Program Description: Master of Science in Statistics
(Courses and Thesis option)

The undergraduate major of a prospective student is important. Therefore, students who are not holding Bachelor degree in statistics need to take six courses as supplementary courses to fulfill the requirements.

Supplementary Courses

Course	Code	Credit		PRE
Probability Theory-I	STAT 211	3	CORE	
Probability Theory-II	STAT 312	3	CORE	
Statistical Inference-I	STAT 321	3	CORE	
Sampling Techniques	STAT 351	3	CORE	
Regression Analysis	STAT 403	3	CORE	
Statistical Inference-II	STAT 422	3	CORE	

The following is a summary of the Master of Science degree requirements in statistics. Students will take **all core courses** (Group-I). These courses designed to cover the fundamental topics of probability, mathematical statistics, and statistical methodology.

Group-I: (Core)

Course	Code	Credit		PRE
Probability Theory	STAT 611	3	CORE	STAT 211, STAT 312
Statistical Inference-I	STAT 631	3	CORE	STAT 321, STAT 422
Linear Models	STAT 622	3	CORE	STAT 403
Statistical Inference-II	STAT 632	3	CORE	STAT 631
Thesis	STAT 692	3	REQUIRED	

Student need to take **at least two** courses from the following list:

Group-II

Course	Code	Credit	PRE
Stochastic Processes	STAT 612	3	STAT 611
Time Series Analysis	STAT 613	3	STAT
Sampling Techniques	STAT 637	3	STAT 351
Design Experiments	STAT 625	3	STAT 403

Electives: Four additional courses, which may consist courses listed below or any of STAT612, STAT613, STAT637, and STAT625, not already used to meet Group II requirements. Selection of electives requires approval of supervisor.

Group-II: (Electives)

Course	Code	Credit	PRE
Queuing Theory	STAT 614	3	
Reliability and Life Testing	STAT 615	3	
Multivariate Analysis	STAT 621	3	
Econometrics	STAT 624	3	
Quality Control and Assurance	STAT 625	3	
Mathematical Programming	STAT 627	3	
Sequential Analysis	STAT 634	3	

Nonparametric Statistics	STAT 636	3
Bayesian Inference	STAT 638	3
Statistical Computer Packages	STAT 641	3
Modeling and Simulation	STAT 642	3
Game theory	STAT 661	3
Nonlinear Programming	STAT 662	3
Selected Topics	STAT 691	3

First Year

Fall ...

Course	Code	Credit		PRE
Probability Theory	STAT 611	3	CORE	STAT 211, STAT 312
Statistical Inference-I	STAT 631	3	CORE	STAT 321, STAT 422
Time Series Analysis	STAT 613			STAT 321
OR	OR	3	ELECTIVE	
Sampling Techniques	STAT 637			STAT 351
Total		9		

Spring ...

Course	Code	Credit		PRE
Linear Models	STAT 622	3	CORE	STAT 403
Statistical Inference-II	STAT 632	3	CORE	STAT 631
Stochastic Processes	STAT 612			STAT 611
OR	OR	3	ELECTIVE	
Design Experiments	STAT 625			STAT 403
Total		9		

Second Year

Fall ...

Course	Code	Credit		PRE
	STAT ***	3	ELECTIVE	
	STAT ***	3	ELECTIVE	None
	STAT ***	3	ELECTIVE	
Total		9		

Spring ...

Course	Code	Credit		PRE
	STAT ***	3	ELECTIVE	
Thesis	STAT 692	3	REQUIRED	
Total		6		

Total Credits	33