

**Course title:**

<b>Course Basic Information</b>			
<b>Academic Unit:</b>	Faculty of Civil Engineering		
<b>Course title:</b>	Linear algebra with the analytical geometry		
<b>Level:</b>	Bachelor		
<b>Course Status:</b>	Mandatory		
<b>Year of Study:</b>	Year 1, Semester 1		
<b>Number of Classes per Week:</b>	2+2		
<b>ECTS Credits:</b>	6		
<b>Time /Location:</b>	According to the Timetable		
<b>Teacher:</b>	Prof. Dr. Fevzi Berisha		
<b>Contact Details:</b>	exi.berisha@hotmail.com +383 44 126 989		
<b>Course Description:</b>	The subjects has to do with knowledge of mathematics that are necessary to facilitate gaining knowledge from other courses and apply the knowledge in geodetic engineer.		
<b>Course Goals:</b>	Introduction to the mathematical knowledge needed to apply for the science of geodesy measurements.		
<b>Expected Learning Outcomes:</b>	<p>After completing this course / subject teaching / student will be able to use and understand math concepts to high, so that they know how to help aid apparatus in cases where it is necessary to use mathematical apparatus. Students should be able to:</p> <ul style="list-style-type: none"> <li>- Implement community-numeric presentation reviews and other insights from algebra as well as mathematical analysis</li> <li>- To know the meaning of matrix determinants and determinants proved settings that are applied to solving the system of equations</li> <li>-Solve systems of equations in different forms and ways</li> <li>- To know the meaning of the vector, acts as linear and nonlinear vector and settings you applied sciences vector operations with technical mechanics</li> </ul>		
<b>Student Workload (should be in compliance with student's Learning Outcomes)</b>			
<b>Activity</b>	<b>Hours</b>	<b>Day/ Week</b>	<b>Total</b>
Lectures	2	15	30
Theory/ Lab Work/Exercises	2	15	30
Practical Work			
Study for intermediate test	1	13	13
Consultations with the teaher	1	15	15
Field Work			
Test, seminar paper	4	2	8
Homework	1	15	15
Self-study (library or home)	2	13	26

Preparation for final exam	1	15	15
Assessment time (test, quiz, final exam)			
Projects, presentations, etc.			
<b>Total</b>			<b>152</b>
<b>Teaching Methods:</b>	<ul style="list-style-type: none"> <li>- Lecture</li> <li>- Discussion during lectures</li> <li>- Exercises</li> <li>- Work in group</li> </ul>		
<b>Assessment Methods:</b>	<p>In evaluation, the percentage of the attendance of each partial evaluation in the final evaluation must be determined. One of the ways of evaluation would be:</p> <p>First Evaluation: 20%</p> <p>Second Evaluation: 20%</p> <p>Homework or other engagement: 10%</p> <p>Attendance 5%</p> <p>Final Exam 45%</p> <p>Total 100%</p>		
<b>Primary Literature:</b>	<ol style="list-style-type: none"> <li>1. Fevzi Berisha-Abdullah Zejnullahu: Matematika- për arkitekturë , 1996, Prishtinë.</li> <li>2. Fevzi Berisha: Përmbledhje detyrash të provimit nga matematika1,2, Prishtinë 2006.</li> </ol>		
<b>Additional Literature:</b>	<ol style="list-style-type: none"> <li>1. Ejup Hamiti- Matematika I, II. Elektro - Prishtinë</li> <li>2. Isak Hoxha-Matematika I,I Ndërtimtari, Prishtinë</li> <li>3. Ismet Dehiri-Matematika I,I Fakultet Teknik, Prishtinë</li> <li>4. Përmbledhje të ndryshme të detyrave</li> </ol>		
<b>Designed teaching plan</b>			
<b>Week</b>	<b>Title of the Lecture</b>		
<b>Week 1:</b>	Real numbers		
<b>Week 2:</b>	Mathematical induction, binomial formula		
<b>Week 3:</b>	Complex numbers		
<b>Week 4:</b>	Empowerment and indigenization of complex numbers		
<b>Week 5:</b>	Matrices, Dealing with matrix		
<b>Week 6:</b>	Determinants inverse matrix		
<b>Week 7:</b>	Systems linear equations		
<b>Week 8:</b>	Methods for solving the system equations		
<b>Week 9:</b>	Analytic Geometry space		
<b>Week 10:</b>	Ongoing linear vector		
<b>Week 11:</b>	Production scalar vector		
<b>Week 12:</b>	Production vector of vectors and Production of mixed vector		
<b>Week 13:</b>	Equation plains		
<b>Week 14:</b>	Equation of straights		
<b>Week 15:</b>	Surfaces		

### Academic Policies and Code of Conduct

- Regular attendance of lectures and exercises
- Being quiet during the sessions
- Shutting down mobile phones
- Being on time

**Note | If a student has more than 3 class assignments evaluated below 50% he/she loses the right on taking the final exam. Evaluation is done from 0-100 %.**