

Program of M.Sc. in Statistics and Operations Research:

Aims of the programs

- 1- Offering A high training in statistics and operations research for distinguish students holding the bachelor degree in statistics, operations research, mathematics or any other related fields.
- 2- Provide the society with statisticians and operations research people they have a very good motivations in dealing with statistical analysis, computing, statistical software packages; working with large data sets; exploratory data analysis; graphical methods; statistical consulting practice.
- 3- Provide a strong background for students wish to continue for Ph. D. in Statistics and in Operations Research.

Majors and Fields

- 1- Statistics
- 2- Operations Research
- 3- Biostatistics

Admissions

See the admission requirements in the Academic Calendar of the Graduate Studies.

Requirements

For M. Sc. in Statistics

- 1- The student must successfully complete 24 credit hours of courses included in M.Sc. Academic Calendar (in accordance with the bylaws of graduate studies). These courses divided to 15 compulsory credit hours and 9 optional credit hours that he/she can select.
- 2- A Thesis satisfies some regulations, guidelines and specifications of the Graduate College should be submitted.

For M. Sc. in Operations Research

- 1- The student must successfully complete 24 credit hours of courses included in M.Sc. Academic Calendar (in accordance with the bylaws of graduate studies). These courses divided to 15 compulsory credit hours and 9 optional credit hours that he/she can select.
- 2- A Thesis satisfies some regulations, guidelines and specifications of the Graduate College should be submitted.

M. Sc. Program in Statistics

The plan of study for the Department of Statistics and Operations Research

Specialization: Statistics

Degree: Masters degree of Science

Compulsory courses		
Course Code	Name of course	Unit
STAT 520	Theory of statistics I	3
STAT 531	Analysis of variance	3
STAT 533	Regression analysis	3
STAT 559	Theory of statistics II	3
STAT 570	Stochastic processes I	3

Optional courses		
Course Code	Name of course	Unit
STAT 523	Special topics in Statistics	3
STAT 532	Analysis of biomedical categorical data	3
STAT 534	Design of experiments	3
STAT 536	Nonparametric statistics	3
STAT 556	Linear models	3
STAT 557	Order Statistics	3
STAT 558	Time Series Analysis	3
STAT 574	Survival analysis	3
STAT 576	Sample survey	3
STAT 578	Applied multivariate Analysis	3
OPER 563	Theory of reliability and life testing	3

M. Sc. Program in Operations Research

The plan of study for the Department of Statistics and Operations Research

Specialization: Operations Research

Degree: M. Sc. degree of Science

Compulsory courses		
Course Code	Name of course	Unit
STAT 520	Theory of statistics I	3
STAT 559	Theory of statistics II	3
OPER 530	Theory of nonlinear programming (I)	3
OPER 554	Network flows	3
OPER 574	Stochastic models in O. R. (I)	3

Optional courses		
Course Code	Name of course	Unit
OPER 534	Nonlinear programming methods (II)	3
OPER 537	Integer and combinatorial optimization	3
OPER 543	Simulation and modeling	3
OPER 553	Sequencing and scheduling	3
OPER 563	Theory of reliability and life testing	3
OPER 521	Advanced forecasting	3
OPER 579	Special topics in O. R.	3