**Video transcript: WACE 2015-16 – Technologies**

Year 11 students in 2015 and Year 11 and Year 12 students in 2016 will study the revised Western Australian Senior Secondary Curriculum for the first time.

The Western Australian Curriculum will include the Australian Curriculum courses which have been adopted and adapted to suit Western Australian needs and WACE courses which have been adapted to suit the revised structure.

There is increased rigour in the syllabuses. The changes are not about making school harder for students. They do raise the bar, though. Raising expectations means that we are supporting students to achieve at a higher standard.

For more information about the changes to the WACE starting in 2015 we recommend you watch the WACE 2015–16 overview video.

Courses in Technologies build on the current WACE courses and are available as ATAR or General.

The ATAR suite for Technologies comprises

* Applied Information Technology
* Aviation
* Children, Family and the Community
* Computer Science
* Design
* Engineering Studies
* Food Science and Technology, and
* Materials Design and Technology.

The General Suite comprises

* Applied Information Technology
* Automotive Engineering and Technology
* Building and Construction
* Children, Family and the Community
* Computer Science
* Design
* Engineering Studies
* Food Science and Technology, and
* Materials Design and Technology.

There is a Foundation course in Applied Information Technology and Preliminary courses in Food Science and Technology and Materials Design and Technology.

Foundation courses are typically for students with severely limited English literacy and numeracy skills. Only students who have not demonstrated the minimum standard in the relevant component of the literacy and numeracy requirement may enrol in these courses.

Preliminary courses are for students who have identified special needs.

It is important to remember that students who have achieved the numeracy standard are not eligible to enrol in Mathematics Foundation and other List B Foundation courses. As well as this, students who achieve the minimum standard of numeracy in Semester 1 of Year 11 are not eligible to continue in the associated Foundation courses in Semester 2 of that year.

Information about the numeracy standard is available on the Authority website.

There is a syllabus for each year of each course that sets out the content to be covered in each unit. The Year 11 syllabus details Units 1 and 2. The Year 12 syllabus details Units 3 and 4.

Units 1 and 2 are typically studied as a pair. Units 3 and 4 must be studied as a pair.

The complexity of the syllabus content increases from Year 11 to Year 12. For this reason, a student cannot complete Year 12 units and then move to Year 11 units.

Typically, the Year 11 and 12 Western Australian syllabuses follow the same structure. They all begin with a rationale and aims that are followed by information about the organisation of the course. Unit information includes a unit description, learning outcomes and unit content.

The syllabuses include information about school-based assessment and grading, which is supported through grade descriptions. The grade descriptions have been modified from the current WACE courses. These are interim descriptions and will be refined during the early years of implementation.

The grade descriptions are included in an appendix of the syllabuses. Many courses also have a glossary that defines key words in the context of the course.

Consistent with the Australian Curriculum, the organisation section of the syllabuses includes reference to general capabilities and cross-curriculum priorities. The unit information, specifically the unit content, identifies the expected learning within each syllabus. Unless they are identified within the specified unit content, the general capabilities and cross-curriculum priorities are not assessed.

Some syllabus elements are course and year specific.

In general, the progression from Year 7–10 in the Year 11 syllabuses shows how the courses build on knowledge, understandings and skills.

The Year 11 and 12 ATAR course syllabuses adopted and adapted from the Australian Curriculum are organised around the course aims and unit learning outcomes.

The Year 12 ATAR courses contain the WACE examination design briefs.

The Year 11 and 12 ATAR course syllabuses based on the current Stage 2 and Stage 3 WACE courses are organised around the course outcomes.

Year 12 General courses, except Preliminary, include information about the externally set tasks, known as ESTs, which are part of the Authority’s moderation processes from 2016. There are sample externally set tasks on our website.

Engineering Studies ATAR has been revised and now has two specialist fields – mechanical and mechatronics. Mechatronics is a combination of the old electrical/electronics and systems and control specialist fields.

Having just two specialist fields provides a better depth and clearer comparability between the content of the speciality fields.

The common content provides depth of treatment of:

* the design process
* materials
* calculations, and
* engineering in society.

There is no longer a specifications booklet for Computer Science. The relevant content from that booklet has been incorporated into the syllabus.

Minor amendments have been made to most other ATAR courses in Technologies. For example, clarification of the sub-content organisers in Food Science and Technology, revisions to the course resource requirements in Applied Information Technology and Computer Science, the refinement of content dot points.

Defined contexts – hospitality, nutrition and health promotion, and product development – are no longer taught in Year 11 for Food Science and Technology General.

In Children, Family and the Community Genera, defined contexts – Living Independently and Caring for Others – are now suggested contexts for the Year 11 General course. Living Independently and Caring for Others are re-introduced to the Year 12 General course as suggested contexts.

Year 11 Automotive Engineering and Technology General has an increased emphasis on practical mechanics and content phrases have been re-worded to remove heavy duplication between units. Year 12 Automotive Engineering and Technology General has improved layout and there is a better sequencing of skills.

The focus of Applied Information Technology Foundation is on developing functional literacy and numeracy and building ICT skills. The course has core and elective modules.

Content from Food Science and Technology Preliminary A and Preliminary B units have been repackaged into Units 1, 2, 3 and 4, whereas in Materials Design and Technology Preliminary A has been placed into Units 1 and 2 and Preliminary B into Units 3 and 4.

There has also been some minor revision of content.

A course unit is completed when a grade is assigned.

This means a student must have had the opportunity to complete the structured education program and the assessment program for the course unit, unless the school accepts there are exceptional and justifiable circumstances.

The assessment program is summarised in the assessment table.

You will notice the assessment tables for Year 12 now show fixed assessment weightings rather than having a weighting range.

Examinations are now specified as a separate assessment type.

There have been minimal changes to the assessment tables for courses in the Technologies learning area beyond the generic changes for all courses already outlined.

In Applied Information Technology and Computer Science, the descriptive statements of each assessment type have been revised to improve readability, clarity and alignment to syllabus content.

The Materials Design and Technology Year 12 ATAR course now has two assessment tables in Year 12 – one defining practical tasks and assessment and a table for written tasks and examinations.

In Design, the investigation assessment type has been removed. The skills and knowledge demonstrated through investigations will now be assessed through practical or response tasks. In Design, these are productions.

In Automotive Engineering and Technology there are minor corrections to the wording of the types of evidence and assessment descriptions.

Students enrolled in Year 12 ATAR courses are required to sit the WACE examination. When sitting an external examination, it is critical that students make a genuine attempt.

There have been changes to the examination design briefs in Technologies.

Applied Information Technology General section 2, short and extended answers, has been split into two sections but the relative weightings and the number of questions remains unchanged. The description of the stimulus materials, which students can be required to refer to, has been revised to provide clarity.

In Engineering Studies, students can now choose from only two specialist engineering fields, while the number of questions in Part B has increased.

Design ATAR students will no longer be able to take their portfolio into the exam.

There are also minor changes to the exam design brief in Computer Science ATAR, Food Science and Technology ATAR and Materials Design and Technology ATAR.

Students who enrol in General courses, except Preliminary, must make a genuine attempt in the externally set task to complete a course.

The ESTs will be written assessments. The Authority will inform schools during Term 3 of the preceding year of the section or sections of the syllabus content on which an EST will be based.

The ESTs will be worth 15 per cent of a student’s final mark.

More information about ESTs is available on the Authority website.

Applied Information Technology, Automotive Engineering and Technology, Building and Construction, Computer Science and Materials Design and Technology General students may be asked to refer to a scenario and/or a case study for their externally set task.

Engineering Studies General students will be asked to provide a written description or explanation of design process or stages of production of a project.

The same sort of question may also be asked of the Automotive Engineering and Technology, Building and Construction and Materials Design and Technology General students as an alternative to the scenario or case study.

Syllabuses will be reviewed typically on a five-year cycle, according to learning area. The schedule of review will be published in 2014.

The Australian Government announced a review of the Australian Curriculum in January 2014. The report on the review is due to be completed by 31 July 2014. Any changes that the Australian and Western Australian Governments may endorse as a result of the review will be considered in the Western Australian syllabuses as part of our curriculum review cycle.

A range of support materials for teachers can be found on the Authority’s website.

We encourage teachers to participate in briefings and discussions and to register for the eCircular to keep up to date.