, mental health, big data, private healthcare, research in bioscience and pharmaceuticals, genetics, robotics.</p> <p>Technology is starting to squeeze out roles such as receptionist and is allowing more health checks to be done at home by the patient; in the future it's likely to take on more diagnostics.</p>	<p>Nurse</p> <p>Doctor</p> <p>Care worker</p> <p>Paramedic</p> <p>Healthcare assistant</p> <p>Home support worker</p> <p>Social worker</p> <p>Support worker</p> <p>Radiographer</p> <p>Psychiatrist</p> <p>Emergency medicine doctor</p> <p>Orhotist/prosthetist</p> <p>Neurophysiology practitioner</p> <p>Dental nurse</p> <p>Residential care managers</p>

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HS2	project manager, civil engineer, labourer, procurement manager, structural engineer, electrical design engineers, welder, architect, site supervisor, scaffolder, construction manager, electrician, carpenter, steel fixer, tunneller, plant operative, passenger and freight operating staff, marketing & communication officer, health and safety manager, estimator, IT professional, HR officer	25,000 additional jobs during construction; 2,000 apprenticeships; 10,000 additional jobs from growth in wider economy New technologies mean new skills. Digital skills are sought after – data handling and analysis, problem solving. Opening up of recruitment pathways – local providers, support for local workforce but also stiff competition for some roles and courses. Aim to recruit a diverse workforce.	Engineer: civil, structural, electrical, design & development; production and process; quality control & planning Safety manager Signalling and telecommunications specialists Skilled trades: welder, carpenter/joiner, electrician Labourer
ICT inc. cyber security and defence	telecommunications engineer, cyber security expert, artificial intelligence (AI) administrator, data architect, digital project manager, satellite engineer, GPS expert	Higher/degree apprenticeships The number of digital business increased by 30% between 2010 and 2015 (almost twice that of UK business enterprises as a whole (17%). There's a huge demand for roles in big data management data/cyber security - by 2020 there could be a shortfall of 1.5million cyber security experts. Digital health	Architectural technician Digital project manager Software engineer Developer Data scientist CAD designer
Life sciences	lab technician, intellectual property expert, microbiologist, antimicrobial resistance researcher, geneticist, design & development engineer, pharmacologist, precision engineering technician, sales executive	Sector is a key driver in the UK economy with thousands of new jobs to be created over the next few years. Three main sub-sectors: pharmacology (drugs and chemistry), med tech (hi-tech equipment) and bio tech (microbiology); pharma is the largest sub sector. Bioinformatics - connecting computing, biology and medicine - is one of the fastest growing areas of research and development. Sector is also concerned with food and energy security, healthy ageing and living with environmental change – research is a large part of this. Many roles for craft and technical occupations.	Science research roles Sales roles

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Low carbon and environmental technologies	Mechanical engineer, design engineer, wind turbine technician, energy assessor, scientific specialist, operational waste plant specialist, smart meter fitter, electrician, solar PV installer, process engineer, CAD technician, electronics engineer, software engineer, driverless vehicle technician	Many roles for craft and technical occupations Significant opportunities are expected in renewable energy and micro generation technologies, cleantech, recycling and waste management and clean and waste water management. Opportunities for business services and consultancy around sustainability and carbon reduction. Driverless vehicles and digital transport technologies innovation a priority for Coventry & Warwickshire, Black Country	Engineer: mechanical, design & development, electronics Technician roles Project manager
Transport & logistics	LGV driver, customer service roles, warehouse manager, export manager, logistics specialist, pilot, ICT manager	Around 1.2 million workers in ports, transport and logistics will be needed by 2022. Technology is having a huge impact on roles such as GPS tracking, electronic signature scanners, robotic warehouse pickers, drone delivery and advanced online operations. More roles are becoming multi-skilled, making it harder to recruit. Aims to increase diversity of workforce.	LGV driver Pilot Data handling expert Warehouse manager
Visitor economy (includes catering & hospitality)	travel consultant, chef, waiting staff, hotel receptionist, manager, customer service roles, cleaner	Overseas tourism from the UK remains strong despite the weaker pound and higher paid opportunities in the sector could continue to grow. People 1 st estimates that 1.3 million employees will have to be recruited by 2025, of whom 975,000 will be replacements for staff that have left. Issues for the hospitality & catering sector include retention of staff, living wage, impact of Brexit.	Leadership and management roles Chef Kitchen staff Front of house staff Cleaning staff Housekeeper Travel consultant