

# ARPM Marathon

Advanced Risk and Portfolio Management

In collaboration with  
 OLIVER WYMAN

[arpm.co/marathon](http://arpm.co/marathon)

## Modular, Assisted, Online Course

Master the most advanced techniques in data science and quantitative finance

The ARPM Marathon is a master-level, online, quantitative program, to mold renaissance quants for **Asset Management**, **Banking**, and **Insurance**. It is designed for professionals and recent graduates with a college degree in the hard sciences.

### Instruction

120 hours of core courses

- [Financial Engineering for Investment](#)
- [Data Science for Finance](#)
- [Quantitative Risk Management](#)
- [Quantitative Portfolio Management](#)

\* *Mathematics Refresher and Python/MATLAB Refreshers available*

The courses of the ARPM Marathon cover in a unified framework and with consistent notation

- **asset classes:** credit, insurance, public/private investments, alternatives, high-frequency, business lines, ...

- **applications:** forecasting, portfolio construction, risk measurement, enterprise risk management, algo trading, balance sheet optimization, ...

- **disciplines:** machine learning, econometrics, optimization, pricing, decision theory, ...

### Practice

Upon enrolling in any core course of the ARPM Marathon, immediate access to the [ARPM Lab](#) is provided for 1 year.

The ARPM Lab contains the study materials to learn and practice all the concepts introduced during the lectures:



Code  
(Python/MATLAB)



Theory



Simulation  
clips



Exercises



Case studies



Slides

Homework for each lecture comprises theoretical exercises and practice sessions in the ARPM Lab.

### Assistance

- Homework grading
- questions follow-up in open forum
- office hours
- schedule customization
- coaching service.

### Certifications

Preparation for [ARPM Certificate](#)  
120 GARP CPD  
Academic credits with partner universities

**Individual and group discounts are available**

Contact us at [info@arpm.co](mailto:info@arpm.co) for more information

**Revisit and practice all the topics at your own pace on the ARPM Lab**

[arpm.co/marathon](http://arpm.co/marathon)

# In Depth. Practical. Online course.

5-month to 1 year online course to master the most advanced quantitative techniques for investment management

Level 1	Level 2
Fin. Eng.    Data Science    for Invest.    for Finance	Quant. Risk Mgmt.    Quant. Portf. Mgmt.
<b>Valuation</b>	<b>Aggregation: portfolio and firm-level</b>
<b>Risk drivers identification</b>	<b>Ex-ante performance evaluation</b>
<b>Multivariate statistics</b>	<b>Ex-ante attribution</b>
<b>Quest for invariance</b>	<b>Optimization</b>
<b>Estimation and Model risk</b>	<b>Construction: portfolio optimization</b>
<b>Projection</b>	<b>Construction: embedding views</b>
<b>Pricing</b>	<b>Construction: cross-sectional strategies</b>
<b>Linear factor models</b>	<b>Construction: time series strategies</b>
<b>Machine learning</b>	<b>Execution</b>



## Attilio Meucci

ARPM Founder

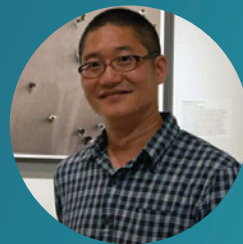
Attilio Meucci is the founder of ARPM - Advanced Risk and Portfolio Management. Prior to ARPM, Attilio was the chief risk officer at KKR; and the global head of research for Bloomberg's risk and portfolio analytics platform. Attilio has taught at Columbia-IEOR, NYU-Courant (New York), Bocconi University (Milan), and NUS-Business School (Singapore). Attilio earned a BA summa cum laude in Physics from the University of Milan, an MA in Economics from Bocconi University, a PhD in Mathematics from the University of Milan and is a CFA charterholder.



## Javier Peña

Professor at Carnegie Mellon University

Javier Peña is a full professor of operations research at Carnegie Mellon University. He teaches Financial Optimization and Asset Management in the Masters of Computational Finance program at Carnegie Mellon University. He is the co-author of the upcoming second edition of the textbook "Optimization Methods in Finance". His research interests span all aspects of optimization with a particular interest in optimization models for portfolio management and for data science. Javier has published his research in a variety of outlets including Quantitative Finance, the Journal of Risk, and Mathematics of Operations Research.



## Tai-Ho Wang

Professor at Baruch College

Tai-Ho Wang is a full professor in mathematics at Baruch College, City University of New York. He is one of the core instructors in Baruch's MFE program, where he teaches Probability and Stochastic Processes in Finance and Probability Theory for Financial Applications in the PreMFE seminars. His research in quantitative finance specializes in implied volatility modeling, exotic option pricing, optimal execution in market impact models, and information dynamics in financial market.



## Angela Loregian

ARPM Researcher

Angela Loregian is a senior researcher at ARPM, where she has contributed since inception to the creation of the ARPM Lab. In her previous academic career Angela has published on theory and applications of thick tailed processes in asset management. Angela runs research seminars and webinars for ARPM worldwide, including within the ARPM Bootcamp, ARPM's flagship event. Angela earned a Ph.D. in Mathematics for financial market analysis, an M.S. in Economics and Finance, and a B.S. in Economics from the University of Milano-Bicocca.

Follow ARPM's faculty of top practitioners and academics across a guided, compact and complete program

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