

## Erasmus+ - Undergraduate Studies

- [Fall Semester](#)
- [Spring Semester](#)

### Fall Semester - Undergraduate Studies

			<b>1<sup>st</sup></b>
			<b>ECTS</b>
			PM101 Analytic Geometry
	7		PM102 Introduction to Algebra and Set Theory
		8	PC103 Calculus I
	7		IC102 Basic Principles of Programming - Fortran 90
			<b>2<sup>nd</sup></b>
			<b>ECTS</b>
			PM106 Calculus III
	8		AM201 Introduction to Ordinary Differential Equations
	7		IC204 Introduction to Numerical Analysis
			ST201 Probability I
			<b>3<sup>rd</sup></b>
			<b>ECTS</b>



□	□	□	□	DI432 Introduction to Educational Studies
□	□	6	□	□
□	□	□	□	DI433 School Mathematics Curricula and Learning
□	□	6	□	□
□	□	□	□	DI463 History of Mathematics
□	□	6	□	□
□	□	□	□	PM462 General Topology II (not offered this year)
□	□	6	□	□
□	□	□	□	PM463 Tensor Analysis and Geometry
□	□	6	□	□
□	□	□	□	AM464 Special Functions
□	□	6	□	□
□	□	□	□	AM465 Topics in Classical Mechanics
□	□	6	□	□
□	□	□	□	AM466 Fluid Mechanics
□	□	6	□	□
□	□	□	□	ST462 Selected Topics in Probability and Statistics
□	□	6	□	□
□	□	□	□	ST463 Nonparametric Statistics
□	□	6	□	□
□	□	□	□	IC463 Numerical Solution of Transcendental Equations
□	□	6	□	□
□	□	□	□	IC361 Concurrent Programming using Ada
□	□	6	□	□
□	□	□	□	IC334 Numerical Linear Algebra
□	□	6	□	□
□	□	□	□	IC336 Data Structures
□	□	6	□	□
□	□	□	□	11461 Undergraduate Thesis (lasts two semesters)
□	□	12	□	□

**Spring Semester - Undergraduate Studies**

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Code	Name	ECTS	Prerequisites
PM104	Linear Algebra	8	
PM105	Calculus II	8	
IC103	Discrete Mathematics	7	
IC101	Introduction to Computer Science-Python	7	
2	nd	2	
PM207	Algebra	6	
AM202	Multivariable Integral and Vector Calculus	6	
PM231	Linear Algebra II	6	
PM261	Projective Geometry (not offered this year)	6	
AM231	Algebraic Computing for Advanced Mathematics	6	
AM232	Second Course in Elementary Ordinary Differential Equations	6	
DI231	Euclidean Geometry and its Teaching	6	
ST231	Probability II	6	
IC231	Advanced Numerical Analysis	6	
IC232	Object Oriented Programming using C++	6	

□	□	6	IC233 Mathematical Foundations of Theory of Co	□
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□	□	□	□	□
□	□	□	□	□
□	□	6	PM310 Complex Analysis	□
□	□	□	PM332 General Topology	□
□	□	□	PM333 Differential Geometry II	□
□	□	6	AM333 Special Relativity	□
□	□	□	AM262 Analytical Mechanics	□
□	□	□	AM263 Integral Equations	□
□	□	□	DI361 Mathematical Logic	□
□	□	□	ST332 Mathematical Programming	□
□	□	□	ST333 Mathematical Statistics II	□
□	□	□	IC335 Numerical Solution of Ordinary Differentia	□
□	□	□	ST361 Simulation Methods	□
□	□	□	IC362 Microcomputers	□
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		ECTS	
	6	PM438 Functional Analysis	
	6	AM437 Operator Theory	
	6	AM438 Fourier Transform, Distributions and Applications	
	6	DI434 Problem Solving and the forming of Definitions	
	6	PM464 Elements of Commutative Algebra	
	6	AM469 Dynamical Astronomy	
	6	AM468 Introduction to Modern Physics	
	6	AM467 Chaos and Fractals	
	6	DI465 Natural Language and the Language of Mathematics	
	6	IC464 Introduction to Interval Analysis	
	6	ST464 Actuarial Mathematics	
	6	ST437 Introduction to Data Analysis	
	6	ST438 Theory of Sampling	
	6	IC438 Algorithms and Complexity	
	6	ST465 Queuing Theory	

```
var msc1tab=new ddtabcontent("msc1tab") msc1tab.setpersist(true)
msc1tab.setselectedClassTarget("link")// "link" or "linkparent" msc1tab.init()
```

## Erasmus+ - Postgraduate Studies

- [Fall Semester](#)
- [Spring Semester](#)

### Fall Semester - Postgraduate Studies

	ECTS
Ordinary Differential Equations	10
Mathematical Modeling	10
Integrability of Classical and Quantum Systems	10
Dynamical Systems and Chaos	10
Elementary Mathematics from Advanced Viewpoint	10
History of Mathematics	10
Cognitive and Social Aspects of Mathematics Education from Advanced Viewpoint	10
Numerical Analysis	10

Discrete Mathematics  
10

Algorithms  
10

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**2**  
**ECTS**

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Number Theory

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Measure Theory (not offered this year)

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Homological Algebra and Theory of Distributions

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Topological Groups

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Numerical Solution of Partial Differential Equations

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Software Engineering

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Computational Complexity

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Logic Programming

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Numerical Optimization

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### Spring Semester - Postgraduate Studies

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**1**  
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Algebraic Geometry



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□	□		Algebraic Topology □
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□	□		Riemannian Geometry and Applications
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□	□		Ordered Fields and Valuation Theory
□	□	10	□
□	□		Dimension Theory
□	□	10	□
□	□		Theory of Distributions and Fourier Analysis (not
□	□	10	□
□	□		Mathematical Logic
□	□	10	□
□	□		Complex Analysis
□	□	10	□
□	□		Partial Differential Equations
□	□	10	□
□	□		Non Linear Wave Equations
□	□	10	□
□	□		Mathematical Physics
□	□	10	□
□	□		Applications of Logic to the Analysis of Mathemat
□	□	10	□
□	□		Problem Solving and Proof
□	□	10	□
□	□		Fundamental Concepts and Philosophy of Mathem
□	□	10	□
□	□		Computational Intelligence
□	□	10	□
□	□		Interval Analysis
□	□	10	□
□	□		Numerical Solution of Ordinary Differential Equat
□	□	10	□
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		2	nd
		ECTS	
		Master Thesis (two semesters)	
		40	

```
var msc2tab=new ddtabcontent("msc2tab") msc2tab.setpersist(true)  
msc2tab.setselectedClassTarget("link") //"link" or "linkparent" msc2tab.init()
```

- For further information please contact any of the following faculty members of the Erasmus+ committee:
- Andreas Arvanitoyeorgos, Coordinator, arvanito@math.upatras.gr
  - Sotiris Kotsiantis, sotos@math.upatras.gr
  - Dimitrios Georgiou, georgiou@math.upatras.gr
  - Tasos Bountis, bountis@math.upatras.gr
  - Panagis Karazeris, pkarazer@math.upatras.gr
  - Vagia Vlachou, vvlachou@math.upatras.gr