

## Program Skills (Program Level)

Code  
MUP08a

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

**Student Learning Outcome:** On successful completion of this programme, students should be able to Continue to acquire and outline mathematical and statistical knowledge and skills appropriate to professional activities

Mathematical Reasoning

KPI( 1 )

Strategy/Procedures

KPI( 2 )

Mathematical Terminologies and Notations

KPI( 3 )

**Integrative and Applied Learning**

(A mental process that integrates existing knowledge to develop further learning)

KPI( 4 )

KPIs

<p><b>Student Learning Outcome:</b> On successful completion of this programme, students should be able to <b>Construct</b> mathematical arguments and proofs and <b>apply</b> the underlying unifying structures of mathematics.</p>		
<p>Solving equations and finding an answer</p>	<p>KPI( 1 )</p>	<p style="writing-mode: vertical-rl; text-orientation: mixed;">KPIs</p>
<p>Formulate the problem using equations</p>	<p>KPI( 2 )</p>	
<p></p>	<p>KPI( 3 )</p>	
<p></p>	<p>KPI( ... )</p>	

<p><b>Student Learning Outcome:</b> On successful completion of this programme, students should be able to <b>Develop</b> and <b>explain</b> critical thinking skills to solve problems that can be modeled mathematically.</p>		
<p><b>Problem Solving</b> Is a process in which one works through a series of operations to come to a conclusion</p>	KPI( 1 )	KPIs
<p><b>Inquiry and Analysis</b> A systematic process of exploring issues/objects/works through the collection and analysis of evidence that result in informed conclusions/judgments</p>	KPI( 2 )	
<p><b>Creativity</b> Involves the ability to adapt to situations of Change.</p>	KPI( 3 )	
	KPI( ... )	

<b>Student Learning Outcome: On successful completion of this programme, students should be able to <u>Communicate</u> mathematical ideas, both orally and in writing</b>		
<b>Ability to express ideas and answer questions</b>	KPI( 1 )	KPIs
<b>Oral Communication</b> Includes interpersonal skills and oral speaking	KPI( 2 )	
<b>Written Communication</b> The ability to express one's ideas through a variety of writing styles	KPI( 3 )	
<b>Active Listening</b> Involves being attentive and respectful when others are speaking, and responding effectively to others' comments during conversation	KPI( ... )	

<b>Student Learning Outcome:</b> On successful completion of this programme, students should be able to Critically <u>interpret</u> numerical and graphical data..		
<b>Quantitative Expertise</b> Includes numeracy, and a confidence in working with numerical data	KPI( 1 )	KPIs
<b>Depth and Breadth of Understanding</b> An ability to break disciplinary boundaries and bring together information.	KPI( 2 )	
<b>Diagrams and/or sketches</b>	KPI( 3 )	
<b>Information Gathering</b>	KPI( ... )	