

# QRAP

## Quantitative Risk Analytics Professional

In collaboration with Genpact



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*The Quantitative Risk Analytics Professional (in collaboration with Genpact) is an advanced risk Analytics program aimed at creating a pool of senior quantitative risk analysts with expertise in handling complex financial data with the help of **advanced level statistical modeling and risk Analytics tools**. These risk analysts shall be not only equipped with the knowledge of how to use analytical tools but also have considerable **risk Analytics domain expertise** owing to various projects / case studies they will work upon as part of the course.*

#### QUICK FACTS



DURATION  
**3 months**



LOCATION  
**Weekend classes,  
Bangalore**



FEE  
**Rs 94,500+taxes**

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# PROGRAM OVERVIEW



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The Quantitative Risk Analytics Professional is a 3 month Advanced Certification Program by Ivy Pro School in collaboration with Genpact aimed at creating a pool of Quantitative Risk Analysts with expertise in handling complex financial data with the help of Advanced Level Statistical Modeling and Risk Analytics tools. This first of its kind Industry-Academia Collaboration has curriculum designed in collaboration with Genpact.

## WHAT IS QUANTITATIVE RISK ANALYTICS?



Quantitative Risk Analytics involves the use of Quantitative Models, Statistical Methods, Numerical Algorithms, and software to address the challenging and important issues associated with Big Financial Data. It includes:

- Credit Risk Analytics
- Regulatory Compliance
- Capital Planning and Forecasting



# JOB ROLES OF A QUANTITATIVE RISK EXPERT

- *Credit risk specialist*
- *Quantitative risk analyst*
- *Risk Modeling expert*

## WHO SHOULD ATTEND?

### *Banking & Finance Professionals*

Professionals with work experience in the BFSI domain who want to steer their career into roles that define data driven decision making.

### *Analytics Professionals*

Data Analytics professionals who want to make their next big move to mid-level Quantitative Risk Analytics roles

### *MIS Reporting Analysts*

MIS / Data Reporting professionals who wants to make it to the next level of Advanced Quantitative Risk Analytics.



# 5

## KEY BENEFITS OF QRAP

1.



### JOIN A TRUE INDUSTRY ENDORSED PROGRAM

Join the industry endorsed program by Ivy Pro School co-created with Genpact. Unique Collaboration between Academia and Industry specifically focused on Advanced Risk Analytics - First of its kind in the country.

2.



### JOIN RISK ANALYTICS INDUSTRY

Opportunity to work as a level 2 resource in the Risk Analytics team with Genpact\* and other large risk Analytics firms.

3.



### LEARN IN A CLASS-ROOM IN BANGALORE, ON WEEKENDS

Focused classroom learning based on curriculum designed by Genpact and Ivy together, delivered by Senior Risk Analytics practitioners on weekends.

4.



### WORK ON REAL-LIFE CASES / PROJECTS

Hands-on learning on real-life projects / case studies using Advanced Statistical Tools (SAS, R) and latest models used in Risk Analytics.

5.



### GET MENTORED BY GENPACT

The course framework has been designed in close collaboration with Genpact's Senior Risk Analytics practitioners. You'll also get an opportunity to get mentored by them during the course.



## COURSE'S UNIQUE HIGHLIGHTS

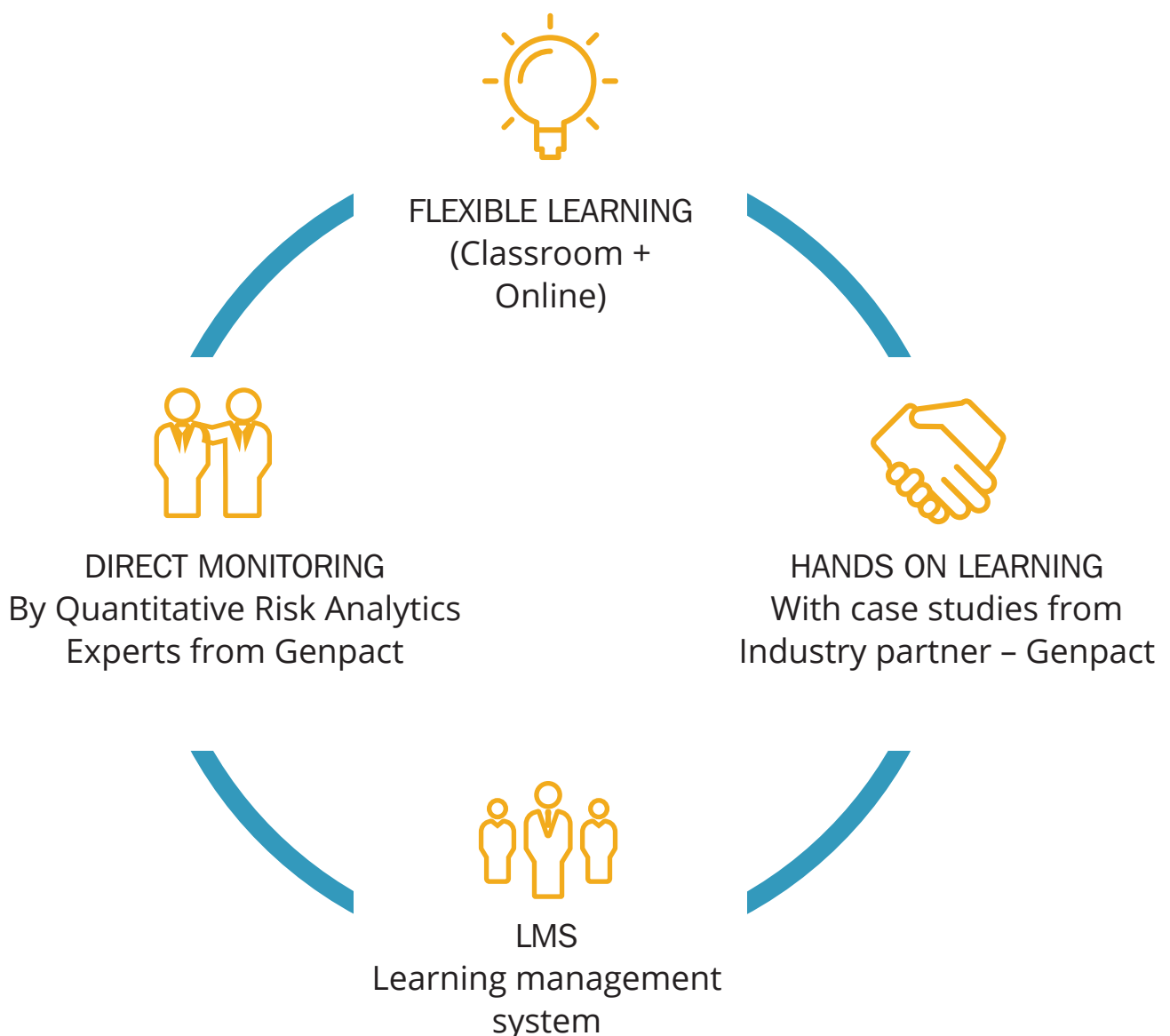
- A.** Instill deep knowledge and understanding of cutting edge Analytics tools to solve complex problems in the field of Quantitative Risk Analytics.
- B.** Network and interact with Eminent Faculty from Analytics Industry and speakers from Genpact.
- C.** First of its kind in India to provide classroom sessions on Quantitative Risk Analytics by eminent faculty from world renowned institutions (IIM, ISI, University of Texas, American Express, etc).
- D.** Weekend delivery ensures that you don't have to leave your current job to join this course.



# FINANCIAL AID:

*Ivy Professional School will help participants to avail Financial Aid for the course.*

## PEDAGOGY





# COURSE OUTLINE

## OPTIONAL PRE-REQUISITES MODULE: 38 HOURS

(mandatory for participants who don't come with prior Analytics skills)

- Statistics for risk modeling using SAS
- SAS programming (base SAS and Advanced SAS)

## CREDIT RISK ANALYTICS: 116 HOURS

### CREDIT RISK FOUNDATION

- Overview of Consumer Credit Products
- Credit Risk Fundamentals
- Credit Rating Agencies
- External Analysis for Credit Information
- Verification Frameworks

### RISK MODELING: FUNDAMENTALS

- Different approaches for risk modeling
- Binomial Logistic, Multinomial Logistic, Survival Analysis, Penalized Models, Hazard Models, ARIMA

### RISK MODELING: DEEP DIVE

- Decision Trees
- Clustering
- Build Model to Predict Probability of Default (PD)
- Rare Event Modeling
- Business case studies using industry relevant datasets on almost all the models
- Advanced Modeling Techniques – Neural Networks (Pros/Cons), Support Vector Machines and how they are used in Risk Analytics

## CREDIT RISK REGULATIONS (GLOBAL)

- BASEL II Concepts – Pillar 1, 2 and 3
- BASEL II vs BASEL III
- IFRS9 standards - Comparison between requirements by FSA and APRA - Comparison between IFRS9 standard and CECL (FASB)
- CCAR - Regulation and calculation overview
- Asset Classes
- Business case studies

## MODEL VALIDATION – REGULATIONS' CONTEXT

- Data Cleaning & Model Diagnostics, Variable Selection, Candidate Models, Residual Diagnostics, Holdout / OOT Sample Testings
- SR 11-7 Requirements – Detailed understanding (Conceptual Soundness, Outcome Analysis, and Model Monitoring)
- Model Documentation

## ADVANCED CREDIT RISK MODELS – SETTING UP LGD, EAD MODELS

- Economic LGD Calculations
- Selection of “Discount” Factor in creating Economic LGD
- Conversion of model LGD to “Downturn LGD”
- How EAD is calculated for Loan Products vs Products with Limits
- EAD Modeling options for / approach comparison

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Total Duration & Schedule: 38 hours for the Optional Pre-requisites Module and 116 hours for Credit Risk Module (in approx. 8 to 9 weeks – 8 hours per Saturday and Sunday)

**Course Fee: Rs 94,500+Taxes**

# SELECTION PROCESS:

01

## APPLY

Send your CV to  
[info@ivyproschoo.com](mailto:info@ivyproschoo.com)

1. Minimum 2 years of experience in Finance / Business Analytics
2. Minimum 55% in education degrees

02

## PROFILE CHECK

Your Profile will be screened to check profile fitment for the program.

03

## ONLINE ASSESSMENT

An online Assessment to check the proficiency level required for the program

04

## INTERVIEW

A quick interview  
Genpact and Ivy  
Professional  
School



Send in your Profiles to  
[info@ivyproschoo.com](mailto:info@ivyproschoo.com)

**Limited  
Seats**



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