# Master Program in Applied Statistics

**Research Fields** 

Sample Survey Operations Research, Quality Control, Simulation, IT Statistical Theory Applied Statistics (Biostatistics, Time Series, Regression)



For more information, please visit the following website. www.cmustat.com



#### Master of Science Program in Applied Statistics

## Plan 2 (Plan A Type A2) Degree Requirements

Deg	ree Require	ments		a minimum of	37 credits
A	. Coursework	<		a minimum of	25 credits
1.	Graduate C	Courses		a minimum of	25 credits
1.	.1. Field of Sp	ecializatio	٦	a minimum of	19 credits
1.1.1. Required courses		25	a minimum of	16 credits	
	1.1.1.1.	Required	core courses		9 credits
		208711	Statistical Theory 1		3 credits
		208738	Multivariate Analysis	3 credits	
		208770	Methods of Statistics	3 credits	
	1.1.1.2.	Required	courses for each option (seled	ct only one option)	
	1)	Statistics			7 credits
		208712	Statistical Theory 2		3 credits
		208780	Linear Statistical Models		3 credits
		208793	Seminar in Statistics		1 credit
	2)	Statistics	for research		9 credits
		208760	Research Methodology in A	pplied Statistics	3 credits
		208761	Biostatistics		3 credits
		208772	Computer Packages for Adv	vanced	3 credits
			Statistical Analysis		
				· · .	7
	1.1.2. Electi	ve courses		a minimum of	3 credits
	1.1.2. Electi Se	ve courses lect the su	bject which correlate with int	a minimum of erest and benefit to the th	s credits esis, subject to the
	1.1.2. Electi Se approv	ve courses lect the su al of advis	bject which correlate with int ors, as follows:	a minimum of erest and benefit to the th	3 credits esis, subject to the
	1.1.2. Electi Se approv	ve courses lect the su al of advis 208731	b bject which correlate with int ors, as follows: Statistical Decision Method	a minimum of erest and benefit to the th	3 credits esis, subject to the 3 credits
	1.1.2. Electi Se approv	ve courses lect the su al of advis 208731 208734	bject which correlate with int ors, as follows: Statistical Decision Method Sample Survey	a minimum of erest and benefit to the th	3 credits esis, subject to the 3 credits 3 credits
	1.1.2. Electi Se approv	ve courses lect the su al of advis 208731 208734 208737	bject which correlate with int ors, as follows: Statistical Decision Method Sample Survey Statistical Methods of Catego	a minimum of erest and benefit to the th prical Data	3 credits esis, subject to the 3 credits 3 credits 3 credits 3 credits
	1.1.2. Electi Se approv	ve courses lect the su al of advis 208731 208734 208737 208740	bject which correlate with int ors, as follows: Statistical Decision Method Sample Survey Statistical Methods of Catego Operational Research	a minimum of erest and benefit to the th prical Data	3 credits esis, subject to the 3 credits 3 credits 3 credits 3 credits 3 credits
	1.1.2. Electi Se approv	ve courses lect the su al of advis 208731 208734 208737 208740 208744	bject which correlate with int ors, as follows: Statistical Decision Method Sample Survey Statistical Methods of Catege Operational Research Linear Programming	a minimum of erest and benefit to the th orical Data	3 credits esis, subject to the 3 credits 3 credits 3 credits 3 credits 3 credits 3 credits 3 credits
	1.1.2. Electi Se approv	ve courses lect the su al of advis 208731 208734 208737 208740 208744 208745	bject which correlate with int ors, as follows: Statistical Decision Method Sample Survey Statistical Methods of Catego Operational Research Linear Programming Queueing Theory	a minimum of erest and benefit to the th orical Data	3 credits 3 credits
	1.1.2. Electi Se approv	ve courses lect the su al of advis 208731 208734 208737 208740 208744 208745 208746	bject which correlate with int ors, as follows: Statistical Decision Method Sample Survey Statistical Methods of Catego Operational Research Linear Programming Queueing Theory Game Theory	a minimum of erest and benefit to the th orical Data	3 credits esis, subject to the 3 credits 3 credits
	1.1.2. Electi Se approv	ve courses lect the su al of advis 208731 208734 208737 208740 208744 208745 208746 208747	bject which correlate with int ors, as follows: Statistical Decision Method Sample Survey Statistical Methods of Catege Operational Research Linear Programming Queueing Theory Game Theory Inventory Control	a minimum of erest and benefit to the th orical Data	3 credits esis, subject to the 3 credits 3 credits
	1.1.2. Electi Se approv	ve courses lect the su al of advis 208731 208734 208737 208740 208744 208745 208746 208747 208748	bject which correlate with int ors, as follows: Statistical Decision Method Sample Survey Statistical Methods of Catego Operational Research Linear Programming Queueing Theory Game Theory Inventory Control Network Analysis	a minimum of erest and benefit to the th orical Data	3 credits esis, subject to the 3 credits 3 credits
	1.1.2. Electi Se approv	ve courses lect the su al of advis 208731 208734 208737 208740 208744 208745 208746 208747 208748 208749	bject which correlate with int ors, as follows: Statistical Decision Method Sample Survey Statistical Methods of Catego Operational Research Linear Programming Queueing Theory Game Theory Inventory Control Network Analysis Simulation	a minimum of erest and benefit to the th orical Data	3 credits esis, subject to the 3 credits 3 credits
	1.1.2. Electi Se approv	ve courses lect the su al of advis 208731 208734 208737 208740 208744 208745 208746 208747 208748 208749 208753	bject which correlate with int ors, as follows: Statistical Decision Method Sample Survey Statistical Methods of Catege Operational Research Linear Programming Queueing Theory Game Theory Inventory Control Network Analysis Simulation Demographic Statistics	a minimum of erest and benefit to the th orical Data	3 credits 3 credits
	1.1.2. Electi Se approv	ve courses lect the su al of advis 208731 208734 208737 208740 208740 208745 208745 208746 208747 208748 208749 208753 208757	bject which correlate with int ors, as follows: Statistical Decision Method Sample Survey Statistical Methods of Catege Operational Research Linear Programming Queueing Theory Game Theory Inventory Control Network Analysis Simulation Demographic Statistics Demographic Estimation	a minimum of erest and benefit to the th orical Data	3 credits 3 credits
	I.I.2. Electi Se approv	ve courses lect the su al of advis 208731 208734 208737 208740 208744 208745 208746 208746 208747 208748 208749 208753 208757 208773	bject which correlate with int ors, as follows: Statistical Decision Method Sample Survey Statistical Methods of Catego Operational Research Linear Programming Queueing Theory Game Theory Inventory Control Network Analysis Simulation Demographic Statistics Demographic Estimation Forecasting Techniques	a minimum of erest and benefit to the th orical Data	3 credits 3 credits
	I.I.2. Electi Se approv	ve courses lect the su al of advis 208731 208734 208737 208740 208744 208745 208746 208745 208747 208748 208749 208753 208757 208773 208774	bject which correlate with int ors, as follows: Statistical Decision Method Sample Survey Statistical Methods of Catege Operational Research Linear Programming Queueing Theory Game Theory Inventory Control Network Analysis Simulation Demographic Statistics Demographic Estimation Forecasting Techniques Non-parametric Statistical M	a minimum of erest and benefit to the th orical Data Aethods	3 credits 3 credits
	1.1.2. Electi Se approv	ve courses lect the su al of advis 208731 208734 208737 208740 208740 208745 208746 208745 208748 208749 208753 208757 208773 208774 208775	bject which correlate with int ors, as follows: Statistical Decision Method Sample Survey Statistical Methods of Catege Operational Research Linear Programming Queueing Theory Game Theory Inventory Control Network Analysis Simulation Demographic Statistics Demographic Estimation Forecasting Techniques Non–parametric Statistical <i>N</i> Statistical Quality Control	a minimum of erest and benefit to the th orical Data Aethods	3 credits 3 credits

208782 Factor Analysis 3 credits 208791 Selected Topics in Statistics 1 credit and the others courses in level more than 700 which will launch in future in the field of applied statistics or students may choose from the subject list of other required courses for each option. 1.2. Other courses a maximum of 6 credits 1.2.1. Required courses – None – 1.2.2. Elective courses a maximum of 6 credits Subject to the approval of the Graduate Program Administrative Committee in applied statistics.

- 2. Advanced undergraduate courses-None-B. Thesis12 credits
  - 208799 Master's Thesis

12 credits

### C. Non-credit courses

- 1. Graduate School's requirement a foreign language
- 2. Program requirement

Under the recommendation of the Graduate Program Administrative Committeee in applied statistics.

#### D. Academic activities

- 1. A student has to attend the department's seminar every time throughout the study period and present a thesis progression of thesis once an academic year, approved by the program committee.
- 2. The whole or part of a thesis must be published or accepted for publication according to the Chiang Mai University regulations on Graduate Study and Graduate School Announcement in Criteria and Guideline for Dissemination of Thesis.

#### Plan 3 (Plan B) Dearee Requirem

egree Requirements		a minimum of	37 credits
A. Coursework		a minimum of	31 credits
1. Graduate Courses		a minimum of	31 credits
1.1.Field of Specializat	on	a minimum of	25 credits
1.1.1.Required cou	rses	a minimum of	16 credits
1.1.1.1. Require	ed core courses		9 credits
2087	1 Statistical Theory 1		3 credits
20873	38 Multivariate Analysis		3 credits
2087	70 Methods of Statistics		3 credits
1.1.1.2. Require	ed courses for each option (selec	t only one option)	
1) Statist	ics		7 credits
2087	2 Statistical Theory 2		3 credits
20878	30 Linear Statistical Models		3 credits

208793	Seminar in Statistics	1 credit
2) Statistics	s for research	9 credits
208760	Research Methodology in Applied Statistics	3 credits
208761	Biostatistics	3 credits
208772	Computer Packages for Advanced	3 credits
	Statistical Analysis	
1.1.2. Elective of	courses a minimum of 9 cre	edits
Sele	ect the subject which correlate with interest and benefit t	to the independent
study, su	bject to the approval of advisors, as follows:	
208731	Statistical Decision Method	3 credits
208734	Sample Survey	3 credits
208737	Statistical Methods of Categorical Data	3 credits
208740	Operational Research	3 credits
208744	Linear Programming	3 credits
208745	Queueing Theory	3 credits
208746	Game Theory	3 credits
208747	Inventory Control	3 credits
208748	Network Analysis	3 credits
208749	Simulation	3 credits
208753	Demographic Statistics	3 credits
208757	Demographic Estimation	3 credits
208773	Forecasting Techniques	3 credits
208774	Non-parametric Statistical Methods	3 credits
208775	Statistical Quality Control	3 credits
208776	Experimental Designs	3 credits
208782	Factor Analysis	3 credits
208791	Selected Topics in Statistics	1 credit

and the others courses in level more than 700 which will launch in future in the field of applied statistics or students may choose from the subject list of other required courses for each option.

1.2. Other courses	a maximum of	6 credits
1.2.1. Required courses		– None –
1.2.2. Elective courses	a maximum of	6 credits
Subject to the approval of the Graduate Pr	ogram Administrative Committee	in applied statistics.

	2. Advanc	-None-	
В.	Thesis		6 credits
	208798	Independent Study	6 credits
C.	. Non-credit courses		

- 1. Graduate School's requirement a foreign language
- 2. Program requirement

Under the recommendation of the Graduate Program Administrative Committee in applied

statistics.

#### D. Academic activities

- 1. A student has to attend the department's seminar every time throughout the study period and present an independent study progression of thesis once an academic year, approved by the program committee.
- 2. The whole or part of an independent study must be published or accepted for publication according to the Chiang Mai University regulations on Graduate Study and Graduate School Announcement in Criteria and Guideline for Dissemination of Independent Study.

#### E. Comprehensive Examination

Having submitted a request form to the Graduate School, approved by general advisor or major thesis advisor, a student must then complete a comprehensive examination.