Actuarial statistics 322 (WST 322)

Qualification	Undergraduate
Faculty	Faculty of Economic and Management Sciences
Module credits	18.00
Programmes	BCom Statistics
	BSc(Computer Science) Computer Science
	BSc Actuarial and Financial Mathematics
	BSc Applied Mathematics
	BSc Environmental and Engineering Geology
	BSc Geology
	BSc Mathematical Statistics
	BSc Mathematics
Service modules	Faculty of Economic and Management Sciences
	Faculty of Natural and Agricultural Sciences
Prerequisites	WST 211, WST 221, WTW 211 GS and WTW 218 GS
Contact time	1 practical per week, 2 lectures per week
Language of tuition	Double Medium
Academic organisation	Statistics
Period of presentation	Semester 2

Module content

Decision theory. Loss distributions. Reinsurance. Risk models. Ruin theory. Credibility theory. Methods to forecast future claim numbers and amounts. The generalised linear model: Exponential family, mean and variance, link functions, deviance and residual analysis, test statistics, log-linear and logit models. Practical statistical modelling and analysis using statistical computer packages.