List of Recommended Courses for research fellows in Statistics

Effective from the Academic Year 2022-23[1]

(Syllabus for every course should be the same as given in the M. Stat. Curriculum)

1. Statistical Inference I (B stream)
2. Regression Techniques
3. Multivariate Analysis
4. Stochastic Processes
5. Categorical Data Analysis
6. Large Sample Statistical Methods
7. Measure Theoretic Probability
8. Resampling Techniques
9. Metric topology and complex analysis
10. Statistical Computing I
11. Time Series Analysis
12. Martingale Theory
13. Functional Analysis
14. Weak Convergence and Empirical Processes
15. Brownian Motion and Diffusions
16. Statistical Inference II
17. Survival Analysis
18. Pattern Recognition
19. Inference for high-dimensional data
20. Advanced Nonparametric Inference
21. Asymptotic Theory of Inference
22. Branching Processes
23. Ergodic Theory
24. Percolation Theory
25. Robust Statistics
26. Theory of Large Deviations
27. Theory of Random Graphs

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[1] All courses approved in the 77th meeting of the Academic Council, held on August 1, 2022

Tentative List of Research Courses in Statistics (January 29,2009)

1. Linear Models
2. Large Sample Statistical Methods
3. Measure Theoretic Probability
4. Applied Stochastic Processes
5. Statistical Inference
6. Regression Techniques
7. Multivariate Analysis
8. Time Series Analysis
9. Nonparametric and Sequential Analysis
10. Survival Analysis
11. Statistical Computing
12. Applied Multivariate Analysis
13. Theory of Games and Statistical Decisions
14. Advanced Design of Experiments
15. Analysis of Discrete Data
16. Advanced Sample Surveys
17. Statistical Methods in Genetics
18. Pattern Recognition and Image Processing
19. Analysis of Directional Data
20. Bayesian Inference[2]
21. Asymptotic Theory of Inference
22. Martingale Theory: Application to Survival Analysis
23. Effective Computing in Quantitative Research
24. Graph Theory
25. Machine Learning: Theory and Practice
26. Data Science

P.S. For Research Fellows admitted prior to 2022-23, the list of courses required for registration will be decided by the Academic Council shortly.

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[2] Items 20-26 approved in the 65th meeting of the Academic Council, held on November 30, 2017.