

SOFTWARE
Estimation CHALLENGE
May 25, 2024

Call for Students Participation

Software Estimation is challenging & worth winning an international award:
1st place: **500 EUR**
2nd place: **300 EUR**
3rd place: **200 EUR**

Students' teams will size the requirements of a case study and estimate development effort within a three-hour timeframe on:
Saturday, May 25th 2024
9:00 am to 12:00 (Montreal time)
(No registration fees)

More information:
Software Estimation Challenge - Cosmic Sizing (cosmic-sizing.org)
Team leaders must register their team by April 25, 2024 - contact: alain.abran@etsmtl.ca

© COSMIC

SOFTWARE
Estimation CHALLENGE
May 25, 2024

Call for Students Participation

Software Estimation is challenging & worth winning an international award:
1st place: **500 EUR**
2nd place: **300 EUR**
3rd place: **200 EUR**

Students' teams will size the requirements of a case study and estimate development effort within a three-hour timeframe on:
Saturday, May 25th 2024
9:00 am to 12:00 (Montreal time)
(No registration fees)

More information:
Software Estimation Challenge - Cosmic Sizing (cosmic-sizing.org)
Team leaders must register their team by April 25, 2024 - contact: alain.abran@etsmtl.ca

© COSMIC



Students Teams Awards

- ✓ 1st prize: 500 Euros
- ✓ 2nd prize: 300 Euros
- ✓ 3rd prize: 200 Euros



Estimation Challenge Inputs

1. A set of detailed functional requirements.
2. A set of functional requirements at unspecified levels of completeness.
3. Some non-functional requirements (NFR).
4. Description of a development environment.
5. A data set with historical data on development productivity.



Estimation Challenge Tasks

Using the Challenge 'case study':

1. Size with COSMIC the detailed functional requirements.
2. Approximate the size of other functional requirements.
3. Size the non-functional requirements allocated to software functions.
4. Develop an estimation model from historical data provided.
5. Estimate the effort to develop both functional & non-functional requirements.

Useful Documents for the Challenge



SOFTWARE ESTIMATION CHALLENGE
May 25, 2024

Call for Students Participation

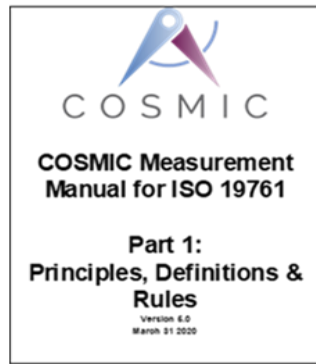
Software Estimation is challenging & worth winning an international award:
1st place: **500 EUR**
2nd place: **300 EUR**
3rd place: **200 EUR**

Students' teams will size the requirements of a case study and estimate development effort within a three-hour timeframe on:
Saturday, May 25th 2024
9:00 am to 12:00 (Montreal time)

More information:
Team leaders must register their team by April 26, 2024 - contact: alan.abran@getsmtd.ca

(No registration fees)

© COSMIC

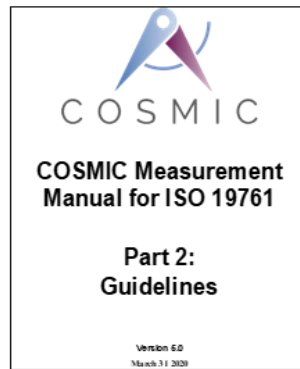


COSMIC

COSMIC Measurement Manual for ISO 19761

**Part 1:
Principles, Definitions & Rules**

Version 6.0
March 31 2020

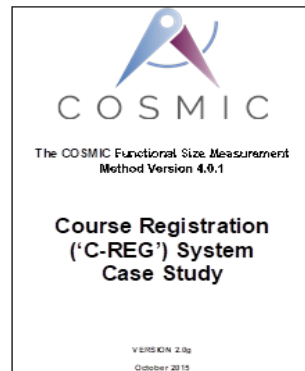


COSMIC

COSMIC Measurement Manual for ISO 19761

**Part 2:
Guidelines**

Version 6.0
March 31 2020

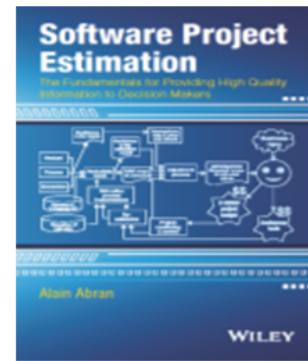


COSMIC

The COSMIC Functional Size Measurement Method Version 4.0.1

Course Registration ('C-REG') System Case Study

VERSION 2.0g
October 2015

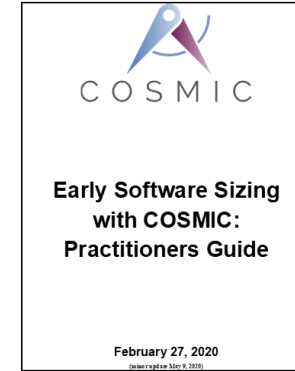


Software Project Estimation
The Fundamentals for Providing High Quality Information to Decision Makers

Alan Abran

WILEY

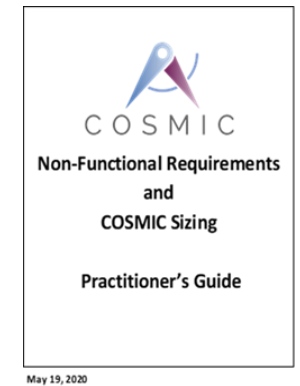
Chapters 5, 6 & 9



COSMIC

**Early Software Sizing with COSMIC:
Practitioners Guide**

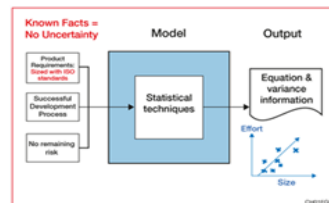
February 27, 2020
(Intercept Mar 1, 2020)



COSMIC

**Non-Functional Requirements and COSMIC Sizing
Practitioner's Guide**

May 19, 2020





Free access to COSMIC documents

- [COSMIC Measurement Manual \(cosmic-sizing.org\)](https://cosmic-sizing.org)
- [Case Studies Archives - Cosmic Sizing \(cosmic-sizing.org\)](https://cosmic-sizing.org)
- [Early Software Sizing, Practitioners - Cosmic Sizing \(cosmic-sizing.org\)](https://cosmic-sizing.org)
- [Non-Functional Requirements and COSMIC Sizing Practitioner's Guide - Cosmic Sizing \(cosmic-sizing.org\)](https://cosmic-sizing.org)



YouTube Training Material

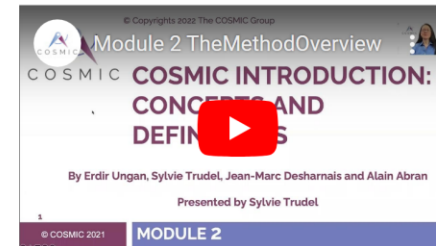
[Learn COSMIC Sizing from these Videos \(cosmic-sizing.org\)](https://cosmic-sizing.org)

Learn the essentials of the COSMIC software sizing methodology from these videos produced in English and French.

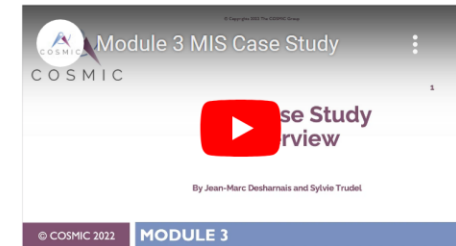


Training Module 1 – Why Measure Software Size

Module 1 Slides



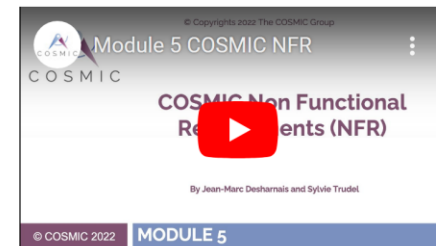
Training Module 2 – The Method Overview



Training Module 3 – MIS Case Study



Training Module 4 – Realtime Software Case Study



Training Module 5 – Non-Functional Requirements



Training Module 6 – Early COSMIC Sizing



More Training Material

- [Module 7: Estimation process in software engineering \(slides\) - Cosmic Sizing \(cosmic-sizing.org\)](#)
- [Tutorial - Early Sizing - Module 1 - Description of techniques - Cosmic Sizing \(cosmic-sizing.org\)](#)



Teams registration

- Team size: from a minimum of 2 students to a maximum of 5 students.
- The team leader must register his team by April 25, 2024. Contact: alain.abran@etsmtl.ca
- There is no registration fee.



Students feedback (2022 Challenge)

- *“.. an extraordinary experience for me. It was an instructive and entertaining activity and reinforcing work; thank you very much.”*
- *“... fun working together with friends.”*
- *“.. a different and unique experience.”*
- *“Thanks to our professors, we became aware of this COSMIC challenge and participated in the challenge. It was beneficial for us. I think we will use these things we learned in our future business life, and I would like to thank our professors.”*
- *“.. both a fun and instructive challenge. I am happy to participate and experience.”*
- *“..beneficial to understand estimating project size.”*

Source: Hacaloglu *et al.*, ‘A Survey on COSMIC Students Estimation Challenge’, IWSM-MENSURA – Izmir (Turkey) 2022.



More information

Software Estimation Challenge - Cosmic Sizing (cosmic-sizing.org)

Contact: alain.abran@etsmtl.ca