A comparative schedule between courses on statistical machine learning in Oxbridge and LSE*

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This table consists of 3 postgraduate level courses I have taken or taught in LSE, Oxford, and Cambridge.

University	LSE	Oxford	Cambridge
Term	2022 Lent	2020 Hillary	2021 Michaelmas
Course title	ST456 Deep Learning	SC4 Advanced topics in statistical machine learning	Part III Modern Statistical Methods
Lecturer(s)	Milan Vojnovic, Marcos E Barreto, Parley R Yang	Yee Whye Teh	Rajen Shah
W1	Introduction and applications of Deep Learning	Review of Fundamentals: PCA and ERM	Kernel Machines: review of SVD and ridge regression
W2	Neural Networks (NN) architectures	Support Vector Machines	Kernel Machines: cross validation and Support Vector Machines
W3	Training NN: stochastic gradient descents	Kernel Methods	Lasso estimation: prediction error and sub-Gaussian bounds
W4	Training NN: modern optimisation methods	Deep Learning: Graphs, Optimisation, and Regularisation	Lasso estimation: sub-Gaussian bounds and variable selection
W5	Convolutional NN: operations and architectures	Latent Variable Models, Variational Inference, and Autoencoders	Lasso estimation: prediction, estimation, and extensions
W6	Reading Week (break, no new materials)	Bayesian Machine Learning: Inference and Approximations	Graphical models and Graphical Lasso
W7	Convolutional NN: modern architectures	Gaussian Processes and Bayesian Optimisation	High-dimensional Inference: de-biased Lasso and asymptotic statistics
W8	Recurrent NN: training and deep networks	Bayesian NNs and Neural Tangent Kernels	High-dimensional Inference: testings
W9	Sequence modelling: transformers and encoders	NA	NA
W10	Autoencoders	NA	NA
W11	Generative Adversarial Networks	NA	NA

*Relevant webpage: `https://parleyyang.github.io/ST456/index.html`

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