


GREATER BIRMINGHAM & SOLIHULL

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The Greater Birmingham and Solihull Institute of Technology (GBSIoT)

**Interactive STEM
Educational Resources:**
supporting you to deliver
your STEM programme





We are the Greater Birmingham and Solihull Institute of Technology.

We bring together a partnership of the leading further education colleges, universities and employers in the region. Working together and with our other stakeholders, we want to promote the engineering and manufacturing sector's incredible career opportunities. Our aim is to support all learners to progress to the highest technical jobs in industry through clear pathways, supported by industry expertise and state of the art teaching and learning facilities.

Supporting you to deliver your STEM programme


Working with our local schools, colleges, universities and communities, we want to support you to be able to access and take advantage of the wide range of STEM resources and support that is available to you across our extensive partnership and networks.

GBSIoT Interactive STEM Education Resources

GBSIoT has a great range of interactive STEM learning resources available for all ages, from primary and secondary school pupils to further and higher education. While most of our resources can be used by all ages, we've separated them into education stages for ease.

Browse our equipment selection and contact us to find out more about how you can access these sources to support your learners.

All our STEM resources are aligned to the curriculum, supported with lesson plans and interactive apps. There are endless fun opportunities for learners of all ages to engage, learn and create, developing their motivation and skills for their future careers.



If you are interested in using any equipment, email us at enquiries@gbsiot.ac.uk

Primary resources

Robo Wunderkind



Modular robotics kit that introduces children 5-14 to the essentials of programming and robotics.

[More information](#)

USEFUL LINKS:

- + [Software](#)
- + [Lesson plans](#)



LEGO Education WeDo 2.0 (KS2)

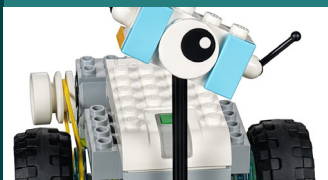


The WeDo 2.0 Core set enhances pupils' curiosity and skills in computing and science.

[More information](#)

USEFUL LINKS:

- + [Software](#)
- + [Lesson plans](#)



KUBO Coding



Ideal starting point for introducing coding and computational thinking to students from 4+.

[More information](#)

USEFUL LINKS:

- + [Lesson plans and support](#)



iRobot Root



Root® is a coding robot packed with lessons and projects designed to challenge coders of any experience level.

[More information](#)

USEFUL LINKS:

- + [Software](#)



Secondary resources

LEGO Education SPIKE Prime



Combines LEGO building elements and coding language based on Scratch, SPIKE Prime engages students through playful activities.

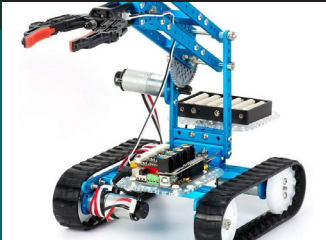
[More information](#)

USEFUL LINKS:

- + [Software](#)
- + [Lesson plans](#)



Ultimate Robot

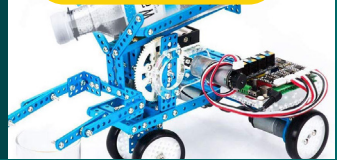


Ultimate 2.0 is a flagship robot kit based on Makeblock platform with rich features and strong compatibility. It helps learn about mechanical structure, electronic modules and programming.

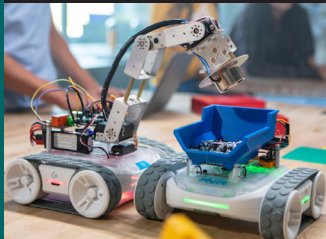
USEFUL LINKS:

- + [Software](#)

[More information](#)



Sphero RVR



A unique programmable robot- immediately drivable, includes a variety of sensors, and completely customizable.

USEFUL LINKS:

- + [Software, lesson plans and support](#)

[More information](#)



Primary and secondary resources



mBot Explorer



mBot is an all-in-one solution to enjoy the hands-on experience of programming, electronics, and robotics.

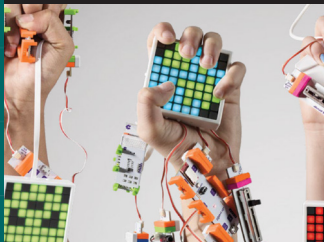
[More information](#)

USEFUL LINKS:

+ [Software](#)



littleBits



littleBits are electronic building blocks that snap together with magnets to make learning about circuitry and electronics exciting and engaging.

USEFUL LINKS:

+ [Lesson plans and support](#)

[More information](#)



Sphero BOLT



Sphero BOLT is an app-enabled robotic ball that provides endless opportunities to be creative and have fun while learning.

[More information](#)

USEFUL LINKS:

+ [Software, lesson plans and support](#)



Ozobot



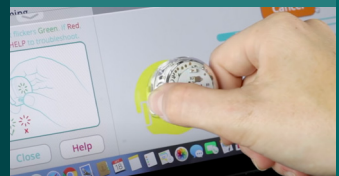
Ozobot trains educators in 2 Ways to Code, making it simple to bring coding and STEAM to any school.

[More information](#)

USEFUL LINKS:

+ [Software](#)

+ [Lesson plans](#)



Primary, secondary and HE/FE resources

Laserbox Pro



LaserBox is a smart desktop laser cutter that's specially designed for education and creation purposes.

[More information](#)

USEFUL LINKS:

+ [Software and support](#)



mCreate 3D Printer



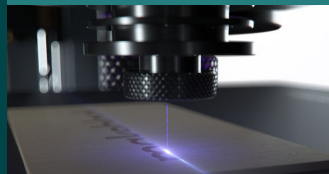
mCreate is a versatile desktop 3D printer featuring the innovative Genius smart levelling technology for accurate printing.

[More information](#)

USEFUL LINKS:

+ [Ultimaker Cura Software](#)

+ [mCreate Plug-in download](#)



ClassVR headsets



ClassVR is a versatile platform using the power of Virtual and Augmented Reality for education and training from the classroom to the boardroom.

[More information](#)

USEFUL LINKS:

+ [Software and support](#)



GBSIoT Hub



The GBSIoT Hub is a centre for STEM learning, creation and innovation and is available for learners, teachers and community groups to use, learn and inspire.

Containing two classrooms and a 'factory of the future' the hub will bring Greater Birmingham and Solihull to the forefront of manufacturing research and learning.

Please contact us to find out more and to organise a trip to inspire your learners enquiries@gbsiot.ac.uk

Visit our website to learn more:
www.gbsiot.ac.uk.

Find us at:
Holt Street
Birmingham B4 7ET

GREATER BIRMINGHAM & SOLIHULL

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