



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



# **Materials Design and Technology ATAR course**

## **Practical (portfolio) examination requirements**

# **2016**

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## **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 the ATAR course examination. There are no exemptions.

Schools are required to submit their candidates' practical (portfolio) submissions to the designated venue by **4.00 pm on Wednesday, 21 September 2016**.

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/internet/Publications/Circular\\_eCircular](http://www.scsa.wa.edu.au/internet/Publications/Circular_eCircular). Teachers should also refer to the ATAR course examination information published in Section 6 of the *WACE Manual 2015-16 [Revised edition]*, which is available on the School Curriculum and Standards Authority website at [http://www.scsa.wa.edu.au/internet/Publications/WACE\\_Manual](http://www.scsa.wa.edu.au/internet/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 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/internet/Events\\_and\\_Forms/Application\\_Order\\_Forms](http://www.scsa.wa.edu.au/internet/Events_and_Forms/Application_Order_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 will not receive a mark for the practical component of this course.

#### **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* witnessed by the supervising teacher and the Principal to endorse the originality/authenticity (a legal document) 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](http://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 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 2015-16 [Revised edition]*.

## **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 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.

Alleged breach of examination rules are 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/internet/Publications/year12\\_information\\_handbook](http://www.scsa.wa.edu.au/internet/Publications/year12_information_handbook). 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 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. Each candidate must have their practical (portfolio) examination submission on an individual USB. Candidates must submit their practical (portfolio) examination through the school.

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** pdf pages or power point slides
- use at least a black 11 point font size and/or style for all writing and annotations in the practical (portfolio) examination submission so that it is suitable for markers to read
- 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

- three dimensional objects should be 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.

**Note:** It is the teachers responsibility of ensuring that the USB 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.

### 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 of 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 processed 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 lead to the development of a candidate's submitted practical (portfolio) 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.

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.

**Note:** 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](http://www.courts.dotag.wa.gov.au/W/witnessing_documents.aspx).

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

Practical (portfolio) examination submissions must be collected by metropolitan schools on the **14 October 2016**. Submissions not collected by metropolitan schools will be destroyed in accordance with the Authority's retention and disposal schedule.

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

Country schools will have practical (portfolio) examination submissions returned via post.

#### 14. Key dates

29 July 2016	Last date for withdrawal of enrolment from ATAR courses with a practical examination component
13 September 2016	Practical (portfolio) examination submission information received by schools/providers
21 September 2016	Practical (portfolio) examination submission by 4 pm
14 October 2016	Practical (portfolio) examination submissions collected by schools from the venue

## Appendix 1: Declaration of authenticity

### 2016 Materials Design and Technology practical (portfolio) examination Declaration of authenticity

This form must be completed by candidates enrolled to sit the 2016 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: 

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 Context: 

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As a candidate for the 2016 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 pair of ATAR 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 where it has been acknowledged in the portfolio.
- None of the work contained in this submission was submitted for external assessment in any other ATAR course or program.

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Please note:

1. To maintain anonymity this declaration form must accompany, but not be attached to, the submitted work.
2. Teachers must keep a 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 pair of ATAR 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
- has not been submitted for external assessment in any other ATAR course.

Teacher's name: \_\_\_\_\_

Teacher's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Principal's name: \_\_\_\_\_

Principal's signature: \_\_\_\_\_ Date: \_\_\_\_\_

#### Private 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](http://www.courts.dotag.wa.gov.au/W/witnessing_documents.aspx) for a list of authorised witnesses.

#### Authorised witness

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

# Appendix 2: Predicted scores data entry form



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**School Curriculum and Standards Authority**  
**Materials Design and Technology practical (portfolio) examination - Predicted scores data entry form 2016**

School \_\_\_\_\_

Page \_\_\_\_\_

Portfolio Not Submitted	DoA Submitted	Context	Surname	Given Name	Student Number	Predicted Score (/100)	
<input type="checkbox"/>	<input type="checkbox"/>	Metalworking					
<input type="checkbox"/>	<input type="checkbox"/>	Metalworking					
<input type="checkbox"/>	<input type="checkbox"/>	Metalworking					
<input type="checkbox"/>	<input type="checkbox"/>	Metalworking					
<input type="checkbox"/>	<input type="checkbox"/>	Metalworking					
<input type="checkbox"/>	<input type="checkbox"/>	Metalworking					
<input type="checkbox"/>	<input type="checkbox"/>	Metalworking					
<input type="checkbox"/>	<input type="checkbox"/>	Metalworking					
<input type="checkbox"/>	<input type="checkbox"/>	Metalworking					
		Total number of candidates enrolled in examination <input type="checkbox"/>		Number of portfolios submitted <input type="checkbox"/>		Number of portfolios not submitted <input type="checkbox"/>	
				Number of DoAs submitted <input type="checkbox"/>		Number of DoAs not submitted <input type="checkbox"/>	

**INSTRUCTIONS:**

- Shade the Portfolio Not Submitted box for each candidate for which a portfolio is NOT submitted and leave the box blank if the candidate has submitted a portfolio.
- All candidates must submit a completed Declaration of Authenticity (DoA) form. After checking that each student has correctly completed their DoA form, shade the DoA Submitted box.
- Place a predicted score out of 100 in the column provided for each candidate.
- Portfolios must be received by the School Curriculum and Standards Authority between 8.30 am and 4.00 pm Wednesday, 21 September 2016 at the specified venue.
- This form must be placed in the folder and submitted with the practical portfolios.
- This form is scanned on return so do not fold or write outside the boxes.

7080051865

TIME 10:58:00 DATE 17/11/05

Shade squares like this ->

**Teacher details**

Name \_\_\_\_\_

Email \_\_\_\_\_

Phone no. \_\_\_\_\_

Signature \_\_\_\_\_