

A level Design and Technology: Product Design

Year 13 revision plan

Key dates

Examinations

Formal mock examination 1: Jan 20th 2020 – Feb 14th 2020

Formal mock examination 2: April 20th – June 4th: Final examination preparation and revision

Final external examination: **Friday 5th June 2020 9.00am**
contingency

Major Project

Feb 14th 2020 – Major project review submission deadline

March 20th 2020 – Major project agreed deadline

March 23rd – April 3rd: Major project assessment and

May 5th 2020: Major Project submission of marks deadline

Focussed plan for February formal mock examination

Week Commencing 6 th Jan 2020			Web links and resources
Time and date	Teacher	Topic	
Tuesday Period 2:	RNS	Natural and Manufactured Timber	https://resources.eduqas.co.uk/Pages/ResourceSingle.aspx?riid=1077 http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-4/website/index.html https://www.bbc.co.uk/bitesize/examspecs/z4nfwty http://www.technologystudent.com/ https://www.focuselearning.co.uk/u/972/ropwoahrkkAvAtAlseywkrkohcBaiqkzE
Thursday Period 1	RNS	Ferrous and Non-Ferrous Metals	https://resources.eduqas.co.uk/Pages/ResourceSingle.aspx?riid=1077

			http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-4/website/index.html https://www.bbc.co.uk/bitesize/examspecs/z4nfwty http://www.technologystudent.com/ https://www.focuselearning.co.uk/u/972/ropwoahrkkAvAtAlseywkrkohcBaiqkzE
Thursday Period 2	MES	Mathematics Practice paper	http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-4/website/index.html https://www.bbc.co.uk/bitesize/examspecs/z4nfwty http://www.technologystudent.com/ https://www.focuselearning.co.uk/u/972/ropwoahrkkAvAtAlseywkrkohcBaiqkzE
Week Commencing 13 th Jan 2020			
Monday Period 4	RNS	Thermoforming and Thermosetting Polymers	https://resources.eduqas.co.uk/Pages/ResourceSingle.aspx?rId=1077 http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-4/website/index.html https://www.bbc.co.uk/bitesize/examspecs/z4nfwty http://www.technologystudent.com/ https://www.focuselearning.co.uk/u/972/ropwoahrkkAvAtAlseywkrkohcBaiqkzE
Tuesday Period 1	RNS	Smart and Modern Materials	https://resources.eduqas.co.uk/Pages/ResourceSingle.aspx?rId=1077 http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-4/website/index.html https://www.bbc.co.uk/bitesize/examspecs/z4nfwty

			http://www.technologystudent.com/ https://www.focuselearning.co.uk/u/972/ropwoahrkkAvAtAlseywkrkohcBaiqkzE
Tuesday Period 2	RNS	Adhesives	https://resources.eduqas.co.uk/Pages/ResourceSingle.aspx?rId=1077 http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-4/website/index.html https://www.bbc.co.uk/bitesize/examspecs/z4nfwty http://www.technologystudent.com/ https://www.focuselearning.co.uk/u/972/ropwoahrkkAvAtAlseywkrkohcBaiqkzE
Thursday Period 1	RNS	Application of materials practice questions	
Thursday Period 2	MES	Application of Materials themed mock practice paper 1	
Week Commencing 20 th Jan 2020			
Time and date	Teacher	Topic	
Monday Period 4	RNS	Mock paper review and target setting including DIRT tasks	
Tuesday Period 1	RNS	Quality Assurance and Quality Control	https://resources.eduqas.co.uk/Pages/ResourceSingle.aspx?rId=1077 http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-4/website/index.html

		Methods of controlling quality during making CAD/CAM/CNC	https://www.bbc.co.uk/bitesize/examspecs/z4nfwty http://www.technologystudent.com/ https://www.focuselearning.co.uk/u/972/ropwoahrkkAvAtAlseywkrkohcBaigkzE
Tuesday Period 2:	RNS	Paper and Board	https://resources.eduqas.co.uk/Pages/ResourceSingle.aspx?rId=1077 http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-4/website/index.html https://www.bbc.co.uk/bitesize/examspecs/z4nfwty http://www.technologystudent.com/ https://www.focuselearning.co.uk/u/972/ropwoahrkkAvAtAlseywkrkohcBaigkzE
Thursday Period 1	RNS	Environmental Awareness and Health and Safety	https://resources.eduqas.co.uk/Pages/ResourceSingle.aspx?rId=1077 http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-4/website/index.html https://www.bbc.co.uk/bitesize/examspecs/z4nfwty http://www.technologystudent.com/ https://www.focuselearning.co.uk/u/972/ropwoahrkkAvAtAlseywkrkohcBaigkzE
Thursday Period 2	MES	Application of Materials themed mock practice paper 2	
Week Commencing 27 th Jan 2020			
Monday Period 4	RNS	Mock paper review and target setting including DIRT tasks	
Tuesday Period 1	RNS	Principles of Design Theory	https://resources.eduqas.co.uk/Pages/ResourceSingle.aspx?rId=1077

			http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-4/website/index.html https://www.bbc.co.uk/bitesize/examspecs/z4nfwty http://www.technologystudent.com/ https://www.focuselearning.co.uk/u/972/ropwoahrkkAvAtAlseywkrkohcBaiqkzE
Tuesday Period 2	RNS	Industrial and Commercial practices – Natural and Manufactured Timber	https://resources.eduqas.co.uk/Pages/ResourceSingle.aspx?rId=1077 http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-4/website/index.html https://www.bbc.co.uk/bitesize/examspecs/z4nfwty http://www.technologystudent.com/ https://www.focuselearning.co.uk/u/972/ropwoahrkkAvAtAlseywkrkohcBaiqkzE
Thursday Period 1	RNS	Industrial and Commercial practices – Ferrous and Non-Ferrous metals	https://resources.eduqas.co.uk/Pages/ResourceSingle.aspx?rId=1077 http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-4/website/index.html https://www.bbc.co.uk/bitesize/examspecs/z4nfwty http://www.technologystudent.com/ https://www.focuselearning.co.uk/u/972/ropwoahrkkAvAtAlseywkrkohcBaiqkzE
Thursday Period 2	MES	Application of Materials themed mock practice paper 3	
Week Commencing 3 rd Feb 2020			
Time and date	Teacher	Topic	

Monday Period 4	RNS	Mock paper review and target setting including DIRT tasks	
Tuesday Period 1	RNS	Industrial and Commercial practices – Thermoforming and Thermosetting plastics	https://resources.eduqas.co.uk/Pages/ResourceSingle.aspx?rlid=1077 http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-4/website/index.html https://www.bbc.co.uk/bitesize/examspecs/z4nfwty http://www.technologystudent.com/ https://www.focuselearning.co.uk/u/972/ropwoahrkkAvAtAalseywkrkohcBaiqkzE
Tuesday Period 2:	RNS	Scales of Production	https://resources.eduqas.co.uk/Pages/ResourceSingle.aspx?rlid=1077 http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-4/website/index.html https://www.bbc.co.uk/bitesize/examspecs/z4nfwty http://www.technologystudent.com/ https://www.focuselearning.co.uk/u/972/ropwoahrkkAvAtAalseywkrkohcBaiqkzE
Thursday Period 1	RNS	Product Analysis	https://resources.eduqas.co.uk/Pages/ResourceSingle.aspx?rlid=1077 http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-4/website/index.html https://www.bbc.co.uk/bitesize/examspecs/z4nfwty http://www.technologystudent.com/ https://www.focuselearning.co.uk/u/972/ropwoahrkkAvAtAalseywkrkohcBaiqkzE
Thursday Period 2	MES	Principles of Design Theory themed mock practice paper	

Week Commencing 10 th Feb 2020			
Monday Period 4	RNS	Full content review	
Tuesday Periods 1, 2 and 3	IPE	Full 3 hour mock for year 13 students	
		Full 2.5 hour AS paper for year 12 students	

Overall content map and weblinks

Focus area for revision	Weblinks
Applied Mathematics	http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-4/website/media/eduqas-dandt-maths.pdf
Section 1: Designing and innovation	http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-3/Design%20and%20Innovation/Eng/eduqas/Design%20and%20Innovation.pdf
(a) Principles of designing	http://www.technologystudent.com/despro_flsh/iterative1.html
(b) Research techniques	
(c) Analysis of the problem	
(d) Problem solving strategies	
(e) Quantitative and qualitative testing	<p>Quantitative : Measurement of specific amplitude, level, or quantity of a material, output, or product to evaluate the operational characteristics of an item.</p> <p>Read more: http://www.businessdictionary.com/definition/quantitative-testing.html</p> <p>Qualitative: Associated with the subjective quality of a thing or phenomenon, such as feel, taste, expertise, image, leadership, reputation.</p> <p>Read more: http://www.businessdictionary.com/definition/qualitative.html</p>
(f) Ergonomics and anthropometrics	http://www.technologystudent.com/despro_flsh/revise11.html
(g) Computer systems for designing	
(h) Innovation	
(i) Consider issues when designing	

(j) Research, plan and evaluate	
(k) Generate and develop ideas	
(l) Develop proposals	
(m) Detail design	
(n) Communicate ideas & information	
2 Materials and components	For Product Design students
(a) Materials and their application	http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-3/Design%20and%20Innovation/Eng/eduqas/Materials%20and%20Components.pdf
(b) Working characteristics of materials	http://www.technologystudent.com/
(c) Materials with specific properties	https://www.bbc.com/bitesize/examspecs/z4nfwty - although it's intended for GCSE it's still useful
(d) Modern material technology	
(e) Materials for specific requirements	For Textiles students
(f) Choice of finishes	http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-3/website/pdf/_eng/_wjec/textiles-1/materials-resource-1.pdf
(g) Components and their application	http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-3/website/pdf/_eng/_wjec/textiles-1/materials-resource-2.pdf
(h) Safe working practices	
(i) Work with materials & components	https://resources.eduqas.co.uk/Pages/ResourceSingle.aspx?rliid=1103 http://www.textileshotline.co.uk/
3 Processes	http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-3/Design%20and%20Innovation/Eng/eduqas/Processes%20Industrial%20and%20Commercial%20Practice.pdf
(a) Hand methods	
(b) Machine methods	
(c) Combining/forming materials	http://www.technologystudent.com/
(d) Computer-aided manufacture	
(e) Work with tools and equipment	https://www.bbc.com/bitesize/examspecs/z4nfwty
(f) Work with materials, components	http://www.textileshotline.co.uk/
4 Industrial & commercial practice	http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-3/Design%20and%20Innovation/Eng/eduqas/Processes%20Industrial%20and%20Commercial%20Practice.pdf
(a) Manufacturing industry	
(b) Manufacturing systems	http://www.technologystudent.com/
(c) Stages of production	
(d) Detailed manufacturing methods	https://www.bbc.com/bitesize/examspecs/z4nfwty
(e) Management systems	
(f) Safe working practices	http://www.textileshotline.co.uk/

(g) Industrial methodology	http://www.julieboyd.co.uk/dt-textiles-2/website-for-students-dt.html
5 Product analysis and systems	http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-3/Design%20and%20Innovation/Eng/eduqas/Product%20Analysis%20and%20Systems.pdf
(a) Design and production	
(b) Form and function	http://www.technologystudent.com/
(c) Trends & influences on design	https://www.bbc.com/bitesize/examspecs/z4nfwtv
(d) Intellectual Property & Standards	http://www.textileshotline.co.uk/
(e) Systems and sub-systems	
(f) Control systems	
(g) The use of ICT	http://www.julieboyd.co.uk/dt-textiles-2/website-for-students-dt.html
(h) Issues when designing	
(i) Systems analysis	
(j) ICT when planning	
(k) ICT when designing and making	
6 Human responsibility	http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-3/Design%20and%20Innovation/Eng/eduqas/Human%20Responsibility.pdf
(a) Service to the customer	
(b) Regulatory frameworks	http://www.technologystudent.com/
(c) Risk assessment procedures	
(d) Values in design solutions	
(e) Forms of energy	https://www.bbc.com/bitesize/examspecs/z4nfwtv
(f) Responsibilities when designing	http://www.textileshotline.co.uk/
(g) Quality (of the product)	
(h) Quality (human processes)	http://www.julieboyd.co.uk/dt-textiles-2/website-for-students-dt.html
7 Public interaction	http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-3/Design%20and%20Innovation/Eng/eduqas/Public%20Interaction.pdf
(a) Innovation in the market	
(b) Researching the market	http://www.technologystudent.com/
(c) Selling the product	
(d) Diffusion of products	
(e) Researching market/client needs	https://www.bbc.com/bitesize/examspecs/z4nfwtv
(f) Determine product marketability	http://www.textileshotline.co.uk/
(g) Evaluate products	http://www.julieboyd.co.uk/dt-textiles-2/website-for-students-dt.html

Accessing past papers and mark schemes is an excellent way of revising what you know and testing your application of knowledge. When using past papers it is best to use papers for the course you are doing. However, all past papers test the same knowledge so using paper from different exam boards is just as useful.

To access past papers.

EDUQAS: <https://www.eduqas.co.uk/qualifications/qualification-resources.html?subject=DesignandTechnology&level=asaLevel&pastpaper=true>

WJEC: <https://www.wjec.co.uk/students/past-papers/>

OCR: <https://ocr.org.uk/qualifications/past-paper-finder/>

AQA: <https://www.aqa.org.uk/find-past-papers-and-mark-schemes>

EDEXCEL: <https://qualifications.pearson.com/en/support/support-topics/exams/past-papers.html>