Open Systems and Advanced Manufacturing Technologies

N.B. This qualification is ready for teaching this September as it is already listed on the 2019 Performance tables which was published at the beginning of the year.

BTW. If you are considering doing our rocketry qualification but worried it will clash with GCSE Engineering or possibly Manufacturing, worry no more. It is actually Advanced Manufacturing with a discount code of WA3. GCSE engineering is XA and Manufacturing WA.

NEW! All schools following this qualification will receive 10 FREE licences of KerbalEdu for their school: http://kerbaledu.com/teaching [1] The Kerbal education team are going to work with us to develop teaching materials.

Please drop us an email and let us know if you are doing this qualification and we will make sure it is avalable to you on the Markbook.

Open Systems and Advanced Manufacturing Technologies is the official title of this new qualification from TLM, but at TLM it's better known as "It's not Rocket Science", because actually it is!

That's not all that it is though, it is perhaps one of the first multifunctional qualifications to gain performance table points for 2019. On top of that it's a genuine Information Technology course and lastly a true STEM course that will facilitate Scientists and Technologists working synergistically on the same qualification.

The Assessment model is the same as the much loved Open Systems and Enterprise or "ITQ" course that has introduced so many schools to TLM. 30% Coursework marks for reaching a level 2 threshold standard and then up to 70% available from a single, grade determining, exam.

The course structure is simplicity itself and lends itself to a wide range of teaching styles and delivery methods.

Four units require learners to develop their knowledge and understanding of cutting edge uses of Information technology from modelling rocket flight to building an unmanned vehicle. From a practical study of artificial intelligence to an understanding of the part that satellite technology plays in our ever increasing understanding of our planet's part in the wider cosmos and the way that we communicate with each other. There is also an underlying social dimension: is it good to have such technology, especially things like robots that may eventually replace us in some jobs?

The 4 units are both the content for the examination and also the challenges to learners to explore and develop their knowledge and skills in these four fascinating areas.   Coursework does not require expensive resources, but if you have the good fortune or foresight to have programmable control technology systems such as Lego mindstorms or Data Harvest Flow Go systems, learners can be guided through discovery learning to a deeper understanding of artificial intelligence (AI) and unmanned vehicles (UV).

Enrolling with STEM Learning https://www.stem.org.uk/ [2] opens up a treasure chest of resources for the exploration of Space including how to launch your own rockets but, if this is a step too far into the unknown, Kerbal's exciting software will allow you to use your IT skills and expertise to model the whole thing from the safety of the IT labs.

Backed, as all our courses are, by our Moodle and Mahara eportfolio systems TLM will not leave you unsupported by a syllabus that at first may look daunting, resource packs and how to videos will provide comprehensive teaching assistance.   The Autumn term will herald opportunities to explore all the units in one of our acclaimed workshops where you can get hands on experience with TLM's online systems as well as hardware and software solutions to the challenges of "It's not rocket science" - the question is "Will you boldly go.................?"

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The full course handbook can be downloaded from:

https://theingots.org/community/sites/default/files/uploads/user4107/TLM%20L2%20Handbook%20-%20Open%20Systems%20and%20Advanced%20Manufacturing%20Technologies.pdf [3]

Source URL: https://theingots.org/community/node/145712

Links
[1] http://kerbaledu.com/teaching
[2] https://www.stem.org.uk/
[3] https://theingots.org/community/sites/default/files/uploads/user4107/TLM%20L2%20Handbook%20-%20Open%20Systems%20and%20Advanced%20Manufacturing%20Technologies.pdf