College: **Science** Department: **Mathematics** Program: **B.Sc.(Mathematics)**

Code
MUP12

Student Learning Outcomes to Courses Matrix (X Matrix)

		A			B		C			D	
		a1	a2	a3	b1	b2	c1	c2	c3	d1	d2
courses	PENG 111								√		
	PMTH 112	√			√		√			√	
	PCOM 113		√				√				√
	PSSC 114						√				
	PENG 121								√		
	PMTH 127	√			√		√			√	
	PENG 123								√		
	PPHS 128		√				√			√	
	MATH 201	√	√				√		√		
	STAT 201		√			√			√		√
	MATH 202	√			√		√			√	
	MATH 203	√	√				√	√			√
	MATH 204	√				√	√				√
	MATH 231	√					√			√	
	MATH 241	√			√		√			√	
	MATH 271	√		√	√					√	
	STAT302		√				√		√		
	MATH 321	√	√			√		√		√	
	MATH 322		√			√		√		√	

		A			B		C			D	
		a1	a2	a3	b1	b2	c1	c2	c3	d1	d2
	MATH 342	√					√			√	
	MATH 351	√			√			√			√
	MATH 352				√	√	√				√
	MATH 353		√	√			√			√	√
	MATH 381	√			√			√		√	
	MATH 423	√			√	√	√				
	MATH443				√		√			√	
	MATH 472			√	√		√			√	
	MATH 473			√	√		√			√	
	MATH 483			√		√		√	√		
	MATH 484			√		√		√	√		
	MATH 499			√	√		√	√	√	√	√
	MATH 411	√			√			√		√	
	MATH 482										
	MATH 344	√	√				√		√		

Student Learning Outcomes:

Domain	Code	*learning outcomes*
A	a1	**Define** and **write** fundamentals and concepts of mathematics.
	a2	**Recall** and **reproduce** fundamentals and concepts of General sciences and Computer skills.
	a3	Continue to **acquire** and **outline** mathematical and statistical knowledge and skills appropriate to professional activities
B	b1	**Construct** mathematical arguments and proofs and **apply** the underlying unifying structures of mathematics.
	b2	**Develop** and **explain** critical thinking skills to solve problems that can be modeled mathematically
C	c1	**Demonstrate** the work independently and within a team
	c2	**Illustrate** and bear responsibility for different situations
	c3	**Analyze** and realize the codes of ethics and their importance.
D	d1	**Communicate** mathematical ideas, both orally and in writing
	d2	Critically **interpret** numerical and graphical data.
E	e1	N. A.