

WE DRIVE GROWTH THROUGH SKILLS

**West of England business skills
survey and the development of the
Local Sector Skills Statements.**



@wofenglandlep

Business and economic intelligence

Curating data from multiple sources, e.g.:

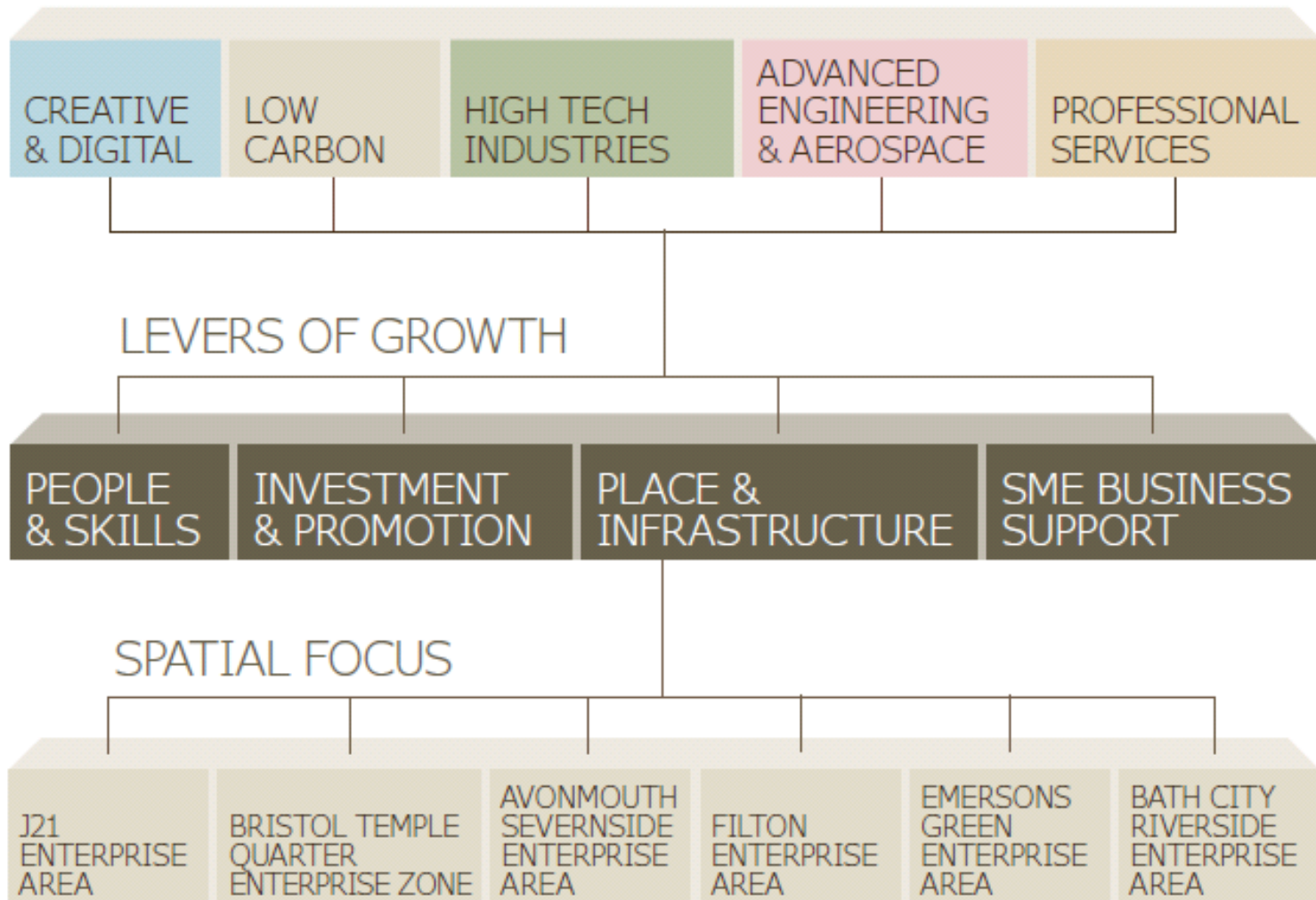
- UKCES
- National Sector Skills Councils
- Local industry bodies
- DfE / BIS / SFA / HEFCE
- Ofsted / QAA
- **LEP Sector Groups**
- **WE LEP Business Skills Survey**
- **Apprenticeship Ambition 2020 & Business Advisory Group**
- **Direct employer engagement**

National policies and priorities

(listed references on each statement)



FIVE PRIORITY SECTORS

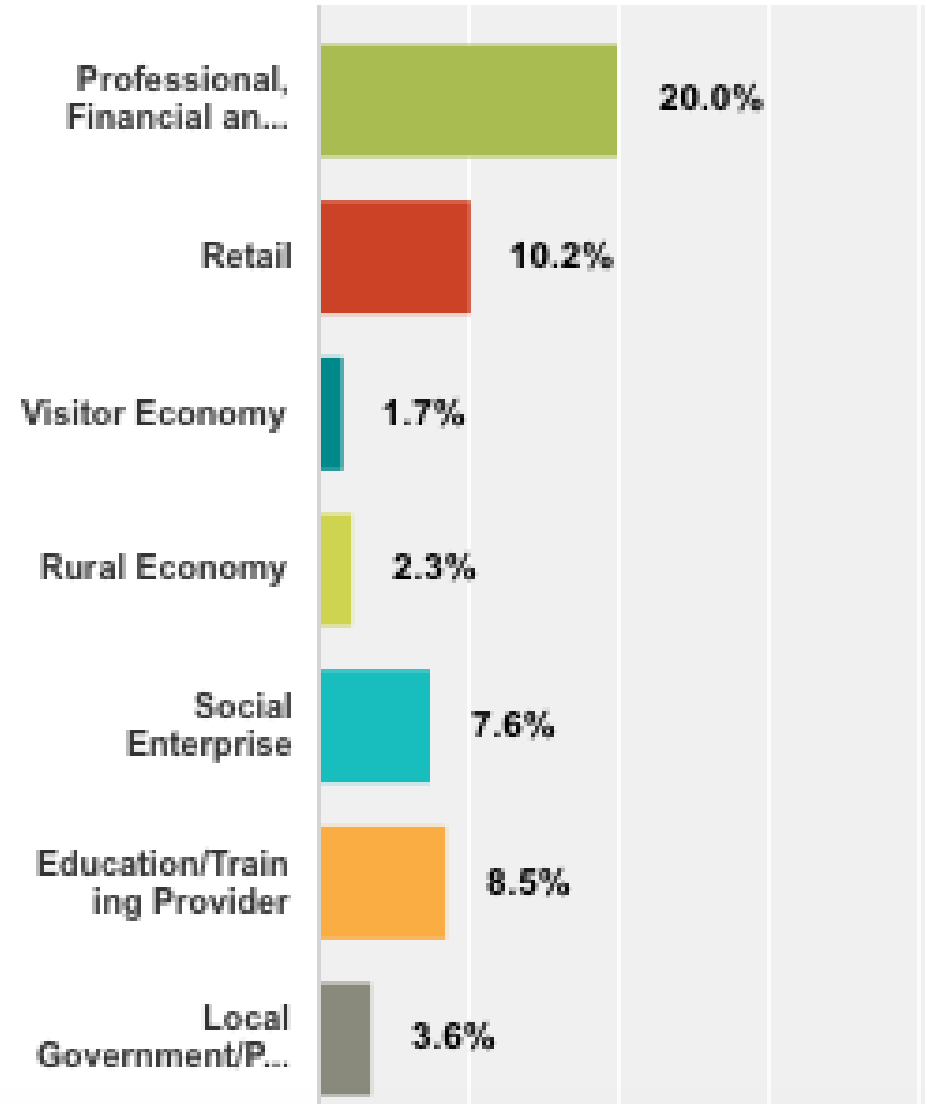
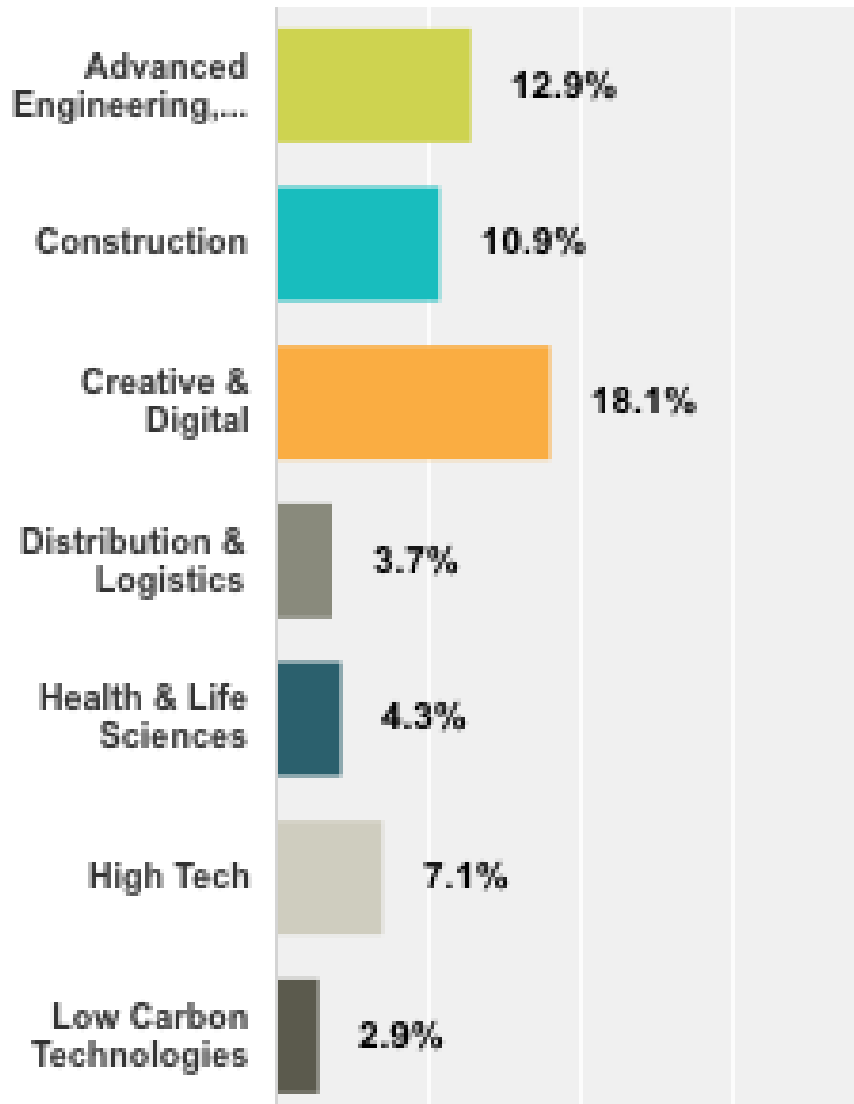


Mapping skills gaps / shortages

LEP Business Skills Survey open March – June 2015
Online questionnaire and telephone survey
643 responses, representing nearly 27,000 staff

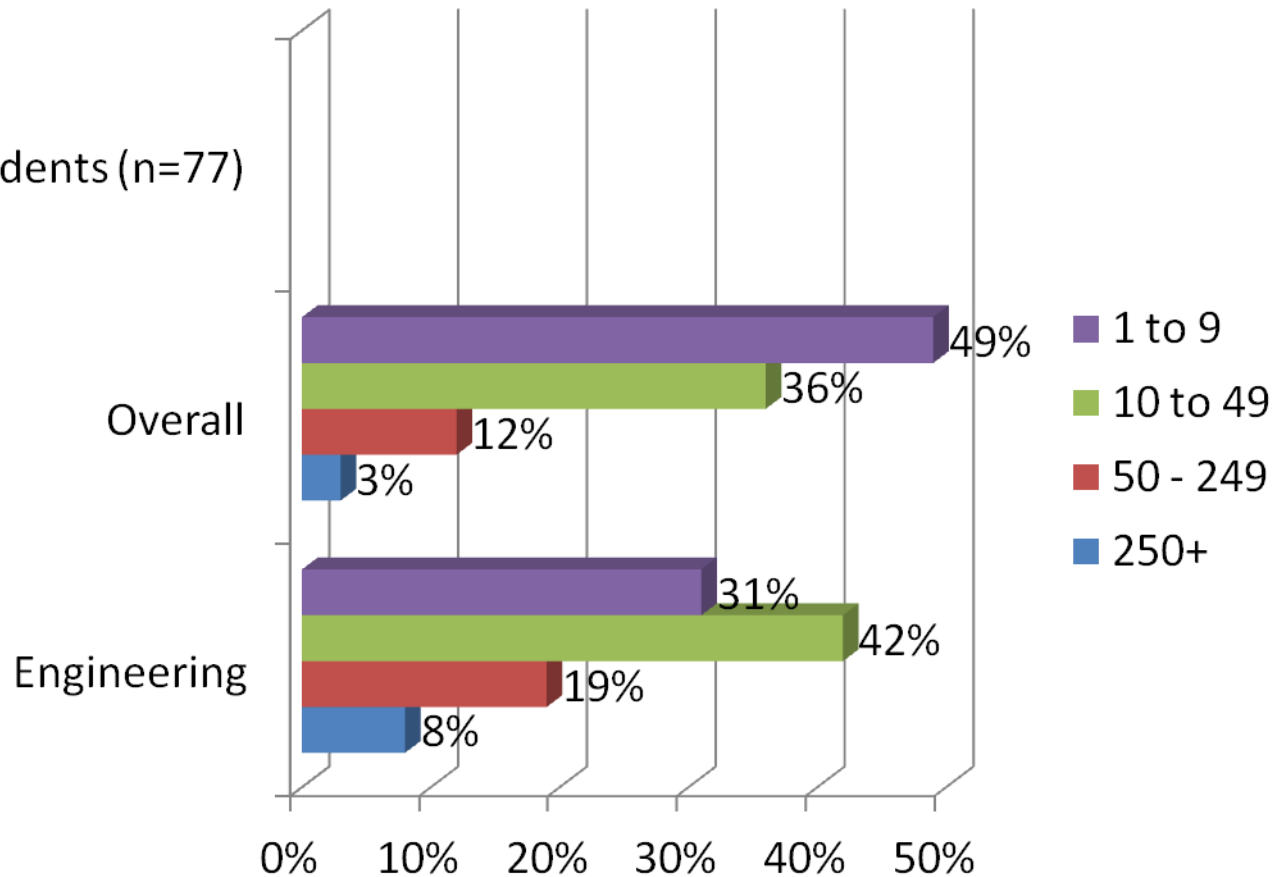
- Informs production of Local Sector Skills Statements which form basis of action plan for schools, colleges, universities, other education/training providers and partners (DWP, NCS, Chambers etc.)
- Supports Joint LEP working e.g. Nuclear, High Tech, Infrastructure

Q3 In which sector(s) does your company operate?



Q4 How many employees at your West of England site (excluding contractors and agency workers)?

Base: Respondents (n=77)



Respondent business postcodes

BS1		11.94%	77
BA1		7.60%	49
BA2		5.12%	33
BS2		5.12%	33
BS8		4.03%	26
BS3		3.72%	24
BS4		3.72%	24
BS37		3.26%	21
BS21		3.10%	20
BS5		2.95%	19
BS16		2.79%	18

B&NES 139 (**22%**)

Bristol 277 (**43%**)

N Somerset 90 (**14%**)

S Gloucestershire 137 (**21%**)

Engineering Training and skills

61% state skills are a barrier to growth

47% don't have a training plan

46% don't have a training budget, but **22%** had a budget of £15k or more

69% carry out an annual appraisal that considers workforce development with **98%** considering how existing staff might fill their skills gaps.

Engineering Training and skills

75% felt that sector specific technical training was more important than business skills.

67% training days delivered by external companies.

Asked to rate satisfaction with a range of training providers and FE colleges scored the lowest.

65% compared to **79%** overall

20% stated that staff undertook no form or training in 2014.

Greatest barriers to training staff are prohibitive cost (**35%**) and can't spare staff time (**52%**).

Top skills required **now**

- Technical, practical or job specific skills (**63%**)
- Leadership and Management (**42%**)
- Business and customer awareness (**42%**)
- Positive Attitude (**37%**)
- Planning and organising skills (**34%**)
- Team working skills (**34 %**)

Top skills required **in 3-5 years**

- Technical, practical or job specific skills (**56%**)
- Leadership and Management (**37%**)
- Advanced IT or software skills (**33%**)
- Business and customer awareness (**27%**)
- Planning and organising skills (**25%**)

Future skills needs

Future skills needs most likely required due to:

- Business growth (**61%**); and
- New technologies (**60%**)

The job roles most likely to be affected by future skills needs are Technical and Associate Professional Occupations (**45%**) and Process, plant and machine (**44%**)

75% state that sector specific technical training is more important to their business growth than generic business skills training.

Recruitment experiences

52% (n=34) found vacancies in 2014 hard to fill

The main reasons of this were:

- Low number of applicants with the required skills (**68%**)
- Low number of applicants with required attitude, motivation or personality (**35%**)

Most frequently lacking in applicants were:

- Technical, practical or job-specific skills (**75%**)
- Lack of attitude, motivation or personality (**35%**)
- Too much competition (**26%**)

Apprenticeships

49% do not employ apprentices.

33% apprentices were a core part of the growth strategy.

73% planning to take on at least one apprentice.

29% during 2016

44% in the next 2-3 years

Barriers – government funding, relevant training and retention issues.

Business engagement with education

55% currently work with schools or colleges to support the development of employability in young people.

Most common activities:

- Offer work experience (**81%**)
- Offer traineeships/apprenticeships (**44%**)
- Giving careers advice/talks (**25%**)

WEST OF ENGLAND LOCAL ENTERPRISE PARTNERSHIP

WE ARE A PARTNERSHIP FOR GROWTH



WEST OF ENGLAND ADVANCED ENGINEERING AND AEROSPACE

Local Sector Skills Statement 2016



Skills Themes to focus the sector priorities

- **Improve Careers Education, Information, Advice and Guidance**
- **Improve the relevance and /or quality of Provision**
- **Increase Apprenticeship starts and the availability of Higher Apprenticeships**
- **Engage SMEs & supply chains to support growth and improve productivity**
- **Enhance Equality & Diversity through multiple career pathways.**

SECTOR GROUPS

LC

Adv
Eng

PS

C&D

Htec

Cons
truct

H&L
S

Improve Careers Education, Information, Advice & Guidance

Improve the relevance and /or quality of provision

Increase Apprenticeship starts and availability of higher apprenticeships

Engage SMEs & Supply Chains to support growth and improve productivity

Enhance Equality and Diversity through multiple career pathways

Improve careers education, information, advice & guidance (CEIAG)

Issues

- Young people and those advising them in education do not understand the breadth, depth or accessibility of career opportunities across the engineering sector in the West of England.
- In addition there are a plethora of initiatives which add further complexity for both the employers and education institutions. 36% of STEM teachers feel confident in providing engineering careers advice, and 17 % of STEM teachers believe a career in engineering is undesirable for their students.

Objectives

- Support a co-ordinated approach to engagement in schools, utilising existing initiatives. eg Engineering UK has two STEM based strategic goals.
 - To improve the perception of engineering, engineering and technology
 - To improve the supply of engineers
- Add value to these engagements by delivering an industry-led careers activity in partnership with national or local initiatives.

WEST OF ENGLAND LOCAL ENTERPRISE PARTNERSHIP

WE ARE

COMPOSITES

AT THE FOREFRONT OF ADVANCED MATERIAL DEVELOPMENT

WE HELPED DEVELOP

LIGHT WEIGHT TUBE DOORS
ELECTRIC LIFESAVER CRAFT



COMPOSITE WINGLETS



INVICTUS CATAMARAN



NOVEL BICYCLE WHEELS

UP TO

£25,000

LOCAL ANNUAL GRADUATE STARTING SALARY

RECOGNISED LOCAL BUSINESSES

GE / AIRBUS / GKN AEROSPACE / ROLLS-ROYCE / IPECO / HUNTSMAN / LMAT / AGUSTA WESTLAND



FURTHER EDUCATION

CITY OF BRISTOL COLLEGE
MECHANICAL ENGINEERING APPRENTICESHIP
AEROSPACE ENGINEERING MANUFACTURING - FOUNDATION DEGREE

WESTON COLLEGE
MECHANICAL ENGINEERING APPRENTICESHIP
COMPOSITE MANUFACTURING COMPOSITE TECHNOLOGY



66%

OF THE NCC GRADUATE INTAKE IN 2014 WERE FEMALE ENGINEERS

WHAT MAKES A COMPOSITES ENGINEER

- PRECISE
- MOTIVATED
- ORGANISED
- CONFIDENT
- INNOVATIVE
- ATTENTION TO DETAIL
- WRITING SKILLS
- LEADERSHIP QUALITIES
- TEAM PLAYER

MORE THAN

£14 million

OF TECHNOLOGY DEVELOPMENT LAST YEAR

THE WEST OF ENGLAND IS HOME TO THE NATIONAL COMPOSITES CENTRE (NCC)

WE HAVE EUROPE'S LARGEST OPEN-ACCESS COMPOSITES MANUFACTURING PRESS



HIGHER EDUCATION

UNIVERSITY OF BRISTOL
The Advanced Composites Centre for Innovation and Science (ACCIS)

UNIVERSITY OF BATH
Composites Research Unit



REQUIREMENTS FOR A TECHNICAL ENGINEERING APPRENTICESHIP AT THE NCC

- 5 GCSES A-C
- B IN MATHS
- B IN SCIENCE
- WORK EXPERIENCE
- A DEMONSTRABLE INTEREST IN COMPOSITES AND ENGINEERING

APPLY HERE

RISE OF THE ENGINEER



ISSUE 2 OF 6 | Next issue: RAIL | www.westofenglandlep.co.uk/rote

The Employability Chartermark

- An Investors in People-type development tool to help schools adopt a more strategic approach to employability and employer engagement
- 94% of WE secondary schools engaged
- In the West of England, of the 62 state secondary schools:
 - **26** schools have achieved the Chartermark;
 - **32** schools are engaged, including two special schools;
 - Only **four** are yet to engage.



Improve the quality and local responsiveness of education and training

Issue

- Providers appear to business, preoccupied with the needs of the funding rather than the needs of employers, and the quality of provision is varied. The West of England business skills survey illustrated that employers have faith at least in local Further Education provision.

Objectives

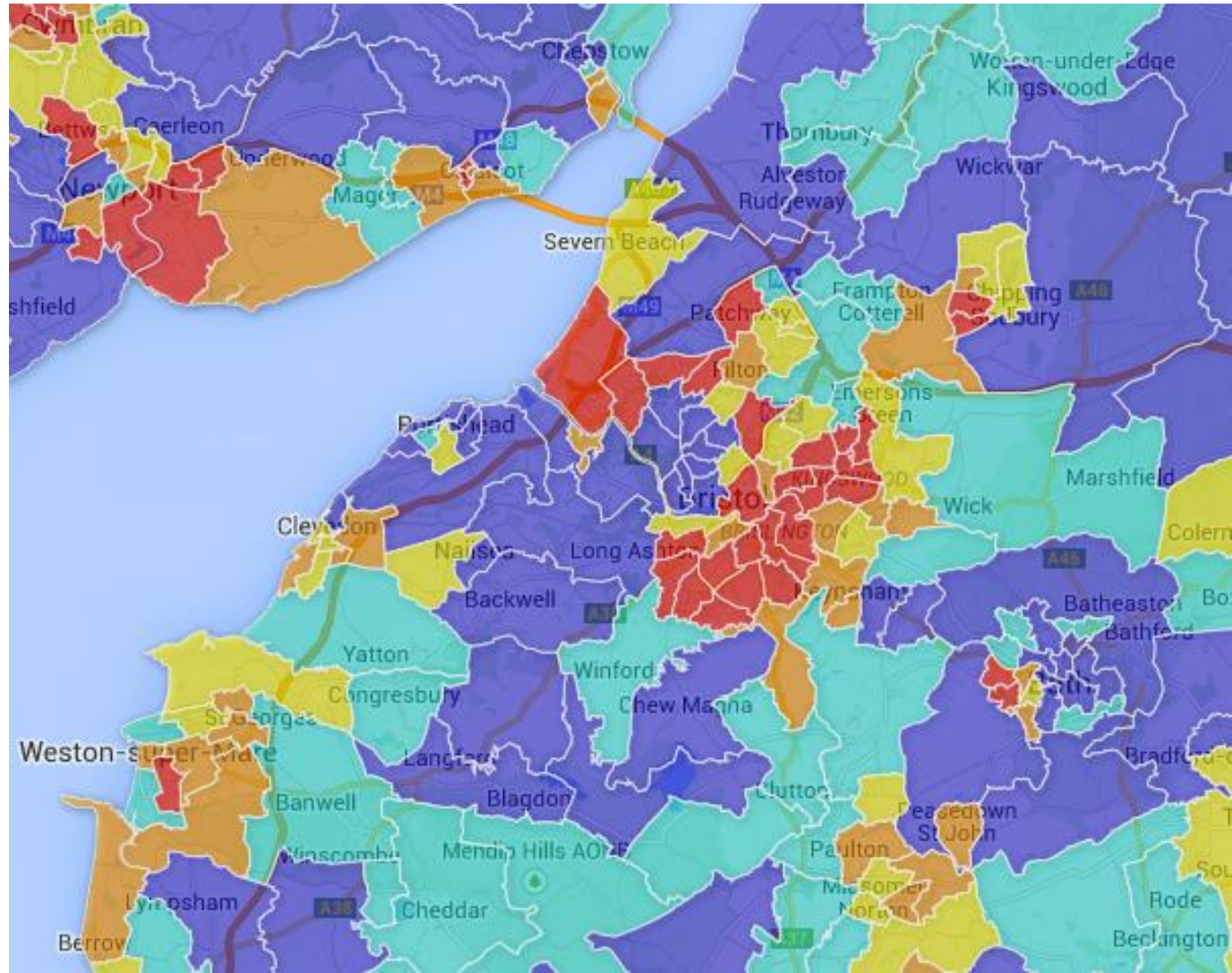
- Work with industry and providers to develop an industry approval scheme or award for recognised local provision; building on the practices of the nuclear sector and creative industries.

We use local data to drive strategic planning



HEFCE POLAR3:

Young people's participation in HE by age 19, by UA ward



FE Priority Sector Leads

College	Lead
Bath College	Law and Professional Services
City of Bristol College	Engineering High Tech
South Gloucestershire and Stroud College	Creative and Digital Health
Weston College	Construction Low Carbon

Increase apprenticeships starts and improve access to higher and degree apprenticeships

Issues

- Sourcing suitable training programmes and skills development opportunities, especially for the SMEs, is complicated and time consuming. Local employers indicated a lack of appropriate training or qualifications available regionally.
- In addition, with the advancement of new technologies such as additive layer manufacture and composites, there is a need to prepare for the future skills needs. UKCES cite emerging technologies as a current challenge and the growing 'computerisation of production processes.

Objectives

- Work with partners and providers to produce a map of provision based on engineering specialisms and enabling technologies facilities from level 3 to level 7 addressing the training needs for Additive Layer Manufacturing / 3D fabrication (ALM).
- Aim to become an ALM centre of excellence by 2020. Utilise the information available from other cities such as Sheffield to increase the variety of future specialist provision.

YOUR FUTURE CAREER

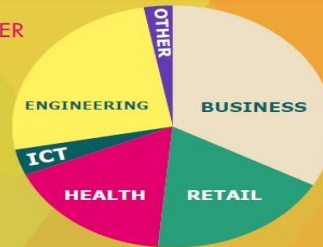
18 JANUARY 2016

YOUR WEEKLY SNAPSHOT OF LOCAL APPRENTICESHIP OPPORTUNITIES
EARN AND LEARN WITH GREAT EMPLOYERS IN BATH, BRISTOL AND BEYOND

130

ADVANCED AND HIGHER
APPRENTICESHIPS

OPPORTUNITIES BY INDUSTRY



342

APPRENTICESHIP
OPPORTUNITIES

EARN UP TO

£353

PER WEEK

FEATURED APPRENTICESHIP OF THE WEEK

Title: BUSINESS ADMINISTRATION

Company: PRIME MOLASSES

Location: CLEVEDON

Weekly wage: £240.00

Reference: 765720

Closing date: 14 FEBRUARY 2016

Description: The main role of this apprenticeship based in Clevedon will be to maintain the quality system through data collection and inputting the data onto the computer database. Working closely with the business managers you will be responsible for chasing necessary documents, categorising documents and filing them systematically. The role will also involve work with the Finance Controller on invoicing. Prime Molasses supplies and markets Molasses and other liquid feeds to the compound feed market. They also supply organic raw materials to the organic trade market.

prime

FEATURED APPRENTICESHIPS

FASHION MARKETING EXECUTIVE // CHEF
IT FIELD ENGINEER // MEDIA TEAM ASSISTANT
TAX APPRENTICE // LEGAL APPRENTICE
ENGINEERING MANAGEMENT // LIFEGUARD

OPPORTUNITIES BY LOCATION



FEATURED EMPLOYERS

CONTAGIOUS CLUBWEAR ARCADIA
BT GROUP LAKEHOUSE NURSERY
MAZARS MINISTRY OF DEFENCE
SHARP BUSINESS SYSTEMS
BABCOCK DC LEISURE
INTERSERVE SUPPORT SERVICES
L-3 MARINE SYSTEMS XEROX
PRIME MOLASSES BEVAN BRITAN
FRANCE MEDIA CAP GEMINI U
CALL CREDIT MARKETING

Apply for these opportunities and more at: gov.uk/apply-apprenticeship



In partnership with



Engage SMEs to boost productivity and build capacity for growth

Issues

- Prime and Tier 1 procurement requirements, within the sector, do not encourage training and lifelong learning and therefore SMEs within the supply chain are not obliged to provide training opportunities.
- A significant number of West of England engineering businesses have no allocated budget for training, yet almost two thirds report skills as a barrier to business growth. UKCES identify encouraging employers to invest in upskilling and developing their workforce as a key action for the future.

Objectives

- Increase SME uptake of apprentices by working with the leading firms to explore the possibilities of introducing skills and training requirements within the procurement process.
- Benchmark the sector against national research, public sector good practice and developments in the construction industries.

We're helping
local people
make **better**
informed
career choices

WE Skills Prospectus
launched 12 November 2015



WEST OF ENGLAND SKILLS PROSPECTUS 2016

Develop the skills local employers need.
Earn and learn right on your doorstep.



FUTURE EMPLOYMENT GROWTH

SUB-SECTOR	% CHANGE IN EMPLOYMENT 2013-2020	NATIONAL AVERAGE EARNINGS
Manufacture of electrical equipment	-20.7	£33,633
Manufacture of machinery and equipment	-7.2	£29,127
Manufacture of weapons and ammunition	-10.6	£37,853
Manufacture of air and spacecraft and related machinery	-8.1	£47,238
Manufacture of medical and dental instruments and supplies	4.4	£33,431
Research and experimental development on natural sciences and engineering	22.2	£60,646
Manufacture of instruments and appliances for measuring, testing and navigation	-1.4	£25,674
Repair of electrical equipment	-24.7	£23,409
Repair and maintenance of aircraft and spacecraft	1.4	£41,518
Engineering activities and related technical consultancy	8.7	£35,373
Manufacture of electrical equipment	-20.7	£33,633

OCCUPATIONS / JOBS ADVERTISED

Over a nine month period since the beginning of 2014 there have been approximately 330 jobs in Advanced Engineering and Aerospace advertised in the West of England.

The advertisements cover a wide variety of occupations within the Advanced Engineering and Aerospace sector these include:

Buyers and Procurement Officers
 Civil Engineers
 Electrical Engineers
 Engineering Technicians
 IT Business Analysts, Architects and Systems Designers
 Mechanical Engineers
 Metal Working Production & Maintenance Fitters
 Programmers & Software Development Professionals

Within these occupations there are a wide variety of job titles, including:

Consultant Engineer
 Controller
 Designer
 Electrical Engineer
 Engineer
 F and Dt Stress Engineer
 Manufacturing
 Mechanical Designer
 PHP Developer
 Project Manager
 Senior Mechanical Engineer
 Service Consultant
 Systems Engineer
 Territory Manager

FUTURE OCCUPATIONAL GROWTH

The number of employment opportunities in occupations related to Advanced Engineering and Aerospace is expected to continue to grow. However, these opportunities are not limited to this sector and may be coming forward in different industries such as Creative or High Tech.

OCCUPATION	% CHANGE IN EMPLOYMENT 2012-2020
Civil Engineers	5
Mechanical Engineers	6
Electrical Engineers	10
IT Business Analysts, Architects and Systems Designers	7
Programmers and Software Development Professionals	9
Information Technology and Telecommunications Professionals n.e.c.	8
Engineering Technicians	5
IT Operations Technicians	12
Buyers and Procurement Officers	3
Metal Working Production and Maintenance Fitters	1

ADVERTISED SALARY

Based on information from local job advertisements the following information provides a broad indication of salary based on common occupations within Advanced Engineering and Aerospace.

Over a nine month period since the beginning of 2014 most of the jobs advertised for occupations related to Advanced Engineering and Aerospace had advertised annual salaries ranging from £30,000 - £49,000.

OCCUPATION	% OF JOBS ADVERTISED BY SALARY BAND						
	≤ £10,000	£10,000-£14,999	£15,000-£19,999	£20,000-£29,999	£30,000-£49,000	£50,000+	
Mechanical Engineers	2.7	0.6	0.2	27.4	43.9	25.1	
Programmers and Software Development Professionals	1.9	1.0	1.1	11.9	60.0	24.2	
IT Business Analysts, Architects and Systems Designers	2.2	0.8	1.6	11.9	42.4	40.1	
Civil Engineers	3.3	0.4	1.9	23.7	59.8	11.0	
Electrical Engineers	2.4	1.3	2.9	22.2	46.6	24.6	
Buyers and Procurement Officers	1.9	1.9	8.0	20.8	50.3	17.0	
Engineering Technicians	3.9	1.9	3.9	43.4	34.5	12.4	
Metal Working Production and Maintenance Fitters	3.5	1.0	10.2	52.1	29.1	4.2	

N.B. Percentages may not sum due to rounding

Promote pathways for employment to enhance equality and diversity in the workforce

Issue

- Diversity within the engineering industry remains a concern locally and nationally. There is still a disproportionate number of white males entering the industry through the apprenticeship route to the detriment of the BME communities and females. Both nationally and locally only 7% of engineering apprentices starts in 2012/13 were female. Over 40% of female engineering graduates do not progress into employment within the engineering sector.

Objectives

- Encourage all schools engagements to see an equal participation of female and male students and prioritise under-represented groups.
- Introduce an Apprentice Ambassador network to enable all schools to access apprentice speakers to encourage more young people, from a wider range of backgrounds into engineering. This will include utilising the support of existing networks and STEM initiatives.

Careers & Enterprise Company

A new independent, government-funded organisation which exists to:

- Help young people unleash their best possible futures.
- Inspire young people
- Inform independent choice
- Help young people achieve even more

From January 2016, 2x local Enterprise Co-ordinators will:

- Develop and support a network of Enterprise Advisors
- Broker links between schools, prioritising those in greatest need
- Co-ordinate complimentary and supporting activities

THE ENTERPRISE ADVISER NETWORK

GO

INVESTMENT FUND

SHOW MORE

ENTERPRISE PASSPORT

SHOW MORE

RESEARCH

SHOW MORE

THE CAREERS &
ENTERPRISE
COMPANY

The Future

- Devolution in The West of England
- Area Based Review – 4 FE colleges and St Brendan's 6th Form
- Apprenticeship Ambition 2020
- Apprenticeship Levy

**Thank you
&
Any Questions?**

Please visit [/www.westofenglandlep.co.uk/skills](http://www.westofenglandlep.co.uk/skills)