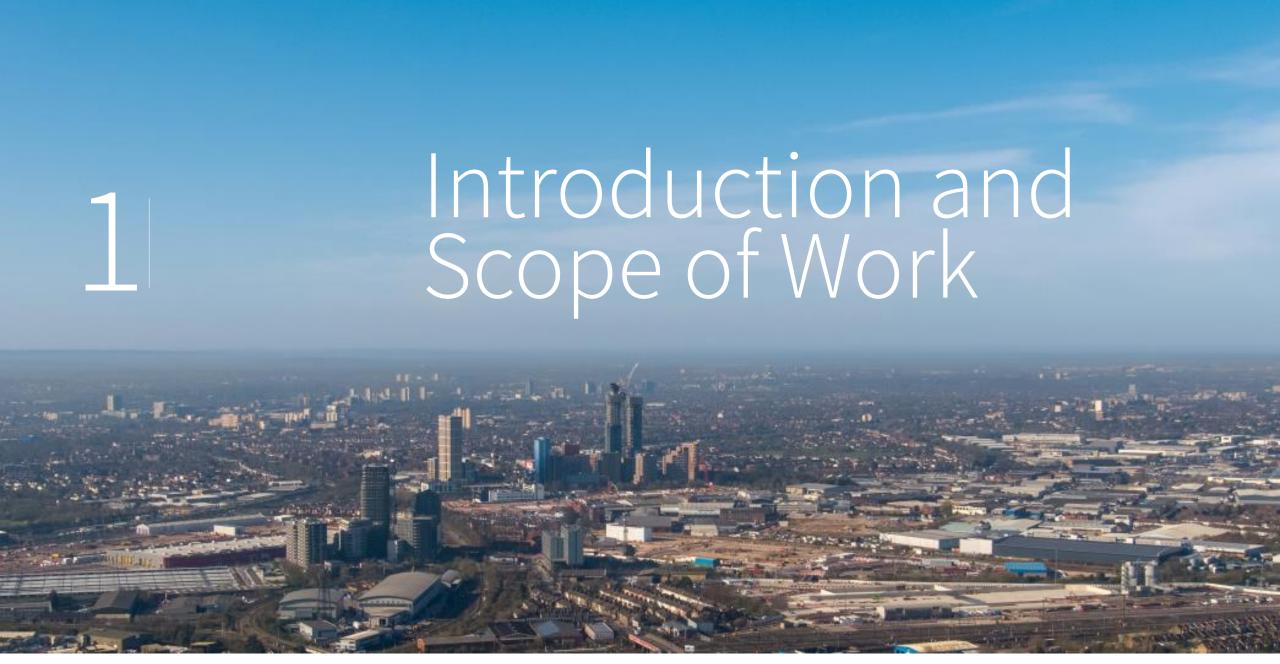


# Hemel: Higher Education Opportunities Study

Stage 2 Report

July 2024



### Introduction

Major economic growth opportunity for Hemel Hempstead and Hertfordshire. Potential to deliver 11,000 additional homes and 10,000 jobs by 2050, transforming Hemel Hempstead and establishing it as an exemplar sustainable new town.

### **The HGC Programme**

The award (2018) of Garden Town status to Hemel Hempstead is underpinned by an ambitious programme that will see the town expand through northern and eastern growth areas. Its spatial vision has two themes – healthy lifestyles and responding to climate change – at its core. Four pillars capture the breadth of the vision, including:

- Green Network: Focusing on the ambition to deliver substantial new green infrastructure and on sustainable mobility.
- **Integrated Neighbourhoods**: Reflecting the priority attached to creating sustainable neighbourhoods.
- **Self-Sustaining Economy:** Realising the opportunity to generate 10,000 jobs, including 8,000 new jobs through Herts IQ with a focus on innovation, green technology, digital technology and the circular economy.
- Engaged Communities: Recognising the critical importance of ensuring that HGC delivers for communities across Hemel Hempstead through placemaking.

#### **Economic Growth**

The economic transformation of Hemel Hempstead is a strategic priority. Increasing the number of knowledge intensive jobs and businesses, attracting and retaining higher paid and higher skilled employment, and targeting research and

development, science and technology led activity are central to this transformation, with opportunities in the following sectors highlighted by partners:

- Envirotech Established as a growth opportunity through Herts IQ enterprise zone
- Agri-tech Driven by the internationally significant Rothamsted Research and the presence of a small number of agritech businesses in and around Hemel Hempstead

In addition, the study has considered opportunities in other sectors which are either priorities or strengths of Hemel Hempstead and its surrounding area, or opportunities and needs driven by the town's future growth. This includes sustainable construction, the expansion of health and social care and the workforce this requires, and the ICT sector.

### **Key Location**

The study focuses particularly on the East Hemel strategic site, a 55 hectare site earmarked for substantial employment development and a major contributor to the future supply of land and floorspace for South West Hertfordshire. Herts IQ, the Crown Estate (land owner), Dacorum Borough Council and HGC have recognised the site's potential as a location for a HE, science and R&D presence, alongside a priority to deliver more employment space as part of the expansion of the Maylands business area. The Maylands Masterplan Stage 1 Report (December 2023) recognises the appetite to attract more 'aspirational' economic activity, the strengths of the wider area in sectors including agritech, environmental technology and life sciences and potential long-term opportunities for Maylands Gateway to contribute to increasing R&D activity in the area.

### **Scope of Work**

The brief for this study centres on the need to identify and test opportunities to secure a higher education presence in Hemel Hempstead, focusing particularly on future employment land development on the east Hemel strategic site. The purpose of the study is to feed into a Learning Framework for Hemel Hempstead. The scope of the research included the following main components:

- Analysis of current higher education provision and student populations in Hertfordshire
- Wider analysis of trends in higher education and graduate employment
- A review of key HE institutions and research organisations in the study area
- Findings from soft market testing exercise with selected institutions to explore the scale and type of activity which might be targeted for Hemel Hempstead, integrated into the report
- Conclusions on opportunities for Hemel Hempstead and implications for Local Plan policies

### Education, Skills and Innovation

Education, skills and innovation are critical to realizing ambitions for a transformed Hemel Hempstead

#### **HGC Programme**

Pillar 3 of the HGC vision is clear about the priority attached to technology and innovation in achieving economic sustainability. Opportunities or initiatives identified include sustainable (or smart) construction, the circular economy and recycling (Envirotech), local agriculture and food production (agritech), and digital technology, AI and data (ICT).

In its own right, the delivery of 11,000+ homes and new social and community infrastructure on HGC sites over a 30 year+ period represents a major opportunity for local job creation and business benefits, innovation and skills development. This aligns well with the priority attached to the broader Envirotech sector and to smart and sustainable construction as a sector priority.

### **Herts Innovation Quarter**

Herts IQ was established as an Envirotech enterprise zone in 2015. Its sectors focus now includes agritech, offsite manufacturing (construction), smart construction, logistics and distribution. Innovation, education and skills were central to Herts IQ's objectives, with key objectives including increasing productivity, attracting and retaining skills and talent, and supporting new business formation.

With a commitment to deliver 3 million sq ft of commercial floorspace, progress to date has revolved around the successful addition of new logistics and distribution floorspace at Maylands (Dacorum) and the delivery of new offices, labs and innovation space at Rothamsted's Russell Building.

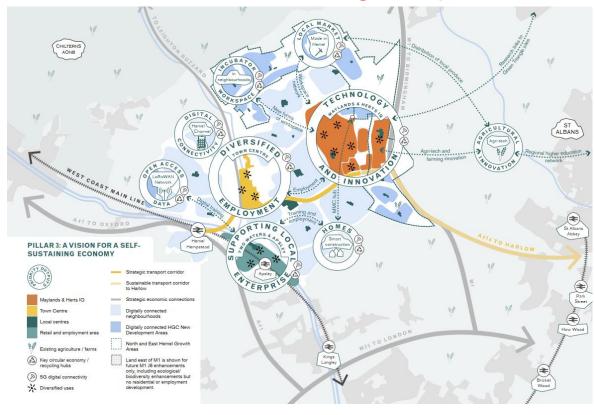
#### **Local Plans**

Local Plans are in preparation for Dacorum and St. Albans. Dacorum issued its consultation Revised Draft Growth Strategy at the end of 2023, and St. Albans its Regulation 18 consultation draft plan in summer 2023.

Positioning Hemel Hempstead as a growing place which seeks to attract higher value employment, target research and development activity and potentially a higher education presence will need to be reflected in planning policies which support this.

St. Albans Draft Local Plan includes policies (EMP4, SP5) which support the development of knowledge-based R&D for Herts IQ identifying part of the East Hemel employment site as the location for such development.

### **Hemel Garden Communities: Self Sustaining Economy**





# Higher Education in the Area

Higher Education is delivered by several institutions across Dacorum, Hertfordshire and in the wider area. Cranfield University is shown overleaf. The list includes universities and further education colleges delivering degree level teaching programmmes. A review of the teaching and research provision of institutions is extended to include specialist research.



### **Institutions Delivering Higher Education in the Area**

	Institution	Locations and Distance from Hemel Hempstead	HE Students (2021-2)	Teaching and Specialist Research
	University of Hertfordshire	Hatfield, Herts 12 miles	31,940	<ul> <li>Creative arts, medical sciences, engineering, health and social work</li> <li>Research institutes in agriculture, food, environment; Health services and clinical research; Astrophysics</li> <li>Designated as University Enterprise Zone</li> </ul>
(5)7	Buckinghamshire New University	High Wycombe Main Campus, 22 miles Also Uxbridge, Aylesbury, Great Missenden, Pinewood	18,800	<ul> <li>Extensive range, including arts, design, fashion, computing, policing and security, health</li> <li>Research impact centres in numerous disciplines</li> </ul>
	University of Buckingham	Buckingham 35 miles	2,300	<ul> <li>Extensive covering social sciences, medicine, computing, business law</li> <li>Centre for Education and Employment Research</li> </ul>
	University of Bedfordshire	Luton 11 miles	16,430	<ul> <li>Broad range of undergraduate and postgraduate teaching with strong vocational focus – business, accountancy, marketing, law, computing, health &amp; education, sport, art &amp; design</li> <li>Research centres including education, health, biomedical, sport, business &amp; management</li> </ul>
	West Herts College	Watford 7.5 miles Hemel Hempstead	139 FTE	Media and design, computing, law, music, science, children & early years, and business & management
	Oaklands College	St. Albans 9 miles Also Welwyn Garden City, Borehamwood	101 FTE	<ul> <li>Theatre, music, engineering at degree level</li> <li>Engineering Centre, STEM Centre</li> </ul>
	North Hertfordshire College	Stevenage 21 miles Hitchin	446 FTE	Occupationally focused - science, art/design, computer tech, sports science

## Research Institutions and Organisations

Several research focused institutions and organisations have been highlighted to the study as either actively engaged already through Herts IQ and the Hertfordshire Local Enterprise Partnership, or as potential opportunities for engagement about a future presence in Hemel Hempstead. All align well with established sector priorities for Hertfordshire, and with the interest in securing science-led uses, R&D activity, knowledge exchange or a higher education teaching and research presence in the town. Their key features are summarised in the table below.

Institution/Organisation	Research Specialisms and Centres	Alignment with Priorities and Opportunities for Hemel Hempstead
Rothamsted Research, Harpenden	<ul> <li>Agricultural sciences, with listed expertise in:         <ul> <li>Net zero and sustainable agriculture</li> <li>Sustainable soil and crops</li> <li>Crop performance and quality</li> <li>Data science and experimental output</li> <li>Sustainable crop protection</li> </ul> </li> <li>Harpenden campus (17 miles from Hemel) provides extensive lab facilities, computing and analysis facilities</li> <li>Institution has an extensive business engagement programme and incubator facilities (Agritech Business Centre) located on its Harpenden campus (Rothamsted Enterprise)</li> </ul>	<ul> <li>Agricultural science and technology is key contributor to Envirotech sector</li> <li>Small but important presence of agritech businesses in Dacorum and St. Albans, with smaller number in Hemel Hempstead</li> <li>Potential connection to HGC objectives around sustainability, local food supply and green space</li> <li>Herts IQ has funded development of Russell Building</li> <li>Evidence that Harpenden site lacks space to provide grow on units for spin out businesses, with potential for East Hemel strategic site to be candidate location</li> </ul>
Building Research Establishment (BRE), Garston, Watford	<ul> <li>Building sciences institute with international profile delivering services including testing and certification, training, building and materials research, standard setting, data and digital tools including software programmes for resource management, safety, energy efficiency.</li> <li>Research expertise in extensive range of building and construction domains include energy efficiency, safety, information management, security, innovation and sustainability</li> <li>BRE Science Park has facilities including: Structures Laboratory, research and testing facilities, demonstrator homes, offices and other building.</li> </ul>	<ul> <li>Driver could be BRE engagement with HGC (and wider Hemel) construction programme, and particularly design and sustainability principles</li> <li>Not clear that BRE would consider a direct presence in Hemel, but potential to explore options to deliver sustainable construction focused facilities (material fabrication, testing, recycling)</li> </ul>
Cranfield University, Cranfield Beds, Shrivenham Wiltshire	<ul> <li>Broad range of teaching research facilities and specialisms including energy and sustainability, manufacturing and materials, aerospace, transport systems, logistics and supply chains, management, environment and agriffood</li> <li>MSc taught and research programmes, PhD research, professional development programmes and extensive business engagement</li> <li>Two main sites in Cranfield (27 miles from Hemel Hempstead) and Swindon, so less well-located for access to and from Hemel</li> <li>Designated as University Enterprise Zone</li> </ul>	<ul> <li>Broad alignment with presence of small but significant advanced manufacturing sector in Hemel Hempstead</li> <li>Specialism in logistics and supply chain management, including research facilities (Supply Chain 4.0) in Cranfield. Possibly connection to established logistics and distribution activity in Hemel, with Cranfield focusing on higher skilled and technology driven processes.</li> <li>Also alignment with priority attached to environmental technology sector</li> </ul>

### The wider roles of higher education and research institutions

Sustained expansion of HEIs over the last 25 years has seen the roles and reach of institutions expand and diversify. Core functions in teaching and research have extended into broadened civic and commercial functions. Hatch's review of how and why HE and research institutions expand, and the changing ways they impact an area through their facilities, services and engagement with businesses and communities, points to a simple typology for considering the opportunities available to Hemel Hempstead and how these might be realized.



- Enterprise, knowledge transfer and training, with HEIs in the area having well-established programmes to develop enterprise, enable business to collaborate with academics and facilities, and to provide skills development and training for specific sectors.
- The core educational functions of HEIs, with institutions in Hertfordshire and the surrounding area already well-geared up to deliver both vocational and wider teaching programmes at undergraduate and postgraduate level.
- Research activity, with all institutions in the area having academic research specialisms and a wide range of research facilities. A substantial number of these research specialisms are directly connected to key economic, social and environmental challenges (e.g. climate change and sustainability, AI and automation, life sciences, food security, health care).

The broad typology and selected examples which are relevant and interesting given the purpose of this study. This includes examples from institutions in the local area, and others whose sector or operational focus aligns with priorities and opportunities identified through the course of this work.



**Enterprise Development and Commercialisation:** Well-established role of HEIs and research institutions as creators and supporters of new business. Includes commercialization of specialized research activity, broader spin out activity, graduate and staff enterprise. Facilities often developed 'on-site', but numerous examples of purpose-built facilities 'off-site', offering space and facilities, enterprise support and connections to research.

**Relevant Examples:** University of Hertfordshire Enterprise Hub, Hatfield; Rothamsted Enterprises; BRE Science Park; Eco-Business Centre, Bicester (Garden Town); Spark Incubation Centre (University of Wolverhampton, digital and creative enterprises);



**Relevant Examples:** (e.g. Hertfordshire Science Partnership; Cranfield Logistics and Supply Chain KTP; VEC University of Liverpool (digital technology);

**Research & Development, Access to Facilities and Equipment:** Many examples across the UK of HEI's providing specialist access to facilities and equipment, more typically located on or close to central campuses, but several examples of research centres locating on opportunity sites including new settlements.

**Relevant Examples:** GSK and life sciences cluster, Stevenage; School of Life and Medical Sciences, University of Hertfordshire; Cranfield Innovation Centre (Sustainable Fuels for Transport and Housing); Engineering and Sustainability Construction Centre, University College Birmingham; Aura Innovation Centre, Hull (Low Carbon Innovation);

**Widening Access to Education and Training:** UK government policy has sought to widen access to HE over same period that opportunities to increase revenue from teaching programmes. There are numerous examples of post-92 institutions establishing new facilities, many in London, delivering vocation-focused degree and post-graduate teaching programmes. Beyond this role, HE and research institutions deliver substantial specialist training and related services.

**Relevant Examples:** Majority in London and general vocational provision. Examples include Coventry in Scarborough (outlier); Teesside London; Sheffield Hallam in London; Cumbria in Lancaster, Chester in Warrington.









# HEI Student Numbers and Subject Areas

## Growth in Higher Education

Higher education has seen continued growth in undergraduate and postgraduate student numbers, underlining the significant role it plays in the UK economy and as a destination for young people

#### **National Growth of Student Numbers**

Higher Education is widely regarded as a UK success story. The growth of the sector is reflected in continual increases in enrolled student numbers over the last 20 years, with the Higher Education Statistics Agency (HESA) putting the estimated number of students (undergrad and postgrad) at 2.86 million in 2022, the latest published data available. This was an increase of 900,000 or 47%, with undergraduate enrolments accelerating faster than postgraduate enrolments. The data suggests that post-Covid 19 pandemic growth in enrolments has accelerated.

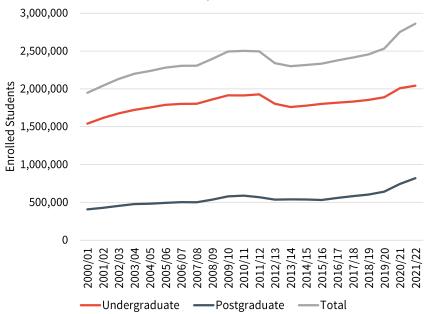
#### **Growth in Student Numbers in the Local Area**

Data for five HE institutions in the area from 2014-15 (Bedfordshire, Buckingham, Buckinghamshire New University, Cranfield, Hertfordshire) shows that student numbers fell for a short period in the middle of the last decade before rising again from 2019/20. As is the case nationally, enrolled student numbers appear to have increased at a faster rate in the early 2020s compared with earlier years.

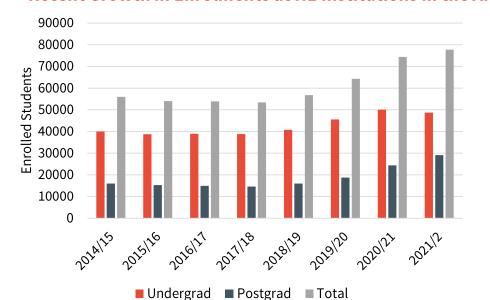
Total student numbers, as reported by the HESA, stood at just under 80,000 in 2021/2 and are likely to have risen further as applications for HE nationally continue to increase. Growth in the early 2020s appears to have been fuelled by increases in post-graduate student numbers.

The largest provider of the five institutions is the University of Hertfordshire. With c. 32,000 enrolled students in 2021/2, the HESA data suggests it has seen a particularly strong increase in postgraduate numbers, increasing from 5,500 in 2014/2015 to more than 15,000 by 2021/2. The current figure appears to be higher than that of the other institutions combined. At undergraduate level, Buckinghamshire New University, saw the biggest expansion in undergraduate enrolments, increasing from 8,000 in 2014/15 to 18,000 by 2021/2.

### **UK Student Enrolments, 2000-22**



### **Recent Growth in Enrolments at HE Institutions in the Area**



### UK Origin of Students Studying in Area

# Hertfordshire, Greater London and locations in the surrounding area are important sources of students studying at HEIs in the area Local and Regional Origins

For the University of Hertfordshire, Greater London is a key source of its students (35%) but Hertfordshire itself accounts for nearly a quarter of students (23%). Impact analysis carried out for the University of Hertfordshire in 2023 reported that 4,600 of its students had their home-time residence in Hertfordshire, with 10% from Dacorum and 13% from St. Albans.

Greater London and Hertfordshire account for the largest share in the home origins of students studying at local institutions. For Buckinghamshire New University, the University of Buckingham and the University of Hertfordshire, Greater London provides the single largest share of students (33%) with 13% from Hertfordshire. Other notable origin locations including Luton, the West Midlands, Buckinghamshire and Northamptonshire.

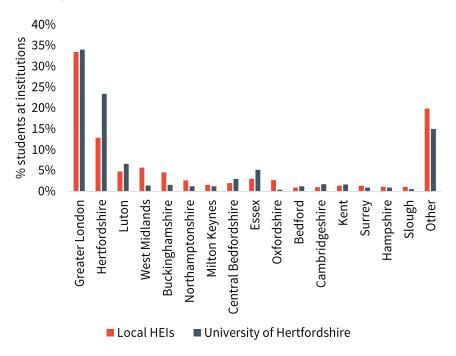
The pattern of other places of origin suggests that Luton, Central Bedfordshire and Essex account for a larger share of its students than that of the three institutions combined. The data clearly shows that proximity is an important factor for HE institutions in the area. A substantial majority of students originate from locations that are relatively close to the institutions, with accessibility and the large number of students from Greater London accounting for the large share from the capital.

### **Students Living at Home**

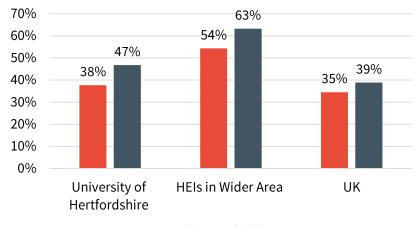
The University of Hertfordshire has a higher percentage of its full-time students living with parents/guardian or in their own permanent residence than either HEIs in the wider area or the UK. The figure increased between 2014 and 2022, driven by change in the number of students reported to have live in their own permanent home.

Analysis of national HESA data suggests that the 2010s saw increases in students who lived with a parent or guardian during term time, but this trend reversed at the end of the decade. However, with living costs continuing to rise, it is possible that growing numbers of students will opt to study at institutions close to 'home'. As Hemel Hempstead's population rises, this may present opportunities to deliver more higher education provision in the local area.

### **UK Origins of Students at Local Institutions**



### % Students Living at Parent/Guardian Home or Own Home



### International Students Studying in Area

# Substantial growth in international students, with students from Asian countries driving increase since 2014/15

#### **Growth of International Student Market**

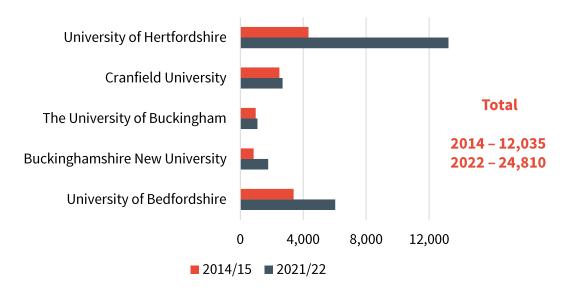
The UK has seen substantial growth in international student numbers in recent years. The UK's strong reputation for the quality of higher education, the increasing importance of revenue from international student fees as HEIs expanded, changes to visa rules for post-study work and demand for graduate skills are all cited as factors driving this growth. The concept of HE as an important export for the UK is now well-established and evidence in the continuing expansion of international student numbers.

For the five HEIs considered in this report, the expansion of international student numbers is striking. HESA data for 2021/22 shows that international student numbers more than doubled from 2014/15, reaching 24,800. Whilst this is consistent with the pattern across much of the UK, it points to the key role that HEI's ability to attract international students has played in the growth of the HE sector.

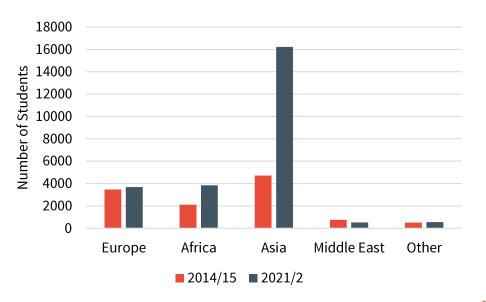
### **Shift in the Origin of International Students**

The UK's exit from the European Union and changes to policy on international students have seen a marked change in the origins of the area's international students. Europe's role as a source of students has been largely static. By contrast, student numbers from Asia have quadrupled, with India by far the largest contributor to the increase which is likely in part to reflect changes in UK visa policies for international students. The number of students from Africa doubled between 2014 and 2022, predominantly from Nigeria. Other global locations including the Middle East, Australasia and the Americas do not significantly feature in the figures.

### **Change in International Student Numbers, 2014-22**



### Origins of International Students, 2014 and 2022



### Destinations of Local Students

# London, East of England and South East capture majority of Hertfordshire's students

The main destinations (by region) for Hertfordshire residents attending HEIs are Greater London (20%), East of England (which includes Hertfordshire (19%), and the South East covering areas adjacent to Hertfordshire (14%). In combination the three regions account for 53% of the destinations of Hertfordshire residents to study. Smaller proportions of residents attend HEIs in other regions, with only the East Midlands accounting for more than 10% of other destinations.

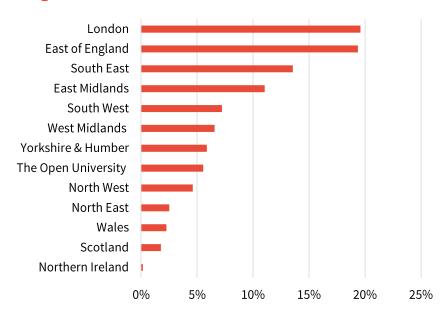
There are some differences for Dacorum students, with slightly smaller proportions of students attending HEIs in London and East of England, but a higher proportion attending HEIs in the South East.

These figures are likely to reflect accessibility and proximity factors, with the majority of students attending higher education at what are probably reasonable distances from home. These are locations where transport infrastructure and services (particularly for London) provide good access from Hertfordshire. It is also likely to reflect the large number of institutions to choose from. HESA lists 100+ institutions offering higher education in London alone, representing a substantial range of choices which are accessible to students who prefer to live a relatively short distance from home.

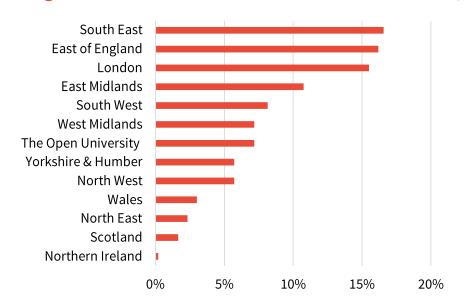
There is no evidence to suggest that students are narrowing the geographic areas they consider in choosing an institution. Data for the 2014/15 academic year shows that the proportion of Hertfordshire resident students attending HEIs in London, the South East and East of England are close to those evident in 2021/2.

Further analysis of HESA data shows that 25% of Hertfordshire students attended just 5 institutions – The University of Hertfordshire (10%), Open University (6%), Nottingham (3%), Nottingham Trent (3%) and Anglia Ruskin (3%). The presence of Nottingham HEIs in the list is not easily explained given the city's distance from Hertfordshire.

### Regional Destinations of Hertfordshire HEI Students 2021/2



### **Regional Destinations of Dacorum HEI Students 2021/2**



# Strengths in Vocational Study

### Substantial majority of students at local HEIs study subjects with strong links to professions and sector strengths

HESA data shows that around 85% of undergraduate students study subjects with clear links to professions including professional and business services, health and care, ICT and engineering. Business and management accounts for by far the largest share, but it is notable that the University of Hertfordshire's highest number is in subjects linked to medicine, reflecting its strengths in life and medical sciences including pharmacology, nursing and care.

The picture for postgraduate study appears even more strongly geared to vocational and professional qualifications. Business and management is the largest single subject area, but computing, engineering/technology, medicine and healthcare and education and teaching account for the substantial majority of postgraduate study across all the institutions.

This represents a significant volume of graduate students with qualifications and skills which are economically and socially valuable, and which appear well aligned to several of the sector strengths and priorities for Hertfordshire, including life sciences, ICT, professional services and environmental technology.

Graduate retention data referenced in a recent Hertfordshire Local Skills Report (2022) indicated that 40% of the University of Hertfordshire's students were working in the East of England region a year after graduation. The University's 2023 Impact Study found 10% of graduates studied at Hertfordshire companies after graduation, with 20% in East of England companies.

### Main Undergraduate Subjects Studies, 2021/2

		Subjects Linked to Medicine			Design, Creative and Perf. Arts		Engi. & Tech.		% of all undergrad in these subjects
University of Bedfordshire	3910	1395	2565	675	490	210	300	9545	82%
Buckinghamshire New									
University	11305	2355	1860	375	585	630	125	17235	93%
The University of									
Buckingham	170	55	95	110	0	270	0	700	44%
Cranfield University	40	0	0	35	0	0	0	75	100%
University of Hertfordshire	3000	4870	675	1505	1560	775	1370	13755	82%
Total	18425	8675	5195	2700	2635	1885	1795	41310	85%

### Main Postgraduate Subjects Studies, 2021/2

	Business and		Engineering and	Linked to	and		% all postgrads in these
	Management	Computing	Technology	Medicine	Teaching	Total	subjects
University of Bedfordshire	2170	935	170	385	380	4040	84%
<b>Buckinghamshire New University</b>	690	110	10	745	65	1620	83%
The University of Buckingham	150	140	0	0	1305	1595	86%
Cranfield University	1560	320	3125	0	0	5005	94%
University of Hertfordshire	4580	3375	915	2515	1280	12665	84%
Total	9150	4880	4220	3645	3030	24925	86%

# Summary and Implications

Evidence	Implications
Higher education institutions in Hertfordshire and across the wider area have seen student numbers increase, with more significant growth in the early 2020s appearing to be driven by rising post-graduate numbers. There were 78,000 enrolled students in 2021/2.	Growing 'pool' of graduates from Hertfordshire and wider area institutions available to the area's economy, providing some foundations for attracting higher skilled and better paid employment to the area.
The University of Hertfordshire and HE institutions across the wider area are drawing substantially on a relatively local and home-based student population, including students domiciled in London.	With rising living and studying costs, this could be regarded as a strength and opportunity, particularly if the area is able to retain more of the graduates who have studied locally, and who have ties to the area.
The choices Hertfordshire's young people make about where they study point to preferences for destinations which are relatively accessible from home, including Hertfordshire. Around 50% study in the East of England, London or the Greater South East.	Further reinforces the potential of the area to benefit from more students living and working close to home during and after study.
Regional graduate retention appears positive, with Hertfordshire's Local Skills Report pointing to 40% retention of the University of Hertfordshire's graduates in the East of England, and the University's own research suggesting that 20% were working in private sector organisations in the East of England.	Evidence that the East of England is generating the types of employment that encourage graduates to take up opportunities in the regional economy, but more to do to create jobs that support retention in Hertfordshire
Substantial growth in international student numbers in the area's HEIs, which have doubled since 2014/15. This is predominantly driven by growth in the numbers of students from Asian countries, predominantly India.	Further increases the number and range of graduates and qualifications generated locally, and available to the area's economy. International students typically bring higher levels of spending than domestic students in a local economy.
The University of Hertfordshire, and HE institutions in the wider area, have notable strengths in vocational/professional subject study at both undergraduate and postgraduate level. These include business and management, life sciences, health and care, engineering and technology, computing, education, design and the performing arts.	HEIs in the area are delivering graduates with qualifications which appear well-aligned with priority sectors for Hertfordshire, and with sectors which are projected to see future growth.

# Future Demand and Need for Graduates

# Trends in Higher Education

# 2.86 million students at 285 UK HE institutions, with growth in demand expected to continue

#### **Growth of HE Student Numbers**

Enrolments of both undergraduates and postgraduates at UK universities have continued to climb, with HESA data showing an acceleration in the early 2020s. There were around 2.86 million enrolled students in 2022, the latest data available from HESA.

### **Increase in % of Young People Entering HE**

Department for Education data records the number and percentage of 15 year olds entering higher education. For the latest available data in 2022, around 47% of young people who were aged 15 in 2016/17 entered HE. The participation rate on this measure has risen continually since 2002, climbing by more than 14 percentage points.

### **Projected Increases in Demand**

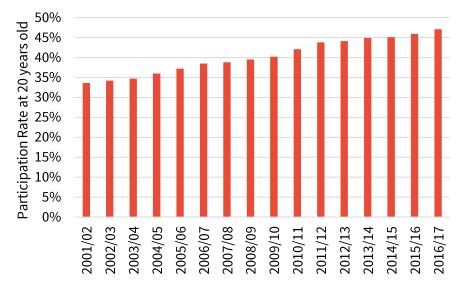
Future change in demand for higher education in the UK will be driven by several factors including demographic change (ie the number of young people leaving school), economic conditions and the value attached to obtaining higher level qualifications, the costs of pursuing higher level study, and the availability of places at HE institutions which have to cater for both UK domiciled and international students. Demographic data suggests that UK demand is likely to continue to increase through the 2020s as the population of 18 year olds increases to 2030, before it slows down. A continuation of the upward trend in participation will also be a factor, assuming that this continues.

Whilst there is some uncertainty about how demand is likely to evolve over the next 10-15 years, recent analysis by the Higher Education Policy Institute suggests that the UK could require 358,000 additional university places by 2035, based on an additional 108,000 new entrants if participation rates continued at their present trajectory (+28%). For the East of England, the study suggests that just under 8,000 new entrant places would be required.

Data from UCAS, the university and colleges admission service, for 2024 suggests that applicants for places from 18 year olds rose to their second highest figure on record, suggesting that demand is continuing to increase.

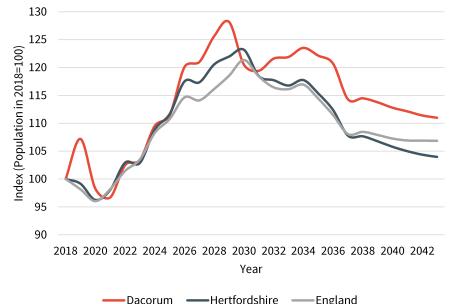
Sources: Higher Education Policy Institute (2020) Demand for Higher Education to 2035, HEPI Report 134; UCAS (2024) 2024 Sees More 18-Year Olds Apply for Higher Education

### **Entrants to Higher Education by 20 years old, England**



Source: Department for Education, Participation measures in higher education, 2023

### **Projected Change in 18 Year Olds, 2018-42**



### Future graduate employment

# UK will need 11 million graduates to fill graduate jobs by 2035

# Increased Demand for Higher Level Qualifications

Universities UK projections suggest **88%** of <u>new</u> jobs created by 2035 are expected to be graduate level. This implies an additional 11 million extra graduates beyond the 15.3 million already qualified to graduate level in the UK's current workforce. This underlines the critical role that higher education will continue to play in the UK economy

This continues a long-term trend in which the UK has seen the number of jobs in professional and associate professional occupations, generally associated with higher level qualifications, increase by 4 million since 2004, whilst nongraduate level jobs have decreased.

Evidence of increased demand from the economy for higher level qualifications is consistent with the projected increases in demand linked to population growth and participation rates.

### **Drivers of Change**

This change is being driven by many factors, including trends occurring globally.

Technological development is one key driver, with sustained innovation and adoption of digital

technology and internet-based activity, cloud-based activity and AI changing the requirements of many professions. Climate change is driving new products, materials, processes and working patterns which demand technology, engineering and knowledge-intensive solutions. A growing and ageing population, and advances in medical technology, is creating a need for many more qualified health professionals. Finally, many of the changes and challenges need creative problem solving with education an important contributor to such capabilities.

### **Fast growing occupations**

The Universities UK research found that 80% of the fastest growing occupations to 2035 will be graduate level jobs. The top 5 such needs in the UK will include:

#1 computer programmers

#2 higher level teaching & classroom assistants

#3 financial managers

#4 IT managers

#5 IT business analysts

The broader implication is that demand for graduate level qualifications will be fuelled by a mix of demand from a growing and changing population, from the continuing development of the ICT industry and its applications, and from financial and professional services.

Source: Universities UK (2023) Jobs of the Future

Future Grad	Future Graduate Employment in the UK							
88%	By 2035 88% of new jobs created projected to be at graduate level							
1.9m	An additional 1.9 million STEM professionals required, with computer programming projected to grow fastest							
1.2m	Health and social care will need 1.2 million associate professionals by 2035, and 1 million professionals (e.g. doctors/nurses)							
1m	A million extra education professionals (e.g. university and higher education teachers) needed by 2035							
10%	Artificial intelligence will drive a 10% net increase in roles requiring a degree							

### Future graduate level demand in Hertfordshire

# Hertfordshire projected to have 400,000 graduate level jobs by 2035

# Substantial number of future jobs projected to be graduate level

For Hertfordshire, Department for Education projections suggest nearly 400,000 jobs by 2035 will be in higher level occupations typically associated with degree level qualifications including higher managerial and professional and associate professional occupations. With the exception of caring, leisure and other service occupations, all other occupations are project to be either static or fall by 2035.

# Jobs with degree level qualifications or higher projected to significantly increase

This is consistent with evidence on employment by qualification, with the same projections suggesting that Hertfordshire will have 379,000 jobs by 2035 carried out by individuals with a foundation degree, first degree or higher degrees. This compares to an estimated 294,000 in 2015, an increase of 85,000.

All categories of higher education-driven qualifications, from study below degree level to PhD, are projected to increase their share in employment, with a particularly notable increase in PhD and other postgraduate level jobs.

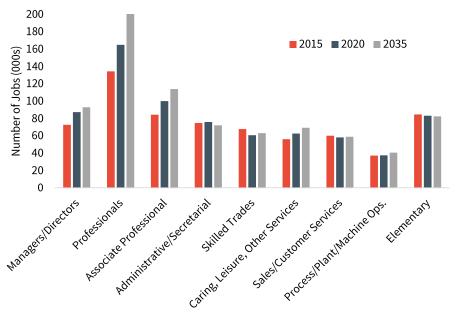
# Wide range of sectors will require additional graduates

The need for more graduates (foundation degrees to postgraduate) applies across a full range of occupations. The DfE projections for Hertfordshire point to several specific occupations which have the largest projected increases to 2035, driven by both employment growth and replacement demand (ie qualified people exiting a sector):

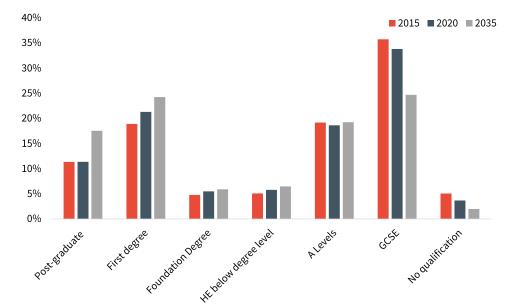
- Science, engineering, research and technology professionals/associate professionals for which the projections point to a need for 46,000 additional graduates.
- An additional 23,000 health professionals and association professionals
- The need for an additional 50,000 business, media and public service professionals and associate professionals

Much of this requirement for a graduate qualified workforce stems from estimates of replacement demand, but it should be noted that more than 50% of the need for graduates in science, engineering, research and technology is assumed to be driven by the changing nature of the sector itself.

### **Projected Change in Occupations, Hertfordshire, 2015-35**



### **Project Share of Jobs by Qualification, Hertfordshire, 2015-35**



# Summary and Implications for Hemel Hempstead

Evidence	Implications
Upward trend in demand for higher education places across the UK, with the number of 20 year olds in HE having risen by 14 percentage points since 2001/2.	Underlines the potential of HEIs in the local area to capture what is a growing proportion of the area's young people going on to further study.
Projections suggest demand for HEI places will continue to increase to 2035, driven by both further growth in the number of young people (demographic) and a continuation of long-term trends in participation.	Continuing increase in demand for places at HEIs, and opportunity to capitalise on the already substantial share of the area's students who study from or close to home.
National projections point to significant growth in demand for graduate level qualifications and skills, with one source suggesting that 88% of all new jobs created by 2035 will be graduate level, driven by global shifts including technological development (particularly ICT), climate change, a growing and ageing population and the need for innovative and creative solutions to these grand challenges.	National projections point to positive alignment with sector strengths and priorities for Hemel and Hertfordshire, including those which arise through the growth of the town and its population. Also strong alignment between the vocational/professional focus of area's HEIs and future demand for graduates.
Hertfordshire projected to have a 400,000 graduate level jobs by 2035 compared with around 290,000 in 2015, driven both by replacement demand (ie older people leaving the workforce) and economic changes that will demand higher level qualifications and skills.	Existing employers in Hemel Hempstead and across Hertfordshire will need to attract and retain graduates to respond to transition. Area should be well placed given the strong vocational and professional focus of its undergraduate and postgraduate output.
Broad industry groups that will drive demand for graduate level qualifications include science, engineering and technology, health, business, media and public services.	These are already sectors identified either as strengths of Hertfordshire or as opportunities for growth. For Hemel Hempstead, population growth linked to future housing development will be a key source of demand for health and care services, and for public services growth more generally.



### Enterprise Facilities, Start-Ups and Support

# Positive connections between HEIs, research and enterprise

HE and research institutions in the area have wellestablished facilities and enterprise support services. This includes:

- Enterprise Hub University of Hertfordshire, Hatfield. This £12 million investment provides business incubation and office workspace, collaborative areas and teaching facilities. The University is currently working with 200+ businesses and is notable for having seen the most substantial recent growth of any HEI in the region in the number of active student enterprises. In 2021/2 the University reported having delivered 6,200 hours of business advice.
- Rothamsted Enterprises, Harpenden: With 34 firms providing 320 jobs co-located with Rothamsted Research on its Harpenden site, the institution has seen substantial expansion since 2018 in agritech enterprise activity. New lab space opened in early 2023 backed by a £1.8 million investment from the Lawes Trust, BBSRC and Hertfordshire LEP. The success of the operation is generating needs for grow-on space.
- BRE Group: BRE Science Park provides a range of office space from small units targeted at start-ups to grow on space on 49 acre campus. Facilities include breakout and events space. The campus provides access to extensive testing and development facilities, demonstrator facilities, and access to internationally leading expertise and data on the built environment with an increasing focus on

sustainability.

Beyond the provision of business facilities and services on-site, these institutions and HEIs in the wider area engage extensively with businesses through supporting start-up and spin-off activity, academic-business collaboration and knowledge exchange, and broader advice and support to businesses. For example:

- In 2022 the University of Hertfordshire delivered the Hertfordshire Sustainability Accelerator with Hertfordshire Growth Hub supporting small businesses to develop and scale-up sustainable products, services and technologies.
- Rothamsted provides access to its lab space, data, research and academic expertise internationally, including business-academic collaborations partnership initiatives which support the region's agritech sector. A good example is the SHAKE Climate Change programe, a partnership which also involves the University of Hertfordshire, Cranfield University and UCL providing start-up loan finance and support for agriculture and food production businesses.

284	Active student enterprises, University of Hertfordshire (East of England average 220)
110	Completed KTPs, University of Hertfordshire (Innovate UK)
5,700	SMEs, large businesses and other organisations working with Universities of Hertfordshire, Bedfordshire and Cranfield on contract research, consultancy or through access to facilities and services, 2022-23

Sources: Higher Education Statistics Agency, 2024; Innovate UK

# Value of Services to Business and Non-Commercial Organisations, 2022-23 (£ million)

	Contract Research (£m)	Consultancy (£m)	Facilities and Equipment (£m)	Total (£m)
University of				
Hertfordshire	2.1	10.1	0.2	12.4
Buckinghamshire				
New University	0.3	0.3	0.3	0.9
University of				
Bedfordshire	0.9	1.4	1.0	3.3
Cranfield University	14.4	3.7	0.0	18.0
Total	17.7	15.4	1.5	34.6

Source: Higher Education Statistics Agency, 2024

### Wider education and training provision

### Education and research institution provide extensive training and skills development

Beyond the core function of HEI's in delivering graduate degree programmes, HE and research institutions are significant contributors to the economy and communities through continuing education, professional development programmes and other training and skills development services.

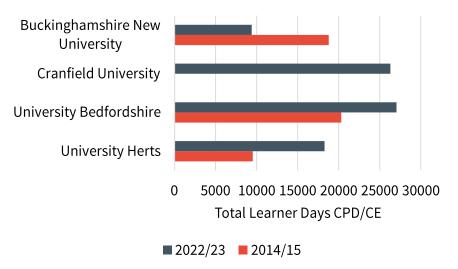
- The University of Hertfordshire delivered 18,700 days of CE or CPD in 2022-23, with 70%+ provided in health and medicine, with partners including the Society of Radiographers and the Nursing and Midwife Council. The University delivers a wide range of professionally accredited course in business (e.g. Chartered Institute of Management), life and medical sciences (e.g. General Pharmaceutical Council), physics, engineering and computer science (e.g. Engineering Council), the creative arts, education and law.
- **BRE Academy** operates a comprehensive range of specialist training services which are part of the BRE Group's core commercial activity. They centre on the BRE's leading position in the development and application of technical standards and information on building safety, sustainability and environmental standards. These are delivered through a mix of in-person training at the BRE facility and online, and

reach national and international delegates.

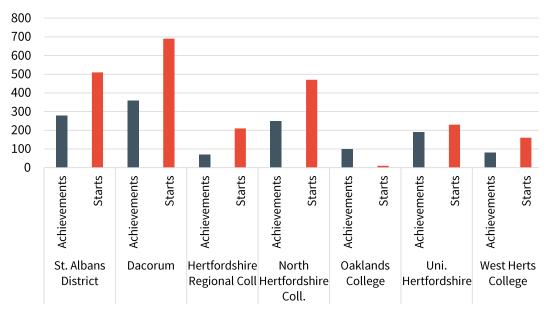
**Rothamsted Research** provides specialist training through its scientific research facilities, delivered both through its academic research programmes and the access it provides for research projects using its facilities and equipment. This has international reach, with the institute recognized globally in agri-science research.

Access to higher education, including foundation courses, apprenticeships, professional training including accredited technical training and other learning provision is delivered by a much wider range of institutions and businesses across the area. The Hertfordshire Higher Education Consortium, for example, includes four organisations (Hertford Regional, North Hertfordshire, Oaklands and West Herts College) which provide a substantial range of vocational learning programmes, include degree level qualifications, HNDs, T-Levels and professional training driven by relationships with employers. As is the case with the University of Hertfordshire, a review of courses offered by these organisations points to a strong focus on learning for professions, with health and medicine, computing, creative arts, education and construction appearing to be a strong feature of provision.

### **Learner Days CPD and Continuing Education, 2014 and 2022**



### **Apprenticeship Starts and Achievements, 2022-23**



Sources: Higher Education Statistics Agency, Open data and official statistics, 2024; Department for Education, Apprenticeships, 2024

### Research and Innovation Strengths

Innovation, knowledge-based jobs and businesses, and research and development activity, are key contributors to productivity and wealth creation, and to strategic priorities for increasing the number of better paid and higher skilled jobs. These are strongly reflected in visions and priorities for Hemel Hempstead and the wider area. The Hertfordshire LEP, together with its local authority partners have delivered several programmes to support enterprises to engage in product, process or service innovation.

A review of HEs, the area's research institutions, business sectors and related innovation confirms established strengths of the area and points to an active scientific research and technology-intensive base of organisations and companies across Hertfordshire.

- Life sciences, medicine and health related research: This is a major strength of Hertfordshire and a priority sector for Hertfordshire LEP. Its Life Sciences Sector and Cell and Gene Therapy Cluster Action Plan (Sept 2022) and supporting research points to just under 250 businesses across Hertfordshire concentrated in bio-pharma and its supply chain, medical technical technology manufacturing, services and supply chain, and genomics. Key R&D activity centres on GSK's Stevenage Hub and the Biosciences Catalyst, set to expand with the development of a new campus backed by Reef and UBS in 2024/5. Elsewhere in Hertfordshire, medical technology businesses
- manufacturing and providing services are more dispersed, with Hemel Hempstead notable for the presence of Boston Scientific. Connections with HEIs and the biosciences cluster's position in London-Cambridge-Oxford triangle are key to its location and growth. The University of Hertfordshire's strengths in research and teaching in this area are also evident, with the institution's impact study pointing to 10% of graduates going on to work in life sciences and engineering. Beyond these core scientific research strengths, the University of Hertfordshire has notable strengths in applied health and care research.
- Environmental Technology: This broadbased sector was the target for Herts IQ enterprise zone bid and continues to provide its strategic focus, which includes sustainable/smart construction, agri-tech and other 'clean tech' activity. Hertfordshire is well-served with science and research capabilities, particularly in the HEIs and research organisations described in this study. Rothamsted agri-science research is strongly connected with sustainability and the development of scientific and technological solutions to climate change effects. BRE's reach and impact are similarly underpinned by research expertise and facilities at its campus, including its design and testing facilities, the development of software for environmental impact measurement, and scientific research inn

- areas including materials and fire safety.
- Agritech: Rothamsted Research's status as a leading international scientific research institution underpins a relatively small but important concentration of businesses in Hertfordshire operating in food productions and agricultural technology sectors. Spinouts from the institution and micro and small businesses are locating at Rothamsted's campus, with the Hertfordshire LEP having co-funded with the BBSRC and Lawes Trust the development of new laboratory and office space. Agritech is now well-established as essential to tackling global challenges including demand for food from a growing population, the impacts of climate change on agricultural production and the natural environment, and the need to decarbonize the food chain.
- Advanced Manufacturing and Engineering:
  Whilst not a nationally significant strength of
  Hertfordshire, there is some research
  expertise in rapidly developing technologies
  include Artificial Intelligence, Robotics and
  Autonomous Systems. This includes the
  University of Hertfordshire whose recently
  opened physics, engineering and computer
  science facility (Spectra) combines research,
  teaching and access to businesses for
  collaboration. Cranfield University has
  significant strengths in AI and autonomous
  systems for transport and logistics, with the
  potential for connection to Hemel
  Hempstead's strengths in the logistics and

distribution sector.

Much of the knowledge-intensive activity described here is concentrated at specific locations in Hertfordshire, primarily at central 'campus' locations where research organisations are rooted. These are not facilities either based in Hemel Hempstead, nor with satellite operations in the town. However, the commercialisation of research, strong emphasis on collaboration between researchers and businesses, and evidence that businesses operating in these sub-sectors and technologies are present across Hertfordshire signals opportunities to retain and grow this activity in the area.

For bio-sciences in particular, there is now widely recognized to be a critical shortage of laboratory space in the UK, with London in particular identified as being unable to meet demand. One analyst puts the shortfall at c. 59,000 sq m for London in 2024; another analyst pointed to a c. 80,000 sq m shortfall of lab space in Cambridge. Generally, the London-Oxford-Cambridge golden triangle, including Hertfordshire, and its potential to deliver substantial growth in the life sciences economy is seen as being constrained by current shortfalls of this scale.

Sources: Knight Frank (2024) Lab crunch: British science needs more space; Cambridge Network (2024) 'Data shows an 850,000sq ft shortfall of lab space in Cambridge'

### Research and Innovation Activity

# R&I strengths in life sciences, envriotech and agritech

Data on projects funding by Innovate UK since 2018 is consistent with the strengths described on the previous page. Innovate UK data on projects funded since 2018 covering Dacorum and St. Albans Districts shows that agriculture and food related projects (54) account for around 35% of projects and funding. Projects focused on digital, environmental or medical technologies and sustainable construction are also prominent, each accounting for 13-16% of projects and 11-14% of funding. Whilst advanced manufacturing and engineering account for a smaller proportion of activity, a review of the types of projects funded shows that, in practice, innovation activity which involves the fabrication of materials and equipment features in many of the projects in other categories.

Rothamsted Research and BRE stand out for the number of projects in which they are participants, accounting for c. 25% of all projects with a Dacorum or St.Albans district participant. The majority of other participants are enterprises (mostly micro or small businesses) and a

small number of academic institutions. Businesses which have spun out or are located at Rothamsted are prominent in the project data.

Current (2023-4) Innovate UK Projects in the Hertfordshire LEP area follow a similar pattern. Projects with a medical technology, life sciences or health focus are the largest single category, with agritech and digital technology projects also prominent.

UK Innovation Survey data shows that higher proportions of businesses in the Hertfordshire LEP are innovation active across a range of measures than the England average. The highest ranks for Hertfordshire (out of 38 LEPs) are recorded for internal R&D being undertaken, and for businesses introducing products not offered by competitors.

Between 2004 and 2023, companies in Hemel Hempstead secured and/or were partners in 41 Innovate UK funded projects (total funding £5.85 million). Advanced manufacturing projects were largest single contributor, including sustainable materials, technologies and processes, aligning with priorities for the environmental technology sector.

# Innovate UK Funded Projects, Dacorum and St. Albans Districts, 2018-24

Sector	No. of Projects	Funding (£m)
Advanced Manufacturing & Engineering	8	1.65
Aerospace Engineering	5	0.62
Agritech	54	7.04
Arts and Culture	2	0.06
Digital Technology	23	2.55
Envirotech	24	2.79
Medtech/Life Sciences/Health	18	2.58
Sustainable Construction	20	2.09
Total	154	19.39

### **Innovate UK Funded Projects, Herts LEP, 2023-4**

Sector	No. of Projects	Funding (£m)
Advanced Manufacturing & Engineering	7	1.4
Agritech	15	1.3
Digital Technology	10	0.4
Envirotech	5	0.4
Medtech/Life Sciences/Health	21	3.2
Public Transport	2	0.05
Sustainable Construction	5	0.6
Total	65	7.35

# % Innovation Active Businesses, 2023

Activity	Herts LEP	England Average	Herts LEP Rank (out of 18)
Innovation			
active	40%	37%	19th
Product			
innovator	23%	20%	14th
Process			
innovator	31%	29%	18th
Internal R&D	19%	14%	8th
Introduce products not offered by competition	21%	19%	11th

Source: Department for Business and Trade, UK Innovation Survey 2023

Source: Innovate UK, 2024

# Summary and Implications for Hemel Hempstead

Evidence	Implications
Evidence of strength in the creation of enterprises generated by HEIs in the local area, including in particular what appear to be positive graduate business formation rates, accommodated in enterprise facilities on campuses.	Continued growth in student numbers and demand in economy for graduate level qualifications provides an opportunity to capture/retain and then enable the growth of more of this activity within the area – points to need for facilities and services to support it.
Substantial volume and value of professional development and training delivered by HEIs, further education and research institutions in the area, with evident strengths in health and medical professions, ICT, sustainable construction, arts and creative activity, and professional services.	Infrastructure and track record is in place to respond to future population and employment growth, and demand for skills development and training this generates, and appears well-aligned with economic strengths of the area.
Established and growing spin out and co-location of enterprises with HEIs and research institutions, including recent expansions, with equipment and facilities to support research business collaboration and R&D.	Demonstrable demand from enterprises to work with HEIs and research institutions, with evidence of at least one facility (Rothamsted Enterprises) generating need for additional commercial space, specifically grow-on space for existing tenants of the facility.
Confirmation of science and technology research and commercial strengths in the area, including life sciences and medical technology, wider health and medical research, agriculture and food sciences and sustainable construction.	Diverse platform of institutional and commercial research and development activity, with important cross-over between sub-sectors (e.g. envirotech and construction, life sciences and wider healthcare).
Positive evidence on business innovation in Hertfordshire LEP area, particularly for internal R&D activity and new product development. Engagement in funded innovation activity aligns with the science and technology strengths described above, with evidence of concentration of activity around sustainability and response to climate change.	Some strong foundations, both in research institutions and business innovation, to develop and expand innovative activity in Hertfordshire with concentrations around research institutions and the Stevenage biosciences but no indication there are significant clusters of innovating firms in Hemel Hempstead.



# Benefits of Higher Education and Research Activity for Hemel Hempstead

HGC's vision is clear about the importance of innovation and technology, recognizing both the existing strengths of the area in sub-sectors including Agritech and Envirotech, and the need to work with education and skills providers to ensure that communities across the area benefit from commitments to creating a self-sustaining economy. For local authority partners and the Hertfordshire LEP, priorities attached to creating more and better-quality employment, and the specific priority to attract R&D and knowledge-based activity to the East Hemel strategic site, are also key drivers for considering opportunities for higher education and research activity. For HGC and Hemel Hempstead, such activity could deliver wide ranging benefits.



### **Improving Accessibility**

High cost of living and costs of entering higher education leading to increase in studying at or close to home location. Expanded or new HE teaching facility in the town would increase access for local residents and has potential to underpin workforce development for future economic growth, with sectors including health and care, construction, ICT, science, engineering professional services expected to see growing and/or changing demand.



### Research and Innovation

Knowledge exchange and transfer, research spin outs and the broader potential of open innovation connect universities to businesses and the communities they are located in. Well-established HE and research institution presence in Hertfordshire with extensive academic-research-business engagement to build on. In its own right, HGC programme presents opportunities to embed innovation, R&D in its delivery, for example, through sustainable design, infrastructure and construction materials and techniques.



### **Footfall and Spending**

Further and higher education facilities generate benefits to local businesses through volume of students, staff and visitors living, attending or visiting and spending time and money in an area. The town has an existing HE facility in (West Herts College) but College understood to have a relatively small number of HE students (139 FTE).



### **Skills and Labour**

Graduates of HEIs directly benefit area's economy by increasing the size of the labour with higher level qualifications or specific skills and training that support an area's economic strengths and growth objectives. Potential to grow the workforce in sectors including ICT, construction, health and social care, creative industries. HE qualifications deliver benefits to productivity and earnings. Strong track record of training and professional development in Hertfordshire, and opportunity to connect to delivery and operation of HGC.



### **Employment**

Universities and FE Colleges significant employers in their own right – research, teaching, management, operation - create direct employment at the facility. They support wider employment generated through supply chains and spending of employees living in an area. Larger scale operations generate substantial numbers of higher skilled and higher paid jobs.



### **Placemaking**

Education and research facilities can significantly contribute to place making through investments in facilities, and supporting infrastructure. They raise the profile of places and can encourage additional capital investment and development, particularly where they anchor a location. Beyond design and development impact, the operation of such facilities positively influences the vitality of places through attracting new and additional cohorts of students and working people.



### **Student & Visitor Spending**

Student residents of the proposed development will spend money in the local economy supporting businesses and jobs in the area. Visits by families and friends will have similar effects. There will also be multiplier effects from this expenditure.



### **Labour and Skills**

Opportunity for student residents to contribute to local workforce, including those working alongside studying, and potential for graduates to remain in the area.



### **Employment and Businesses**

Commercial uses will provide a base for what are likely to be new or recently started enterprises, supporting their development and growth within Greenwich, and the wider benefits that this business activity will support in the local economy.



### **Fiscal Benefits**

Proposed development will generate Community Infrastructure Levy payments to Royal Borough of Greenwich Council and the Greater London Authority, and business rates may be payable on commercial uses.



### **Placemaking**

Redeveloping disused industrial site with delivery of a well-designed building and outdoor space will positively contribute to place-making and encourage further investment in the area.

# Examples of HE, Innovation and Enterprise Facilities – HE Satellite Facilities

This section of the report contains summaries of 12 examples of facilities which are relevant to the focus of this study and the type of facilities and services which might be considered as part of a strategy to attract higher education, research and enterprise activity to Hemel Hempstead. The case studies include examples covering sector-specific facilities which have a similar focus to strengths and priorities for HGC and Hertfordshire, satellite HE developments, collaborative research and enterprise centres, and initiatives linked to Garden Towns.

Evidence	Description	Relevance to Study
Coventry University, Scarborough Campus	Established in 2015, with a £45 million new campus developed and opened in 2016, accommodating Coventry University's HE facility, the Scarborough University Technical College (focused on engineering) and a sports campus. Delivers degree, foundation, degree apprenticeship, HTQ and pre-access courses. Course provision includes health and social care, electromechanical engineering, ICT (computing & cyber security, education, sports science. Around 600 students (2022-3). Delivering access to higher education in this area of North East England appears to have been a key factor in the development, with a small HE operation from another provider already operating in the town, and the Council having worked with local partners including businesses and Coventry University to retain and expand the facility.	Good example of a HEI establishing a new build, satellite operation outside London or a major city. Focus on vocational learning programme reflects strengths of the University and commitment to provide HE and wider learning linked to key and target sectors in the local area. With potential to accommodate up to 2,000 students, the facility would have a potentially significant impact in terms of footfall and people spending time in the town each day.
Northumbria University, London	Opened in 2014 Northumbria University's London campus is one of several examples of universities establishing satellite operations which are focused on primarily vocational teaching, and which reflect the substantial number of potential students, including international students, living and working in the capital. Undergraduate and postcgraduate courses are delivered at the central London facility centre on computing (e.g. AI, cybersecrurity), business management and related professional occupations (e.g. accountancy, marketing, logistics), tourism and hospitality. The University's programme is delivered in partnership with QA education, which is understood to be a specialist in corporate training.	More general example of HEIs establishing new satellite operations in London when there is evident demand for degrees, a significant population to recruit from, and strong connections to the type of qualifications which are required by employers or where there are evidently opportunities to secure work with higher level vocational qualifications.
University Centre Warrington, University of Chester	Operating since 2000 on an edge of town site, the University Centre relocated and established a new teaching and training facility in two Warrington town centre sites, including one as part of a major regeneration programme (Time Square). Teaching programme is focused on professional occupations, including social care, education and policing, business/management, nursing, sports coaching, film and median. The University Centre is located around 30 miles from the University of Chester's main campus, occupying two buildings.	Example of a satellite HEI operation which is part of a wider development that supports regeneration in a town centre location, with the footfall generated by students studying at the facility available to a retail, leisure and other businesses in the town centre.

# Examples of HE, Innovation and Enterprise Facilities – Specialist Teaching and Training

Development	Description	Relevance to Study
Engineering and Sustainable Construction Centre, University College Birmingham	£10 million, 5,000 sq m facility developed in Birmingham's Jewellery Quarter, redeveloping former printworks site, with potential for 1,200 learners by 2025. Accommodates UCB's specialist courses in modular methods of construction, retrofit and green technologies. Backed by employers, the facility aligns with the area's growth priorities including sustainable construction methods and renewables Qualifications offered through centre will include Level 2, T-levels, degree courses and apprenticeships whilst working in partnership with local employers to provide training opportunities within the West Midlands. The facility is located in a central urban area experiencing substantial new residential and commercial development, with learners likely to benefit from practical opportunities for work experience and to implement skills acquired through training programmes.	Focus of the facility on sustainable construction skills aligns with strengths and growth priorities for Hertfordshire. Delivery of HGC, and housing growth across the town and wider area, will generate need for labour and skills and opportunity for low and zero carbon development.
Enfield Construction Skills Academy, Meridian Water, Enfield	Opened in April 2023 and part of the Meridian Water regeneration which will deliver1,000 homes alongside wider infrastructure, the skills and training facility will train more than 500 people per year. The academy's courses will be delivered by the College of Haringey, Enfield and North East London (CONCEL) and will provide training sustainable construction methods (including retrofit buildings). Training provision will include apprenticeships in plumbing, electrical installations, carpentry, brickwork, thermal insulation, assembly and installation, design and build, floor laying roofing, groundwork, site supervision and engineering.	Smaller scale example of a facility and skills development programme which is functionally part of a major residential development initiative, so takes the opportunity provided by construction activity. Focus on skills required for sustainable construction is also relevant to priorities for HGC and existing academic and research strengths in area.
Petroc (North Devon) and Bradford Satellite Nursing Centres, University of Bolton	Satellite facilities delivering University of Bolton degree courses in nursing, with partnership between the university and NHS Trusts operating from FE/HE college facilities in North Devon and Bradford. First intake at North Devon facility understood to have started in 2020 in newly created School of Nursing, with students studying for degrees part-time while working in NHS roles. The initiative in Devon is understood to have been created specifically to address challenges in recruiting nurses to work in the area as part of the Trust's workforce development programme. Teaching is delivered by the University of Bolton.	Interesting example of an HEI establishing satellite operations (at relatively long distances) in partnership with anchor employers and addressing known recruitment/skills challenges. University of Hertfordshire already has national reputation for delivery of health care learning at undergraduate and postgraduate level.
Net Zero Skills Centre, Suffolk College	Led by Suffolk New College working with industry partners including Morgan Sindall, the Net Zero Skills Centre opened in 2023 on the College's Ipswich Campus. The project was part-funded through a £1 million investment from Ipswich's Towns Fund programme. Its facilities include a sustainable construction centre (backed by Morgan Sindall), an electric vehicle studio, renewable energy equipment for installation training (air and ground source heat pumps, solar panels) and other domestic heating equipment.	One of numerous examples in England of Hertfordshire already has established net zero skills development provision, and West Herts College is understood to have led the preparation of a Green Skills Strategy for Hertfordshire.

# Examples of HE, Innovation and Enterprise Facilities – Innovation Centres

Development	Description	Relevance to Study
Aura Innovation Centre, Hull	The Aura Innovation Centre is a 2,000 sq m facility located in Hessle, Hull, providing hotdesking workspace, spaces for collaboration, meetings and events facilities and specialist equipment. The Innovation Centre connects SMEs and academic research from the University of Hull, which drove the development, focusing on technologies, services and products which respond to climate change. This is connected with Humberside's growing commercial base in offshore wind and low carbon energy development, and to climate change challenges which are specific to the area (for example, flood defences and mitigation).	Example of new, purpose-built facility with an environmental technology focus whose design and functions are intended to drive collaboration between researchers and businesses.
Sussex Innovation Centre, University of Sussex	A 3,700 sq m enterprise centre on the University of Sussex Falmer campus. Accommodates 50+ tenants in a wide range of office spaces from up to 15-150 sqm with hotdesking workspaces, communal and collaboration areas, café and central reception.  Established in 1996, the Centre's tenants operate in wide range of sectors including ICT, media, design and other professional services, engineering, health and biomedical research. Members benefit from an enterprise support programme delivering advice and guidance including mentoring, coaching and finance to businesses from early stage and start-ups (business incubation) to fast growth businesses, drawing on a range of public sector funding including Share Prosperity Fund, Local Growth Fund etc. The facility's location and status as a subsidiary of the University of Sussex links academic research to businesses as part of the support package. The success of the original facility has seen a new hub opened in Croydon (2015) and a new facility will shortly open in Brighton City Centre.	Good example of a well-established and broadbased enterprise centre led by a HEI which has established new, satellite operations in other locations. Also notable for the wide range of services and facilities available, having successfully integrated academic support, consultancy, public-sector funded business support services.
University of Warwick Innovation Campus, Wellesbourne	190 hectare campus with background as agricultural research facility, including a core built area of 20ha providing a mix of office, lab, workshops/light industrial units and communal/collaborative spaces in buildings. Now the subject of a masterplan and SPD for future development of the site, including the creation of innovation hubs encouraging the co-location of academic research, commercial R&D and businesses. Presence of university research functions (Applied Crop Research, School of Life Sciences and sustainable transport research, Warwick Manufacturing Group), and commercial R&D operations for companies including Corteva Agriscience, Lotus and Rimac.	Example of a facility which specialises in a strength of Hertfordshire (agricultural research and technology) and in environmental technology (sustainable transport technologies). Relevance also in its location away from the University of Warwick Campus, with the university moving functions to the site and attracting businesses.

# Examples of HE, Innovation and Enterprise Facilities – Enterprise Centres in New Settlements

Development	Description	Relevance to Study
Eco-Business Centre, North West Bicester	Opened in 2019, a three floor, 1,400 sq m eco-business centre located in the North West Bicester Eco Town (Garden Town) a new settlement, which provides a central hub and flexible office workspace aimed at attracting both start-ups and small businesses to the area. The business centre was constructed to the Passivhaus Plus standard as a flexible space providing office accommodation to local micro-and small businesses. Elements of incubator provision are understood to include access to business support. The centre was backed by Cherwell District Council, and was part of action to encourage the creation of employment in the new settlement, including enabling self-employed residents to establish businesses and use business space close to new housing.	Example of an enterprise facility, with the building itself delivered to high environmental standards, which is directly connected to the development of new homes as part of a Garden Town development. Of particular relevance is its proximity to new homes in the Garden Village and the intent to provide workspace for residents who are running businesses.
Cambourne Park Science and Technology Campus, Cambridge	Part of a new town development to the west of Cambridge, Cambourne Science and Technology Park has established itself as a location for 'blue chip' occupiers. A development of eight office buildings provides a range of units from workspaces and smaller scale offices to larger floorplates Companies established on the business park include Citrix, Convergys, Global Graphics and Mediatek. The Park provides a mix of office accommodation from micro/small scale provision to larger floorplates, and laboratory space. It has attracted occupiers including medical technology and agritech companies. The development is also notable for the prominence it gives to the environmental features of the site.	Larger scale example of an employment development that is part of a new settlement, effectively an extension of Cambridge. Also relevant for its success in attracting companies in sectors that are strengths or priorities for Hertfordshire and HGC, primarily capitalising on the strengths of life sciences academic research and commercial R&D in Cambridge.

### Opportunities for Hemel Hempstead

Provision of grow-on space for micro and small businesses in knowledge-driven sectors

### **Opportunity**

Future development of 'grow on' or expansion floorspace for recent start-ups and micro businesses, with objective of accommodating businesses in science and technology led sectors including agritech, sustainable construction etc. East Hemel employment site and area identified for science and research led activity is the most obvious location. Floorspace in 150—350 sq m range, with potential for mix of office, lab space, possibly workshoptype space. This appears to be a current opportunity.

#### **Justification**

Specific need identified by Rothamsted Research, but evidence of sustained market demand for small workspace in South West Herts, particularly for industrial uses. In the long-term delivery of HGC will create opportunities for growth of business in net zero/sustainable construction.

#### Recommendations

- Further, direct engagement with Rothamsted Enterprises to identify specific grow-on space potential
- Market research with start-ups/micro and small businesses in target sectors to understand growth opportunities and need for premises
- Ensure opportunity to provide grow-on space is reflected in Local Plan employment policies

Development of space to support expansion of life sciences

### **Opportunity**

Provision of laboratory space linked, with bioscience cluster the most obvious driver of demand in Hertfordshire, but evidence that innovating businesses in both agricultural sciences and sustainable construction are also operating in or using lab space. However, there is no evidence from this study that there is demand for or need for lab space in Hemel Hempstead specifically, but the opportunity for Hemel could be to contribute to addressing a shortfall of such space.

#### **Justification**

Evidence that the London-Oxford-Cambridge triangle does not currently have the lab space capacity to meet demand. The availability of land in East Hemel with strong connectivity and good access from across the area help boost the supply, with bio-sciences research and enterprise present across Hertfordshire. This appears to be an immediate opportunity in terms of unmet need, although expanding Stevenage bio-sciences facility is likely to remain the focus for growth in Hertfordshire.

#### Recommendations

- Explore in more detail with The Crown Estate to the potential to deliver such facilities in East Hemel.
- Local Plan policies could include a specific reference to laboratory (or at least scientific uses) for East Hemel

New higher education teaching facilities

### **Opportunity**

Development of additional HE learning facilities in Hemel Hempstead. The East Hemel employment area is of a scale which could accommodate a substantial development, while Hemel town centre would benefit from development which substantially increases footfall generated by students and staff. Examples from elsewhere suggest focus on vocational provision, with strengths in the area in life sciences, health and medical care, computing and ICT, film and television. This may be a longer-term opportunity.

#### **Justification**

Whilst no specific candidate institutions or subject specialisms for Hemel have emerged in the study, the evidence points to strong demand for vocational HE provision and professional development provision. HGC and housing growth across the area will generate demand for specific skills and training including in sustainable construction and health care, the latter driven by population growth and ageing.

#### Recommendations

- Continued dialogue with HEIs and colleges in the area about future potential to enhance HE provision in the town.
- Not a strong case to explicitly refer to the development of new HE teaching facilities in Local Plan policies.