



## On-Line Training: Introduction to Measuring Software Size with COSMIC FSM

- Learn how to size software projects in five short (2.5 hour) web-based training sessions.
- Ideal for Agile developers seeking to improve capability to analyse and estimate user requirements
- Suitable for business managers and software developers
- Presented by one of SMS' experienced lecturers, this series of webinars is designed for anyone who wants to improve their ability to analyse, understand or measure functional user requirements allocated to software. Expert tuition guides participants through a series of lectures and exercises derived from decades of practical experience of managing software projects that develop new software applications & products, or enhance existing software systems.
  - **Purpose** – this course is designed to introduce participants to the COSMIC functional size measurement method, the only FSM method that has been conceived and designed for both business and real-time software; it discusses the applicability of the method, some of the reasons why organisations choose to adopt the method, (such as: the capability to quantify functional requirements; improved estimating; better control of project progress; managing output-based software contracts); the COSMIC 3-Phase Measurement Process is explained, and participants learn, through classroom examples and exercises, how to apply the method to various types of software system, including systems with complex architectures.
  - **Expected results** –participants learn the principles and steps of the COSMIC FSM Method; individuals completing the course will be able to apply the method to projects developing new functional user requirements and/or modifying software to enhance the functional user requirements supported by an existing system; participants learn how to decompose functional user requirements to a consistent level of granularity, so they can determine the functional size, in COSMIC Function Points, of an individual functional process, and valid ways governing how functional size measurements may be aggregated to determine the size of distinct software items and projects.
  - **Suitability** – this class is particularly suitable for participants using Agile development methods, but can be applied regardless of the kind of project or product life-cycle; it is suited to those whose usual role involves them in: project management of software projects; requirements development; quality assurance; architecture; design; programming and testing.
  - **Preparation** – prior to the course, participants will find it useful to have read the 'COSMIC Method v3.0 Method Overview' document, which is available as an Adobe Acrobat PDF file for download from < [www.lrgl.uqam.ca/cosmic-ffp](http://www.lrgl.uqam.ca/cosmic-ffp) >



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## Outline Agenda

- Introduction – aims of the class – the need for and purpose of functional size measurement - sizing User Stories with COSMIC
- Overview of COSMIC – applicability – functional user requirements – the COSMIC Generic Software Model – events, objects of interest, data groups, functional processes, data movements, functional users
- The Mapping Phase – identifying functional processes – data movements: Entry, eXit, Write & Read – Data Movement Sequence Diagrams – identifying data groups – measuring new development – measuring modifications to legacy systems
- The COSMIC 3-Phase Process – the Measurement Strategy Phase – purpose, scope, granularity, context – aggregation strategy
- The COSMIC Software Context Model – multi-layered, multi-component architectures – layers and peer items – context diagrams
- The Measurement Phase – aggregation principles – further examples
- Summary – meta-model of COSMIC concepts – Conclusion