Southampton Data Science Academy

Chartered Insurance Institute

Introduction to Data Science & AI for Insurance

Course overview

This introductory-level course is an important first step in developing your knowledge of data science and artificial intelligence (AI) within the context of insurance. It provides an overview of data tools and technologies and develops your understanding of data analysis, data visualisation techniques, an ethical approach to AI and data science techniques for insurance.

The *Introduction to Data Science & AI for Insurance* also provides opportunities to unlock business innovation through the use of data-driven insights and tools.

Who is the Introduction to Data Science & AI for Insurance for?

The course is ideal for anyone in the insurance profession seeking to develop an understanding of data science and AI capabilities – from broking, underwriting and claims professionals, to business analysts, product development, management and marketing roles.

Data science is becoming an increasingly vital skill in many core insurance functions, including risk assessment and pricing, reserving, fraud detection, customer segmentation, customer experience, product development, reporting and communication.

Learning outcomes

On completion of the course, you will be able to:

- Explain core concepts and methods in data science and AI within insurance.
- Identify opportunities to apply data-science driven business solutions.
- Gather, process, analyse, visualise and communicate insight from novel, large and heterogeneous datasets.
- Perform basic analysis of relevant datasets with state-of-the-art tools and technologies in the insurance context.
- Provide insights about the legal, ethical and technical implications of using big data and AI in an insurance context.

Key features

Flexibility of online study – study at a time that suits your schedule.

Study support – support via 1:1 sessions and group tutoring.

Non-assessed technical exercises using data science tools.

Available to all employees with a working knowledge of MS Excel.

"Insurance professionals need to know the importance of data, what can be done with data science and most importantly how putting good data into operational systems is vital."

"The materials were fantastic. I really enjoyed the mixed media approach; switching between live sessions, videos and independent reading as well as practical task and discussions – this really helped to keep me engaged."

- Customer review 2021

Syllabus summary

Data Science, Data Management and Processing – introduces the concept and processes of data science, as well as what to do with data before you begin to extract insights.

Data and Methods of Analysis for Insights Generation – focuses on data analysis approaches, including using statistics and machine learning techniques to extract insights.

Data Visualisation and Communication – considers data visualisation, insights arising from visualisation techniques and ways particular data types can be displayed to highlight key findings.

Further Analysis and Artificial Intelligence – explores the common artificial intelligence methods and how these can be applied in real-life insurance businesses to maximise data's potential.

Application of Data Science Techniques in Insurance – focuses on considerations when carrying out a data science related project in an insurance context, including Professional Standards within the sector and some of the key issues with respect to Data Science.

Ethical Implications and the Future – highlights some of the most important considerations in carrying out a data science related project, with an emphasis on ethics.

Study

- 30 hours study time
- 6 modules
- Interactive quizzes and exercises
- 6 group tutorials (one tutorial per module)
- 1:1 tutoring session
- Coursework assignment
- Peer networking via discussion forum

The course is delivered by the Southampton Data Science Academy, a partnership between the Web Science Institute at the University of Southampton and Cambridge Education Group. The course programme was developed in partnership with the Chartered Insurance Institute.

Assessment

The course will have two forms of assessment: a final assignment (80% of the total mark) and a set of discussion forum contributions (20% of the final mark). Results are released 3-4 weeks following completion of the course.

Completion Certificate

On successful completion of this course, you will receive a completion certificate from the Chartered Insurance Institute and Southampton Data Science Academy in recognition of your achievement.

CPD accreditation

The Introduction to Data Science & AI for Insurance meets the Chartered Insurance Institute and membership CPD requirements.

Fees

Course price: $1,640 for members or $2,050 for non-members

How to enrol

Course start date: 10th January 2022
(registrations close 31st December 2021)
Call customer service: +44 (0)20 8989 8464
Email us at: datascience@cii.co.uk

To find out more visit our website **here**.