



Materials Design and Technology ATAR course

Practical (portfolio) examination requirements

2017

Copyright

© School Curriculum and Standards Authority, 2017

This document – apart from any third party copyright material contained in it – may be freely copied, or communicated on an intranet, for non-commercial purposes in educational institutions, provided that the School Curriculum and Standards Authority is acknowledged as the copyright owner, and that the Authority's moral rights are not infringed.

Copying or communication for any other purpose can be done only within the terms of the *Copyright Act 1968* or with prior written permission of the School Curriculum and Standards Authority. Copying or communication of any third party copyright material can be done only within the terms of the *Copyright Act 1968* or with permission of the copyright owners.

Any content in this document that has been derived from the Australian Curriculum may be used under the terms of the Creative Commons [Attribution 4.0 International \(CC BY\)](#) licence.

Materials Design and Technology ATAR course Practical (portfolio) examination

This document contains general advice to teachers, candidates and parents on the Materials Design and Technology practical (portfolio) examination.

Students who are enrolled in a Year 12 ATAR course pair of units are required to sit both the practical and written ATAR course examination. There are no exemptions and if candidates fail to sit and do not have an approved sickness/misadventure claim then the grades for the course units will not contribute to any of the WACE requirements.

Schools are required to submit their candidates' practical (portfolio) submissions to the designated venue by **4 pm on Wednesday, 20 September 2017**.

Delivery instructions for the portfolios will be sent to schools during Term 3. Non-school candidates will be notified directly by mail.

For Materials Design and Technology, the ATAR course examination weightings are:

- Written examination paper 50%
- Practical (portfolio) examination 50%

1. Reporting achievement

Teachers are responsible for ensuring the practical (portfolio) requirements are met and making sure candidates are adequately prepared for the practical (portfolio) examination. Teachers must ensure they are using the current syllabus. Any further advice on matters related to the syllabus or assessment will be published in the *11to12 Circular*, which is available on the Authority website at

<http://www.scsa.wa.edu.au/publications/circular-ecircular>.

Teachers should also refer to the ATAR course examination information published in Section 6 of the *WACE Manual 2017* which is available on the School Curriculum and Standards Authority website at <http://www.scsa.wa.edu.au/publications/wace-manual>.

For all ATAR courses with a practical examination, for the pair of units, schools are required to submit to the Authority a:

- course mark out of 100 (weighted for each component)
- mark out of 100 for the written component
- mark out of 100 for the practical component
- grade for the completed pair of units.

2. Forms

The following forms will be used for the practical (portfolio) examination submission and have been provided in this document as sample appendices only:

- *Declaration of authenticity* (Appendix 1)
- *Predicted scores data entry form* (Appendix 2).

3. Provisions for sickness/misadventure

Consideration may be given to candidates (except non-school candidates) who believe their practical (portfolio) examination submission may have been affected by an unexpected sickness, or unforeseen event beyond their control, close to or during the ATAR course examinations. Such candidates may apply for sickness/misadventure consideration.

Application is made by the candidate by the prescribed date using the form available in schools or from the Authority website <http://www.scsa.wa.edu.au/forms/forms>.

A candidate with an injury or illness existing at the start of Term 3 is not entitled to apply for sickness/misadventure consideration on the basis of the existing injury or illness.

4. Late submissions

Late practical (portfolio) examination submissions cannot be accepted and candidates who do not submit a portfolio and do not have an approved sickness/misadventure claim will not receive a mark for the course and it will not contribute to any of the WACE requirements.

5. Principles of external assessment

5.1 The marking process preserves the anonymity of the candidate and the candidate's school

This requires that candidates and their work are identified only by their SCSA student number.

5.2 The authenticity of the candidate's portfolio work must be guaranteed

It is essential that:

- the main development of work takes place in school time
- work completed away from school is regularly monitored by the teacher
- each candidate signs a *Declaration of authenticity* (a legal document) witnessed by the supervising teacher and the Principal to endorse the originality/authenticity of the submitted practical (portfolio) examination
- a copy of the signed *Declaration of authenticity* is kept by the teacher on record at the school
- under no circumstances can any other person work directly on any part of the candidate's practical (portfolio) examination submission
- this work is not to be submitted by the candidate for any other ATAR course
- only materials received by the Authority by the specified time on the due date are permitted to be presented to the markers
- the teacher/supervisor has a significant role in monitoring candidate progress and in providing ongoing feedback and assessment throughout the process.

The *Declaration of authenticity* is a legal document. Teachers should monitor the candidate's work from the beginning to ensure that there is no plagiarism in the work that is to be submitted for marking. If the teacher has been unsuccessful in working with the candidate to avoid plagiarism whilst monitoring the process of work, then the teacher should sign the *Declaration of authenticity* and attach a note to this effect to the declaration at submission time.

Non-school candidates are to complete the *Declaration of authenticity* in the presence of an authorised witness. The following internet link provides a list of authorised witnesses www.courts.dotag.wa.gov.au/W/witnessing_documents.aspx.

5.3. Markers apply a consistent standard to assess the candidate's work

This requires:

- the marking key for the examination

- attendance at a marker training meeting prior to the commencement of marking
- trial marking of work to ensure a common understanding of the marking key
- the practical (portfolio) examination submission will be marked independently by at least two markers
- that the marks will be reconciled
- that the chief marker ensures consistency throughout by monitoring the marking process and reconciling significant differences where necessary
- if the chief marker considers that the practical (portfolio) examination submitted is not the candidate's work completed through the duration of the units being examined, the matter is referred to the Breach of Examination Rules committee
- that each practical (portfolio) examination submission must not incorporate marks or teacher comments
- that each practical (portfolio) examination submission will be marked by specialists in the designated contexts
- that exemplar materials are selected by the chief marker and used to exemplify the standards
- that markers do **not** adjust marks according to alleged plagiarism
- that markers assess candidates' work in light of the marking key.

6. Criteria for marking

The chief marker sets the standards based strictly on the criteria set down in the practical (portfolio) examination marking key.

A numerical scale is used to assess the candidate's practical (portfolio) examination submission in terms of:

- statement of intent or design proposal
- research
- development of ideas and concepts
- production proposal (drawings, materials and planning process)
- evidence of production (process, time and visual)
- finished product and final evaluation.

7. Plagiarism, appropriation and attribution

Plagiarism means:

- submitting, as one's own work, artwork that another person has completed.
- downloading work, graphics or other material from the internet and presenting it as one's own without acknowledgement.
- submitting work to which another person such as a parent, teacher or professional expert has contributed substantially. While the practice of having others significantly assist in the preparation of submitted work may be a form of plagiarism, it may also be a form of fraud when it involves significant and/or improper third party assistance.

Candidates may use appropriation provided that they have appropriately referenced and acknowledged the work and designer below the image as they appear within the portfolio.

Candidates whose work uses appropriated or re-worked designs must attribute all borrowed ideas and images. The name of the work and designer are to be clearly cited to identify the

source, below the existing design, image or product that has been used as they appear within the portfolio.

Appropriation means:

To 'appropriate' is to take possession of something. Appropriation artists deliberately copy images to take possession of them in their art and re-present the significance of the image or images to achieve a new level of meaning and innuendo, including irony.

These artists are not stealing or plagiarising. They are not passing off the appropriated images as their very own. The appropriation artist 'recontextualises' (puts into a new context) these particular images in order to create a whole new work, independent of the original source.

Appropriation artists hope the viewer immediately recognises the images they copy, and they depend on the viewer's ability to bring all of his/her original associations with the image to the artist's new context in order to enhance the meaning of the work. Irrespective of the work, this deliberate 'borrowing' of an image for this new context helps the artist comment on the image's/images' original meaning and the viewer's association with the original image/s or the real thing.

[By kind permission Beth S. Gersh-Nešić, Ph.D., Director, New York Arts Exchange]

Attribution means:

Attribution can be defined as something, such as a quality or characteristic, that is related to a particular possessor; an attribute; the act of attributing, especially the act of establishing a particular person as the creator of a work of art.

[© 2011 Houghton Mifflin Harcourt Publishing Company. Adapted and reproduced by permission from The American Heritage dictionary of the English language (5th ed.)]

The Authority has a specific process for dealing with alleged plagiarism in an examination. See Section 6 of the *WACE Manual 2017*.

8. Predicted marks

Schools are required to submit to the Authority a predicted mark out of 100 for the practical (production) examination submission. If there is a large difference between the predicted mark and the examination mark, the practical (production) examination submission is reviewed by the chief marker. This process assists in ensuring the integrity of the practical (production) examination submission marks.

The predicted mark is the school's mark assigned to the practical (portfolio) examination submission only. The teacher will provide the predicted school mark on the *Predicted scores data entry form*.

9. Breach of examination rules

A breach of examination rules referral will result in the following situations if the practical (portfolio) examination submitted by the candidate:

- is not in accordance with the signed *Declaration of authenticity*
- incorporates marks or teacher comments
- identifies the candidate's name, school, teacher, friends and/or family

- is plagiarised.

An alleged breach of examination rules is referred to the Breach of Examination Rules committee. Further information related to breach of examination (malpractice) can be found at <http://www.scsa.wa.edu.au/publications/year-12-information>.

A breach of one of these rules can result in cancellation of a part or all of the practical raw examination mark.

10. Submission requirements

Candidates must submit their practical (portfolio) examination through the school. A candidate's practical (portfolio) examination submission **must** be on a USB which should include:

- a folder named with the candidate's SCSA student number
- do not identify the candidate (by name and/or photograph) or the candidate's school
- do not contain evidence of previous marking or teacher annotations/comments.

Identification labels will be provided by the Authority for attachment to the plastic zip-lock sandwich bag and USB containing the practical (portfolio) examination submission. A candidate's name, names of persons associated with the candidate's school or family and the school name must not appear on any item within the USB.

The practical (portfolio) examination submission **must** document the development of a completed design process from the initial design brief through to the finished product and show the quality of the final product.

Good quality USBs must be used for the practical (portfolio) examination submissions. All USBs must be formatted as 'exFAT' (Extended File Allocation Table). Ensure that the USB is formatted first before loading the practical examination submission. Ensuring the USB is formatted as 'exFAT' will assist the marking process if there is a problem with the USB by locating the submission if it becomes fragmented. More information may be obtained from <http://www.howtogeek.com/235596/whats-the-difference-between-fat32-exfat-and-ntfs/>.

The practical (portfolio) examination submission must:

- be submitted on a USB and placed in an A5 plastic zip-lock sandwich bag (size 18 cm x 16.5 cm)
- have a label with the candidate's SCSA student number which will be provided by the Authority, attached to the top right hand corner of the plastic bag below the zip-lock.
- have only **one** practical (portfolio) examination submission per USB for each candidate
- have the file/presentation on the USB titled with the candidate's SCSA student number and context
- have the candidate's SCSA student number on the cover page/title screen of the file when opened on the USB
- have a contents page/slide after the cover page/title screen
- have all pages/slides numbered sequentially
- have the SCSA student number on each page in the bottom right hand corner
- have the SCSA student number on pages that are scanned before the scanning is done
- be no more than a **maximum of 60** pages in one PDF file only
- **not** be a word document or power point slides
- only be **one** PDF file on the USB i.e. the submission should **not** be broken into parts

- ensure that the orientation of each page is correct when viewed on screen for ease of marking
- use at least a black 11 point font size and/or style for all writing and annotations in the practical (portfolio) examination submission
- have minimal use of italics in all writing and annotations
- be presented on a white or light coloured background
- comprise original drawings and/or composites using scanned images, photographs or digital copies
- ensure that images have a 300 dpi resolution for best quality
- have three dimensional objects photographed or otherwise represented to clearly demonstrate the details and contribution to the design.

10.1 USB requirements

The practical (portfolio) submission on the USB submission must:

- have file formats capable of being played or opened in a web browser, for example Internet Explorer, Google Chrome or Safari.
- be compressed if they are large to make the opening of them by the markers easier.

It is the teacher's responsibility to ensure that the USB used is formatted correctly as an 'exFAT' format and that it works, is checked for viruses before submitting and that it does **not** contain any other material except the practical (portfolio) examination submission. Markers will **not** view or mark any additional material on the USB.

Note: Candidates may choose to provide a second backup USB with a copy of their production. If this option is chosen then the second USB **must** be clearly labelled 'backup copy'. This backup copy will only be accessed should the original be faulty.

10.2 Contents of the practical (portfolio) examination submission

The practical (portfolio) examination submission should contain:

1. A statement of intent or design proposal, identifying how a problem or situation may be solved. This may include some, or all, of these design considerations and limitations:
 - product purpose
 - client profile/target audience
 - location or environment where product will be placed
 - timeline or time constraints
 - budget and cost constraints
 - limited materials
 - perceived skill levels.
2. Evidence of research using different strategies to investigate some, or all, of the following:
 - an analysis of product research including specific product data, client and/or market survey
 - inspirations/influences
 - pre-existing products by application of the design fundamentals and factors affecting design
 - an analysis of materials research with samples or images, including testing

- production techniques joining, construction, embellishment, finishes.

All references and extracts (i.e. another person's ideas, works or images) used in the investigation and development of design concepts are to be clearly cited to identify the source, below the reference as they appear within the portfolio.

3. Development of concepts and ideas should include some, if not all, of the following:
 - evidence of a clear relationship between research and concept development, through images and notation linked to design fundamentals and the statement of intent
 - client feedback on ideas
 - number of annotated images or sketches of products
 - ongoing evaluation and justification of design development
 - justify selection of materials based on materials specifications
 - final proposed design in this section must reflect a progression of ideas development
 - final proposed design chosen and justified
 - use of correct terminology.
4. Production proposal should include some, if not all, of the following:
 - working drawings with dimensions and annotations
 - 3D presentation drawing
 - specification sheets
 - materials list/s and costing must be included with a full list of individual pieces required for the product
 - production procedures to show proposed timed procedure for making product in hours and minutes
 - planned use of equipment and safety appropriate to the procedures
 - possible additional use of extra time available at lunch and after school.
5. Evidence of production should include some, if not all, of the following:
 - description of actual process
 - relevant photographs of process
 - timeline of production
 - comparison to proposed timeline
 - evidence of ongoing evaluation in each stage of the production process
 - comparison to original design
 - discussion of changes to design and process where appropriate.
6. Finished product and final evaluation include some, if not all, of the following:
 - clear photographic evidence showing aspects and features of the final product
 - photographs that show specific features of the finished product
 - evaluation statements that relate back to the features of:
 - statement of intent
 - design process and specific design features
 - design fundamentals, essentially aesthetics and function.

Note: Clearly cite all references to extracts (i.e. source of another person's ideas, works or images) used in the development of the design to identify the source, below the images as they appear within the portfolio.

11. Documentation of thinking and working practices

Records of the thinking and working practices that led to the development of a candidate's submitted work must be kept by the school. The Authority may after the examination process, call upon the documentation to substantiate the authenticity of a candidate's submitted work.

12. Declaration of authenticity

A *Declaration of authenticity* must accompany the practical (portfolio) examination submission. Any practical (portfolio) examination submitted to the Authority without a completed *Declaration of authenticity* will result in a referral to the Breach of Examination Rules committee.

The completed *Declaration of authenticity* must **not** be attached to the USB with the practical (portfolio) examination submission. The completed declaration must be placed in the folder provided for this purpose by the Authority.

Every candidate is required to complete a *Declaration of authenticity* and to submit it with the Materials Design and Technology practical (portfolio) examination submission to declare that:

- the work submitted was completed as part of the pair of ATAR course units being examined
- the work submitted was developed mainly in school time and any work developed away from school was monitored regularly by the teacher
- none of the work submitted was worked upon directly by a teacher or any other person
- none of the work was submitted for assessment in any other ATAR course or program
- the practical (portfolio) examination USB has been checked prior to submission and is in working order.

If the chief marker considers that the work submitted is not in accordance with the signed *Declaration of authenticity*, the matter will be referred to the Breach of Examination Rules committee.

The *Declaration of authenticity* is a legal document and therefore proper records must be maintained by the school. Teachers must ensure that copies of completed declarations are kept on official school records.

Teachers should monitor the candidate's work from the beginning to ensure that there is no plagiarism in the work that is to be submitted for marking. If the teacher has been unsuccessful in working with the candidate to avoid plagiarism then the teacher should sign the *Declaration of authenticity* and attach a note to this effect to the declaration at submission time.

Non-school candidates must complete the *Declaration of authenticity* in the presence of an authorised witness. The following internet link provides a list of authorised witnesses www.courts.dotag.wa.gov.au/W/witnessing_documents.aspx.

13. Submission and return/collection of practical (portfolio) examination submissions

Practical (portfolio) examination submissions **must** be collected by metropolitan schools on **Wednesday, 11 October 2017**. Submissions not collected by metropolitan schools will be destroyed in accordance with the Authority's retention and disposal schedule.

Country schools' practical (portfolio) examination submissions will be returned by the Authority.

Note: Practical (portfolio) examination submissions received after the published time and date cannot be accepted.

14. Key dates

28 July 2017	Last date for withdrawal of enrolment from ATAR courses with a practical examination component
12 September 2017	Practical (portfolio) examination submission information received by schools/providers
20 September 2017	Practical (portfolio) examination submission by 4 pm
11 October 2017	Practical (portfolio) examination submissions collected by schools from the designated venue

Appendix 1: Declaration of authenticity



Government of **Western Australia**
School Curriculum and Standards Authority



2017 Materials Design and Technology practical (portfolio) examination Declaration of authenticity

This form must be completed by candidates enrolled to sit the 2017 Materials Design and Technology ATAR course examination. Failure to submit a completed Declaration of authenticity could result in a referral to the Breach of Examination Rules committee.

Candidate declaration

Name: _____ School Code: _____

SCSA Student Number:

--	--

--	--	--	--

--	--	--

 Context:

--

As a candidate for the 2017 Materials Design and Technology ATAR course practical (portfolio) examination, I declare that:

- I have completed all the work contained in this submission through the duration of the course units being examined
- none of the work contained in this submission was worked upon directly by a teacher or any other person or company except those acknowledged in the references/acknowledgement section
- none of the work contained in this submission was submitted for external assessment in any other course or program.

Signed: _____ Date: _____

Please note:

1. To maintain anonymity, this signed declaration form must accompany, but not be attached to, the submission.
2. Teachers must keep a completed copy of this form on official school records.

Principal and teacher declarations

This section is to be signed by the school principal and the candidate's teacher.

I declare that, to the best of my knowledge the work contained in this submission:

- has been completed by the candidate through the duration of the course units being examined
- has been developed mainly in school time and any work away from school was regularly monitored
- has not been worked upon directly by a teacher or any other person or company, or any such work has been formally acknowledged in the references/acknowledgement section
- has not been submitted for external assessment in any other course or program
- has been checked, meets the School Curriculum and Standards Authority's technical requirements is in working order.

	Teacher	Principal
Name:		
Signature:		
Date:		

Non-school candidates

An authorised witness needs to witness your signature and complete this section. See the following link: www.courts.dotag.wa.gov.au/W/witnessing_documents.aspx for a list of authorised witnesses.

Authorised witness

Name: _____

Address: _____

Signed: _____ Date: _____

