

## Checksheet for the Graduate Certificate in Data Analytics at Virginia Tech

The Graduate Certificate in Data Analytics is available to all graduate students in the university. Graduate students can select courses from the list below. Courses taken must span all three departments: Computer Science, Statistics and Electrical and Computer Engineering (cross-listed courses can count either way). Per university requirements, at most 6 of the 12 required credits for the certificate can be double counted toward a student's degree program. All courses are 3-hour credit unless otherwise noted in the Graduate Catalog. Students must achieve GPA of at least 3.0 in the four courses. Transfer credits are not permitted.

Student Name: \_\_\_\_\_

Department: \_\_\_\_\_ Degree (MS/Ph.D.): \_\_\_\_\_

Advisor (if applicable): \_\_\_\_\_

	Credit Hours	Course	Grade
<b><u>A. Required Core Courses: (6 credit hours minimum)</u></b>	3	_____	_____
	3	_____	_____
CS/STAT 5525 Data Analytics I			
CS/STAT 5526 Data Analytics II			
CS 5824/ECE 5424G: Advanced Machine Learning			
<b><u>B. Restricted Elective Courses: (6 credit hours minimum)</u></b>	3	_____	_____
	3	_____	_____
CS 5234 Advanced Parallel Computation			
CS 5604 Information Storage and Retrieval			
CS 5614 Database Management Systems			
CS 5764 Information Visualization			
CS 5804 Introduction to Artificial Intelligence			
CS 6604 Advanced Topics in Data and Information			
STAT 5114 Statistical Inference			
STAT 5314 Monte Carlo Methods in Statistics			
STAT 5414 Time Series Analysis I			
STAT 5444 Bayesian Statistics			
STAT 5444G Advanced Applied Bayesian Statistics			
STAT 5504 Multivariate Statistical Methods			
STAT 5544 Spatial Statistics			
ECE 5524 Pattern Recognition			
ECE 5554 Computer Vision			
ECE 5606 Signal Detection and Estimation			
ECE 5734 Convex Optimization			
ECE 6504 Deep Learning for Perception			
ECE 6554 Advanced Computer Vision			
CS6424/ECE6424 Probabilistic Graphical Models and Structured Prediction			

The above student has successfully completed the program requirements.

Signed: \_\_\_\_\_ (Chair, Oversight Committee)

Date: \_\_\_\_\_