

Approved Scientific Calculators for the 2022 Higher School Certificate Examinations

Approved: September 2020

NESA provides an approved calculator list for the purpose of ensuring the fairness and integrity of the HSC examinations.

NESA approved calculators can be used in some HSC examinations. Examinations for which students are permitted to use an approved calculator are listed on the [exam equipment list](#) page of the NESA website.

The calculators in the table below are referred to as 'scientific' calculators and are approved for use in the 2022 HSC examinations. These calculators meet the requirements as listed below under calculator features.

Candidates are expected to familiarise themselves with a calculator's operation before the examination. Instruction booklets or cards (eg reference cards) on the operation of calculators are NOT permitted in the examination room.

Calculators must have been switched off/reset for entry into the examination room.

NESA-approved scientific calculator list (2022 HSC)	
Brand	Model
ABACUS	SX-II MATRIX a
ABACUS	SX-II MATRIX n
CANON	F717SGA
CASIO	fx-82AU
CASIO	fx-82AU PLUS
CASIO	fx-82AU PLUS II 1st or 2nd Edition
CASIO	fx-85MS
CASIO	fx-100AU
CASIO	fx-100AU PLUS 1st or 2nd Edition
CASIO	fx-350MS
HEWLETT-PACKARD	HP10S
HEWLETT-PACKARD	HP10S+
HEWLETT-PACKARD	HP300S+
JASTEK	JasCS1
JASTEK	JasCS EVO
JASTEK	JasCS2 EVO
RSB	FB 350MS
Scholar	SC-250MX
SHARP	EL-531TH
SHARP	EL-531VH
SHARP	EL-531WH
SHARP	EL-531X
SHARP	EL-531XH
SHARP	EL-W531HA
SHARP	EL-W532TH
SHARP	EL-W532XH
Texas Instruments	TI-30XB MultiView
Texas Instruments	TI-30X Plus MathPrint

Accessible calculators

The following accessible calculators have been approved for use in HSC examinations by students with low vision or vision impairment.

NESA-approved accessible scientific calculator list (2022 HSC)	
Brand	Model
SciPlus	SciPlus -2200
SciPlus	SciPlus -2300*
Texas Instruments	Orion TI-30XS Multiview*

* Students wishing to use the speech output function of these calculators will be required to apply through NESA's HSC [Disability Provisions](#) program.

Students who are unable to use the accessible scientific calculators listed above, may apply to NESA's HSC Disability Provisions program to use an appropriate alternative, including the

Features of approved calculators

In addition to the features commonly available on calculators, the NESA approved scientific calculators can typically:

- calculate in scientific notation: EXP or $\times 10^x$
- calculate powers and roots: x^2 and \sqrt{x} ; x^3 and $\sqrt[3]{x}$; x^n and $\sqrt[n]{x}$
- calculate reciprocals: x^{-1} or $\frac{1}{x}$
- evaluate logarithms and exponentials: $\ln x$ and e^x ; $\log_{10} x$ and 10^x
- calculate trigonometric and inverse trigonometric values: $\sin x$, $\cos x$, $\tan x$, $\sin^{-1}x$, $\cos^{-1}x$ and $\tan^{-1}x$
- calculate permutations and combinations: ${}^n P_r$ and ${}^n C_r$
- convert between polar and Cartesian form
- perform basic statistical operation to obtain measures such as mean, median lower and upper quartiles and standard deviation
- perform linear regression.

Calculator features that are not permitted

A NESA approved calculator may NOT:

- be programmable (A calculator is considered programmable if it can have a sequence of steps entered by the user, and then stored to be executed by the calculator)
- have graphing capability (A calculator with graphing capability is able to graph data or store, manipulate and graph functions)
- have computer algebraic system (CAS) functionality. This functionality includes:
 - differentiation and integration, and the solution of equations
 - symbolic manipulation such as addition of algebraic expressions and binomial expansion
- have inbuilt financial functions such as for the calculation of depreciation, annuities, simple and compound interest, and break-even point.

Adding or removing calculators from the approved list

The list of approved calculators was created following an evaluation of models submitted for consideration by calculator suppliers in June/July 2020, as well as through the inclusion of calculators previously approved that meet the requirements as listed under calculator features.

Manager of approved calculators

Calculator suppliers seeking more information regarding the addition or removal of calculators from the approved list should contact:

[Kerry Sheehan](#)

Curriculum Inspector, Science

Email: kerry.sheehan@nesa.nsw.edu.au

2021 HSC Study Guide



Full study guide nsw.com.au/hsc-study-guide-2021

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Exam equipment list

You should write in black pen. Make sure you bring spare pens to each exam. You may also bring a ruler, highlighters, pencils (should be at least 2B) and a sharpener, and a bottle of water in a clear bottle. You can wear your watch to your exams, but once you sit down you will have to take it off and place it in clear view on your desk. Programmable watches, including smart watches, will not be allowed in the exam room.

The following list shows the exams for which you are to bring specific equipment, as there may be some exam questions that require the use of this equipment. If an item is listed as optional, it means that there will be no exam questions for which the item is essential. But you may bring and use it if you wish.

All equipment you bring is subject to inspection on entry. Make sure any equipment you are allowed to bring, such as a calculator, is in good working order because an appeal under misadventure provisions for equipment failure will not be upheld.

What you *cannot* bring into your exam room

- A mobile phone. Mobile phones are not permitted in an exam room under any circumstances.
- A programmable watch, eg a smart watch.
- Any electronic device (except a calculator where permitted). This includes mobile phones or other communication devices, organisers, tablets (eg iPads), music players or electronic dictionaries.
- Paper or any printed or written material. You can ask your presiding officer for working paper.
- Print dictionaries, except where permitted in language exams.
- Correction fluid.

You are not allowed to borrow equipment during exams.

Equipment for specific HSC exams

This list details specific equipment that students are expected to bring for particular exams. Only those exams that require specific equipment are listed. View a list of [NSW Education Standards Authority \(NESA\)-approved calculators](#).

Agriculture

- [NESA-approved calculators](#)

Automotive (VET)

- [NESA-approved calculators](#)

Biology

- [NESA-approved calculators](#)

Business Services (VET)

- [NESA-approved calculators](#)

Business Studies

- [NESA-approved calculators](#)

Chemistry

- [NESA-approved calculators](#)

Construction (VET)

- [NESA-approved calculators](#)

Earth and Environmental Science

- [NESA-approved calculators](#)
- pair of compasses
- protractor
- set squares

Economics

- [NESA-approved calculators](#)

Electrotechnology (VET)

- [NESA-approved calculators](#)

Engineering Studies

- [NESA-approved calculators](#)
- pair of compasses
- protractor
- set squares
- circle templates
- isometric/ellipse templates

Entertainment Industry (VET)

- [NESA-approved calculators](#)

Financial Services (VET)

- [NESA-approved calculators](#)

Geography

- [NESA-approved calculators](#)
- pair of dividers
- pair of compasses
- protractor
- coloured pencils and/or coloured felt pens
- (optional) a hand-held magnifying glass
- (optional) a piece of string or thread for measuring

Hospitality (VET)

- [NESA-approved calculators](#)

Human Services (VET)

- [NESA-approved calculators](#)

Industrial Technology

- [NESA-approved calculators](#)
- pair of compasses
- protractor
- set squares

Information and Digital Technology (VET)

- [NESA-approved calculators](#)

Information Processes and Technology

Please note that calculators are NOT permitted.

Investigating Science

- [NESA-approved calculators](#)

Languages

Unannotated monolingual and/or bilingual print dictionaries may be used in Latin exams, as well as all Beginners, Continuers, [Language] in Context, [Language] and Literature and Extension courses in modern languages. No dictionaries may be used in classical Greek or classical Hebrew exams. Digital dictionaries are not permitted.

Mathematics Standard 1, Mathematics Standard 2

- [NESA-approved calculators](#)
- ruler

Mathematics Advanced, Mathematics Extension 1, Mathematics Extension 2

- [NESA-approved calculators](#)
- ruler

Physics

- [NESA-approved calculators](#)
- pair of compasses
- protractor
- set squares

Primary Industries (VET)

- [NESA-approved calculators](#)

Retail Services (VET)

- [NESA-approved calculators](#)

Science Extension

- [NESA-approved calculators](#)
 - a desktop or laptop computer with the lockdown browser pre-installed
 - headphones (wired) to listen to audio stimulus for questions
 - a physical keyboard (wired or wireless)
 - a pointing device such as a mouse for navigation
- Your presiding officer can provide you with blank working paper.

For more information, see [Science Extension online exam](#).

Software Design and Development

Please note that calculators are NOT permitted.

Tourism, Travel and Events (VET)

- [NESA-approved calculators](#)

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Coronavirus advice

COVID-related advice for:

- [Year 11 and 12](#)
- [Kindergarten to Year 10](#)
- [Teacher accreditation](#)
- [Home schooling](#)
- [Students with disability](#)
- [COVID Response Committee](#)

Latest updates

- Students can attempt each of the [HSC minimum standard](#) online tests up to six times in 2022.
- [School-based assessments](#) should be conducted in line with your sector's COVID-smart protocols.

Further advice

Visit the [Department of Education](#) for current advice for schools, including COVID-smart protocols.

Get the latest [NSW Government advice](#) on current restrictions.

Contact the COVID-19 support team

Call: 1300 138 323

Email:

covid19support@nesa.nsw.edu.au

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