

UNDERGRADUATE COURSES

Curriculum for the Degree of Bachelor of Science in Mathematics: *Pure Mathematics*

COURSE CODE	COURSE TITLE	CREDITS
Semester I (Fall)		
	Calculus I	4
	General Physics I	3
	General Physics Lab I	1
	English I For Science	3
	General Courses	4
Semester II (Spring)		
	Calculus II	4
	Foundation of Mathematics	4
	Fundamentals of Computer Programming	4
	General Physics II	3
	General Physics Lab II	1
	General Courses	2
Semester III (Fall)		
	Elementary Differential Equation	3
	Probability I	3
	Linear Algebra	4
	Mathematical Analysis I	4
	General Physics (Waves)	3
	General Courses	2
Semester IV (Spring)		
	Algebra I	4
	Mathematical Analysis II	4
	Probability II	3
	Elementary Partial Differential Equation	2
	General Courses	3
Semester V (Fall)		
	Discrete Mathematics	4
	Mathematical Analysis III	4
	Numerical Analysis I	4
	Algebra II	4
	General Courses	2
Semester VI (Spring)		
	Algebra III	4
	Mathematics Software	2
	Number Theory	4
	Introduction to Ordinary Differential Equations	4
	General Courses	
Semester VII (Fall)		
	Complex Variable	4
	Topology	4
	Differential Geometry	4
	Elective	4
	General Courses	2
Semester VIII (Spring)		
	Introductory Algebraic Geometry	4
	Elective	7

**Curriculum for the Degree of Bachelor of Science in Mathematics:
*Industrial Mathematics***

COURSE CODE	COURSE TITLE	CREDITS
Semester I (Fall)	Calculus I	4
	General Physics I	3
	General Physics Lab I	1
	English I for Science	3
	General Courses	4
	Calculus Lab I	1
Semester II (Spring)	Calculus II	4
	Calculus Lab II	1
	Differential Equations	3
	General Physics II	2
	General Physics Lab II	1
	Probability I	3
	General Courses	2
Semester III (Fall)	Fundamentals of Computer Programming	3
	Probability II	3
	Statistical Methods	3
	Mathematical Analysis I	4
	General Courses	3
Semester IV (Spring)	Applied Algebra	3
	Applied Linear Algebra	3
	Discrete Mathematics	3
	Elementary Partial Differential Equation	3
	Stochastic Processes	3
	General Courses	2
Semester V (Fall)	Introduction to Ordinary Differential Equations	3
	Statistical Quality Control	3
	Numerical Analysis I	4
	Advanced Computer Programming	3
	Elective	3
	General Courses	2
Semester VI (Spring)	Mathematical Modeling	3
	Numerical Linear Algebra	3
	Statistical Simulation	3
	Engineering Economy	3
	Operational Research I	3
	Project	3
Semester VII (Fall)	Industrial Projects Control	3
	Elementary Econometrics	3
	Operation Research II	3
	Elective	6
	General Courses	2
Semester VIII (Spring)	Elective	17

Curriculum for the Degree of Bachelor of Science in *Statistics*

Semester I (Fall)	Elementary Probability and Statistics	3
	Calculus I	4
	English I For Science	3
	General Courses	6
Semester II (Spring)	Probability I	3
	Calculus II	4
	Fundamentals of Computer Programming	4
	Foundation of Economics	4
	General Courses	2
Semester III (Fall)	Statistical Methods	3
	Probability II	3
	Foundation of Mathematics	4
	Elementary Differential Equations	3
	General Courses	2
Semester IV (Spring)	Mathematical Statistics I	3
	Sampling Methods I	3
	Applied Linear Algebra	3
	Numerical Methods	2
	Mathematical Analysis I	4
	General Courses	2
Semester V (Fall)	Mathematical Statistics II	3
	Sampling Methods II	3
	Stochastic Processes	3
	Regression	3
	Foundation of Demography	3
	General Courses	3
Semester VI (Spring)	Design and Analysis of Experiments I	3
	Multivariate Statistical Methods I	3
	Nonparametric Methods	3
	Time Series	3
	Foundation of Sociology	3
Semester VII (Fall)	Design and Analysis of Experiments II	3
	Computational Statistics	3
	Multivariate Statistical Methods II	3
	Statistical Quality Control	3
	General Courses	2
Semester VIII (Spring)	Training	2
	Elective	7
	General Courses	2