“Advanced Excel VBA For Engineers and Scientists” Short Course

OreVenture Training and Technical Services

The essential technical knowledge into Excel for Engineers and Scientists

Increase your knowledge, productivity, and capabilities with Microsoft Excel, within the context of engineering by learning how to use Excel building advanced data processing tools, visual tools and modelling tools in engineering and science world.
**Expert Course Instructor**

Dr Stephen Gay is a leading world expert and is committed to developing optimisation and simulation software and mathematical algorithms for mineral processing. He has completed a PhD from JKMRC (Julius Kruttschnitt Mineral Research Centre) in 1994. After his PhD, he was appointed as a Senior Research fellow focusing on mathematical modelling, particularly the development of an integrated simulation system. He contributed to the development of various JKTech software: JKMultiBal and JKSImFloat primarily producing algorithms for data reconciliation. He was a senior metallurgist with SGS Canada (2009-2010) on the Integrated Geometallurgical System focusing both on mineralogical and flotation integration. Before working in mineral processing he worked as a Physical Oceanographer (Australian Institute of Marine Science). He is the author of over 60 published papers.

**Key Learning Outcomes**

Most engineers use Excel daily yet they are not taught how to use Excel efficiently. In practice this means that engineers may develop spreadsheets in a manner that is:

- Inefficient,
- Error-prone, and
- Incomprehensible.

This course provides engineers with a logical and structured framework so that the multitude of functions (both directly in Excel and also available in third party add-ins) can be utilized to enhance Excel productivity in the workplace.

Topics include:

- The basics of Excel
- What is VBA?
- How to call VBA modules?
- Creating an add-in
- Customising the Ribbon
- Using colour Styles in Excel
- Using Named Ranges
- Templates
- Constructing a flowsheet to represent dataflow
- Visio flowsheets vs. Excel flowsheets.
- Linking a flowsheet with named ranges
- Databases - how to integrate with Excel
- Automated table creation
- A flowsheet simulation system

**Who Will Benefit**

As the methods identified in this course provide a framework for more efficient use of Excel not only professional staff but also executives and those responsible for professional staff efficiency, are encouraged to attend. However in general the course is targeted at professionals with strong quantitative skills. A knowledge of VBA is beneficial, however not essential to the purposes of the course.

The course is designed to provide key knowledge of Excel VBA to:

- All engineering discipline and scientists
- Research analysts and consultants
- Project managers
- Other Professions (accountants, actuaries, auditors, business analysts, corporate finance)
About the Course
More than 90% of quantitative professionals (inclusive of Engineers, scientists and analysts) use Excel at a basic level. Yet possibly less than 10% would have received any guidance on how to use Excel effectively. Hence many professionals use Excel in a manner that much of their work is not shared effectively with their colleagues leading to a significant loss in productivity.
Indeed there are ‘Horror stories’ where poor Excel management has lead to millions of dollars in direct losses through wholesale loss of data and models. The course focuses on providing a strategy to ensure that Excel is used efficiently. At the end of the course participants will be invited to estimate the efficiency gain that is provided by using the strategies of the course.

Course Outline (Two Days)

1.0 Introduction to Excel
2.0 Introduction to VBA
3.0 Advanced Excel Concepts
4.0 Add-ins
5.0 Constructing a Flowsheet in Excel and Visio
6.0 Linking Flowsheets to Named Ranges
7.0 Linking Excel with a Database
8.0 Excel Add-ins that Increase Efficiency
9.0 Customising the Ribbon Interface
10.0 A General Excel Flowsheet Simulation System
11.0 Improving Your Own Workbooks

Locations and Dates
(Venue details will be confirmed with participants 2 weeks prior to the event via email)
Vancouver, CANADA I June 26, 27 I 2017
Toronto, CANADA I October 12, 13 I 2017

How to Register
Please go to our website and follow the links to register or simply email or phone us and express your interest for registration.
Web: www.oreventure.com
Email: registration@oreventure.com
Phone: +1- 604 782 7501
Register early and save 10% (To be eligible for early bird discount, you need to book and pay at least 3 months before the course date)
For group booking discount (4 or more) please contact us at registration@oreventure.com
**Course Cost**

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*Excluding applicable tax

**Cancelation Policy**

Please review our terms & conditions online at [www.oreventure.com/terms-and-conditions](http://www.oreventure.com/terms-and-conditions) for a full detail of course cancelation policy.

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**Onsite and Customised**

If you need onsite or custom tailored versions of this course please contact us at registration@oreventure.com

The advantages of private course are:

- More cost effective for larger class sizes.
- Training can be at a convenient at a unique time and location that suits you.
- Course modules can be customised to address specific site needs.
- Confidential information can flow freely giving maximum learning outcome.