

Genomics/Synthetic Biology

Genomic Computations

- Computational Genomics
- Structural Genomics**

Genomic System View

- Systems biology
- Biological Networks**

Genomic Learning

- Machine Learning / Pattern Recognition
- Deep Learning in Genomics**
- Biological Signal Processing

Optional Courses:

Random Process, Introduction to Molecular and Cellular Biology, Synthetic Biology, Advanced Biosensor, Time series Analysis, Advanced Computational Genomics, Casual Inference, Bioinformatics Database Analysis, Parallel Processing, Optical Processing, Optimization, Game Theory, Statistical Learning, Probabilistic Graphical Models, Theory of Machine Learning, Introduction to Statistical Methods for Quantitative Research