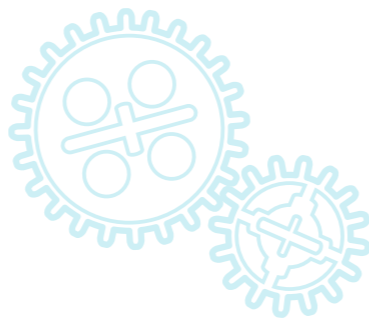


LEGO® Education Training Programmes 2016-2017



**Teach successfully with
our hands-on solutions**





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Get started with LEGO® Education Training Programmes

Supplementary training and our expert advice is key to ensuring that you get the most from each LEGO® Education product. We support you as you work through our varied selection of courses and therefore this approach will give you the tools and confidence to deliver engaging, lifelong learning.

Each LEGO Education training course focuses on the academic content of the material for each subject, then explains how the material can be included in your lessons and annual plans. However, we also hope to inspire you to be able to complete more self-directed lesson planning.

This catalogue covers a range of courses aimed at Elementary and Middle Schools for the 2016/17 academic year. If you have any questions or would like to find out more, please get in touch. We look forward to meeting you.

"The training was great and very useful. The trainer was very professional and engaging. Looking forward to use WeDo in the future."

Filipa T. Carneiro,
Elementary Teacher, 2016



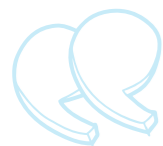
Literacy with StoryStarter

An engaging hands-on literacy tool for Elementary classrooms. Spark students' imagination and help them grow in confidence, as they start to bring their stories to life.



Subject	Literacy, 2 nd -5 th grade
Teachers	Language Arts teachers
Duration	7 hours
Content of the course	This programme will help you integrate StoryStarter into your daily teaching and will allow you to choose from the 24 hands-on classroom activities from the StoryStarter Core Curriculum, teaching you how to familiarise yourself with the activities and product. By the end of the programme, we hope you'll be inspired to use StoryStarter for anything from 5-10 minute short student build exercises to longer term project work, for groups and individuals, all as part of an engaging classroom experience.

Learning outcome	<ul style="list-style-type: none"> • Help your students to structure their stories, develop collaborative skills, and write and present their work with confidence, via an introduction to StoryStarter and inspiration as to how it can spark your students' imaginations. • Become familiar with the brick set, the curriculum and the StoryVisualizer software through hands-on practical activities. • Develop best practices on classroom management with help from our expert advisors. • Reach clear learning objectives, via targeted activities and lesson plans. • Link the programme content to your local and national curriculum plans, by discussing StoryStarter in relation to your daily teaching.
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Reflection and Expression with BuildToExpress

Encourage students to engage with the wider world around them, reflect on their experiences and express their thoughts and feelings in a positive and supportive environment.



Subject	Cross Curricular, 1 st -5 th grade
Teachers	All teachers
Duration	7 hours
Content of the course	This programme will give you a strong understanding of how to use BuildToExpress in your daily teaching, across a range of different subjects. We'll introduce you to the predefined lesson cards to give you a good understanding of how to manage BuildToExpress in different teaching situations and how to develop your own lessons over time.

Learning outcome	<ul style="list-style-type: none"> • Discover how to involve every pupil, take an active role in the learning process and become a true hands-on facilitator, via an introduction to BuildToExpress. • Understand how BuildToExpress enables students to communicate as equals in an inclusive and highly-motivated environment. • Become familiar with the brick set, the curriculum and the challenges cards, through hands-on practical activities. • Practice the use of symbols and metaphors for reflection and self-expression. • Link the programme content to your local and national curriculum plans, by discussing BuildToExpress in relation to your daily teaching.
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Mathematics problem solving with MoreToMath

Using our hands-on educational tool, students will feel encouraged and motivated to think, write and speak freely about mathematics.



Subject	Mathematics, 1 st -2 nd grade
Teachers	Mathematics teachers & Mathematics Specialist
Duration	4 hours
Content of the course	This programme will give you a strong understanding of how to use MoreToMath, including how this problem solving resource can complement your daily teaching. We'll introduce you to the programme's content and practical usage using the MoreToMath Curriculum Pack, including the teacher guide, 48 lessons, integrated assessment and differentiation tasks. As a result, we hope you'll feel equipped to engage students by making mathematics a tangible, relevant part of everyday life.

Learning outcome	<ul style="list-style-type: none"> • Gain an understanding of MoreToMath and how it helps students to succeed, including problem solving and making sense of problems, reasoning, perseverance, precision, modelling and representation. • Become familiar with the brick set, the curriculum and the MathBuilder interactive white board software, through practical examples. • Explore best practices on classroom management. • Understand how MoreToMath can help you reach clear learning objectives. • Discuss the use of MoreToMath in your daily teaching, including how to link it to your local and national curriculum plans.
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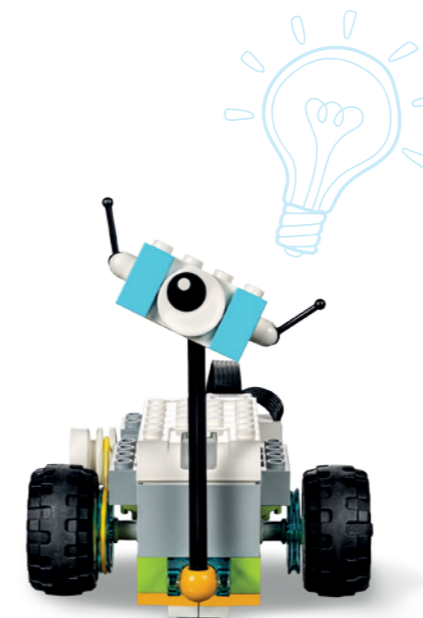
Real life Science with WeDo 2.0

WeDo 2.0 builds students' confidence, encouraging them to ask questions, define problems and design their own solutions. Based around real-world science projects including engineering, technology, and computing, students can witness science as it comes to life.



Subject	Science, engineering, computing, 2 nd -4 th grade
Teachers	Science, engineering and computing teachers
Duration	7 hours
Content of the course	Led by a certified LEGO® Education Academy trainer and using exciting hands-on activities and programme software, we'll discover how the projects in our three subject areas can bring science to life in your classroom. We also cover lesson planning, ensuring WeDo 2.0 can fit into your everyday curriculum. By the end of the programme, you will be fully prepared to make elementary science an inspiring, engaging experience for all the students in your class.

Learning outcome	<ul style="list-style-type: none"> • Increase your understanding of WeDo 2.0 and how to use it effectively in your classroom. • Explore a range of different project subjects and project types. • Learn to work with the software and gain hands-on experience. • Develop effective techniques to apply WeDo 2.0 in the classroom, including lesson planning and classroom management. • Understand how WeDo 2.0 works in parallel with the National Curriculum. • See coding and construction as a great motivators in science topics.
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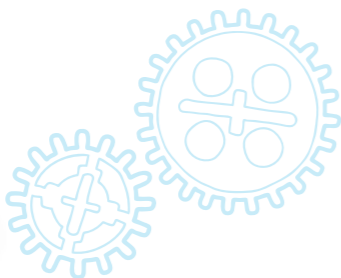
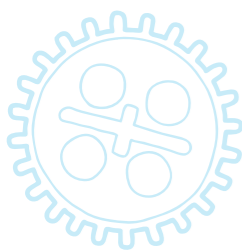
Early STEM learning with Early Simple Machines

Help students to behave as young scientists by providing them with tools and tasks that promote scientific enquiry. Together you'll investigate simple machines, for an early hands-on insight into science and engineering.



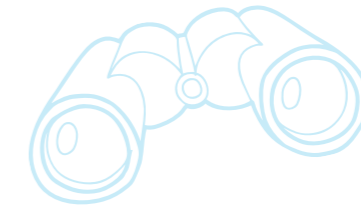
Subject	Science, Kindergarten - 2 nd grade
Teachers	Science and elective class teachers
Duration	4 hours
Content of the course	We'll help you understand how LEGO® Education learning can facilitate STEM Learning using inspiring hands-on practices. Working through projects from this engaging, topical programme, we'll demonstrate how you can achieve key learning objectives from the National Curriculum.

Learning outcome	<ul style="list-style-type: none"> • Help your students to behave like scientists with an introduction to Early Simple Machines. • Gain a strong understanding of LEGO Education learning methodology. • Understand how to get the most from Early Simple Machines in your classroom. • Spend time practicing reaching learning objectives. • Increase the efficiency of your lesson planning for STEM learning.
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Elementary STEM with Simple Machines

Engage students in scientific inquiry and creative engineering design, using STEM learning techniques for basic mechanisms, structures and power sources in the real world.



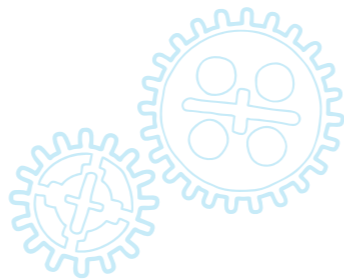
Subject	STEM, 1 st -3 rd grade
Teachers	Science and elective class teachers
Duration	4 hours
Content of the course	Understand how to achieve STEM learning objectives using curriculum materials from Simple Machines and the LEGO Education learning methodology.

Learning outcome	<ul style="list-style-type: none"> • Learn how to encourage your students to investigate and understand the operation of simple and compound machines found in everyday life, enabling them to work as young scientists and engineers. • Increase your understanding of LEGO Education learning methodology. • Become familiar with best practices in facilitating learning, by using Simple Machines in a classroom setting. • Gain hands-on practice to help you reach your learning objectives, with Simple Machines. • Increase the efficiency of your lesson planning for STEM learning.
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STEM with Simple & Powered Machines - Introduction

Enable your students to link textbook-based learning in science, technology, engineering and mathematics with real-world phenomena, using a range of challenging hands-on tools.



Subject	STEM, Science, 4 th -5 th grade
Teachers	Science and elective class teachers
Duration	7 hours
Content of the course	We'll equip you with a strong understanding of how to use LEGO Education methodology to facilitate STEM learning, using our Simple & Powered Machines programme content and inspiring hands-on practices. Plus discover how you can achieve key learning objectives, using the curriculum materials of Simple & Powered Machines.

Learning outcome	<ul style="list-style-type: none"> • Learn how to help students investigate their world, from basic mechanical principles to advanced motor-powered machines, gaining relevant insights in science, engineering and technology. • Increase your understanding of LEGO Education learning methodology. • Explore and learn from best practice examples of Simple & Powered Machines in use. • Practice achieving your learning objectives through hand-on activities. • Learn how to plan for STEM learning.
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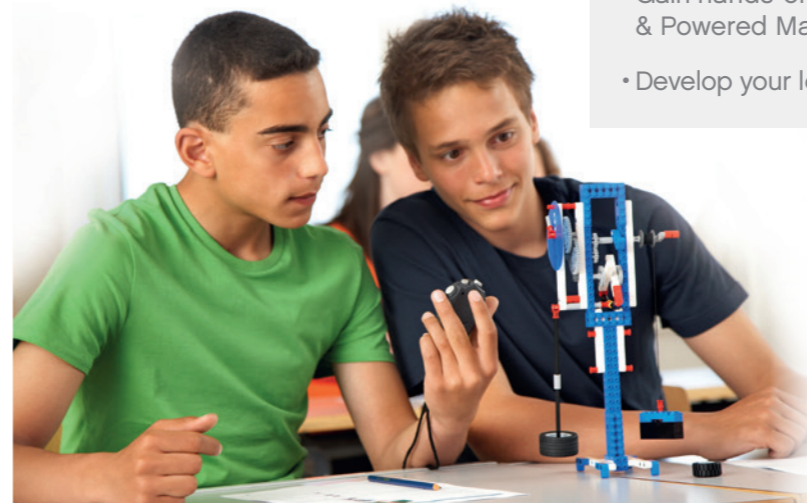
STEM with Simple & Powered Machines - Advanced

Simple & Powered Machines includes a range of challenging hands-on experiences that link book-learning in science, technology, engineering and mathematics to real-world phenomena.



Subject	STEM, Science, 6 th -9 th grade
Teachers	Science and elective class teachers
Duration	7 hours
Content of the course	Through inspiring hands-on practice, you'll learn how to use LEGO Education learning methodology to facilitate STEM learning, using the Simple & Powered Machines programme. In addition, we'll help you achieve key learning objectives using the curriculum materials.

Learning outcome	<ul style="list-style-type: none"> • A presentation of the Advancing with Simple & Powered Machines curriculum pack and understand how it enables students to continue exploring a range of key subjects (from basic mechanical principles to advanced motor-powered machines), while also accruing key insights in science, engineering and technology. • Increase your understanding of LEGO Education learning methodology. • Understand how to get the most from Simple & Powered Machines in a classroom setting. • Gain hands-on practice in reaching learning objectives with Simple & Powered Machines. • Develop your lesson planning for STEM learning.
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STEM with Machines & Mechanisms – Renewable Energy



Help your students discover renewable energy, while meeting curriculum goals in science, technology and engineering.

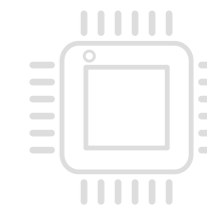
Subject and Teachers	STEM, Science, 6 th -8 th grade, Science and elective class teachers
Duration	4 hours
Content of the course	Inspiring hands-on training covering the Renewable Energy curriculum pack and how it enables your class to explore topics including energy supply, transfer, accumulation, conversion and consumption, using real-life LEGO® models.
Learning outcome	<ul style="list-style-type: none"> • Gain a strong understanding of LEGO Education learning methodology and explore best practices in using Renewable Energy in a classroom setting. • Get hands-on experience of reaching learning objectives with Simple & Powered Machines in conjunction with Renewable Energy and explore how this might influence your lesson planning.

STEM with Machines & Mechanisms – Pneumatics



Encourages logical and creative thinking, motivating students in scientific inquiry and engineering design.

Subject and Teachers	STEM, Science, 6 th -8 th grade, Science and elective class teachers
Duration	4 hours
Content of the course	Enable students to develop their creative thinking and investigation in real-world power systems and components.
Learning outcome	<ul style="list-style-type: none"> • Learn more about how to get started with Pneumatics from Machines & Mechanisms and gain a clear understanding of how to use the product. • Pick up classroom tips and tricks and develop your lesson planning technique for teaching STEM. • Gain hands-on practice in reaching your learning objectives.



LEGO® MINDSTORMS® Education EV3 Beginner day



Grow students' critical thinking and creativity in computer science, science, technology, engineering and mathematics. The greatest challenge you'll face is persuading them to leave the classroom afterwards!

Subject	STEM, Computing, Coding and Computer Science, 6 th -9 th grade
Teachers	STEM, Computing and Robotics teachers
Duration	7 hours
Content of the course	<p>We'll provide you with a thorough understanding of how to facilitate STEM learning with LEGO® MINDSTORMS® Education EV3. Using inspiring hands-on practice and classroom management tips, you'll learn how to achieve learning objectives in an interesting, interactive way.</p> <p>The course includes several one-hour modules to explore each of the programmes. Each module will be tailored to meet your needs, but will cover specific subjects (e.g. science, technology, engineering, mathematics and computing) and focusing on a specific topic (e.g. data-logging, data collection, algorithm).</p>

Learning outcome	<ul style="list-style-type: none"> • We'll introduce you to the LEGO® MINDSTORMS® Education EV3 solution, where you will build your first robot model. You will then take part in several one-hour workshops to see how LEGO® MINDSTORMS® Education EV3 can easily be integrated into your classroom. • Develop your understanding of the LEGO® MINDSTORMS® Education EV3 hardware and software. • Increase awareness of the numerous curriculum opportunities. • Gain hands-on practice in reaching your learning objectives and pick up some useful classroom management tips. • Understand more about, and start using, the content editor.
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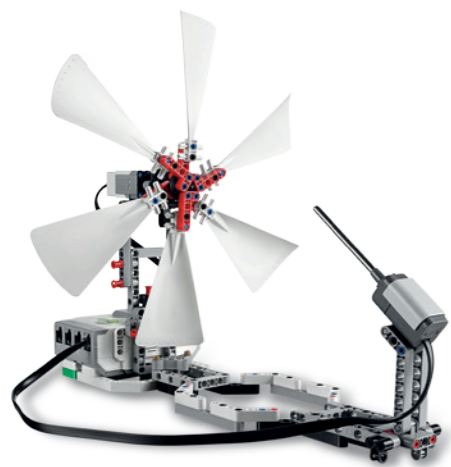
LEGO® MINDSTORMS® Education EV3 – Intermediate day

Take students' critical thinking and creativity in computer science, science, technology, engineering and mathematics to the next level with this comprehensive and exciting course.



Subject	STEM, Computing, Coding and Computer Science, 6 th -9 th grade
Teachers	STEM, Computing and Robotics Teachers
Duration	7 hours
Content of the course	<p>This hands-on programme covers all elements of the EV3 Beginner course, focusing on any specific areas requested by the days participants. You will learn multi-task programming and how to become a more efficient programmer.</p> <p>The course includes several one-hour modules in which you'll explore each of the programmes. Each module will cover a specific subject (e.g. science, technology, engineering, mathematics and computing), and focus on specific topics (e.g. data-logging, data collection, algorithm), all of which are tailored to meet your needs.</p>

Learning outcome	<ul style="list-style-type: none"> • Increase your understanding of the LEGO® MINDSTORMS® Education EV3 hardware, by spending hands-on time with the sensors and simple data wires, software and data operations. • Get ideas on how to run and facilitate hands-on sessions. • Understand the curriculum and its opportunities, plus receive classroom management tips. • Increase your knowledge in how to reach learning objectives.
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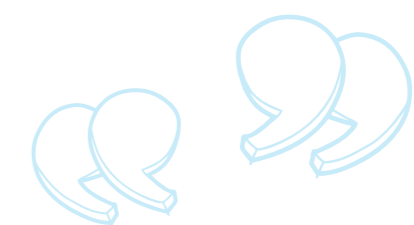


Reflection and Expression with BuildToExpress

Encourage students to engage with the wider world around them, reflect on their experiences and express their thoughts and feelings in a positive and supportive environment.



We offer face-to-face training for Middle School teachers with focus on grades 6-9. The content of the course is identical to the face-to-face training for Elementary teachers (please see page 5) but with a Middle School focus.



Introduction to LEGO Education eLearning

With a strong focus on flexibility, our new eLearning solutions offer web-based training designed to help you enhance the experience and effectiveness of using LEGO® Education in your classrooms.



What this includes?	<ul style="list-style-type: none"> • Getting to know the product. • Guidance on how to use the different product components. • Classroom management. • Software introduction and usage. • Inspiration for planning your first lessons.
eLearning programs available in 2016/17	<ul style="list-style-type: none"> • Literacy with StoryStarter • Science with WeDo 2.0 • STEM and Robotics with LEGO® MINDSTORMS® Education EV3

Ready to transform your teaching approach?



LEGO® Education
WeDo 2.0 – 2016



LEGO® Education
WeDo 2.0 – 2016



LEGO® MINDSTORMS®
Education EV3 – 2014
StoryStarter – 2014



LEGO® MINDSTORMS®
Education EV3 – 2014
StoryStarter – 2014

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2014

StoryStarter – 2014



LEGO® MINDSTORMS®
Education EV3 – 2013



LEGO® Education
BuildtoExpress
Getting Started
Set – 2013



WeDo – 2010

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supplier at [education.lego.com/
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