

Program Planner Master of Science Plan II – Comprehensive Exam

This checklist is a planning tool. Please consult with your advisor to track academic progress. Students must maintain a minimum 3.0 GPA and enroll in at least 12 units per quarter.

COURSE REQUIREMENTS – Standard Track – 44 UNITS

CORE COURSES – 32 units Term Taken Course Title Units STA 135 Multivariate Data Analysis 4 units STA 200A Introduction to Probability 4 units STA 200B Intro to Mathematical Statistics 4 units STA 200C Intro to Mathematical Statistics 4 units STA 206 Statistical Methods for Research 4 units STA 207 Statistical Methods for Research 4 units STA 208 Statistical Methods in Machine Learning 4 units ONE of the following courses: STA 242 Intro to Statistical Programming 4 units STA 243 4 units **Computational Statistics** TOTAL CORE UNITS: The following courses can be used as substitutes: For students who entered the Statistics MS program as PhD students, successful completion of STA 232A, B, C substitutes for STA 206, 207, 208

ELECTIVE COURSES – 12 units

At least three courses, with at least one course at graduate level, selected from this list:

Course	Title	Units	Term Taken
STA 137	Applied Time Series Analysis	4 units	
STA 138	Analysis of Categorical Data	4 units	
STA 141B or 22	O Data & Web Technologies for Data Analysis	4 units	
STA 141C or 22	1 Big Data & High Perf Stat Computing	4 units	
STA 142	Reliability	4 units	
STA 144	Sampling Theory of Surveys	4 units	
STA 145	Bayesian Statistical Inference	4 units	
STA 260	Statistical Practice & Data Analysis	3 units	

or any 4-unit letter-grade graduate level course in Statistics. With the permission of a graduate advisor, an internship coupled with STA 299 can substitute for an elective.

TOTAL	ELECTIVE	UNITS:	



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COURSE REQUIREMENTS – Data Science Track – 48 UNITS

CORE COURSES – 36 units

Course	Title	Units	Term Taken	The following
STA 135	Multivariate Data Analysis	4 units		courses can be
STA 141A	Fundamentals of Stat Data Science	4 units		used as
STA 200A	Introduction to Probability	4 units		substitutes:
STA 200B	Intro to Mathematical Statistics	4 units		For students
STA 206	Statistical Methods for Research	4 units		who entered
STA 207	Statistical Methods for Research	4 units		the Statistics MS program as
STA 208	Statistical Methods in Machine Learning	4 units		PhD students,
STA 200	Optimization for Big Data Analytics	4 units		successful
31A 209	Optimization for big Data Analytics	4 units		completion of
				STA 232A, B, C
ONE of the fo	llowing courses:			substitutes for
STA 242	Intro to Statistical Programming	4 units		STA 206, 207,
STA 243	Computational Statistics	4 units		208

TOTAL CORE UNITS:

ELECTIVE COURSES – 12 units

ECS 289G

At least one co	urse from the following:			A third 4-unit
Course	Title	Units	Term Taken	elective course
STA 137	Applied Time Series Analysis	4 units		taken from
STA 138	Analysis of Categorical Data	4 units		Mathematics, Statistics,
STA 141B or 22	O Data & Web Technologies for Data Analysis	4 units		Computer
STA 141C or 221 Big Data & High Perf Stat Computing		4 units		Science, or
STA 144	Sampling Theory of Surveys	4 units		related
STA 145	Bayesian Statistical Inference	4 units		disciplines (with Graduate
STA 260	Statistical Practice & Data Analysis	3 units		Advisor
				approval)
At least one co	urse from the following:			
ECS 122 A or B	Algorithm Design & Analysis	4 units		
ECS 165 A or B	Database Systems	4 units		
ECS 170	Artificial Intelligence	4 units		
ECS 171	Machine Learning	4 units		

TOTAL ELECTIVE UNITS:

4 units

Special Topics in Computer Science



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MS Comprehensive Exam

Every M.S. student needs to pass a comprehensive exam, to continue in the program. The M.S. Comprehensive Examination is a written examination. The examination may include the use of statistical software and may be offered in a computer lab. The examination is taken at the end of the Winter quarter (during Spring Break) upon completion of STA 206 and STA 207. If a student does not attempt the examination upon completion of those courses, and does not receive prior approval from the exam committee, it will be counted as not passing the comprehensive exam.

More information can be found on the Statistics website

Advancement to Candidacy

Plan II M.S. Candidates must file an <u>advancement to M.S. candidacy (Plan II) form</u> prior to completion of the program. Candidates must have taken at least half of the required coursework for their degree requirements (18 units). Contact your Program Coordinator for details.

Typical Programs:

For a well-prepared student it is possible to complete the core course requirements by the end of the first year. Students may take longer if they take required electives in the fourth or fifth quarter.

Typical program:	
Year 1 Fall STA 206 (4) STA 200A (4) Elective (4) Winter STA 207 (4)	Year 2 Fall Elective (4) Elective (4) Elective or 299 + internship (4)
STA 200B (4) STA 135 (4) M.S. Comp Exam 8	&
Advance to Candia Spring STA 200C (4)	
STA 200C (4) STA 208 (4) STA 242/243 (4)	

Year 1 Fall STA 106 STA 131A STA 141A/Elective Winter STA 108 STA 135	Year 2 Fall STA 206 STA 200A Elective Winter STA 207 STA 200B	Consult with your faculty advisor to develop a plan based on your experience
STA 135 STA 131B Spring STA 131C Elective Elective	Elective M.S. Comp E Advance to C Spring STA 208 STA 242/243 STA 200C	xam & Candidacy

Typical program for a student requiring two full