

# **Course Title: Using Excel to Automate Business Processes**

Course length: 2 days, 8:30am – 4:30pm

Jerts Consulting and Services seminars and training courses are designed and facilitated by University educated instructors with diplomas or certifications in adult education and continuing education.

Courses are hands-on and participatory. Participants are encouraged to share their techniques, experiences and knowledge to the learning environment.

# Registration

Contact Jerts Consulting at <u>info@jerts.com</u> or call (416) 479-0125 to arrange this course at your location.

# **General Description**

This expert-level course provides participants with a proven methodology and hands-on practice on how to automate a business processes using Excel. The methodology ensures the spreadsheet minimizes risks and maximizes robustness.

Participants learn spreadsheet best practices, how to load, clean and verify raw data, how to apply calculations and manipulations, techniques to analyse and check outputs and how to export or present

VBA, macros and programming techniques are not a part of this course.

# Prerequisites

Participants should be advanced-level Excel users who have experience building spreadsheets from scratch and using Excel to solve business problems or build models. Participants should be comfortable with learning Excel functionality, particularly learning new

No programming skills or experience is necessary, nor is programming a part of the curriculum.

# Course Outline

# Day 1 – Morning

#### **Spreadsheet Best Practices**

- Workbook layout
- Dedicated worksheets
- Formulae and flow
- Error management
- Documentation

# Data Loading

• Cut and Paste



- Importing
- SQL Queries
- Advanced SQL Queries
- Add-ins

# **Data Cleansing**

- Text Techniques
- Numeric Techniques
- Text to Numbers Numbers to Text

# Day 2 – Afternoon

#### **Data Verification**

- Formats: Numbers and text format
- Measures: quantities, units, SI-imperial
- Acceptable value ranges
- Manual data input verification

# Parameters Worksheet

- The importance of named ranges
- Input validation
- VBA considerations

# Day 2 – Morning

### **Calculations and Manipulations**

- Basic principles for automating processes
- Normalizing
- Adding base values
- Sizing a calculation step
- Linear calculation flow
- Calculating groups
- Sort/order calculations

# Day 2 – Afternoon

#### **Control Worksheet**

- Business logic checks
- Mathematical checks
- Visual checks graphs, sparklines
- Highlighting failed checks

#### Documentation

- What needs to be documented
- How to document