

## Things you will learn

- What is a gemstone?
- Where are they found?
- How are they created?
- What gives them their colour?
- Why & how they react to light?
- How are they cut?
- Can you identify a fake?
- Their place in history
- What determines their value?
- Do I want to be a gemmologist?

To register your interest in this course or any other conducted by the Gemmological Association of Australia

Please contact your local State Division

[www.gem.org.au](http://www.gem.org.au)

## Other Courses offered by the Gemmological Association of Australia\* (courses offered varies by state)

- Diploma in Gemmology
- Diploma in Diamond Technology
- Retail Diamond Consultancy
- Practical Diamond Grading
- Advanced Diamond Grading
- Advanced Gemstone Inclusions
- Synthetic Update
- Advanced Instruments
- Antique Jewellery
- Advanced Opal
- Advanced Pearl
- Jewellery Sketching
- Jewellery Design and Communication
- Coloured Gemstones
- Pearl Threading
- Retail Training Correspondence

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# Introduction to Gems & Gemmology



*Passionately educating the industry and consumers about gemstones*



# GAA

Gemmological Association of Australia

This popular and informative course comprises a 2 day weekend or ten evening lectures\* which includes a practical laboratory session. It is designed to teach the basic gemmology of gemstones, plus some of the most important treatments, simulants, synthetics, ornamentals and organics, as well as their properties.

This course is ideal for hobbyists, gem enthusiasts and those considering a career in the gemstone or jewellery industry.

### Gemmology Basics

Discover the fundamental theories and basic terminology of minerals and gemstones. An introduction to the instruments used in the identification of gemstones. The gemmological instruments which you will be introduced to include: 10x eye Loupe, microscope, polariscope, refractometer, UV light, spectroscope and the hydrostatic Balance.

### The science of Gemstones

You will be introduced to the basic physical, chemical and optical properties of gem materials and how this influences the material itself, its value, beauty and durability.

\* delivery format varies by State

### Gemstone Origins

A discussion of basic geology, the cycle of sedimentary, igneous and metamorphic causation and formation which continues to influence both world and Australian gemstones natural formation.

### Coloured Gemstones

Learn about various coloured gemstones. What causes colour and why? Plenty of examples and various cuts to inspect.

Many of these are found in almost any colour and are often used to imitate other gemstones. For example, Spinel has been confused with Ruby for centuries. In fact the Black Prince's Ruby in the British Crown is actually a Spinel!

### Diamonds

An overview of major world and Australian diamond locations. Learn about the chemical and physical properties along with the natural and synthetic formation of diamonds. Learn what determines colour in diamonds, how diamond is cut, mining techniques and a bit of history. And some of the treatments done to enhance diamonds.

### Corundum

Sapphire and Ruby (corundum) are two of the world's most popular gemstones. Learn about the properties of corundum, some of the locations in which it may be found, mining techniques and some major treatments associated with this mineral.

### Cutting

A presentation comprising the art of faceting a gemstone. Why and how, along with procedures and decisions which a cutter will make before cutting. How this is accomplished and the tools used.

### Opal

Australia's National Gemstone. Discover how and when Opal was formed,. Major Australian localities, varieties and properties, what gives it colour. Learn about doublets and triplets.

### Organics

A by product that has been formed from a living or once living organism.

Enjoy an informative presentation on pearl, amber, jet, coral and ivory.

### Synthetics

This section will discuss the manufacturing technique and the basic means of synthetic gemstone identification.

Many gemstones are manufactured in a factory and have the same properties as natural gemstones. Some gemstones are imitated by natural or manufactured materials which are similar in colour but nothing like the gems in which they appear to imitate.

### Practical Laboratory Session

A demonstration and hands on use of some of the instruments which are introduced in the gemmology basics lecture:

Polariscope  
Refractometer  
Spectroscope  
Microscope  
UV light and  
Hydrostatic Balance

Students are encouraged to bring in specimens for identification and these can be tested in the laboratory.

The use of a constant sheet and laboratory test report are explained.

*Students will receive a course manual and lecture notes to take home for future reference.*