

**DAY 1**

**Introductions** **09:00 - 09:30**

**1. Model Structure - Linking Scores and Probabilities – part 1** **09:30 - 10:30**

Non-Score Models - Decision Trees and Expert Systems

Where do scores come from?

Linear, Logit and Probit Models

*Break* *10:30 – 10:45*

**1. Model Structure - Linking Scores and Probabilities – part 2** **10:45 - 11:45**

*Break* *11:45 - 12:00*

**2. Population and Sample Design - Asking the Right Questions - part 1** **12:00 - 13:00**

Business structure of a population

Exclusions and Inclusions

Lifecycles and Stability

Sample Structure

Sample Size

*End of day 1* *13:00*

**DAY 2**

**2. Population and Sample Design - Asking the Right Questions - part 2** **09:00 - 10:15**

*Break* *10:15 - 10:30*

**3. Data Sources and Characteristics - Telling the Story - part 1** **10:30 - 11:45**

Stories and Data

Customer demographics

Affordability

Credit bureau data

Customer behaviour

Geo-demographics

*Break* *11:45 - 12:00*

**3. Data Sources and Characteristics - Telling the Story - part 2** **12:00 - 13:00**

*End of day 2* *13:00*

**DAY 3**

**4. Discretizing Characteristics - part 1** **09:00 - 10:00**

Getting to know the customers  
 One-dimensional Scores  
 Null hypothesis and statistical tests  
 Grouping criteria  
 Information value  
 Continuous variables

*Break* **10:00 - 10:15**

**4. Discretizing Characteristics - part 2** **10:15 - 11:15**

*Break* **11:15 - 11:30**

**5. Logistic Regression - Expectations and Reality** **11:30 - 12:30**

Maximum Likelihood Principle  
 Formulating the Problem  
 Actual vs. Expected  
 Solving the Equations  
 Variance of Scores

*Lunch Break* **12:30 - 13:30**

**6. Marginal Chi<sup>2</sup> Analysis** **13:30 - 15:00**

Goodness of Fit  
 Score Corrections  
 Marginal Information  
 Bringing Characteristics in Model

*Break* **15:00 - 15:15**

**7. Measuring Scorecards - How good is my model?** **15:15 - 16:45**

Measuring the Measures  
 Strategy Curves  
 Kolmogorov-Smirnoff Statistic  
 Gini Coefficients  
 Information Value

*End of day 3* **16:45**

**DAY 4**

**8. Scorecard Building Strategies - Working with Logistic Regression - part 1** **09:00 - 10:15**

Reading Model Estimation Output  
 Stepwise Approach  
 Automated Classing  
 Weight of Evidence Scorecards  
 Characteristic Selection Algorithm  
 Weighting Samples

*Break* 10:15 - 10:30

**8. Scorecard Building Strategies - Working with Logistic Regression - part 2** **10:30 - 11:30**

*Break* 11:30 - 11:45

**9. Interactions and Splits - Multiple Scorecards** **11:45 - 13:00**

Multiple Models – pros and cons  
 Interactions Mother-Child Scorecard Algorithm  
 Scorecard Scaling

*End of day 4* 13:00

**DAY 5**

**12 Reject Inference - Knowing what we don't Know** **09:00 - 10:30**

Truncation and Swap-sets  
 Measuring Reject Inference  
 Parceling and its Problems  
 ... And Fixing Them  
 Reject Inference Diagnostics  
 Extensions

*Break* 10:30 - 10:45

**10. Validation, Calibration and Adjustment - part 1** **10:45 - 11:45**

Why validate?  
 Score Distributions  
 Model Calibration  
 Scorecard Adjustment  
 Qualitative Validation

*Break* 11:45 - 12:00

**10. Validation, Calibration and Adjustment - part 2** **12:00 - 13:00**

*End of Seminar* 13:00