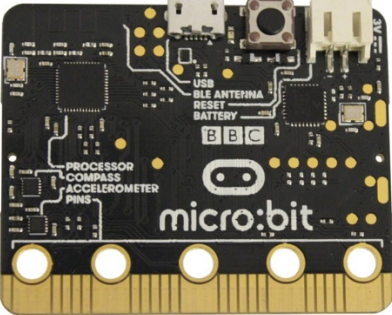





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## MOOCs / Online Resources 2

Course Name	Course Outline	Link to Course
<p><b><i>NCCA / Curriculumonline – Micro:bit</i></b></p> 	<p>Video lessons to develop skills and scaffolding classes around the use of embedded systems. The lessons together address the LOs of ALT4, and are designed to encourage ideas for full implementation of the brief on embedded systems.</p>	<p><a href="https://www.curriculumonline.ie/Senior-cycle/Senior-Cycle-Subjects/Computer-Science/Support-Material-draft-for-T-L/2-ALT-Resources/ALT4-Support">https://www.curriculumonline.ie/Senior-cycle/Senior-Cycle-Subjects/Computer-Science/Support-Material-draft-for-T-L/2-ALT-Resources/ALT4-Support</a></p>




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Course Name	Course Outline	Link to Course
<p data-bbox="142 602 604 662"><i>Teaching Physical Computing with Raspberry Pi and Python</i></p>  <p data-bbox="128 1016 653 1105"><b>Raspberry Pi</b></p>	<p data-bbox="720 597 1272 773">Over four weeks, you'll develop your knowledge of simple electronics and computing, setting up your Raspberry Pi and writing your first program using the Python programming language.</p> <p data-bbox="720 792 1293 967">You'll apply your newfound knowledge to a series of challenges, including controlling an LED with Python, using a button press to control a circuit, and making a button and LED game.</p> <p data-bbox="720 987 1293 1127">If you're a teacher, you'll also have the chance to develop ideas for using the Raspberry Pi and Python in your classroom, and to connect with a network of other educators.</p>	<p data-bbox="1360 607 1934 672"><a href="https://www.futurelearn.com/courses/physical-computing-raspberry-pi-python">https://www.futurelearn.com/courses/physical-computing-raspberry-pi-python</a></p>



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Course Name	Course Outline	Link to Course
<p><b><i>Introduction to Python: Fundamentals</i></b></p> 	<p>Focus on Python data structures, and work with string, list, and range sequences. Discover the power of list iteration, and learn about string and list methods. From there, get the details on file input and output—open files, read them, add to them, close them, and more. At the end of the course, you'll be able to slice strings into substrings, create lists, iterate through them, import files, and use file append mode, along with a lot of other practical Python tasks, as you get started coding.</p>	<p><a href="https://www.edx.org/course/introduction-to-python-fundamentals">https://www.edx.org/course/introduction-to-python-fundamentals</a></p>

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