

Advanced Credit Risk Management

■ ABOUT THE COURSE

This unique online course of TU Delft is for those ambitious risk professionals, consultants and managers who are eager to master the most important models of credit risk management, and to understand and discuss the always-changing regulatory framework.

This course offers you an effective blend of theory and practice to make it both challenging and valuable for your work. With the knowledge and experience gained, you will be able to advance your current work tasks and support future professional development in the field.

The course is authored and given by Dr. Pasquale Cirillo, a risk expert from the Department of Applied Mathematics at TU Delft, coordinator of the financial engineering specialization and experienced statistical consultant for major companies and institutions. The course has been developed in close collaboration with practicing credit risk professionals from Deloitte to ensure its relevance for the industry.

■ COURSE BENEFITS

- Discussion of current and future regulatory frameworks concerning credit risk, from Basel II and III to IFRS 9.
- Review of the most relevant models for PD and LGD: from Moody's KMV to CreditMetrics, from logistic regression to survival analysis, with an emphasis on vital concepts like PIT and TTC estimates.
- Gain practical experience with accompanying learning modules created by Deloitte and guest lectures given by Deloitte's credit risk experts.
- Access course material 24/7, learn in the time that suits you.
- Interact and collaborate with other credit risk professionals from all over the world.
- Enjoy diverse learning materials including video lecture, readings, exercises, quizzes and assignments.
- Additional 6 week period for completing assignments.



estimated effort
4-6 hours
week

ONLINE
24/7
ACCESS

PROFESSIONAL
EDUCATION
CERTIFICATE

FEE
€ 500

"The lecture videos and exercises are short and very instructive. You learn theory and concepts of credit risk management, but also how to apply them. And it was very important for me to be able to follow lectures and complete exercises in a flexible way, whenever it was fitting in my schedule."

Thomas, Germany

Deloitte.

Deloitte is a worldwide leading professional services firm. Deloitte's financial risks management and consulting services have been serving financials for years and have positioned themselves in the forefront of the financial industry.

 **TU Delft**

The online professional education courses of TU Delft are specifically designed for working professionals. The courses provide access to the knowledge and expertise of one of the leading technical universities in Europe and support the personal and professional ambitions of professionals of all levels.

■ WHO SHOULD PARTICIPATE?

This course is for anyone who is ambitious enough to seek a higher level of competence when dealing with credit risk. Participants may include:

- Credit risk professionals and managers who would like to understand what lies behind the formulas and models they use on a daily basis.
- Risk professionals who would like to increase their understanding of credit risk.
- Mathematicians and scientists who would like to learn risk models in a robust way.

Prerequisites: Knowledge of basic risk management, statistics and probability at the advanced bachelor/master level is required, but external references will be provided. Professional business experience is a plus. During the course, codes and examples will be developed using the R language, but participants are free to use their preferred language.



■ LEARNING OBJECTIVES

- Gain knowledge about the latest regulatory developments, such as IFRS9 and the future Basel IV.
- Develop a more solid understanding of the mathematics behind credit risk modeling, which will help you to better understand the foundation of the formulas and models you regularly use.
- Analyze the strengths and weaknesses of important credit risk models, including the hottest ones like survival models for LGD modeling.
- Work with model risk and error quantification.
- Explore open questions like small sample corrections and dependence modeling.
- Investigate the implications of dropping assumptions like Gaussianity.

■ SAMPLE VIDEO LECTURES

Visit the course page to watch sample video lectures from the course Advanced Credit Risk Management.

■ ENROLL TODAY!

Enrollment for this course is open until October 11, 2016.
Enroll today by visiting the course page on TU Delft Online Learning site:

<https://bit.ly/credit-risk-course>

■ INSTRUCTOR

Dr. Pasquale Cirillo

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At TU Delft since 2012, Dr. Pasquale Cirillo received his Habilitation in Applied Statistics from the University of Bern, Switzerland, and his PhD in Statistics from Bocconi University, Italy. In addition to statistics, he studied economics at the Sant'Anna School of Advanced Studies in Pisa, Italy.

He is an expert in risk and extreme value theory, with applications in finance, economics and the social sciences. He has published on top international journals and collaborated with some of the most renowned international scholars in the field. For TU Delft, he has developed the successful MOOC "An introduction to credit risk management" with about 50 thousand students from all over the world. On campus he is the responsible instructor of courses like financial mathematics, stochastic calculus and credit risk modeling. Over the years, as a statistical consultant, he has extensively collaborated with many international institutions, banks and insurance companies.

■ QUALIFICATIONS

By completing this course you will earn a professional education certificate of TU Delft. With this certificate you are eligible to receive 3.0 Continuing Education Units (CEUs).

