### **BLACK COUNTRY & MARCHES**

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## Welcome

## Today's technical education for tomorrow's careers

The Black Country & Marches Institute of Technology is a major new development based at the heart of the Black Country in Dudley, opening for students in September 2021.

Our Institute of Technology forms a key part of the Government's biggest shake up to technical education in a generation. This includes introducing new T Levels, the technical equivalent to A Levels and more high quality technical education programmes and advanced/degree level apprenticeship opportunities.

We offer a wide range of higher level technical education programmes with clear pathways to skilled jobs in the following transformational sectors:

- · Advanced Engineering & Manufacturing
- Modern Construction Methodologies
- · Medical Engineering & Healthcare
- Digital Technologies as a cross-cutting theme.

The Black Country & Marches Institute of Technology brings together the training offer of Dudley College of Technology in collaboration with other anchor delivery and industry partners. This means that we can offer non-traditional progression routes to degree level programmes that are flexible and accessible to all, often combining study and work.

Whether you are a large organisation or a local SME, there are numerous opportunities to raise your company's profile on campus; seek students to assist with a bespoke project, identify talent at one of our careers fairs or participate in one of our workshops. By engaging with us you will significantly assist the development of our students into high calibre, highly skilled employees.

I very much hope that, as you read this brochure, you will find something of interest that could provide tangible benefits for your business and give you the opportunity to engage in ways you may not have considered before.



Georgina Barnard Managing Director, Black Country & Marches Institute of Technology

## How employers can get involved:

The Black Country & Marches Institute of Technology is all about preparing young people and adults to be your employees. We hope that you will look to us first for your workforce needs because our students leave us with the skills you're searching for.

There are a number of ways in which businesses can engage with Black Country & Marches Institute of Technology including:

### 1. Visit the Black Country & Marches Institute of Technology

Employers are welcome to take a tour of our facilities, it helps to build long-term relationships. We will be open in September 2021, please get in touch if you would like to book a tour. For more details, please email us: iotemployerservices@dudleycol.ac.uk

#### 2. Industry Visits

A visit by a group of students to briefly see your business and understand the kind of jobs available. A typical programme could be:

- Welcome and overview of the business
- Tour of facilities
- Q&A session with staff or short practical session.

#### 3. Work Experience Placements

These will be arranged as progressive placements with a clear programme and agreed output. Placements can be tailored to your organisation.

#### 4. Apprenticeship vacancies

Sharing apprenticeship vacancies with our Employment Hub team. We will advertise your vacancy to our students looking for higher apprenticeship opportunities. Our FREE recruitment service means not only will we advertise your vacancy, but we will also refer pre-selected applications suitable for the role.

#### 5. Employment Opportunities

Sharing job vacancies with our Employment Hub team that may appeal to students looking for a new opportunity.

#### 6. Industry Speakers

Inspire young people and adults by volunteering as an Industry Speaker.

#### 7. Award and Competition Sponsorship

As an industry partner, your recognition is of great value to our students.

8. Career Talks and Career Fairs

To find out more, email iotemployerservices@dudleycol.ac.uk or call 01384 363 808

## Our Mission

To work in collaboration with delivery partners from academia and industry to deliver higher level technical education programmes that lead to well-paid rewarding careers for our students and meet the regional and national skills need.

We are proud to be working in collaboration with the following delivery partners









## Our Vision and Values

#### Our vision for the future:

- Be a local Centre of Excellence for higher education that is accessible for all.
- Be the provider of choice for higher education across the West Midlands and nationally within our areas of specialism.
- To provide high quality technical education at Level 4 and above with clear pathways to skilled jobs.
- To provide training on the latest industry equipment to support student's practical skills development.
- To inspire students to be successful. Developing the knowledge, skills and abilities needed to ensure that everyone meets their full potential.
- To create the skills to advance the economic and social prosperity, adding value to the community we serve.

#### Our values:

To provide non-traditional progression pathways to higher education that are flexible and accessible for all, often combining study and work.

To offer higher education that is inclusive and connected to society.

#### Inclusive

Promote equality and diversity through inclusive practices.

Our students will be selected on merit, regardless of gender, race and disability.

#### Integrity

Place the interests of students and employers at the heart of everything we do.

#### Responsive

Listen to the needs of students and employers in order to provide responsive services.

#### Collaboration

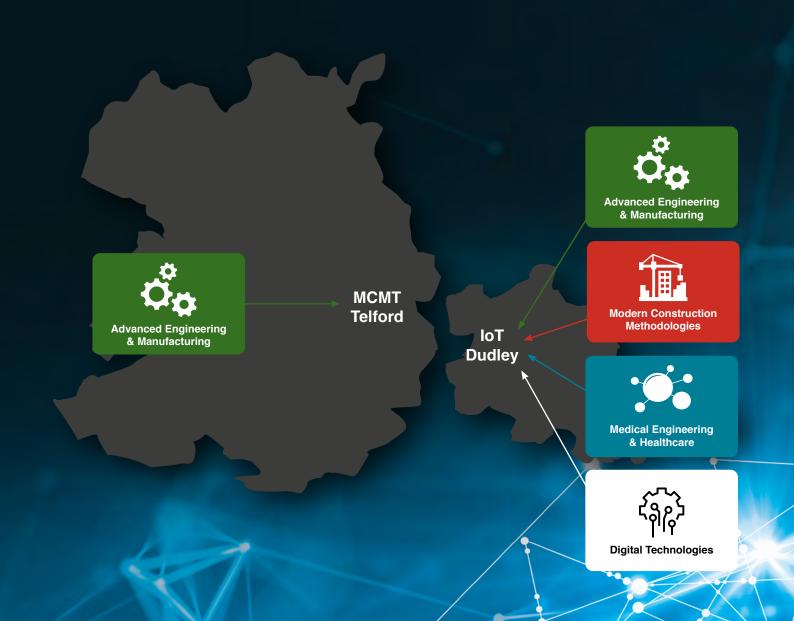
Play a pivotal role in determining the future skills needs, working in collaboration with other delivery partners from academia and industry to deliver high quality education.





## The Black Country & Marches

Black Country & Marches locations and specialisms



# Growing the higher level skills that employers need













Please continue to check our website, we are regularly updating our courses. www.blackcountryandmarchesiot.ac.uk

## Advanced Engineering and Manufacturing

### Higher Apprenticeships

	Level	Duration (months)	Delivery location(s)
Advanced Engineering & Manufacturing			
Automation and Controls Engineering Technician	4	48	IoT Dudley
Engineering Manufacturing Technician (Mechanical Engineering)	4	24	IoT Dudley, MCMT Telford
Engineering Manufacturing Technician (Electrical and Electronics)	4	24	IoT Dudley, MCMT Telford
Process Leader	4	24	IoT Dudley, MCMT Telford
Propulsion Technician Engineer	4	42-48	IoT Dudley
Improvement Practitioner	4	14-18	IoT Dudley, MCMT Telford
Improvement Specialist	5	14-18	IoT Dudley, MCMT Telford
Operations Departmental Manager (Engineering)	5	30	IoT Dudley, MCMT Telford
Senior Metrology Technician	5	36	IoT Dudley, MCMT Telford
Control/Technical Support Engineer	6	60	IoT Dudley
Electrical/Electronic Technical Support Engineer	6	60	IoT Dudley
Manufacturing Engineer	6	60	IoT Dudley
Product Design & Development Engineer	6	60	IoT Dudley
Data Scientist	6	36	IoT Dudley
Maintaining Digital & Technology Strategies Through Technology Leadership	6	36	IoT Dudley
Post Graduate Engineer	7	24-30	IoT Dudley
Process Automation Engineer	7	60	IoT Dudley



## Full/Part Time Courses

	Duration (months)	Delivery location(s)
Advanced Engineering & Manufacturing		
Higher National Certificate in General Engineering (Full-Time)	12	IoT Dudley
Higher National Certificate in General Engineering (Part-Time)	24	IoT Dudley
Higher National Diploma in General Engineering (Full-Time)	24	IoT Dudley
Higher National Diploma in General Engineering (Part-Time)	48	IoT Dudley
Higher National Certificate in Manufacturing Engineering (Full-Time)	12	IoT Dudley
Higher National Certificate in Manufacturing Engineering (Part-Time)	24	IoT Dudley
Higher National Diploma in Manufacturing Engineering (Full-Time)	24	IoT Dudley
Higher National Diploma in Manufacturing Engineering (Part-Time)	48	IoT Dudley
Higher National Certificate in Operations Engineering (Full-Time)	12	IoT Dudley
Higher National Certificate in Operations Engineering (Part-Time)	24	IoT Dudley
Higher National Diploma in Operations Engineering (Full-Time)	24	IoT Dudley
Higher National Diploma in Operations Engineering (Part-Time)	48	IoT Dudley

## CPD Technical Upskilling Short Courses

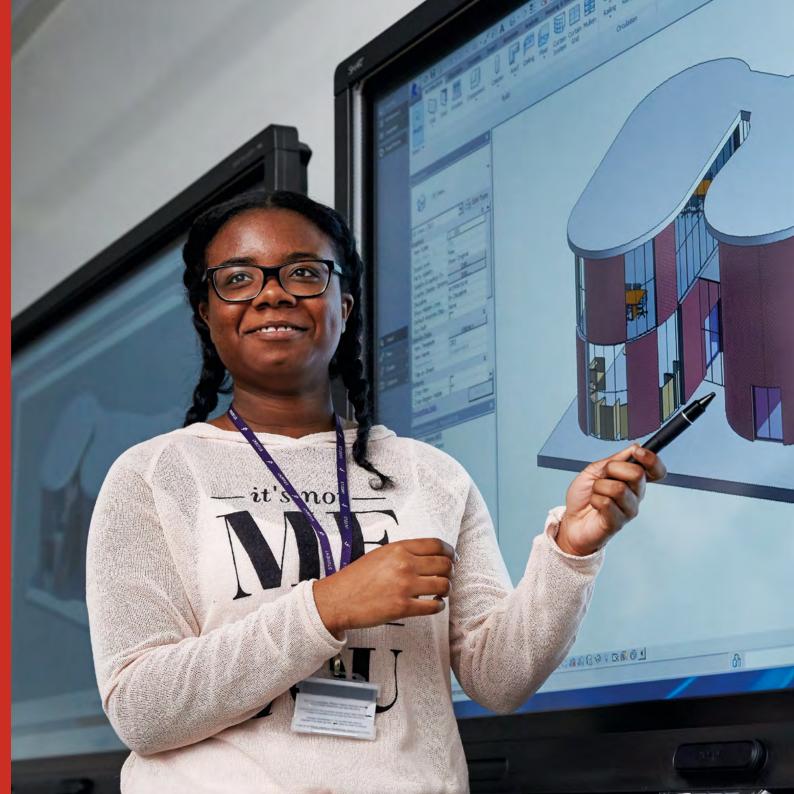
	Duration	Delivery location(s)
Advanced Engineering & Manufacturing		
CAD/CAM (Level 4)	17 weeks	IoT Dudley
Introduction to Robotics	15 hours	IoT Dudley
Robotics Intermediate	50 hours	IoT Dudley
Automation, Robotics and Programme Logic Controllers	50 hours	IoT Dudley



## Modern Methods of Construction and Offsite

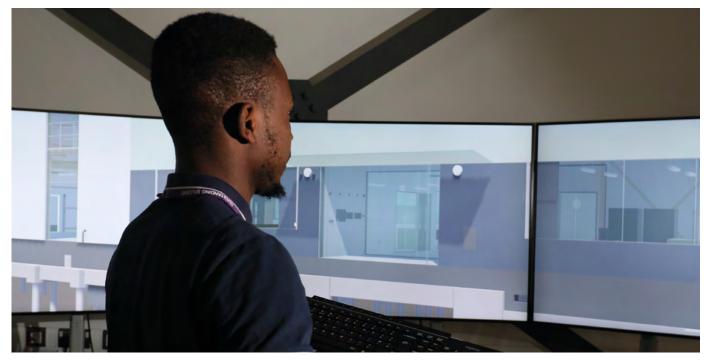
**Higher Apprenticeships** 

	Level	Duration (months)	Delivery location(s)
Modern Methods of Construction and Offsite			_
Building Services Engineering Technician	4	36	IoT Dudley
Construction Design and Build Technician	4	36	IoT Dudley
Construction Site Engineering Technician	4	36	IoT Dudley
Building Energy Management Systems (BEMS) Control Engineer	4	36	IoT Dudley
Construction Quantity Surveying Technician	4	36	IoT Dudley
Facilities Manager	4	24	IoT Dudley
Building Services Design Engineer	6	60-66	IoT Dudley
Building Services Engineering Site Management	6	36-48	IoT Dudley
Geospatial Mapping and Science Specialist	6	36-48	IoT Dudley



Part Time Courses		Delivery location(s)
Modern Methods of Construction and Offsite		
Higher National Certificate in Construction and the Built Environment	2	IoT Dudley
Higher National Certificate in Construction (Building Services – Heating, Ventilation and Air Conditioning )	2	IoT Dudley

Short Courses		Delivery location(s)
Modern Methods of Construction and Offsite		
Advanced Building Information Modelling	3 weeks	IoT Dudley
Digital Scanning and Virtual Rendering	3 days	IoT Dudley
Drone Surveying and Virtual Mapping	3 days	IoT Dudley
Topographic Survey	3 days	IoT Dudley



Please continue to check our website, we are regularly updating our courses. www.blackcountryandmarchesiot.ac.uk



## Medical Engineering and Healthcare

## Higher Apprenticeships

	Level	(months)	location(s)
Medical Engineering			
Healthcare Science Associate	4	24	IoT Dudley

Healthcare			
Healthcare Support Worker	2	15-18	IoT Dudley
Senior Healthcare Support Worker	3	15-18	IoT Dudley
Healthcare Assistant Practitioner Apprenticeship	5	24	IoT Dudley
Operations Departmental Manager (Healthcare)	5	30	IoT Dudley



### **Short Courses**

	Duration	Delivery location(s)
Medical Engineering		
Medical Equipment Technologies	10 days	IoT Dudley
Bio-Medical Equipment Electrical Safety	1 day	IoT Dudley
Cardiovascular	3 days	IoT Dudley
Physiological Monitoring and Infusion	3 days	IoT Dudley
Medical Therapeutic	3 days	IoT Dudley
Operating Theatre and Surgical Equipment	3 days	IoT Dudley
Benchtop Sterilisers	4 Days	IoT Dudley
Anaesthetic and Ventilation Equipment	6 days	IoT Dudley
Medical Imaging Equipment	3 days	IoT Dudley
Dental Equipment	3 days	IoT Dudley
Electro-Mechanical Assistive Equipment	1 day	IoT Dudley
Trolleys Beds and Operating Tables	E-learning	IoT Dudley
Medical Equipment Networking	3 days	IoT Dudley
Introduction to Medical Engineering	3 days	IoT Dudley
Washer Disinfector Testing (Periodic Testing)	5 days	IoT Dudley
Washer Disinfector Testing (Weekly Testing)	1 day	IoT Dudley

Healthcare		
Safe Moving and Handling	1 day	IoT Dudley
Prevention and Control of Infection in a Healthcare Setting	1 day	IoT Dudley
Advanced Life Support	1 day	IoT Dudley
First Response Emergency Care Level 3	5 days	IoT Dudley
First Response Emergency Care Level 4	5 days	IoT Dudley
Medical Gasses (Competent Person)	5 days	IoT Dudley
Medical Gasses (Refresher)	5 days	IoT Dudley
Administering Emergency Medical Gases	1 day	IoT Dudley





#### **Dudley College of Technology**

Dudley College of Technology is one of the most successful further education colleges in the UK, providing a wide range of education and training programmes across the West Midlands.

With a large estate centred on the Dudley Learning Quarter, providing inspirational facilities, in which students can access world-leading technology, we are at the forefront of further education.

We enrol around 12,000 students each year across 4,000 academic and vocational programmes, on both a full and part-time basis the College's provision continues to develop as a response to the ever changing skills agenda. Ofsted rated as "outstanding" in the most recent 2017 inspection, success rates for students, across all programmes, are on or significantly above national benchmarks.

We offer courses in a wide range of subject areas and provide education and training for apprentices, advanced apprentices, international and workplace students. We have extensive links with employers on a local, regional and national basis offering a diverse range of business improvement and employee skills updating programmes. We also offer a number of employability programmes to help adults return to work.

We are the biggest provider of Apprenticeships within the West Midlands Combined Authority area, delivering 27% of all college-delivered Apprenticeships. In 2019/20 we supported over 4,000 apprentices of which 1,379 were young people aged 16-18 years. We are committed to supporting the local economy, with 52% of our apprentices studying in LEP transformational sectors. Most strikingly, 67% of all apprentices in advanced manufacturing in the Black Country study here at Dudley College. As also the largest college provider of Apprenticeships in the wider West Midlands region and one of the largest nationally, our apprentices achieve at a rate significantly above national rates. A very high percentage of our apprentices progress to higher Apprenticeships and degree level programmes.

Over 95% of our 16 -18 year old full-time students move on to higher/further education or employment. For those who study A Levels with us 80% choose to continue to the full-range of Universities, or if staying local move on to our own higher education courses.

In February 2020 we were awarded the Queen's Anniversary Prize for Higher and Further Education in recognition of our contribution to the economy of the West Midlands through large scale advanced vocational and technical education. Our Science, Technology, Engineering and Mathematics Assured (STEM) ® status is also recognition that we are delivering high-quality education and training in all of these areas.

The college employs some 800 staff and has an annual turnover of circa £52 million.





THE QUEEN'S
ANNIVERSARY PRIZES
FOR HIGHER AND FURTHER EDUCATION
2019



#### University of Wolverhampton

The University of Wolverhampton's roots go back to the 19th century Wolverhampton Mechanics' Institutes and School of Art. The University has built on its early foundations and continues to invest in its students, staff, alumni and in the local and international community and offers a broad range of subjects at foundation, undergraduate and postgraduate level - many accredited by prestigious professional bodies. Over 22,000 students, including apprentices study at three main teaching campuses in the Midlands. Our students benefit from innovative and excellent teaching from a university awarded a Teaching Excellence Framework Silver award, commended by the Quality Assurance Agency, with world-class research facilities and a 96% graduate employability rate (Destination of Leavers from Higher Education report 2018).

The Faculty of Science and Engineering at the University of Wolverhampton offers innovative courses and collaboration in the nationally significant areas of Science, Mathematics, Engineering, Computer Technology and the Built Environment. We have built on our rich and long history of technology, teaching and local skills provision to become a significant player in the high-tech reskilling that is of national importance.

Our academic, technical and auxiliary staff support undergraduate and post-graduate courses which provide students a rich immersion in academic study, personal growth, skills expertise and work flexibility. We train scientists, engineers and designers of the environment; but in that process, we also train entrepreneurs and workers who can adapt to constantly changing demands and scenarios.

We are delighted to be working in partnership with the Black Country & Marches Institute of Technology to be able to extend our Apprenticeship offer across the region.



#### **University of Worcester**

The University of Worcester is very pleased and honoured to be a key partner of the Black Country & Marches Institute of Technology. The imaginative initiative to create the Institute is one the University whole-heartedly supports.

Worcester is a long-standing contributor to the skilled workforce of Dudley, particularly in education and health. Known since 1946 for the excellence of our teaching training, many Worcester educated teachers inspire children in Dudley schools. In the 21st Century more and more of our nurses and midwives have chosen to work at Russells Hall hospital and in other health settings; whilst in recent years our paramedics have made a bigger and bigger contribution in Dudley, as well as the Black Country and the West Midlands more broadly. Our highly effective educational partnership with Dudley College, which is one of the country's truly outstanding Colleges, has been crucial to this contribution and will be even more so in the future as we work together to create more opportunities and grow the skilled workforce.

In July 2020, the University of Worcester was awarded the largest allocation in the UK of additional places to educate future health professionals. Many of these future nurses, midwives, occupational therapists, paramedics and physiotherapists will come

from Dudley and will work in Dudley. All will benefit from the high educational quality combined with highly inclusive approach for which Worcester has become so well known.

#### **Expertise in Healthcare Education**

The University of Worcester is recognised as one of the country's leading educators of healthcare professionals, from nurses and midwives, to paramedics and physiotherapists.

With a reputation for the highest quality provision, partnership working and delivery, the University plays a leading role in researching and developing innovative and creative solutions in health and wellbeing, such as establishing the UK's first Masters in Physician Associates, to help meet the changing needs of the health service.

Worcester is shortlisted for the most awards of any UK university in the 2020 Student Nursing Times Awards - eight in total. These OSCARS of Nursing Education include shortlisting Worcester for a record sixth time for Nurse Education Provider of the Year (Pre-registration), as well as Best Student Experience and Teaching Innovation of the Year. Worcester's approach, combining inclusion with high quality, has led to many other awards, including number one in the UK for both Quality Education and Gender Equality in the 2019 University Impact Rankings (THE). In 2020, Worcester is

shortlisted for University of the Year in the UK Social Mobility Awards, for the second year running, and was globally commended for its work on sustainability at the United Nations after being named UK and Ireland Sustainability Institution of the Year 2019 in the Green Gown Awards.

The University works in close cooperation with many employers, including the NHS, County Councils and a wide range of voluntary and private sector employers. Worcester graduates are in the top 10 for employability UK-wide and have been throughout the last 10 years.

We are convinced that the development of the Black Country & Marches Institute of Technology and working ever more closely with Dudley College will bring many fresh opportunities for the people of Dudley and we pledge to do our very best to make a full, worthwhile contribution to the success of the Institute and thus to the flourishing of Dudley and its people.



#### **Avensys UK Ltd**

Avensys UK Ltd is a global leader in the supply of Bio-Medical Engineering Services. Established in 2007 as a Medical Engineering company providing repair and maintenance to medical facilities, the company's service offering now includes medical engineering training, supply of new and pre-owned equipment, medical device storage and medical device financing. In 2017 Avensys was purchased by VAMED; a multinational business of global proportions operating in the healthcare sector on projects ranging from medical equipment maintenance to hospital construction. Of particular interest to VAMED was the Avensys Training Academy, whose knowledge and experience in Bio-Medical Engineering could be of enormous benefit to the rest of the VAMED group. Similarly, when selecting an employer partner, the Institute of Technology was quick to recognise the benefits to be had by partnering with a company considered to be peerless in its ability to deliver industry training in the specialised field of medical engineering.

In recent months there has been an unprecedented demand for medical devices, ranging from anaesthetic machines to thermometers. This has in turn brought the role of medical engineering in to focus and has highlighted the fact that many hospitals do not have the in-house resources to cope

with periods of high demand. Avensys' partnership with the IoT will enable NHS Trusts to 'grow their own' talent from within, reducing reliance on manufacturers and simultaneously enabling them to lower costs associated with OEM service contracts

The partnership will enable both parties to deliver the modules that match their areas of expertise, resulting in a fantastic opportunity for students. Whilst the proximity of the IoT and Avensys' Kidderminster head office affords a close working relationship, the reach of this partnership is truly national and will bring a much needed new generation of medical engineers in to hospitals across the UK.





## The Marches Centre of Manufacturing & Technology (MCMT) with In-Comm Training as the key delivery partner

In-Comm Training is pleased to be a key delivery partner of the Black Country & Marches Institute of Technology. In-Comm Training will be delivering programmes from the Marches Centre of Manufacturing & Technology (MCMT).

In-Comm Training and the Marches Centre of Manufacturing & Technology (MCMT) is one of the UK's leading training providers, delivering a truly 'Ofsted outstanding' learning experience.

Over the last four decades, we have helped more than 10,000 young people develop the skills and experience they need to secure well-paid employment opportunities.

Our apprentices have secured the jobs they want and gone on to make parts for ventilators, become aerospace engineers, members of F1 teams, Managing Directors, quality specialists at large car makers and Operations Directors at Professional Services firms.

They all share one thing in common - they've benefited from the In-Comm and MCMT 'employer-led' approach to training that sees us work with 250 companies across the region: including, Caterpillar, Collins Aerospace, Doncasters, FBC Manby Bowdler and Grainger & Worrall.



Our technical academies in Aldridge and Marches Centre of Manufacturing & Technology sites in Telford and Shrewsbury are at the heart of everything we do and offer vibrant learning spaces that challenges apprentices to be the best they can be.

More than £7m has been spent on creating three state-of-the-art training facilities that feature IT suites, CNC machining zones, fluid power department, metrology rooms, over 25 welding bays and a specialist heritage engineering cell.

The equipment is impressive, but it is just one part of the In-Comm and MCMT offer. Our experienced team of trainers and tutors have significant industry experience and will be on hand to nurture and guide you throughout your journey, helping you fulfil your potential and pass assessments that lead to qualifications in 40 different trailblazer apprenticeships.

Importantly, they are experts in making sure you are ready to make the most of your first job.





## Collaborations













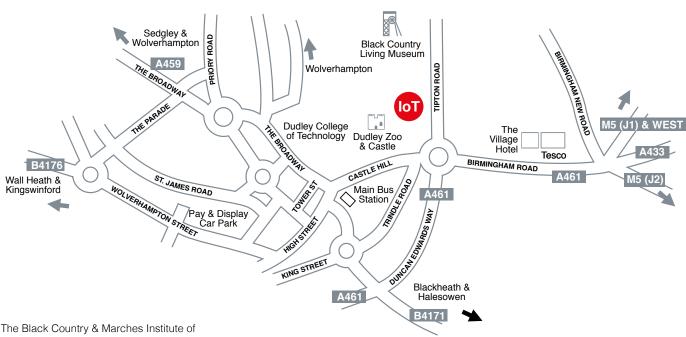




## How to find us

#### **Black Country & Marches Institute of Technology**

Zoological Way, Dudley, DY1 4AE www.dudleycol.ac.uk/Contacts-Maps/Black-Country-Marches-Institute-of-Technology



The Black Country & Marches Institute of Technology is situated a short distance from Dudley Town Centre and is positioned between Dudley Zoo and Castle and the Black Country Living Museum.

Visitors travelling from Wolverhampton on the A4150 along the Birmingham New Road should allow approximately 30 minutes to cover the 8 miles between these locations.

Those travelling from Birmingham City Centre should take New Birmingham Road after leaving M5 Junction 2.

## Get in touch

email: iotemployerservices@dudleycol.ac.uk call: 01384 363 808



Zoological Way, Dudley, DY1 4AE

www.blackcountryandmarchesiot.ac.uk