Math 03 ***Consistency between*** **The Aims of the Bachelor's Degree according to Study Guide VS Learning Outcomes of the Bachelor's Degree according to ASIIN's Subject-Specific Criteria**

Table 1: Goals of Mathematics Program

Graduates of the mathematics program will be able to :	
1	Explain and deliver professionally the most complicated Mathematical concepts and ideas orally and in writing with ethical responsibilities.
2	Have the best positions and opportunity in job market, as well as, get admissions in the quality schools for higher educations

Table 2: Objectives of Mathematics Program

Graduates of the mathematics program will be able to :	
1	Apply various general education competencies through the study of Mathematics.
2	Compete in the job Market or secure acceptance in Postgraduate studies in Mathematics.
3	Explain Mathematical ideas with professional and ethical responsibilities
4	Transmit Mathematical ideas both orally and in writing
5	Work effectively individually and within a team.

Table 3: Program Learning Outcomes of Mathematics Program

Domain		Student learning Outcomes	
		On successful completion of this programme, students would be able to:	
A	Knowledge, Facts Concepts, theories Procedures	a1	Recognize and define the fundamental concepts of mathematics.
		a2	Describe fundamentals and concepts of General sciences and Computer skills.
		a3	Continue to acquire and apply mathematical and statistical knowledge and skills appropriate to professional activities
B	Cognitive Skills Apply skills Creative thinking and problem solving	b1	Construct mathematical arguments and proofs and apply the underlying unifying structures of mathematics.
		b2	Develop and nurture critical thinking skills to solve problems that can be modeled mathematically
C	Interpersonal Skills and Responsibility Responsibility for own learning Group participation and leadership Act responsibly-personal and professional situations Ethical standards of behavior	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	Communication IT and Numerical Skills Oral and written communication Use of IT, Basic math and statistics	d1	Communicate mathematical ideas, both orally and in writing
		d2	Critically interpret numerical and graphical data.
E	Psychomotor Skills	…	N. A.

All students in the Bachelor's Degree Program in Mathematics have the same major subject, Mathematics.

ASIIN Requirements for Bachelor's Degree of Mathematics Program

The diverse professional opportunities of graduates of degree programs in mathematics are based on a sound mathematical education and thorough training, encompassing broad basic knowledge as well as scientific work methods. The Bachelor's degree program facilitates regular completion of a degree with an early career start on the one hand, while on the other hand permitting faster progress of students aiming to do an additional non-mathematical degree (e.g. for consulting, marketing, business, finance, patents etc.).
The **following learning outcomes** (knowledge, skills or competences)1 are typical of a

Bachelor's degree in mathematics:

Specialist learning outcomes

Graduates:

(a)	Have sound mathematical knowledge. They have a profound overview of the contents of fundamental mathematical disciplines and are able to identify their correlations.
(b)	Are able to recognize mathematics-related problems, assess their solvability and solve them within a specified time frame.
(c)	Have a basic ability to work in a scientific way. They are in particular able to formulate mathematical hypotheses and have an understanding of how such hypotheses can be verified or falsified using mathematical methods.
(d)	Can flexibly apply mathematical methods of fundamental component areas of mathematics and are able to transfer the findings obtained to other component areas or applications.
(e)	Have abstraction ability and are able to recognize analogies and basic patterns.
(f)	Are able to think in a conceptual, analytical and logical manner.
(g)	have an extensive comprehension of the significance of mathematical modeling. Are able to create mathematical models for mathematical problems as well as for problems.
(h)	can use basic methods of computer-aided simulation, mathematical software and programming to solve mathematical problems
(i)	are in a position to solve more extensive mathematical problems (generally to be proven within the framework of a Bachelor's thesis)

Social learning outcomes

Graduates can:

(j)	Classify, recognize, formulate and solve mathematics-related problems.
(k)	Use electronic media competently.
(l)	Implement lifelong learning strategies. A prerequisite for this is that the students are persevering and that they have developed persistence.
(m)	can recognize, formulate, classify and solve problems in a mathematical context
(n)	can communicate, possibly also in a foreign language, and contribute their work effectively in teams

Consistency between **The Aims of the Mathematics Bachelor's Degree according to Study Guide VS Learning Outcomes of the Bachelor's Degree according to ASIIN's Subject-Specific Criteria**

Aims of Mathematics Program			Learning Outcomes of the Bachelor's Degree according to ASIIN's Subject-Specific Criteria													
			Specialist learning outcomes									Social learning outcomes				
			a	b	c	d	e	f	g	h	i	j	k	l	m	n
G.1	Obj.1	a1	✓	✓	✓										✓	
		b1				✓	✓	✓	✓		✓	✓			✓	
		b2				✓	✓	✓	✓		✓	✓			✓	
	Obj.3	a1	✓	✓	✓										✓	
		a3	✓	✓	✓										✓	
		b2				✓	✓	✓	✓		✓	✓			✓	
		c2												✓		
		c3														
G.2	Obj.2	a2	✓	✓	✓								✓		✓	
		a3	✓	✓	✓										✓	
		b1				✓	✓	✓	✓		✓	✓			✓	
		d1														✓
		d2								✓			✓			
	Obj.4	a2											✓		✓	
		d1														✓
		d2								✓			✓			
	Obj.5	c1														✓